



Puerto Rico
Science, Technology
& Research Trust

ANNUAL REPORT 2023-2024

Puerto Rico is a
globally recognized
innovation hub.



Puerto Rico
Science, Technology
& Research Trust

Annual Report of the Puerto Rico Science, Technology and Research Trust

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The Puerto Rico Science, Technology & Research Trust, established in 2004 under Act 214-2004, as amended, as an autonomous entity, stimulates innovation, technology commercialization and the creation of high-technology jobs in Puerto Rico’s targeted industry sectors such as: Life Sciences, Alternative Energy, Environmental & Agricultural Sciences, Computer Science & Information Technologies, Medical Devices, and Aerospace & Aeronautics, among others.



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WE ARE THE TRUST

Dear Stakeholders,

As the CEO of the Puerto Rico Science Technology and Research Trust, I am thrilled to present our progress and achievements over the past year. Our steadfast dedication to advancing the Puerto Rico's innovation agenda, nurturing a dynamic innovation culture, and inspiring a new generation of researchers, entrepreneurs, and public health professionals has led to significant outcomes. This commitment is not just a goal, but a driving force that motivates us to push the boundaries of innovation and create a lasting impact.



This year, we made excellent progress in advancing our vision for Puerto Rico to be recognized as a global innovation hub.

On October 23, 2023, President Biden announced the designation of the inaugural 31 Tech Hubs and recipients of 29 Tech Hubs Strategy Development Grants. This included the PRBio Tech Hub, led by the Puerto Rico Science, Technology and Research Trust, which aims to advance the region as a global leader in biotechnology through fast-tracking the discovery, development, manufacturing, and supply of next-generation biotechnology and medical device products to detect, treat, and cure diseases and ailments was selected as one of the designees. In November 2023, the U.S. Department of Commerce announced "Build to Scale" grants awarded to 60 organizations across the country – located in 36 states, the District of Columbia, and Puerto Rico. BioLeap, a life sciences innovation incubator program led by the Puerto Rico Science, Technology and Research Trust to increase economic development through innovation and entrepreneurship in the life sciences sector in key focus areas such as biotechnology, AI-driven medical technologies, genomics, and more, was one of the selected programs.

Also, in November 2023, the Trust was appointed as host of the inaugural Life Sciences Exchange between New York and Puerto Rico to boost the life sciences industry in both jurisdictions. This designation was formalized during the establishment of the New York State and Puerto Rico Economic Opportunity Advisory Council, with the participation of NY Governor Kathy Hochul and P.R. Governor Pedro Pierluisi.

More over, in August 2024, we announced that the Trust is the financial advisor to the Puerto Rico Banco de Desarrollo Económico (BDE) for the Venture Capital Access Program, providing for the first time in Puerto Rico a \$30M allocation from the U.S. Department of Treasury for investment in emerging and expanding companies.

This executive brief highlights our organization's achievements and milestones from the past fiscal year, showcasing our steadfast commitment to driving Puerto Rico's innovation agenda. As we look to the future, we are more determined than ever to push the boundaries of research, foster innovation and entrepreneurship, and strengthen the communities we serve.

We are enthusiastic about the opportunities ahead and their impact on Puerto Rico's future.

The Trust is creating a better future

Our Communications & Marketing Department has demonstrated exceptional performance and innovation in the past year, achieving remarkable milestones that have significantly elevated our brand presence and engagement. These results include a 39.1% growth in social media followers, with LinkedIn experiencing the highest growth at 41.9%. The department organized over 36 successful events, produced 169 videos, and garnered \$3.99 million in non-paid publicity through 746 media appearances. Integrating CRM tools, like HubSpot and Mailchimp, enabled them to manage a database of over 110,000 contacts, enhancing customer retention and engagement.

\$3.9M
Non-Paid Publicity

+30
Public Events Supported

179
Videos Produced

+4k
Social Media Posts

789
Email Campaigns

10
Podcast Episodes Produced

The unwavering support and guidance of our Board of Trustees have been instrumental in steering our initiatives and achieving our goals. Their strategic vision and dedication have provided us with the foundation to excel in our endeavors.

Our program directors and executive team’s leadership have driven our initiatives forward. Their expertise, vision, dedication, and commitment to excellence have ensured the successful implementation of our programs and the achievement of our goals. Additionally, our associates ‘and partners’ energy, enthusiasm, and commitment have been the driving force behind our success. Their collaborative efforts and shared passion for innovation have enabled us to create a thriving ecosystem that fosters growth and development.

Together, we have made significant strides in advancing the Puerto Rico innovation agenda and culture and inspiring a new generation of researchers, entrepreneurs, and public health professionals.

Research & Development

Entrepreneurship

Public Health

Education

We create new technology, products, services, systems, and solutions. It is a process supported greatly by science that can generate new discoveries and knowledge to ultimately improve our lives. Our R&D programs have impacted diverse sectors like research, biodiversity, transfer of technology, health, cultural heritage, agriculture, among others. Each program pushes to expand its field providing funding mechanisms, resources, mentorship, or other means to drive innovation.

148 +\$16M

Grantees since program inception

Cumulative grants

+\$60M 33

Return on funding

inventions disclosures evaluated by TTO

Entrepreneurship is essential for economic development. It fuels innovation and creates new jobs, industries, and markets. It also has the potential to improve lives, communities, and countries. Our entrepreneurship programs provide a blueprint for how to support businesses in all their stages, stimulate their growth and build economic development.

+5k

entrepreneurs in 2023 marking a 36.9% increase compared to 2022

1.8k

Fase1 members, with 578 new registrations on online academy

498

graduated startups from Parallel18

\$760K

Parallel18 grants funding distributed among Generation11, for 19 startups from 19 countries

Public health attempts to promote and protect the wellbeing of people and their environment. This work is achieved by promoting healthy lifestyles, researching disease and prevention, environmental hazards and addressing epidemics of infectious diseases. Our public health programs operate based on evidence to make systematic improvements in the health of the population, increase access to health resources, and reduce inequalities in local communities.

+\$11M 133

new funds obtained by the Puerto Rico Vector Control Unit and the P.R. Public Health Trust, a great achievement for public health pillar

outreach and education activities executed by the P.R. Vector Control Unit

+30 307

active studies for clinical trials for the Puerto Rico Consortium for Clinical Investigation that secured three clinical trials and seven active partnerships more this fiscal year

members in 3 health networks that P.R. Public Health Trust establish, and also deployed 43 community health workers accross 29 municipalities

Innovation is a global force that demands continued adaptation and multisectoral engagement. These programs converge in different sectors and ecosystems to build capacity and propel innovation.

New Forward Center launch

75.5% 100%

retention rate of participants in all STEM Workforce programs

target goal for Puerto Rico Ready

378 795

new students of Stem Boxed Experiences

meetups attendees with 51 subject matter experts in 6 meetups



Research Grants

The Trust’s Research Grants Program has attained significant achievements and milestones over the past fiscal year. These showcase our commitment to advancing research, fostering innovation, and supporting the scientific community. Since the program’s inception, we have had 148 grantees, with 12 new grantees added in this fiscal year. The cumulative grants awarded amount to \$16,308,572, resulting in a remarkable return on funding of \$60,021,220. Our Forward Research & Innovation Summit saw an impressive attendance of 394 individuals, and we currently have 533 active Beacon users.

From July 2023 to June 2024, our active grantees reported remarkable achievements: 47 undergraduate and 41 graduate students were impacted, contributing to 537 students since the program’s inception. One MS thesis and one PhD dissertation were completed, with two MS theses and one PhD dissertation in progress. Active grantees secured \$1,954,867 in external funding and published 16 peer-reviewed articles across various journals.

The **Advanced Research Grant (ARG)** is a solicited proposal mechanism that provides funding to advance locally developed science and technology projects. Awards are up to \$150K. This fiscal year, we received 44 letters of intent, invited 37 to submit full proposals, and received 36. The peer review of these proposals has been completed.

Our funded projects span various institutions, including the University of Puerto Rico (Río Piedras, Mayagüez, Medical Sciences, Cayey, and Ponce campuses), Ana G. Méndez University, Universidad Central del Caribe, and Ponce Health Sciences University. We also funded projects from for-profit and non-profit organizations.



Joseph Acaba
NASA's Chief of the
Astronaut Office

\$16,308,572
in Grants Awarded

Our funded projects cover strategic sectors, such as Biotechnology and Life Sciences, Agriculture, Information and Communications Technology, Clean Technologies/Renewable Energy, Environmental Sciences, Medical Devices, Aerospace, and Clinical Trials. In collaboration with Rhodium Scientific, we announced the Advanced Research Grant: Space Edition in July 2023. This innovative funding mechanism enables Puerto Rican science and technology on the International Space Station (ISS) through a competitive, proposal-based selection process. Two projects from the University of Puerto Rico, Mayagüez Campus, were funded and are on track to be launched to the ISS. On February 23, 2024, we presented the new cohort of grantees during our Advanced Research Grant Recognition Event. We recognized 12 new grantees, including the recipients of the ARG Space Edition, with a total award of \$1.6M.

We announced a new call for the CRG during our Recognition Event. The Catalyzer Research Grant (CRG) enhances the competitiveness of local researchers by providing critical bridge funding. In April 2024, we received 40 letters of intent, invited 32 applicants to submit full proposals, and received 28 proposals, now under evaluation by our peer review group.

On November 30, 2023, the Forward Research & Innovation Summit: Science & Space Edition was held at the Caribe Hilton Hotel. The summit brought together experts, entrepreneurs, and policymakers to facilitate knowledge sharing, networking, and the development of cutting-edge ideas and projects. It featured discussions with leading speakers, including Puerto Rican Astronaut Joseph Acaba, NASA's Chief of the Astronaut Office.

148

Grantees since
program inception

12

New Grantees
in this Fiscal Year

+\$60M

Return on Funding



Technology Transfer Office

In 2024, the Technology Transfer Office (TTO) made significant strides in bridging the gap between scientific research and commercial applications. Under the theme of Connecting Science to Business, the TTO’s mission is to identify, evaluate, protect, market, and transfer the most promising research discoveries from Puerto Rico’s universities, institutions, and research institutes to the private sector, yielding remarkable results.

In its fourth year, the EnTRUST Program, in partnership with Columbia University, continued to accelerate life science discoveries by providing training and funding to researchers. This initiative has been instrumental in de-risking early-stage technologies and fostering entrepreneurial thinking among researchers. In its sixth year, the XLerator Network received new funding to support biomedical researchers with learning opportunities, early-stage de-risking funding, and mentorship networks.

The TTO connects science to business by delivering technology transfer services to five university partners representing 17 campuses, including four medical schools. These partners include the University of Puerto Rico campuses, Ana G. Méndez University campuses, Ponce Health Sciences University/Ponce Research Institute, San Juan Bautista School of Medicine, and Universidad Central del Caribe.

Our portfolio mirrors the R&D activities of its scientists and researchers, with \$108 million in R&D expenditures reported in FY2022. The diversity among TTO inventors is exceptional, with 42% of inventors being female, significantly higher than the U.S. average of 13% for women inventor-patentees. This year, 64% of inventors who submitted an invention disclosure did so for the first time, indicating a growing engagement with new inventors.

TTO evaluated
33 invention disclosures showcasing innovation

This program aligns with other Trust initiatives to support life science innovation. The biopharmaceutical ecosystem saw the TTO lead three efforts to impact Puerto Rico’s biopharmaceutical ecosystem with substantial financial support from the NSF Engines and EDA Tech Hubs programs.

The TTO has made significant progress. They evaluated 33 invention disclosures, showcasing innovation. It TTO maintained an active portfolio of 120 technologies, highlighting diverse research activities. It filed 26 new patent applications, ensuring robust intellectual property protection. The portfolio includes 108 patents under management, demonstrating a commitment to commercialization. Additionally, the TTO secured 13 active licenses, facilitating technology transfer to the market. These accomplishments reflect the TTO’s dedication to promoting innovation, protecting intellectual property, and driving commercialization.



Center for Tropical Biodiversity

The Center for Tropical Biodiversity (CTB) has achieved significant milestones and results over the past year. One key accomplishment is the submission of grants totaling \$10,350,000 for CTB-driven projects. Additionally, identifying 14 new compounds in the Cuban Tree Frog alone and repositing 118 compounds in the NatPORT Online Repository are noteworthy achievements.

The CTB received a funding recommendation from the Defense Threat Reduction Agency (DTRA) with a proposed budget of \$2,991,860 over five years. This proposal aims to create and integrate a dual analysis pipeline for identifying natural products in crude extracts and protein targets for natural extracts. Another significant proposal awarded for funding is the NSF EPSCOR E-Rise Program, led by Dr. Riccardo Papa, with a proposed budget of \$7,000,000 over five years. This proposal focuses on developing tropical insects as growth, development, and genetic variability models.

The CTB has also made progress in identifying compound families within the Arracacia xanthorrhiza, known as “apio” in Puerto Rico. This work has led to identifying genes in the apio leaves that encode the production of polyphenols, a family of compounds with documented health benefits.

Looking forward, CTB will continue supporting companies like Dynamiko Pharmaceuticals LLC and SeaMust LLC in enhancing their value propositions. The CTB also aims to further engage with natural products researchers in the Caribbean and Latin America.

These accomplishments and initiatives highlight the CTB’s commitment to advancing scientific research, conservation, and commercialization of biodiversity-derived products.

Submission of grants totaling
+10,000
for CTB-driven projects



14

new compounds
identified in the Cuban
Tree Frog alone

1

invention disclosures
on behalf of the
PR Science Trust

118

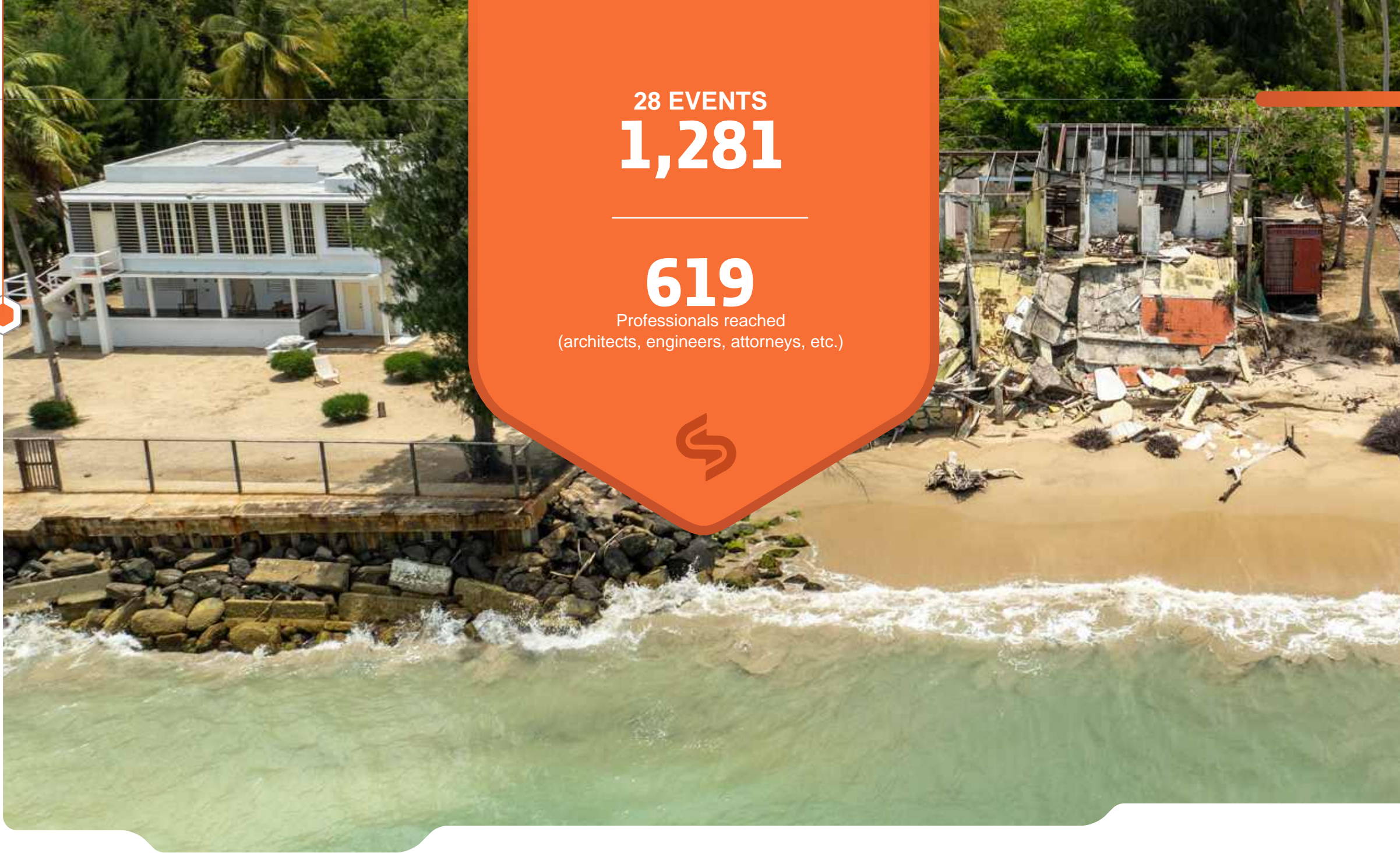
compounds deposited in the
NatPORT Online Repository

Caribbean Center for Rising Seas

The Caribbean Center for Rising Seas has achieved significant accomplishments and results in the past year. They funded a research project covering 10% of their expenditures, addressed 1281 participants at 28 events, delivered 26 presentations, and reached 619 professionals. They formed three external collaborations and commissioned a risk and vulnerability report and digital platform. Their documentary trailer received over 4,800 views, and they submitted public comments for four public hearings. Additionally, they engaged five additional coastal communities.

The Center’s highlights include advancing environmental justice in Puerto Rico through a project with NASA, and the Global Resilience Institute, using earth observation data to strengthen ecological justice in coastal areas. They presented preliminary findings at the American Geophysical Union 2023 Conference, sharing progress and exploring future applications of Earth observation data. They also prepared policy position papers, participated in public hearings, and advocated for considering Sea Level Rise in long-term planning.

33 local and visiting specialist conducted deep dive discussions



28 EVENTS
1,281

619
Professionals reached
(architects, engineers, attorneys, etc.)



The Center co-hosted an expedition to Puerto Rico by the International Committee of Floodplain Managers, facilitating discussions on current flood risk management practices. They commissioned a study on the economic impacts of flooding and sea level rise, creating a digital platform to depict buildings in coastal flood-prone areas of Puerto Rico.

They also engaged in continuing education for professionals, delivering presentations and participating in podcasts and radio shows. The Center’s efforts in advancing climate literacy included providing general presentations, participating in meetups, and designing educational materials. They formed new collaborations, including joining the Scientific Advisory Board of the Caribbean All-Hazards Program to Build Resilience and Climate Equity. They also supported the First Milo Climate Action Academy for Puerto Rico, using satellite data and remote sensing technology to address climate change challenges.

In summary, the Caribbean Center for Rising Seas has made significant strides in research, education, policy advocacy, and community engagement, contributing to environmental justice and resilience in Puerto Rico.

Research Institute

During the 2023-2024 period, the Research Institute has played a pivotal role in shedding light on Puerto Rico’s epidemiological trends through state-of-the-art genomic analysis. Aligned with the Puerto Rico Science, Technology, and Research Trust’s vision of establishing Puerto Rico as a global innovation hub, the Research Institute, through the pioneering efforts of the Puerto Rico COVID-19 Variant Surveillance Initiative (PRCVSI), has sequenced over 15,600 COVID-19 samples. Furthermore, the Institute now houses one of the largest COVID-19 sample repositories in Puerto Rico, containing more than 32,600 specimens, a resource of immense scientific value. These efforts have identified over 13 recombinant COVID-19 variants, including four that had never been reported.

The PRCVSI’s achievements are a testament to the expertise and dedication of its carefully selected team of scientists and the advanced next-generation sequencing infrastructure—the most sophisticated in Puerto Rico and the Caribbean. The PRCVSI remains a vital force in the fight against COVID-19, continuing its mission to protect public health in Puerto Rico through genomic insights and precise epidemiological data.

Now situated within the newly renovated Research Institute Core Laboratories of the Research Institute on the first floor of the Innovation Building, the PRCVSI continues to evolve. The Research Institute remains committed to supporting innovative basic and applied research into the fundamental biological mechanisms of diseases that disproportionately affect our population, ensuring that Puerto Rico stays at the forefront of scientific discovery and public health protection.

The Research Institute continues to evolve significantly, reflecting our commitment to advancing scientific discovery and public health. This semester, we are set to complete the execution of the genomic surveillance initiative we have diligently supported since 2001, a milestone that will result in sequencing thousands of samples. Furthermore, for the first time, we will establish and measure the neutralizing antibody responses to SARS-CoV-2 across the Puerto Rican population, analyzing more than 1,000 samples representative of the entire island. This groundbreaking effort will provide critical insights into the population’s immunity and resilience against the virus.

By integrating these elements, the Research Institute becomes more than just a research facility; it catalyzes the Island’s economic growth. The innovations and breakthroughs that emerge from this ecosystem will drive the development of new industries, attract investment, and create high-quality jobs, transforming Puerto Rico into a global leader in the life sciences. The institute’s impact will ripple through the local economy, elevating the Island’s position on the world-wide stage as a beacon of scientific progress and economic resilience.

The cornerstone of this initiative is the Puerto Rico Integrated Biomanufacturing STEM Program (PR-IBSP). This project was submitted as part of the EDA PRBio Tech Hub Track 2 funding application. This program, developed in collaboration with the North Carolina State University Biomanufacturing Training and Educational Center (NC BTEC) and Accenture, aims to create industry-ready students by establishing the first minor in biomanufacturing at UPRH. Additionally, the program will offer hands-on training in chemistry and microbiology and make the first associate degree in biomanufacturing technology, specifically designed to produce highly skilled biomanufacturing technicians.

We have developed the Puerto Rico Biomanufacturing Apprentice Program (PRBAP) to democratize access to well-paid careers in the biomanufacturing sector. This program mainly targets individuals who may not wish to follow the traditional college route but are eager to enter the workforce with practical, job-ready skills. PRBAP offers rigorous training and hands-on experience for aspiring biomanufacturing process operators, who play a critical role in the manufacturing lifecycle of biotechnology products. Participants in this program will learn essential skills such as managing, monitoring, and regulating complex equipment and performing critical tasks like cleaning, sterilization, and blending active ingredients for pharmaceuticals and biotech products.



\$15.6 M

ARPA PRDOH

\$2.8 M

NIH U01CA26054

Colmena66

In the 2023-2024 fiscal year, Colmena66 achieved significant milestones and impactful results. The organization assisted 5,009 entrepreneurs in 2023, marking a 36.9% increase compared to 2022 and 20,000 entrepreneurs since 2016. They facilitated 3,019 referrals to the right resources at the right time and had 10,031 interactions with entrepreneurs in 2023. Colmena66’s network includes over 200 business resources. The organization ranked first among 80+ SourceLink affiliates in the US for the number of entrepreneurs seeking assistance and counseling hours provided. Additionally, 36.6% of surveyed entrepreneurs decided to start a business after contacting Colmena66, and the services received a 9/10 rating.

The organization assisted
5,009
entrepreneurs in 2023

Key program highlights include the *Levanta tu Negocio PR* platform, which supports SMEs in crisis preparedness and response. This initiative, recognized by the PR & USVI SBA District Office, helped 129 entrepreneurs assess their crisis preparedness. The *Tu Camino Empresarial Tour*, relaunched in Mayagüez, connected over 190 participants with business support resources, achieving a satisfaction rate of 4.9/5. The *Boricua Empeñe Fest*, Puerto Rico’s largest entrepreneurship event, saw a 56% increase in participation, with 1,871 attendees in 2023.



The *Acércate al Grant* program, funded by a \$200k SBA Growth Accelerator Fund 2023 Award, supported 16 projects and reached 516 entrepreneurs and researchers. The PULSO program, part of the SBA’s Community Navigator Pilot Program, secured \$1 million in funding and disbursed over \$160,000 in grants, impacting 62 municipalities.

Colmena66 also launched the first Interactive Status Report of Puerto Rico’s Entrepreneurial Community, using Power BI to present impact metrics and data from annual surveys. The organization was selected as one of thirteen members of the first Leadership Council establishing the Ecosystem Building Leadership Network. Additionally, Denisse Rodríguez, Executive Director of Colmena66, was nominated to the Consumer Advisory Board of the Consumer Financial Protection Bureau.

Looking ahead, Colmena66 will continue to build Puerto Rico’s entrepreneurial ecosystem, host the Boricua Empeñe Fest 2024, and maintain partnerships to support local entrepreneurs. They aim to increase SBIR/STTR awards through the *Acércate al Grant Program* and update the interactive dashboard with new data.

Fase 1

Has made significant strides in fostering entrepreneurship and innovation in the past year. The Fase1 community has grown to over 1,800 members, with 578 new registrations in the online academy, Fase1 Lab. The program has maintained a high retention rate, with 96% of participants completing the modules. The second cohort of Fase1 Intensive concluded with a successful Demo Day, where 46 participants presented their startups. The program’s impact is evident in its support for rural and underrepresented communities, with 55% of participants from outside the metropolitan area and 68% women.

Fase 1 has grown to over **1,800 members** with **578** new registration

Fase1 has also launched two new educational modules, “Transforming my Idea into a Minimum Viable Product” and “PRecovery for Your Business,” to help entrepreneurs develop their ideas and prepare for contingencies. The program’s outreach efforts have been extensive, with 42 events organized or participated in impacting 17 municipalities. The Fase1 Coffee Talks during the 2023 BE Fest was a hit, covering various entrepreneurial topics and ranking as the second favorite track of the day.



The strong network of mentors and partners supporting the participants further highlights the program’s success. Over 30 local and international experts provided tailored guidance and strategic advice through one-on-one sessions. The third generation of Fase1 Intensive received 116 applications, with 50 new ideas selected for the program. The participants represent 18 municipalities, 58% from women-led projects and 54% from low- and moderate-income categories.

Fase1’s commitment to building a vibrant entrepreneurial ecosystem is evident in its efforts to forge stronger connections with the community, educational institutions, and new collaborators. The program aims to expand its footprint by adding 50 new participants to the business incubator, Fase1 Intensive, and continuing to provide high-quality educational materials through the Fase1 Lab. The program’s collaboration with the Puerto Rico Department of Housing is set to continue, providing critical support and resources to enhance the program offerings.

Overall, Fase1’s accomplishments in the past year demonstrate its dedication to nurturing and empowering the next generation of entrepreneurs, fostering innovation, and creating opportunities for underrepresented communities. The program’s success is a testament to the hard work and commitment of its participants, mentors, and partners.



Parallel18

Parallel18 has continued to make significant progress in fostering innovation and supporting startups through its various programs.

The international acceleration program P18 has welcomed companies from across the globe for eight consecutive years, creating a diverse ecosystem that supports the local business landscape and provides opportunities for global expansion. P18 Gen. 11 achieved remarkable milestones in just five months, with 73 closed deals and over 64,000 new users. The cohort experienced a 2.6x increase in revenue and positively impacted the community, with 829 individuals benefiting from its Giveback program.

Additionally, \$760,000 in grants were distributed among 19 startups from 9 countries, and \$380,000 was deployed as investment capital. The participants generated \$1.3M in revenue and reported an \$83M enterprise valuation.



\$760,000
in grants were distributed among
19 startups from 9 countries

Xpand, a post-acceleration program supporting innovative companies in advanced growth stages in Puerto Rico, has also seen significant achievements. In 2023, Gen.3 of Xpand participated in 25 hours of specialized mentorship and 18 sessions or workshops. The program allocated \$100,000 in seed capital investment in up to three companies. Xpand Gen.3 and Gen.4 reported over \$16M in cumulative revenue.

BioLeap, launched in January 2024, is the first Life Sciences incubation program to assist Life Sciences projects. The program provided participants with access to educational and relevant resources, technical assistance, and coworking space. By the end of August 2024, the first generation of BioLeap reported over \$1M in cumulative capital raised and an \$8M cumulative valuation. These accomplishments underscore the effectiveness and commitment of the Trust's programs in fostering business growth, innovation, and societal betterment.

498

Graduated companies in all programs in seven years

123

Partnerships formed

60

Graduated companies in all programs this fiscal year

24

Investments deployed in companies

The local pre-acceleration program, Pre18 Gen.6, consisted of 23 startups in various industries, including Artificial Intelligence, Consumer Goods, Food Technology, and more. After 12 weeks, the startups reported market adaptation and sales increases, received over 38 mentorship sessions, and engaged in more than 18 GiveBack sessions, which impacted over 785 individuals. A total of \$562,500 in grant funding was distributed, and the cohort reported \$2,929,730 in total revenue since inception.

Puerto Rico Vector Control Unit

The Puerto Rico Vector Control Unit (PRVCU) has made excellent progress in the 2023-2024. With \$2,853,478.00 in new funding, the PRVCU deployed 1,372 surveillance traps and tested 46,270 pools for arbovirus, identifying 237 pools positive for dengue. The unit has also processed over 60 WALS applications and intervened in over 30 dengue clusters. Their outreach and education efforts have been extensive, with 133 activities conducted and over 12,300 educational and prevention materials distributed. Additionally, the PRVCU has grown its membership to 430 Puerto Rico Vector Management Association (PRVMA) members, reflecting the community’s commitment to combating vector-borne diseases and promoting public health. The PRVCU continues to perform activities for awards from the Centers for Disease Control and Prevention (CDC) and the US Department of Housing and Urban Development (HUD).

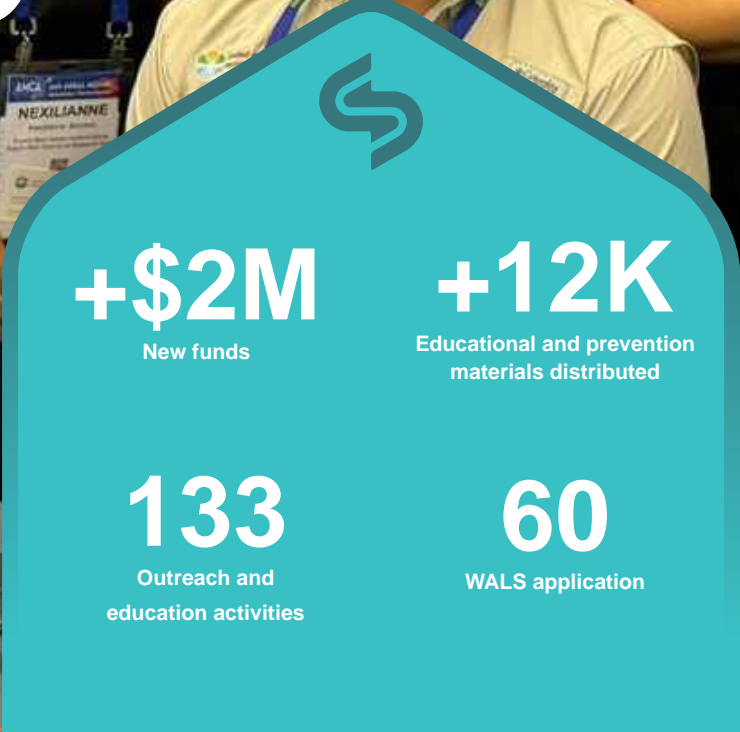
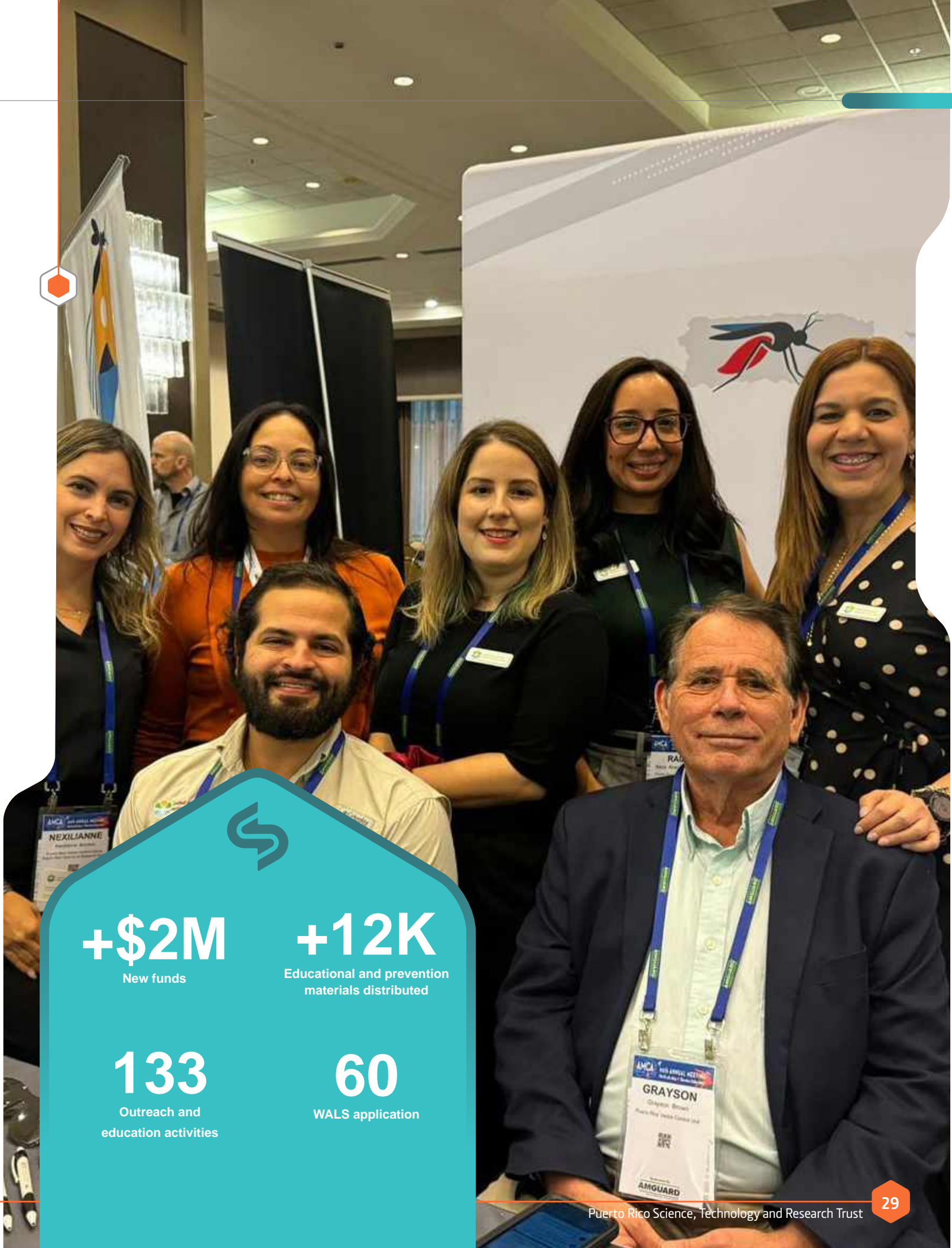
Deployed **+46,000 pools** for arbovirus identifying 237 pools positive for dengue.

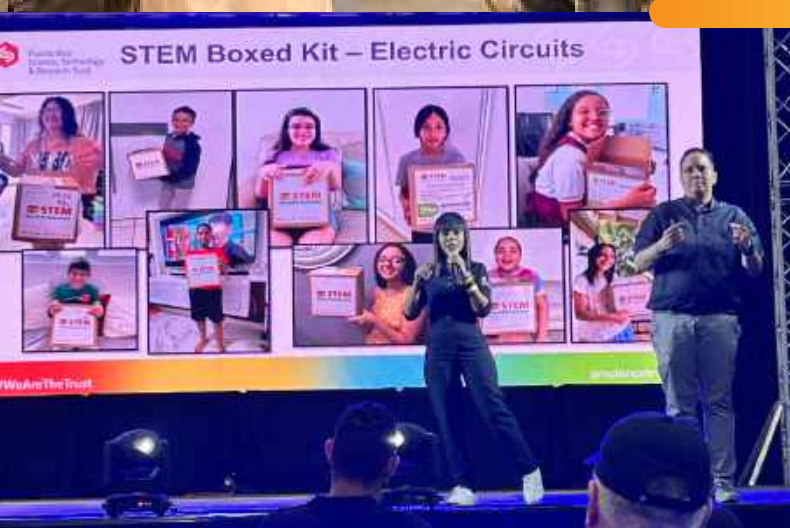
To enhance Global Health Security, the PRVCU has been working on strengthening public health surveillance systems and preparedness globally. This includes establishing and evaluating the use of Wolbachia in the Aedes aegypti population throughout the urban areas of El Salvador. The PRVCU has developed a dengue hotspot response protocol, Advanced Molecular Detection (AMD) applications, and professional networks. With the Lead and Healthy Homes Technical Studies (LHHTS) Grant Program, PRVCU has been evaluating the effectiveness of screens in doors and windows to prevent virus-borne diseases by Aedes aegypti in Ponce, Puerto Rico.

The PRVCU has developed the Tropical Island Training and Evaluation Center (TITEC) for vector-borne disease to provide training, evaluation, and partnerships in preventing and controlling vector-borne diseases in the US territories and freely associated states. The PRVCU hosted three students from the Southeastern Center of Excellence in Vector-Borne Diseases and eight from Interamerican University, Metro Campus. The interns participated in various areas of the PRVCU and supported the implementation of projects.

A public health emergency was declared due to a dengue epidemic in Puerto Rico on March 25, 2024. The declaration was extended until December 31, 2024, to promote prevention and control measures. As of June 2024, there were 1,596 accumulated cases of dengue, with the highest numbers reported in San Juan, Carolina, Rincón, Bayamón, and Canóvanas.

The PRVCU collaborated with the Puerto Rico Department of Health and the Department of Agriculture to implement modern technologies and effective pesticides to control the Aedes aegypti. Laboratory capacities were established in San Juan and Ponce to support surveillance activities and test alternate control technologies. The PRVCU mosquito surveillance system collects, identifies, and tests female Aedes aegypti for arbovirus weekly. The system has expanded to include samples from various projects and municipalities. Up to June 2024, 1,372 AGO traps were processed weekly.





Puerto Rico Public Health Trust

The Puerto Rico Public Health Trust (PRPHT) has made significant strides in public health initiatives over the past year. The organization has established three health networks with 307 members, deployed 43 community health workers across 29 municipalities, and facilitated 1,243 health and social referrals. Additionally, PRPHT has formed 416 collaborations, conducted 710 outreach and educational activities, and developed 212 resources. The distribution of 100,113 health prevention and preparedness materials and the delivery of 36 oral and poster presentations further highlight their impact.

3 health networks with 307 members, deployed 43 community health workers across 29 municipalities, and facilitated 1,243 health and social referrals

The Community Health Workers (CHWs) initiative established the PRPHT as a vital partner to increase access to services and develop solutions based on our communities' needs. This initiative has been particularly impactful, with 43 CHWs providing essential services and advocating for recognizing CHWs as integral to the health system. Environmental health initiatives have focused on protecting vulnerable residents from climate change, with specialized training for rural health professionals and developing resources on extreme heat and emergency preparedness.



The Social Epidemiology and Evaluation Division has raised awareness about the social determinants of health (SDoH) and health equity, reaching hundreds of participants through webinars and educational sessions. The division has also established an interest group in SDoH with 214 members committed to advocacy and education.

The Communications and Marketing Division has disseminated PRPHT's accomplishments and opportunities through various campaigns and media efforts. Notable events include the Health and Research Congress, which attracted over 580 attendees, and the celebration of PRPHT's fifth anniversary with a social media campaign. The division's efforts have resulted in significant growth on social media platforms, with notable increases in followers and engagement.

Overall, PRPHT's initiatives have substantially impacted public health in Puerto Rico, demonstrating its commitment to improving health outcomes and promoting health equity for all residents.



3

Health networks established with 307 members

43

Community health workers in 29 municipalities

416

Collaborations established

710

Outreach and educational activities held

Puerto Rico Consortium for Clinical Investigation

The fiscal year 2023-2024 was a landmark period for the Puerto Rico Consortium for Clinical Investigation (PRCCI), marked by the inauguration of a state-of-the-art Clinical Research Center in August 2023. This new facility has significantly enhanced research capabilities, securing three clinical trials and seven active partnerships.

The Clinical Research Operations team achieved notable progress with over 30 active studies and more than 25 presentations to sponsors and research sites. Business development efforts generated over 50 leads, converting 28 into qualified opportunities, and executed contracts for three Phase III trials. Additionally, PRCCI’s dedication to education and community outreach was evident in the certification of 20 new Clinical Research Coordinators and engagement with over 471 community members. Marketing and communications efforts successfully shifted focus from a consortium to a clinical research center, generating new study leads and achieving significant growth in digital presence.

Overall, PRCCI remains committed to advancing clinical research in Puerto Rico, providing innovative treatment options, and enhancing clinical research capabilities.

+30 active studies
and more than 25 presentations
to sponsors and research sites



33

Active studies

7

Participation in
Patient Advocacy
Activities

20

New Clinical Research
Coordinator

+400

Community Members

STEM Education & Workforce Development Program

The STEM Education & Workforce Development Program for the year 2023-2024 has achieved significant milestones and delivered impactful results. The program has successfully contracted services and philanthropic sponsorships toward education in Puerto Rico worth over \$200,000. Additionally, a direct investment of \$80,000 was made towards free STEM activities for local students, benefiting 378 new students who completed the STEM Boxed Kit Experience. The program also achieved a 100% target goal for PR Ready and maintained a 75.5% retention rate across all programs.

The STEM Boxed Kit Experience, funded by the Medtronic Foundation and local organizations, provided hands-on learning in programming fundamentals to 500 students, focusing on coding and computer science. The HackLab Academy, launched in February, engaged 18 teens in developing computational thinking and problem-solving skills through real-world applications of computer programming. The ConCiencia Podcast, introduced in 2023, produced 12 episodes dedicated to science communication and educational entertainment, reaching hundreds of listeners inside and outside Puerto Rico.

The Despegue Científico event, part of the White House Space Initiative, provided 44 participants with high-quality informal education on aerospace, space careers, and rocket science. The 21st Century Techforce Partner program, with an allocation of \$1.2 million, led procurement efforts for nine Lighthouse Schools, aiming to engage more than 20,000 new professionals in technology over the next ten years. In collaboration with the National Energy Education Development Project, the EV Challenge saw 73 female students from local public schools participate in capacity-building workshops and electric vehicle competitions.

The Puerto Rico Ready program completed its third and final cycle of certifications in Drone Pilot, GIS, and IT Support Specialist, providing workforce training to 272 low-to-moderate-income participants. The program will be sunset in December 2024, and plans are to roll out a Talent Showcase Platform for program graduates and other potential employees.

The STEM education program added long-term founders to its roster of sponsors and opened a 3D printing studio in Ponce. It also launched a five-year strategy to provide 100 teachers with a STEM+AI Professional Development Certificate.

The program will also unveil a learning management platform featuring self-paced and instructor-led courses in various fields, broadening access to high-quality learning for thousands of Puerto Ricans. Additionally, the program will lead collaborations in an initiative from the Puerto Rico Department of Economic Development and Commerce. It will provide high school students early access to IT and Emergent Technology fundamentals.

Overall, the STEM & Workforce Program has made significant strides in promoting STEM education, workforce development, and community engagement, positioning itself for continued success in the coming years.



75.5%

Retention Rate
in all Programs

100%

Target Goal
for PR Ready

\$170k

Contracted Services

378

New Students
that Completed our STEM
Boxed Kit Experience

Puerto Rico Research and Innovation Meetups

The Puerto Rico Research and Innovation Meetups Program had a successful year in 2023-2024, expanding its role as a dynamic platform for addressing critical issues ranging from waste management to AI and the creative economy.

The program engaged a diverse audience of experts, curating events that fostered solution-oriented dialogue and innovation. Notable meetups included the PRCCI event on clinical trials, which aimed to strengthen Puerto Rico’s clinical investigation ecosystem through awareness campaigns and networking. The AI & Creatives meetup explored the transformative potential of AI in creative industries while emphasizing ethical adoption and education.

To foster productive dialogues that lead to innovative solutions, ultimately enhancing the well-being of citizens and driving sustainable economic development



The Science Communications Meetup stressed the importance of continuous education, cultural humility, and intersectoral collaboration in effective science communication. The first Empresas B en Formation Cohort celebrated businesses working towards B Corporation certification, focusing on measuring social and environmental impact. The Agricultural Sustainability Meetup addressed the importance of education and collaboration in sustainable agricultural practices amid climate change challenges. Lastly, the working session on composting systems developed solutions for organic waste management to enhance sustainability in Puerto Rico. Through these initiatives, the program contributed significantly to Puerto Rico’s scientific research, business innovation, and sustainable development growth.

Oso Blanco's
Historical Remnants

Forward Center

Environmental
Research
Laboratory

Science City

The Department of Public Safety will build a 200,000 square-foot Safety Room and Emergency Operation Center for Puerto Rico on parcels B-1 and B-2, rented from the PRSTRT. The Science City Boulevard will be a half-mile road with a right of way of 29.3 meters, located in Science City. This boulevard will have four lanes to accommodate vehicular traffic from two directions. It will include landscaping, a bike lane on the west side, and wide pedestrian-facing sidewalks with street furniture.

A new facility of up to 20,000 square feet will be designed and constructed for PRVCU, serving development activities, the establishment of a mosquito factory, and a storage area for equipment and vehicles. A new grant was submitted to secure funds for constructing a new 80,000-square-foot Forward II Building to provide space for the Research Institute Core Lab and PRCCI operation expansion. This building will include laboratory space for developers and Bio-Tech entrepreneurs, workforce development space, a theater, and classrooms.

The Forward Center project has made significant progress, with the building officially inaugurated on April 3, 2024. The outfitting of the first floor, completed at \$1,710,000, now provides three laboratory-type spaces for lease.

Paralell-18 personnel have moved from the Santurce office into the 3rd floor, while the Comprehensive Cancer Center has leased the entire second level. Additionally, landscaping and sidewalk work for the building has been completed, and a new temporary car park is planned to accommodate up to 60 cars.]

The Innovation Center has added new energy-efficient LED lighting to all office and conference areas. The Research Institute Core Laboratories has recently expanded its facilities with a new laboratory space on the 1st Floor of the Innovation Center. The project, which has a contract amount of \$900,000.00, is currently 90% complete. This new space will enhance the institute's capabilities and support ongoing research and innovation efforts.

*Thank you for your continued
support and partnership*

Eng. Lucy A Crespo

Sincerely,
CEO, Puerto Rico Science Technology and Research Trust

Innovation
Center

Photo by: Tatiana Ortiz



I want to take a moment to highlight some of the remarkable achievements of the P.R. Science Technology & Research Trust's functional areas. These accomplishments showcase our unwavering commitment to operational excellence, innovation, and long-term growth.

Human Resources Department

Made significant strides in creating a dynamic and inclusive work environment. Women constitute 63% of the workforce, particularly in STEM roles, with 50% in management positions. Over 35 new employees were onboarded through a comprehensive Induction Program, and professional development initiatives, such as the Leadership Academy and Project Management certifications, supported employee growth. Additionally, 25 employees were certified in Mental Health First Aid, and launching a Summer Internship Program provided 14 participants with valuable work experience.

Administration

The department focused on wellness programs, health and safety training, and efficient procurement processes. Over 1,800 purchase orders were processed, totaling \$10 million. A significant increase in vehicle fleet management was achieved, from 19 to 28 units. In-house counsel supported over 1,800 consultations and facilitated strategic negotiations with federal and local governments.

Finance Department

Enjoys automated financial processes, including invoicing and expense report processing, and achieved a clean audit opinion for the seventh consecutive year. The department also introduced artificial intelligence to streamline accounting processes and developed a travel expense reimbursement application, enhancing financial oversight.

IT & Cybersecurity

Focused on fortifying the organization's cloud infrastructure and automating administrative processes. The team implemented advanced cybersecurity measures and initiated training programs in artificial intelligence, cybersecurity, and project management, positioning the organization for future technological advancements.



Puerto Rico
Science, Technology
& Research Trust

Research & Development



Andreica Maldonado
Program Director



David L. Gulley, PhD, RTTP, CLP
Program Director



Abel Baerga, PhD
Program Director



Fernando Pabón AIA, CAAPPR
Program Director



Marcos López Casillas
Program Director

Entrepreneurship



Héctor Jirau, PhD
Program Director



Denisse Rodríguez
Program Director



Barbara Rivera
Program Director

Public Health



Amarilys Silva, PharmD
Program Director



Grayson Brown, PhD
Program Director



Marianyoly Ortiz-Ortiz, PhD
Program Director

Education



Jorge Valentine, EdD
Program Director



Frances Zenón Melendez, EdD
Program Director



Ricardo Burgos,
Program Manager

Designations, merits, acnowledgments and accolades

This year, we made excellent progress in advancing our vision for Puerto Rico to be recognized as a global innovation hub, as demonstrated by the following designations, merits, acknowledgments and accolades.



31 Tech Hubs

The Tech Hubs Program was enacted as part of the CHIPS and Science Act of 2022 (as the Regional Technology and Innovation Hubs program) which authorized \$10 billion for the program over five years. On October 23, 2023, President Biden announced the designation of the inaugural 31 Tech Hubs, as well as recipients of 29 Tech Hubs Strategy Development Grants. Puerto Rico, led by the PR Science Trust, organized and engaged a consortium that received a Strategy Development Grant and importantly, the recognition that Puerto Rico was 1 of the 31 Tech Hubs in the United States.

The Tech Hubs Program aims to strengthen U.S. economic and national security with investments in regions across the country with assets and resources with the potential to become globally competitive in the technologies and industries of the future – and for those industries, companies, and the good jobs they create, to start, grow, and remain in the United States.

As a Designated Tech Hub, Puerto Rico has a long-term commitment and partnership with the U.S. Economic Development Administration to support the biopharma/bioscience ecosystem, engaging the private and non-profit sectors, including academic institutions, government, and workforce training organizations.

October 2023



Grant Award

The U.S. Department of Commerce announced “Build to Scale” grants awarded to 60 organizations across the country – located in 36 states, the District of Columbia, and Puerto Rico. BioLeap, a life sciences innovation incubator program led by the Puerto Rico Science, Technology and Research Trust to increase economic development through innovation and entrepreneurship in the life sciences sector in key focus areas such as biotechnology, AI-driven medical technologies, genomics, and more, was one of the selected programs.

November 2023



Life Science Exchange

The Trust was appointed host of the inaugural Life Sciences Exchange between New York and Puerto Rico to boost the life sciences industry in both jurisdictions. This designation was formalized during the establishment of the New York State and Puerto Rico Economic Opportunity Advisory Council, with the participation of New York Governor Kathy Hochul and Puerto Rico Governor Pedro Pierluisi.

November 2023



XLerator Network

The Trust is the state lead for PR in the XLerator Network (started FY2022): NIH/NIGMS IDeA Regional Entrepreneurship Development (I-RED)

May 2023



SBA Growth Accelerator

Colmena66 won for the Trust the SBA Growth Accelerator Fund Competition

September 2023



Financial Advisor

The Trust became the financial advisor to the Puerto Rico Banco de Desarrollo Economico (BDE) for the Venture Capital Access Program, providing for the first time in Puerto Rico a \$30M allocation from the U.S. Department of the Treasury for investment in emerging and expanding companies.

August 2023

Staff Recognition



Leadership Network

Dennisse Rodríguez and Colmena66 was chosen to be part of the Ecosystem Building Leadership Council that is developing the first Ecosystem Building Leadership Network.

December 2023



NSF Engine Development Award

The Trust through its Technology Transfer Office (TTO), was awarded the NSF Engine Development Award (started FY2023).

May 2023



Ambassadors

Ambassadors of the National Community Health Worker Association – Wilma Rivera and Israel Román, PRPHT Community Health Workers.

May 2023



AUTM

Association of University Technology Managers TM Volunteer of the Year- Dr. Carlos Baéz, TTO Associate Director

May 2023



Creating a
better future

TRUSTEES

Our Council of Trustees is composed of distinguished professionals who support and oversee our work and provide guidance to ensure that the Trust is focused on within its mission and vision



Alfredo Casta

Alfredo Casta is the Founder and former Chairman of Cascades Technologies, Inc (CTi), which was is recognized as one of Inc. 5000 magazine’s fastest growing companies for eight years. Mr. Casta combined his technical expertise, management skills and an unrelenting mission focus to accomplish results in the service of the American public. Under the tenants of Think – Build – Measure, CTi delivers IT Governance services, Technical Solutions, Data Management, Agile Development, and IT Organization Analysis including Cyber Security expertise to key cabi- net agencies such as NIH, CDC, Labor, GSA, US Army, DHS, Justice, and Financial Regulatory Agencies.



Esther M. Alegría, PhD

Alegría has nearly 30 years of biopharmaceutical industry experience. She serves as a Senior Executive Biopharmaceutical Advisor at Catalyst Excel & Advance (EA) lending her expertise to establish and start-up pharmaceutical & biopharmaceutical companies. Prior to this, she held multiple executive roles leading to the success of biopharmaceutical large-scale drug substances, medical devices assembly, finished goods and small molecule manufacturing operations. In 2009, she was named Woman Extraordinaire of the Year by Business NC Magazine for her impact in economic success and forward-thinking strategies. Esther holds a Ph.D. in Chemistry from the University of Hawaii and an Executive Business Management certification from Harvard Business School. She has also served as mentor, advocate and educator throughout her career.



Daniel Colón Ramos, PhD

Dr. Colón Ramos is the president of the Scientific Coalition of Puerto Rico. He also serves as the Dorys McConnell Duberg Professor of Neuroscience and Cell Biology at Yale University and is the co-founder of Ciencia Puerto Rico, a non-profit organization that promotes local scientific research and education. His lab at Yale studies the development and function of the nervous system, and their work has been recognized by several awards, including the Sloan Fellowship for “outstanding promise”, an award given to recognize the best researchers of the United States and Canada.



Edith A. Pérez, MD

Dr. Pérez is an internationally recognized translational researcher and cancer specialist, Chief Medical Officer of Bolt Therapeutics, Inc., Professor of Medicine at Mayo Clinic, and Director of the Mayo Clinic Breast Cancer Translational Genomics Program. Dr. Perez is known for her strategic vision in designing innovative clinical trials, her passion for patient care, and her strong team leadership. Her experience includes leadership in academic and biopharmaceutical environments, as well as focused philanthropic endeavors.



Ubaldo Córdova, PhD

Córdova is a professor in UPRM of chemical engineering, a researcher and the institution’s former vice president for Academic Affairs and Research. He holds a bachelor’s degree in Chemical Engineering from the University of Puerto Rico (UPRM) and a MS and PhD from California Institute of Technology. His research experience includes the authoring of peer-reviewed articles in Physics Review Letters, Soft Matter, Journal of Fluid Mechanics, Advanced Functional Materials, and Nature Chemistry. In 2011, he was awarded the prestigious NSF CAREER award, and in 2013 as Distinguished Professor in Chemical Engineering.



Gualberto Medina

Mr. Medina spans career as an attorney, CPA, real estate broker, and New Jersey’s Secretary of Commerce. He also served as the co-founder, president, or general counsel for many technology and biotechnology startups. Because of his successful career in government and business sectors, Mr. Medina was named one of Hispanic Business Magazine’s 100 Most Influential Hispanics. He has ample experience serving as a Trustee for the Trust.



Manuel Cidre

Cidre is the founder of Los Cidrines, a market leader in the sale, distribution and manufacturing of bakery products in Puerto Rico. He is a graduate of the Pontifical Catholic University of PR, with a bachelor’s degree in management, majoring in finance and marketing. He has held several leadership roles, such as president of the PR Products Association, president of the PR Manufacturing Association, founder and president of the Alliance for Puerto Rico’s Development, among other community and philanthropic organizations. Cidre ran for Governor during the Puerto Rican general election in 2016 as an independent candidate. His commitment to Puerto Rico and work has been recognized by multiple communities and professional organizations. His motive in life is returning to God all the blessings he has received by devoting much of his time to organizations seeking to make Puerto Rico a better country.



Frances Santiago-Schwarz, PhD

Santiago-Schwarz is Professor of Molecular Medicine at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell and Professor, Elmezzi Graduate School, Northwell Health. She has contributed to the advancement of human immunology, and as an educator and biomedical scientist, Dr. Santiago-Schwarz has been actively engaged in a variety of mentoring, diversity, and global humanitarian initiatives. Current activity in response to the COVID-19 pandemic includes acquiring insight into the immunopathology of COVID-19, unraveling novel therapeutic opportunities and development of COVID-19 medical-educational alliances with the community.



Félix Negrón

With over 30 years of international experience, Félix Negrón, in his tenure as VP of Operations at Medtronic, was responsible for over 6000 employees, serving as Group VP of Operations for the global Diabetes business, VP of Puerto Rico Operations, Corporate Leader for Lean, Six Sigma, Design for Manufacturability and Global Manufacturing Strategy.

Félix was also the Operations Quality VP in Medtronic with responsibility of 27 sites globally. Prior to Medtronic, he was Senior VP of Global Operations in Pall Corporation and Executive Director in J&J. Now, as Founder of NY Consulting, is advising entities such as like Stryker Corp, Sartorius BioTech, J&J and the Department of Economic Development in Puerto Rico.



Michael A. Caligiuri, MD.

President of the City of Hope National Medical Center in Los Angeles, California. He previously served as CEO of The Ohio State University (OSU) James Cancer Hospital and Director of OSU’s Comprehensive Cancer Center, where he oversaw the construction of the 3rd largest cancer hospital in the U.S. and recruited over 300 physicians and scientists. His research on immunotherapy for tumors has led to over 400 peer-reviewed publications and pivotal discoveries in the development of CAR NK cells for cancer therapy. Dr. Caligiuri has conducted clinical studies involving NK cells for over 1,000 cancer patients, mentored over 100 students, and received numerous prestigious awards. He has held leadership roles in various professional organizations and co-founded several initiatives, including Pelotonia and Cytolimmune Therapeutics.

EXECUTIVE TEAM



Eng. Luz A. Crespo
Chief Executive Officer (CEO)

Ms Crespo has been the Chief Executive Officer of the Puerto Rico Science, Technology and Research Trust since 2015, leading the organization to outstanding achievements and building the innovation capacity of the country. She was previously appointed as General Manager of Hewlett-Packard Puerto Rico, where she served for 31 years. During her tenure, she successfully lead the HP Computing & Printing and Personal Systems business units. She was also the first woman to become president of the Puerto Rico Manufacturers Association.

Lucy is a key figure in the tech and science industry of Puerto Rico due to her ample experience and contributions to these sectors. She holds a bachelor's degree in Industrial Engineering from the University of Puerto Rico (Mayagüez Campus), is a graduate from the Kellogg's Graduate School of Management of Northwestern University for Executive Development and a member of the Alpha Pi Mu, the Industrial Engineering Honor Society. She has also served in several advisory roles and received multiple recognitions for her leadership.



Puerto Rico
Science, Technology
& Research Trust



Gilberto Márquez
Chief Financial Officer (CFO)

In February 2012, Gilberto Márquez joined the Puerto Rico Science, Technology and Research Trust as Advisor and promoted to Chief Financial Officer in 2018. Mr. Márquez has over 14 years of experience involved in initiatives related to technology commercialization. Prior to joining the Trust, Mr. Márquez was Director of the Center for Innovation and Technology, a specialty service center of the Puerto Rico Small Business and Technology Development Center hosted by the Inter American University of Puerto Rico. Mr. Márquez has participated as proposal reviewer panelist for the National Science Foundation's Small Business Innovation Research (SBIR) Phase II program. He is an accountant and holds a master's degree in biotechnology management (MBM) from IE Business School in Madrid, Spain.



Doira Díaz, Esq.
General Counsel and
Administrator

Since 2018, Ms Díaz advises the Chief Executive Officer, the Board of Trustees and the Trust's program directors and managers on applicable regulations, processes and procedures related to the administration, human resources, and general services of the Trust. She is also the Vice President of the Board of Trustees of the Puerto Rico Green Energy Trust, a position she holds *ad honorem*. Prior to joining the Trust, Doira held various positions at top law firms, covering matters in the areas of real estate, environment, land use and telecommunications with emphasis in real estate development, permitting matters and related disputes at the administrative and judicial levels. She also served as Deputy Advisor to the Governor of Puerto Rico for Energy, Environment, and Infrastructure. She holds a Bachelor of Arts degree from the University of Pennsylvania and a Juris Doctor degree from Fordham University and is also a notary public and a certified mediator. She is admitted to practice in the court of Puerto Rico, New York and New Jersey.



Inés Álvarez De La Campa
Human Resources Director

Ms Álvarez de la Campa has a track record of analyzing companies and organization needs and executing plans to improve their competitiveness and overall employees' satisfaction. She has dedicated her career to the management of human resources, talent acquisition and administration in companies like Bristol Mayers Squibb and Johnson & Johnson.

Álvarez holds a bachelor's degree in Accounting and a master's degree in Business Administration. She is also certified as a Personnel Administrator and Yellow Belt Certified (BMS OpEx).



Lupe Vázquez
Chief Communications
& Marketing Officer

Ms Vázquez has served as the organization's Chief Communications Officer since 2015. Prior to that, she served as editor and reporter for more than 30 years at the local newspaper El Nuevo Día. As a journalist, she led the direction of writers, designers and freelancers for the creation of reports on diverse topics such as news, lifestyle, business, education, among many others. Her experience also includes the redesign to improve the reach of print and digital platforms, the conceptualization of new editorial products, brand management, integration of sales strategies and the execution of initiatives to improve revenue and readership models. Lupe holds a bachelor's degree in Liberal Arts and a Master's degree in Translation both from the University of Puerto Rico (Río Piedras Campus). In 2012 she was recognized with the WAN-IFRA award for her leadership in the digital transition of Logon, a newspaper designed for teenagers at El Nuevo Día.



Luis Nieves, PE
Chief Facilities
Management Officer

Luis Nieves is the Chief Facilities Management Officer. He worked for Hewlett Packard Enterprise until 2018 where he engaged in rolls which included Project Engineer, Business Development and Supply Chain Management defining logistics solutions for HPE for subcontractors located in eastern Europe and Mexico. He also had a role as Strategic Sourcing Manager at Pall Life Science (now Cytiva) until 2021.

Luis holds a bachelor's degree and a master's degree in industrial engineering from the University of Puerto Rico, Mayagüez Campus, and completed a minor in accounting from the same institution in 1991.



César Piovanetti
Chief Information Officer (CIO)

Piovanetti has over 15 years of experience in the geographic information sciences (GIS) field, as GIS and technology consultant in various locations in the United States and Puerto Rico. Throughout his career, he has held various roles in the technology sector integrating cloud software solutions for the public, private and NGO sector. Experienced in designing and deployment of platforms and solutions as a service in the Microsoft Azure Cloud, Office 365 integrations at the enterprise level as well as logistic operations using geolocation technologies. During the last couple of years, as part of the Trust's technology team, Mr. Piovanetti has led implementations for federal, local and NGO funded geospatial projects.

Education and Capacity Building for Fiscal Year 2023-2024

Mission

Our Education and Capacity Building initiatives aim to provide participants with instruction, mentorship, and other development opportunities in strategic sectors of science, technology, and entrepreneurship. We strive to give Puerto Ricans the tools they need to be more competitive in science and technology fields or to pursue entrepreneurial initiatives.

The Trust supports and funds various events, conferences, educational activities and summits. Also, through our sponsorship policy, we have powered events and activities related to R&D, entrepreneurship, public health, and innovation.

The Trust invested **\$133,7690.00** in science, technology, research & entrepreneurship training initiatives, including the following **21 organizations**:

- University of Puerto Rico Rio Piedras
- Obsidis Consortia
- Universidad Central del Caribe
- Ernesto Gonzalez Torres
- Jesennia Bonilla Tirado
- The Institute for Cognitive Neuroscience
- National Women’s Collaborative
- University of Puerto Rico Mayaguez Camp
- University of Puerto Rico Foundation
- Palacios Consulting LLC
- Voces Coalicion de Inmunizacion
- Evolving Space Corporation
- Asociacion de agricultores de Puerto Rico
- Centro de Periodismo Investigativo, Inc.
- INDUNIV -Industry University Research Center
- Universidad de Puerto Rico Bayamón
- Colegio de Arquitectos y Arquitectos de Paisajistas de P.R.
- CAPALBIOART La Parguera Corp.
- Christian Nazarene Academy , INC.
- Ecoexploratorio
- Engine4

On the contrary, the following organizations are allies of our organization with sponsorships and support for various events and programs within our strategic pillars. Partnerships are part of our growth and strengthen the relationships of the ecosystems we facilitate. The Trust has received **\$410,084.16** from these **41 organizations** have sponsored some of our events:

- Ferraiuoli LLC
- DECA Analytics LLC
- Banco Popular de PR
- Endeavor
- Marsh Saldaña
- First Bank Puerto Rico
- Permisos SOS
- Aeronet PR
- Triple-S Management
- Puerto Rico Telephone (PRT)/Claro
- Hablando Digital
- CLB Tax
- Centurion Insurance Agency
- Derecho SOS
- Invest Puerto Rico
- Liberty
- Banco de Desarrollo Económico de P.R.
- Puerto Rico SBTDC
- DDEC
- Municipio de San Juan
- AARP
- Compañía de Turismo
- Walmart PR
- Puerto Rico Farm Credit
- Caribe Federal Credit Union
- Departamento de la Vivienda
- Mi Perfil.Co
- Atlantic University College
- Titin Foundation
- Aeronet PR
- Fondo de Inversión y Desarrollo Cooperativo
- BCW Puerto Rico
- Municipio Autónomo de Ponce
- Titin Foundation
- 10,000 Small Businesses Goldman Sachs
- Business Eye
- Centro de Negocios y Desarrollo Económico
- Bravo Family Foundation
- Centro para Puerto Rico
- Coopaca
- Kauffman Foundation Matching

The Trust establishes alliances with a diverse range of organizations, educational, private, and non-profit, and the result is a bigger map of stakeholders to reinforce the Trust’s mission & vision. These are the **more than 38 organizations** with which the PRSTRT and its programs has officialized alliances during this fiscal year.

- Grupo Ferré Rangel (Junte Boricua)
- Menten Puertorriqueñas en Acción
- Universidad de Puerto Rico
- Municipio de Bayamón
- Administración de Vivienda Pública
- World Mosquito Project
- Ministerio de Salud de El Salvador
- Banco de Alimentos de Puerto Rico
- Departamento de Salud
- American Academy of Pediatrics
- Ponce Medical School Foundation
- Municipio de Aibonito
- Ponce Neighborhood Housing Services
- Centro Comprensivo de Cáncer
- UPR – Recinto de Ciencias Médicas
- Decenas de Centros 330
- Escuela de Medicina San Juan Bautista
- Iglesia de Restauración Cristo para Todos Corp.
- Sociedad Intregrada LLC
- National Network of Public Health Institutes (NNPHI)
- Hispanic Alliance for Clinical & Translational Research in PR
- Arizona State University
- Municipio de Coamo
- Fundación Rimas
- CienciaPR
- DDEE
- UAGM – Carolina
- National Security Agency
- Municipio de Utuado
- Password Technical College
- Forward Learning
- The National Puerto Rican Chamber of Commerce, Inc.
- Universidad Interamericana de Puerto Rico – Ponce
- Industry University Research Center, Inc. (“INDUNIV”)
- Invest Puerto Rico
- Banco Popular de PR
- Ciudadanos del Karso Inc.
- Para La Naturaleza

Who We Sponsored



Who Are Our Sponsors





www.prsciencetrust.org



Puerto Rico
Science, Technology
& Research Trust



Infrastructure and Operational Areas

The operational facets of the P.R. Science Technology & Research Trust, including IT, Human Resources, Finances, Administration, the Legal Department, Facilities, and Communications, enhance the organization's overall productivity and efficacy.

INFRASTRUCTURE & FACILITIES

SCIENCE CITY

The Forward Center project has made significant progress, with the building officially inaugurated on April 3, 2024. The outfitting of the first floor, completed at \$1,710,000, now provides three laboratory-type spaces for lease. Paralell-18 personnel have moved from the Santurce office into the 3rd floor, while the Comprehensive Cancer Center has leased the entire second level. Additionally, landscaping and sidewalk work for the building has been completed, and a new temporary car park is planned to accommodate up to 60 cars. The Innovation Center has added new energy-efficient LED lighting to all office and conference areas. The Research Institute Core Laboratories has recently expanded its facilities with a new laboratory space on the 1st Floor of the Innovation Center. The project, which has a contract amount of \$900,000.00, is currently 90% complete. This new space will enhance the institute's capabilities and support ongoing research and innovation efforts.

The Department of Security will build a 200,000-square-foot Safety Room and Emergency Operations Center for Puerto Rico, on parcels B-1 and B-2, rented from the PRSTRT. The Science City Boulevard will be a half-mile road with a right of way of 293 meters, located in Science City. This boulevard will have four lanes to accommodate vehicular traffic from two directions. It will include landscaping, a bike lane on the wet side and wide pedestrian-facing sidewalks with street furniture. Additionally, it will consist of a new bridge over Highway PR-18 (Expreso Las Américas), enabling its continuity from the north entrance of the Science City Project on Highway PR-21, towards the segment of the boulevard currently being built in front of the Comprehensive Cancer Center, extending towards the south entrance of the Medical Center. This boulevard is essential for the full development of the Science City.

A new facility of up to 20,000 square feet will be designed and constructed for PRVCU, serving development activities, the establishment of a mosquito factory, and a storage area for equipment and vehicles. A new grant was submitted to secure funds for constructing a new 80,000-square-foot Forward II Building to provide space for the Research Institute Core Lab and PRCCI operation expansion. This building will include laboratory space for developers and Bio-Tech entrepreneurs, workforce development space, a theater, and classrooms.

Benefits

To support private development efforts to attract tenants to Science City, developers of the site can take advantage of numerous tax incentives including:

- Full real estate tax abatement
- Full sales tax abatement on construction materials and capital equipment
- Full exemption from Federal Income Taxes for bona fide residents of Puerto Rico and Puerto Rican corporations
- Competitive tax incentives to attract investors, tenants and employees

Specific incentives

- Up to \$250,000 of the compensation received by eligible researchers/scientists residing in Puerto Rico and conducting work within the Puerto Rico Science District created by Act No. 214 of 2004, as amended, will be exempt from Puerto Rico income taxes (Section 1031.02(a)(27)).
- Sales tax exemption on construction materials and capital equipment (11.5%)
- New Tax Market Credit Eligible Location

Forward Center

- Building officially inaugurated on April 3, 2024.
- Outfitting of 1st floor at a cost of \$1,710,000, was completed.
- First level outfitting provides three laboratory-type spaces for lease.
- Paralell18 personnel was moved from the Santurce office into the 3rd Floor.
- Comprehensive Cancer Center leased entire 2nd level.
- Landscaping and sidewalk competed.
- New temporary parking planned to park up to 60 vehicles.

Innovation Center

- New energy efficient LED-type lighting added to all office and conference areas.

Research Institute Core Laboratories

- New laboratory space is on the 1st floor of the Innovation Center.
- The contract amount is \$900,000.00.
- The project is 90% completed.



HUMAN RESOURCES DEPARTMENT

HUMAN RESOURCES DEPARTMENT

The Human Resources Department plays a pivotal role in fostering a dynamic and inclusive work environment. Under the leadership of Ms. Inés Alvarez de la Campa, the department has made significant strides in enhancing the organization's operational efficiency and employee satisfaction. This year, we have focused on expanding our diverse talent pool, refining our induction programs, and investing in professional development to ensure that our workforce remains agile and well-equipped to meet the challenges of tomorrow. Our commitment to nurturing professional excellence is evident in the myriad training programs, certifications, and wellness initiatives that we have implemented, all designed to support our employees' growth and well-being.

The following sections detail the key initiatives and achievements of our Human Resources Department over the past year, showcasing our relentless pursuit of fostering a supportive and innovative workplace.

Human Capital (Professional Excellence)

Our team consists of a diverse group dedicated to our mission. Women make up 63% of our workforce, particularly in STEM roles, and they represent 50% of our management team. This diversity enriches our ideas and creativity in executing work plans.

Recruitment

This year, we launched a new Induction Program to give over 35 new employees a thorough understanding of our mission, vision, and policies, affirming our status as a distinguished employer in Puerto Rico. Led by Human Resources, the program brings together different departments and leaders to create a comprehensive training and support team.

Trainings

Leadership Academy

Training leaders is a top priority for us. This year, we're advancing with our second cohort, training 14 supervisors and managers in organizational leadership, modern supervision trends, group management, and providing them with several professional coaching sessions.

Project Management Certifications

20 employees completed courses to earn the Project Management Associate Certificate.

1 employee obtained the CAPM (Certified Associate Project Manager) certification granted by the Project Management Institute.

Mental Health First Aid Certification

This year 25 employees were certified in Mental Health First Aid.

Talks / Workshops:

The Magic of LinkedIn

30 employees were trained in the relevance of promoting our organization, events and personal branding through LinkedIn.

Coffee Talks

We provide four (4) personal development sessions to support our staff in topics aimed at self-knowledge, time management, stress management, among others. The average participation per session fluctuated between 60-65 employees per session.

Professional Development

As part of our commitment to career growth, we are training 10 key talents for Team Leader roles. Additionally, nine exceptional employees have been promoted to support their further organizational development.

Summer Internship Program

We launched the first Summer Internship Program with 14 participants. They gained work experience, attended educational workshops, and networked with the Trust's directors and our CEO.

Employee Commitment

We celebrated Employee Appreciation Day for the first time by giving our team the afternoon off on Friday, March 1 to honor their commitment and dedication.



ADMINISTRATION

ADMINISTRATION

The Administration department serves as the backbone of our organization, seamlessly integrating various areas to ensure smooth operations and support for all staff members. Led by Doira Díaz Rivera, Esq., the department’s responsibilities span across legal advisory services, wellness programs, health and safety initiatives, and procurement logistics. The Administration department plays a critical and multifaceted role in fostering a supportive and efficient work environment, reflected in their impressive metrics and broad scope of responsibilities.

Legal:

- Strategic advice to Board of Trustees and Management
- General legal advice to all Trust programs
- Advised and coordinated Sponsorship Program (over 29 applications processed)
- Negotiation with other entities, including federal and local governments
- Drafting and revision of legal documents
- Over 1,800 legal consultations
- Solid continued legal education compliance

Purchases:

- Logistics support to all Trust programs
- Over 1,800 purchase orders processed
- Total purchases: \$10MM
- Vehicle fleet management – increase from 19 to 28 units
- Travel, flights and hotels reservations management – new responsibilities

Wellness Program:

“Control Your Weight and Take Care of Your Health” program

- Group exercises three (3) per week
- Weekly ergonomic exercises
- Workshops:
 - Essential Habits
 - Destressing
- Management of emotions during challenging climate change situations
- Back-to-School Boot Camp
- Christmas Boot Camp
- Weight loss challenge
- “Los arrepentidos” Race
- Spa Days

Special Classes:

- Zumba
 - Tropical Rhythms
 - Ergo Break

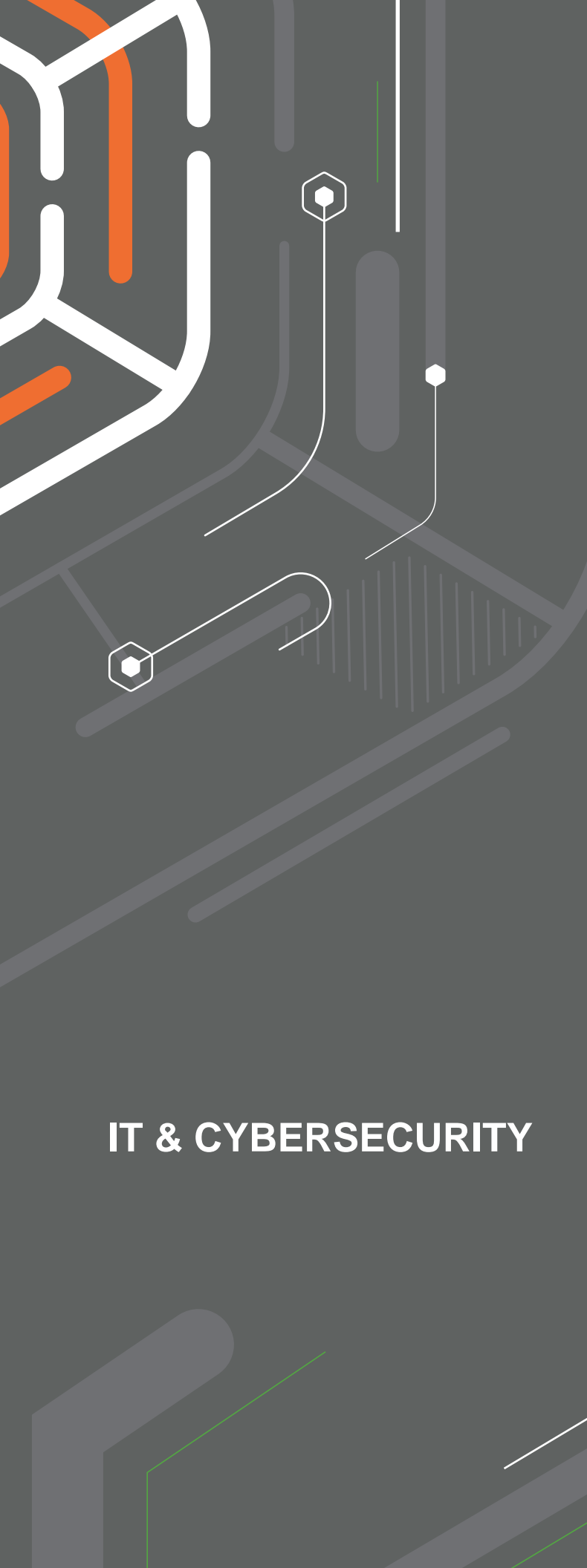
Health and Safety:

Trainings:

- Initial EHS Training for New Hires Onboarding Process - 54
- Defensive driving /Fleet safety - 54
- Health and Safety Aspects in Emergency Management - 39
- Biosafety Program/ Bloodborne Pathogens - 25
- Hazard Communication and Personal Protective Equipment - 54
- Exit Routes, Emergency Action Plans and Fire Prevention (San Juan, Santurce, Ponce) - 54
- Caribe Wave, Ponce - 25
- Health and Safety Aspects - 100
- Heat Stress - 100
- EHS Workshop - 75
- Tabletop EHS - PRVCU Supervisor 10
- Hurricane Emergency Preparedness- 125

Updated internal procedure in case of identifying cases of COVID-19 and management of infectious diseases

- Fleet Safety Program Update
- Fire Prevention Safety System Update
- Medical Surveillance Plan for PRTRT and PRVCU staff.



IT & CYBERSECURITY

IT & CYBERSECURITY

The IT & Cybersecurity team has made remarkable advancements this past year. Their innovative efforts have not only fortified our organization's technological infrastructure but have also streamlined various administrative processes, thereby enhancing overall efficiency. This executive summary encapsulates the significant achievements and highlights of our IT team, emphasizing their unwavering commitment to excellence.

Training of the workforce

- a. Artificial intelligence
- b. Cyber security

Project management

- Automation of administrative processes in Power Apps
 - a. Expenses reimbursement approval
 - b. Invoices approval
 - c. Car & equipment reservations
- Strengthening the cybersecurity of our entire cloud infrastructure.





DESIGN, MARKETING & COMMUNICATIONS

The Communications & Marketing division, also known as DMC (Design-Marketing-Communications) defines the communication strategy for the Puerto Rico Science, Technology & Research Trust and its programs. Guided by the strategic pillars of Research & Development, Entrepreneurship, Public Health and our Education programs, we give visibility to the discoveries, achievements and talent that form the Trust. Through communication and marketing initiatives, we bring to life the mission of our organization, building upon the visibility, credibility, and achievements of the Trust and its programs.

Over \$3.9M in Non-Paid Publicity

The Trust has gained over \$3,935,494 in non-paid publicity by successfully engaging the media and securing coverage that raises awareness and credibility. This represents a 12.61% increase compared to the last fiscal year. This high level of non-paid publicity indicates that the Trust’s work is newsworthy, has a strong impact and is leveraging resources, relationships, and reputation to gain visibility.

IMPACT NUMBERS

\$3.9M

Non-Paid Publicity

+30

Public Events Supported

179

Videos Produced

+4k

Social Media Posts

789

Email Campaigns

10

Podcast Episodes Produced

+71k

Website Visitors

New

Donations Webpage

Agency	Non-Paid Publicity	Impressions	Media appearances
The Big Think Group	\$3,613, 445.68	123,045,523	697
BCW	\$267,999.04	423,334,04	46
Latin2Latin	\$54,050.00	47,032,339	3
TOTAL	\$3,935,494,72	593,412,343	746

Abre el Forward Center a un costo de \$7.1 millones

El edificio, ubicado en los terrenos de la antigua penitenciaría estatal "Ojo Blanco", será la nueva sede de Parallel18.

Trabajan propuesta para desarrollar biotecnología

Trabaja la industria farmacéutica con el apoyo de TTO.

FCTIPR invierte \$1.5M en proyectos locales de investigación

El FCTIPR para Ciencia, Tecnología e Investigación de Puerto Rico invierte \$1.5 millones en proyectos locales de investigación.

Biden designa centro tecnológico para Puerto Rico

También establecerán en 32 estados para crear empleos

Pre18 graduó 22 empresas puertorriqueñas

Parallel18, el programa del FCTIPR para Ciencia, Tecnología e Investigación de Puerto Rico (CTIPR), celebró el Día de Graduación de su programa de emprendimiento, Pre18.

Fructífero encuentro entre emprendedores puertorriqueños

En la búsqueda de impulsar sus ideas de negocios, más de 1500 personas participaron y fueron presentados por el FCTIPR en el Centro de Convenciones.

Vincula la sostenibilidad y el desarrollo

Trabaja la industria farmacéutica con el apoyo de TTO.

Millonario el impacto de las investigaciones clínicas

El nuevo centro de investigación de la PRCCI en el sector de la salud.

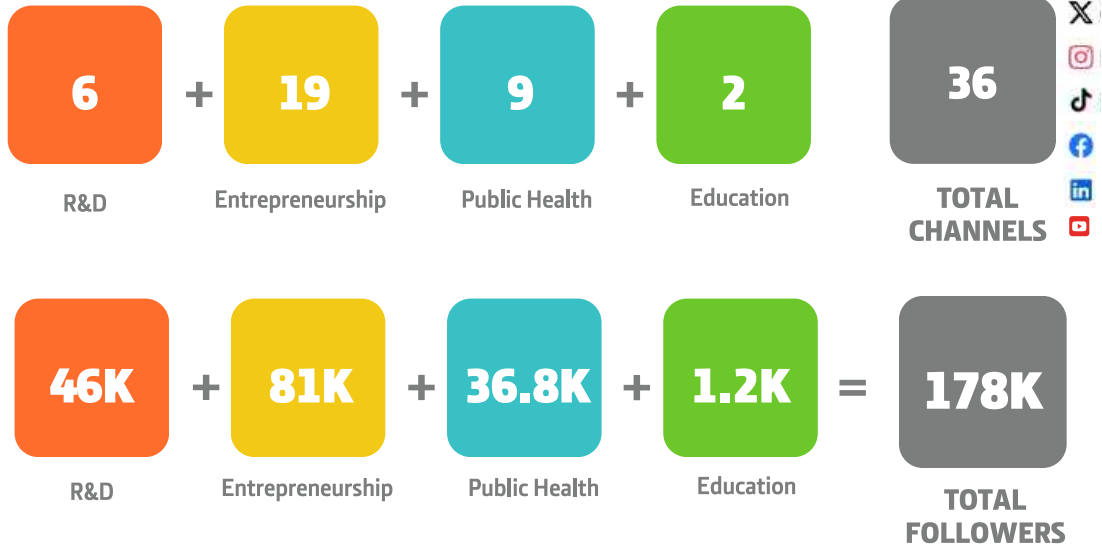
A TODO VAPOR EL CENTRO DE INVESTIGACIÓN CLÍNICA

El nuevo centro de investigación de la PRCCI en el sector de la salud.

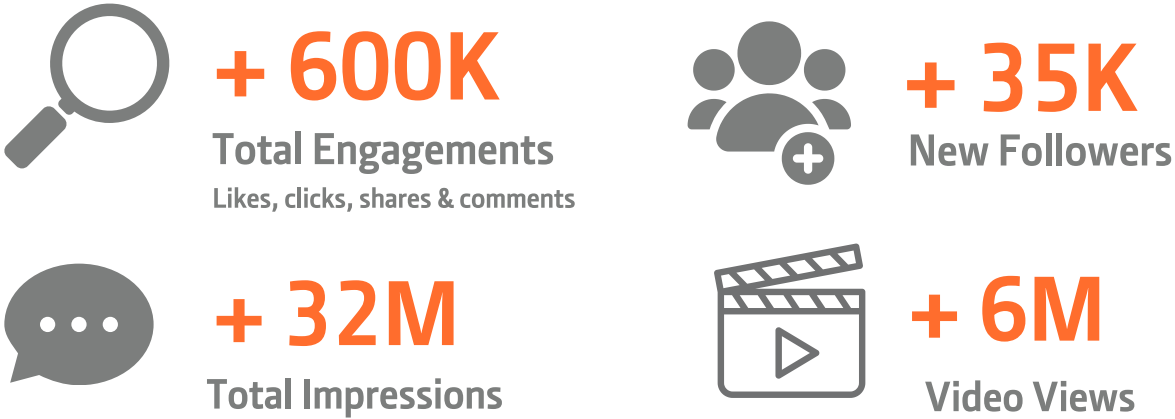
Owned Media Performance

Owned media, such as a nonprofit's website, social media and internal channels, can be a powerful tool for outreach efforts. By regularly updating these platforms with compelling and relevant content for our audiences, we directly engage and build a loyal community.

The Trust and all its programs currently own 36 social media channels, with over 178K followers.



The performance metrics of our digital channels collectively underscore the effectiveness of our strategies in enhancing outreach and engagement.



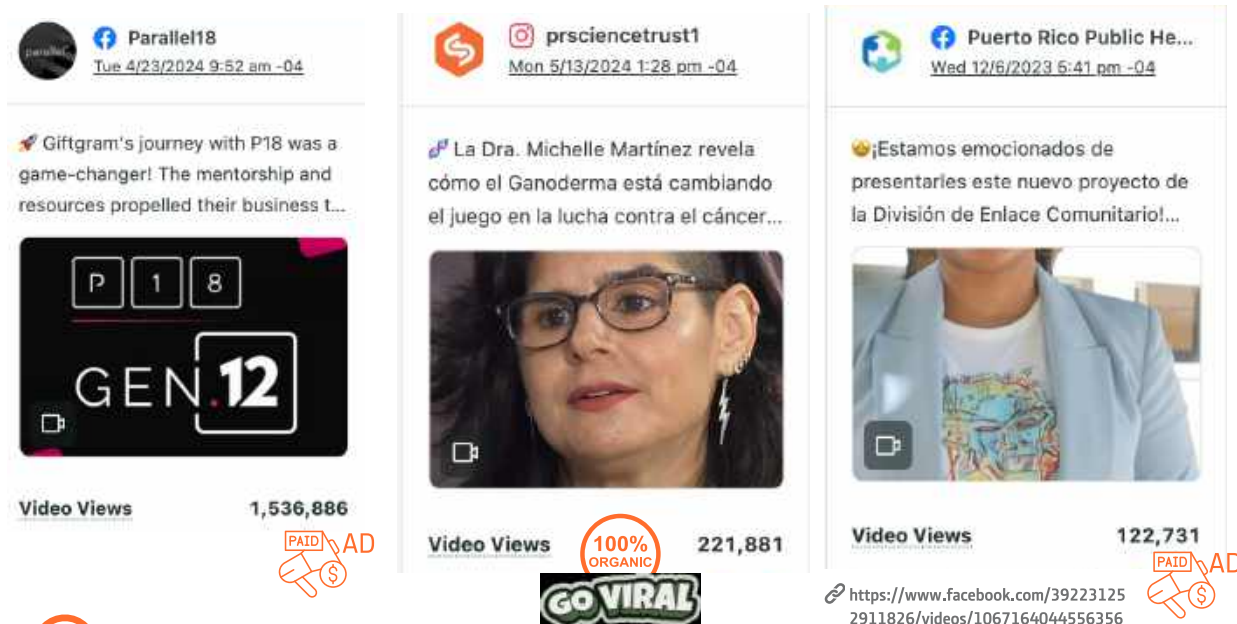
Top 3 Posts

When analyzing the performance of the top 3 social media posts, we can highlight efforts from parallel18, PR Science Trust and PR Public Health Trust. Parallel18's post excelled in driving traffic, achieving the highest engagement primarily through post link clicks, though it generated fewer direct interactions like comments and shares. PR Science Trust's post stood out for its strong organic engagement, with high levels of likes, shares, and saves, demonstrating effective content appreciation. Puerto Rico Public Health's post had balanced engagement across reactions, comments, and shares, though it was less effective in driving clicks to external content.

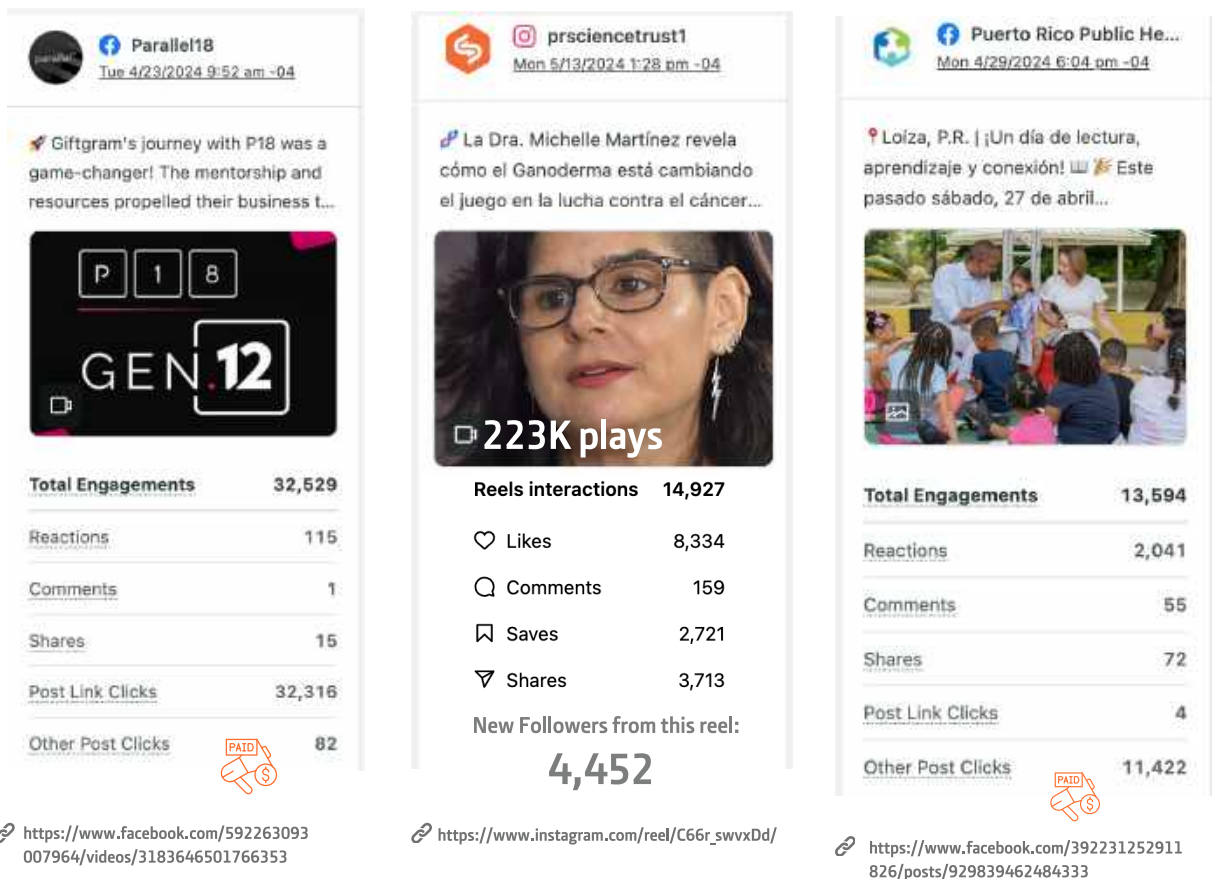


TOP 3 VIDEOS

From June 1, 2023 to July 31, 2024, our video views soared from 36,643 to 335,449, marking an increase of 815.5%.



TOP 3 POST ENGAGEMENTS



PR Science Trust Social Media Performance

In terms of audience growth across the PR Science Trust channels, Instagram saw the highest growth with 5.4K new audience members, a significant increase of 400.9%. LinkedIn also performed well, gaining 3.7K new members, up 16.5%. TikTok had minimal growth, adding only 13 new members. Facebook experienced a moderate growth of 1K new members but saw a 37% decline in growth rate and the platform X (formerly Twitter) gained 62 new members but faced a 43.6% decline in growth; this stagnant growth could potentially be due to the shift in usage and popularity in both platforms.

Our audience is predominantly female and primarily falls within the 25-44 age range, with a significant portion also in the 45-56 age group. These insights showcase the strong performance of key platforms and underscore the importance of refining our strategies to further engage our audiences.

Audience Size



Overall: 41,025

Performance by Social Media Platform

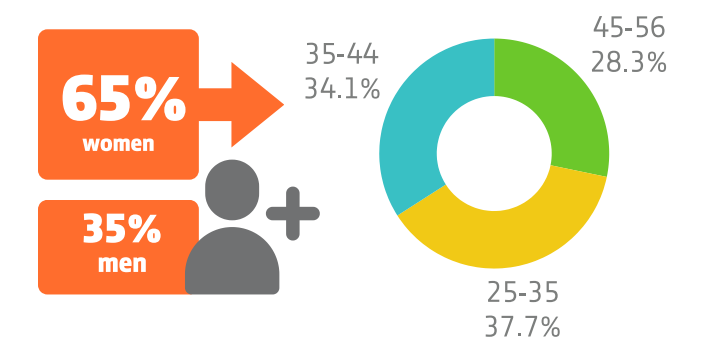
Net Audience Growth

The number of new audience members gained minus the audience members lost.

Facebook:	1K	37% ▼
Instagram	5.4K	400.9 % ▲
LinkedIn	3.7K	16.5% ▲
TikTok	13	
X	62	43.6% ▼

Visitor Demographics

Audience and age range that follows us on Instagram and Facebook.



PR Science Trust Social Media Community highlights

Social media communities and mentions are invaluable for our visibility, as they amplify our messages, engage broader audiences, and foster trust. Federal designations and federal organizations efforts have included the Trust in their key messaging.

N.C. Commerce @NCCommerce · 11/29/23
Earlier today, #NCCommerce Secretary Machel Baker Sanders met with Mr. Manuel Cidre, Secretary of the Department of Economic Development and Commerce (DDEC) in Puerto Rico.

DDEC Puerto Rico and 2 others
1 3 282

N.C. Commerce @NCCommerce
Secretary Sanders, along with Mr. Cidre and his team discussed best practices, PPropósito (the strategic framework for the economic development in P.R.) and the role of the @prsciencetrust1.

Financial Oversight & Mgmt B... @FOMBPR
#FOMBPR member John Nixon talks about the @prsciencetrust1 and the importance of working together to promote Puerto Rico's economic development. Nixon and fellow #FOMBPR member @biggsag and Executive Director Robert Mujica visited the P.R. Trust and met with staff.



U.S. Commerce Dept. @CommerceGov
The Biden-Harris administration, through @CommerceGov's @US_EDA, announced the designation of 31 Tech Hubs in regions across the country.

These #EDATechHubs are located across 32 states & Puerto Rico & represent a cross-section of urban & rural regions.



Deputy Secretary Don Graves @DepSecGraves
The PRBio Tech Hub, led by @prsciencetrust1, aims to advance the region as a global leader in biotechnology. eda.gov/funding/progra...



Fideicomiso TV & Spotify

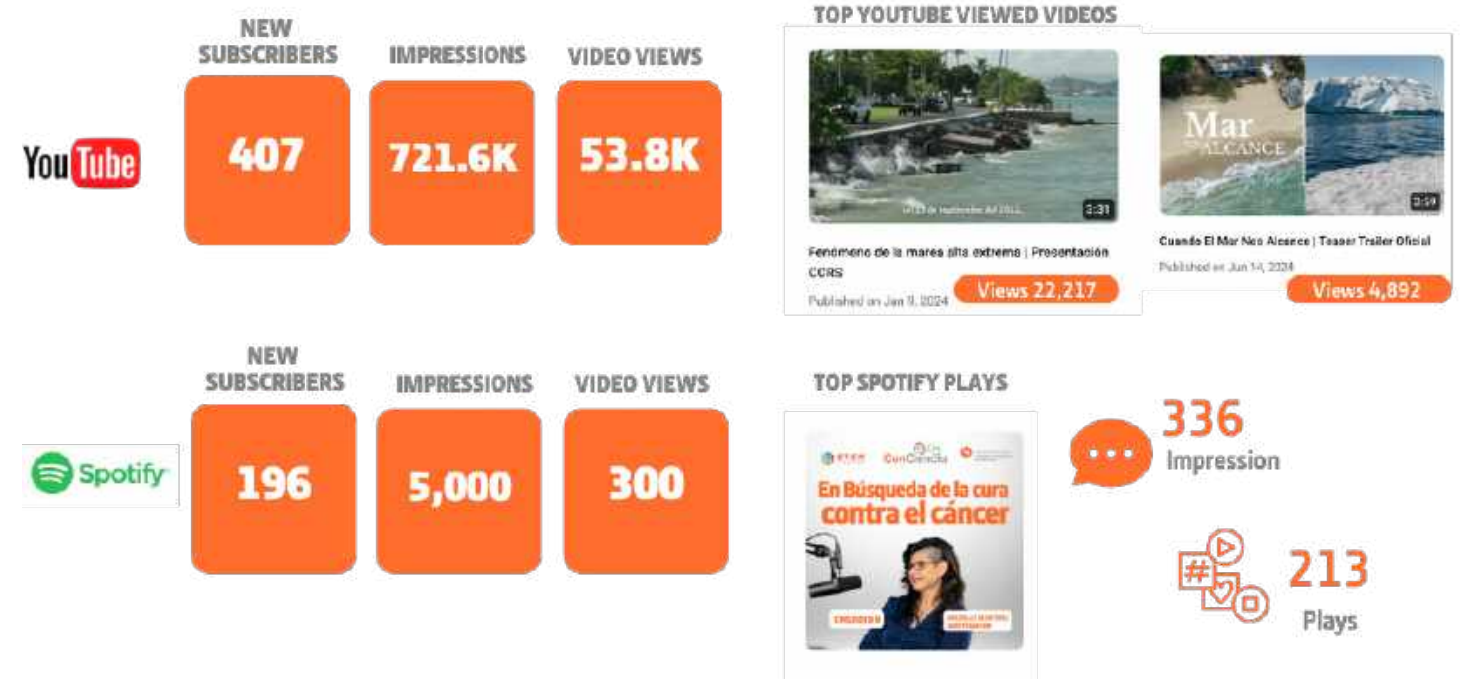
We've redesigned our webpage to enhance user-friendliness and to more effectively highlight content by pillars and program initiatives. With integration to our YouTube channel, the platform allows for simultaneous updates, keeping our content current and relevant. This upgrade has also led to a notable increase in both subscribers and visits across our platforms.

The performance of the top content in YouTube and Spotify shows strong engagement. On YouTube, the channel gained 407 new subscribers, achieved 721.6K impressions, and recorded 53.8K video views. The most popular videos were organic views and reached 22,217 and 4,892 views respectively. On Spotify, the channel attracted 196 new subscribers, generated 5,000 impressions, and had 300 video views. A highlighted podcast episode received 336 impressions and 213 plays. Overall, YouTube outperformed Spotify in terms of reach and engagement. Nevertheless, both platforms show growth potential and interest from our audiences.



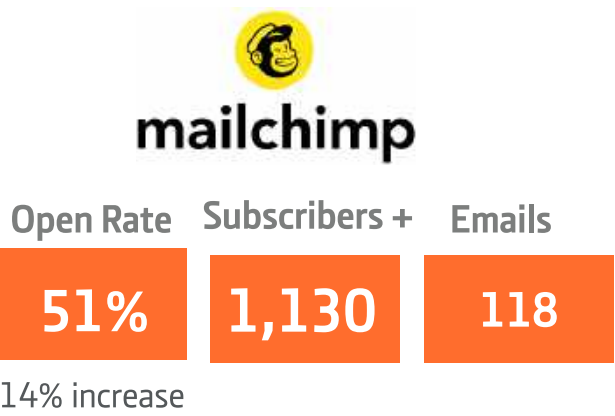
ConCienca Podcast

ConCienca is a podcast presented by the Trust and driven by the STEM Education program in its first two seasons. This podcast features experts who share their experiences and knowledge to teach us in a simple way how science connects with us. The first and second seasons highlighted various topics, including herpetology, cancer, computer science, artificial intelligence, meteorology, and more. These episodes featured distinguished guests such as Ada Monzón and prominent experts like Ana Quintero, Dr. Michelle Martínez, among others. The podcast's performance has boosted organic subscriber growth on YouTube and Spotify channels, solidifying the Trust as a leading voice facilitating conversations on educational topics.



Customer Relationship Management (CRM) Highlights

The CRM efforts have been instrumental in optimizing our resources and amplifying our impact in the groups and communities we serve. They have enabled our programs to target email campaigns more precisely. Additionally, the streamlined communication features allowed us to send personalized and automated updates to our contacts, resulting in an increase in open rate metrics. We have successfully managed over 111K contacts between the Hubspot and Mailchimp platforms, maintained over 2k subscribers and sent more than 789 email campaigns during this fiscal year.



Contact Audiences per Strategic Pillar

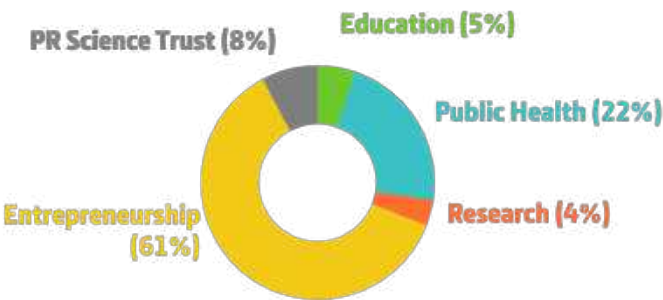
Our contact audience constitutes around 111K contacts. The distribution per pillar is in constant shift and growth. However, the current shares suggest that entrepreneurship is the dominant area of interest, followed by Public Health, Organizational efforts, Education and Research.

Strengthening Program Efforts with HubSpot

In addition to these efforts, migrating our programs from Mailchimp to HubSpot has been a key component of our overall strategy to enhance operational efficiency, improve data-driven decision-making, and strengthen engagement with our supporters. So far, 7 of 16 programs have been migrated to HubSpot, in addition to all corporate internal communications.



CONTACT DISTRIBUTION PER STRATEGIC PILLAR



Website Insights

More than 71K users have engaged with the website with an average engagement time of 59 seconds. Organic search and direct traffic are the dominant sources of new users, each contributing close to 30K users. This indicates strong search engine optimization (SEO) and brand recognition. Referrals and organic social media also contributed significantly to the website traffic.

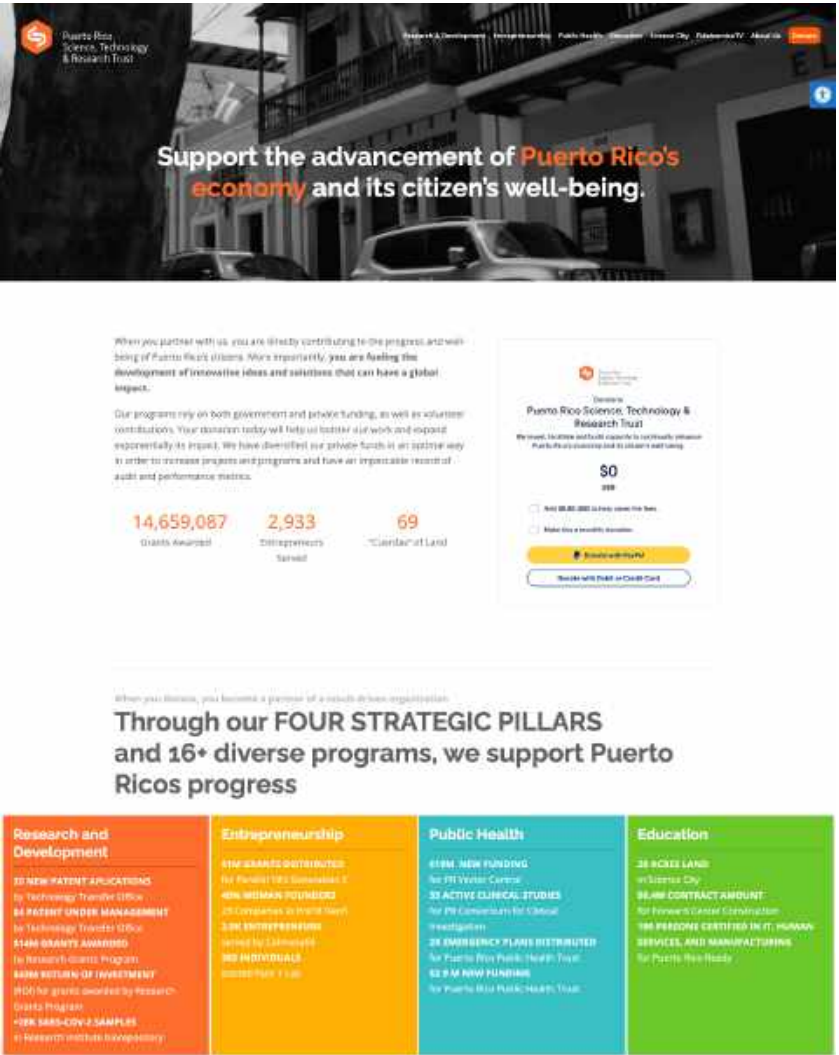
The most viewed page on the platform is related to “Puerto Rico Science, Technology,” with 37K views, indicating a strong interest in this topic. Other popular pages, such as the “Puerto Rico Public Health Trust” (12K views) and “HackLab Academy” (11K views), suggest that users are also highly engaged with content on science, technology, public health, and education. Additionally, pages focusing on research grants and team information, which received 6K-7K views, highlight the audience’s interest in funding opportunities and the organization’s leadership.

New Donation Page

The donation webpage was redesigned to better align with our current brand image, enhance the overall user experience and promote a better engagement with potential collaborators and donors.

What’s Next

- Continue to improve the Trust’s annual metrics for unpaid advertising, digital impressions, and spokesperson engagement.
- Evaluate our website’s performance to implement necessary modifications. Our goal is to ensure the homepage is user-friendly and effectively communicates our core values.
- Collaboration with PRSTRT Endowment plan and fundraising infrastructure



The background is a solid orange color with various white and light orange geometric shapes and lines. In the top left, there is a complex white line pattern that resembles a stylized 'S' or a maze. Below it, there are several thin white lines and small white hexagons. In the bottom right, there is a network of thin white lines connecting small circles, resembling a molecular structure or a data network. There are also several thick, rounded rectangular shapes in different shades of orange and white scattered across the page.

RESEARCH AND DEVELOPMENT



RESEARCH GRANTS
funds to grow

WHAT WE DO

As part of the Puerto Rico Science, Technology and Research Trust, the Research Grants Program is a structured, systematic, open, and competitive funding mechanism to support the development of science and technology research projects in Puerto Rico. The mission of the Research Grants Program is to provide proof-of-concept funding and incentives to advance locally developed R&D projects to become more competitive for federal and private funding and/or commercialization.

The Research Grants Program represents a critical source of competitive financial support for fundamental research and commercialization activities that build the knowledge economy, fuel innovation, and empower Puerto Rican scientists and entrepreneurs.

HOW WE DO IT

Our approach is characterized by competitive mechanisms and rigorous peer review. Through this process, proposals are evaluated by subject matter experts to assess their quality, feasibility, and potential impact. By employing such a system, we ensure that resources are allocated to projects with the highest scientific merit, fostering transparency and encouraging excellence and innovation. Additionally, we are committed to fostering initiatives that promote collaboration within the scientific ecosystem of Puerto Rico. By creating platforms, networks, and opportunities for researchers, we aim to enhance knowledge sharing, interdisciplinary collaborations, and the overall advancement of scientific research in Puerto Rico.

WHO WE CONNECT WITH

The Research Grants Program takes a “Researchers First” approach, striving to create an environment that empowers and supports researchers in Puerto Rico in their scientific endeavors. In addition, we engage subject matter experts from around the world who play a vital role in evaluating their proposals and providing valuable insights. By harnessing their expertise, we ensure a rigorous and comprehensive assessment process. The program also extends its support to research administrators, acknowledging their vital role in facilitating the smooth management of scientific projects. By assisting them, we contribute to advancing the overall landscape of scientific research,

Impact Numbers

148

Grantees since
program inception

12

New Grantees
in this Fiscal Year

\$16,308,572

in Grants Awarded

\$60,021,220

Return on Funding

394

Attendees to our Forward
Research & Innovation Summit

533

Beacon Users

Type of Proposal		Institutions	
Basic/Translational Research	26	University of Puerto Rico - Río Piedras Campus	8
Technology/Product Development for Commercialization	10	University of Puerto Rico - Mayagüez Campus	6
Strategic Sectors		University of Puerto Rico - Medical Sciences Campus	6
Biotechnology and Life Sciences	19	For Profit	5
Agriculture	4	Ponce Health Sciences University	3
Information and Communications Technology	3	Universidad Central del Caribe	3
Clean Technologies / Renewable Energy	2	Non-Profit	2
Environmental Sciences	2	Ana G. Méndez University - Cupey Campus	1
Medical Devices	2	University of Puerto Rico - Cayey Campus	1
Other / Interdisciplinary	2	University of Puerto Rico - Ponce Campus	1
Aerospace	1		
Clinical Trials	1		

10 Funded Projects \$1.5M Awarded

Principal Investigator	Institution	Proposal Title
Mr. Andrés Calle	Docare LLC	Detecting clinical trial communication behavior and preference patterns at a large scale to predict and improve minority-first clinical trial subject retention
Dr. Beatriz Zayas	Ana G. Méndez University - Cupey Campus	Markers for Hypoxia in Skin Cancer
Dr. Camilo Mora	University of Puerto Rico - Mayagüez Campus	Catalyzing Innovation in Extracellular Vesicles: Exploiting Tissue-Specific Extracellular Vesicles for Bioinstructive Substrate Engineering via Titanium Particle Adsorption and Delivery
Dr. David Miranda	Cultimar Technologies, Inc.	Fostering the Creation of Small, Rural Aquaculture Farms by Evaluating the Technical Feasibility of Red Snapper Aquaculture and Establishing Autonomous Aquaculture Modules
Dr. Ivette Suarez Arroyo	Universidad Central del Caribe	The role of SCAMP3/ERK axis in the progression of breast cancer
Dr. Kenneth S. Hughes	University of Puerto Rico - Mayagüez Campus	Landslide Hazard Science and Risk Communication in Puerto Rico
Dr. Lisandro Cunci	University of Puerto Rico - Río Piedras Campus	Activity Study of Intercalated Electrocatalysts for the Oxygen Evolution Reaction in Full Scale Alkaline Electrolysis Cells
Dr. Michelle M. Martinez Montemayor	Universidad Central del Caribe	Understanding the molecular mechanisms of ergosterol peroxide in aggressive breast cancers
Dr. Rodolfo J Romañach	University of Puerto Rico - Mayagüez Campus	Commercialization of an Integrated System for Sampling and Analysis of Flowing Powder Blends
Dr. Wanda I. Vélez -Torres	Universidad Central del Caribe	The role of 4R-cembranoid in age-related cognitive decline.

The Advanced Research Grant (ARG) is a solicited proposal mechanism that provides funding to advance locally developed science and technology projects to a point where these will be able to be further developed through alternate sources of funding and/or commercialized. Awards are up to \$150K. As previously reported, we received 44 letters of intent out of which we invited 37 to submit a full proposal. We received a total of 36 full proposals. During this fiscal year, we completed the peer review of these proposals.

Advanced Research Grant: Space Edition

In July 2023, we announced the Advanced Research Grant: Space Edition in collaboration with Rhodium Scientific. This is an innovate funding mechanism program that will enable Puerto Rican science and technology on the International Space Station (ISS) through a competitive, proposal-based selection process. It aims to propel Puerto Rico’s existing science and engineering industries to the forefront of space innovation by providing rapid ISS access, proven space flight hardware and operations, and expert space mission development consulting.

- Proposals were accepted for the following tracks:
- Biotechnology/Biopharma Science Mission
 - Hardware Technology Development Mission

Two projects from University of Puerto Rico, Mayagüez Campus were funded and are on track to be launched to the ISS. Results are expected to be reported next year.

New Grantees’ Recognition Event

Principal Investigator	Proposal Title
Dr. David Suleiman	Hardware Technology Development Mission: Polymer Nanocomposite Membrane Assembly for Water Purification on the International Space Station
Dr. Maribella Domenech	Biotechnology/Biopharma Mission: Impact of Microgravity on microcarrier culture of mesenchymal stem cells

On February 23, 2024, we presented the new cohort of grantees during our Advanced Research Grant Recognition Event. In this event we recognized 12 new grantees, including the recipients of the ARG Space Edition. These 12 projects received a total award of 1.6M.

The recognition event was a significant event where grant recipients were given the spotlight to highlight their innovative work and the positive impact, creating a sense of community and celebration among everyone involved.

BEACON

Beacon is a centralized platform that collects, displays, analyzes, and reports on academic activity throughout Puerto Rico. This data aggregation is highly beneficial for researchers and their institutions, fostering collaboration among different researchers and institutions, both public and private. Currently, the platform has 533 users.

On August 2023, we conducted a Hands-On Workshop at the University of Puerto Rico at Mayagüez. The event was attended by 24 participants, including registered researchers and prospective members. We guided them in utilizing the platform and offered technical assistance throughout the session. Also, we conducted professional headshot sessions to keep participants’ profiles updated, aiding them in expanding their professional networks.

Catalyzer Research Grant

During our Recognition Event we announced a new call for the Catalyzer Research Grant (CRG). The CRG enhances the competitiveness of local researchers by providing critical bridge funding to help them (1) obtain reproducible and robust preliminary results, (2) address any recommendations from previous grant reviewers to improve their R&D proposals and (3) secure reagents, laboratory materials, collaborations, or additional technical training necessary for the proposed goals. Awards are up to \$70K.

In April 2024, we received 40 letters of intent. Following our initial screening, we invited 32 applicants to submit full proposals. By June 2024, we had received 28 proposals, which are now under evaluation by our peer review group. This group comprises 57 subject matter experts from the United States, Canada, Mexico, Australia, Spain, France, the United Kingdom, Italy, and the Netherlands. We anticipate that the results of this evaluation will be reported next year.

Academix

In April 2024, we launched our first edition of AcadeMix, a networking event designed for universities, researchers, professors, and academic leaders seeking to broaden their research horizons and connecting with peers. The event was filled with networking, innovative discussions, and collaboration opportunities. Throughout the day, we explored The Trust’s initiatives focused on entrepreneurship like Colmena 66, SBIR and Parallel 18’s BioLeap, discussed contagious disease research alongside the Research Institute, presented the impact of our Research Grants Program, discovered tools to foster collaboration through our BEACON platform, understood the value of mentoring with our guest speaker, Dr. Greetchen Díaz, and further connected through a competitive Networking Bingo. Overall, it was a successful event for connecting researchers and fostering collaboration, and it opens the door for more events like these. We have additional events planned for July and the end of the year to continue building on this initiative.

Forward Research & Innovation Summit

With the mission of promoting innovation in science and technology, on November 30, 2023, the Forward Research & Innovation Summit: Science & Space Edition was held at the Caribe Hilton. Bringing together experts, entrepreneurs, and policymakers, the summit aimed to facilitate knowledge sharing, networking, and the development of cutting-edge ideas and projects.

With the goal of fostering collaboration and driving advancements in the fields of space exploration, technology, and scientific research, this edition of the summit was focused on Science and Space. By harnessing the collective intelligence and expertise of participants, the summit sought to propel Puerto Rico’s role in the global space industry, encourage the growth of local innovation ecosystems, and pave the way for impactful discoveries and breakthroughs that benefit both the island and the broader scientific community.

The summit featured discussions with leading speakers, including our Keynote Speaker, Puerto Rican Astronaut Joseph Acabá, Chief of the Astronaut Office at NASA. Acaba was joined by a selection of more than 35 renowned local and international speakers and panelists, some from prominent include: Richard Dalbello, Director of the Office of Space Commerce at NOAA, Dr. Quincy Brown, Director of Space STEM and Workforce Policy at the Office of the Vice President of the United States and Dr. Marla Pérez Davis, Former Director of the Glenn Research Center at NASA. The speakers shared their knowledge in topics such as space industry economy and policy, research in microgravity, bioscience in space, climate change, entrepreneurship and more.

The event, in addition to providing opportunities to connect with resources and network with peers, also provided space for local scientists and students to present their advances and discoveries through a poster session, which showcased an impressive array of 114 projects presented by talented students and researchers. We awarded the top three posters in distinct categories: Scientific and Technical Merit, Global Impact, and Local Impact, each receiving a cash prize of \$1,000. Mitel also sponsored a special prize, further encouraging innovative research.

Visit of Astronaut, Joseph Acaba

In November 2023, we had the privilege of hosting astronaut Joseph Acabá (Chief of the Astronaut Office at NASA) at our Forward Research & Innovation Summit: Science & Space Edition. His inspirational talk captivated our audience and became the highlight of the event. His presence in Puerto Rico was a significant honor, and we played a crucial role in facilitating his visit.

The event also garnered extensive media coverage, further amplifying the impact of his participation and showcasing our commitment to advancing scientific discourse and innovation.

Milo Climate Action Academy

On June 2024, we announced the launch of a new initiative called the Milo Climate Action Academy, in collaboration with the Milo Space Science Institute at Arizona State University (ASU). This initiative focuses on using satellite data to develop solutions for climate change in Puerto Rico. Featured in the White House's Fact Sheet’s Call to Action to Bring the Benefits of Space to Communities Across America, the academy will commence on August 19, 2024. This is a unique opportunity, as it marks the first time the Milo Space Science Institute at ASU is conducting a global climate-focused space academy, with Puerto Rico as the pilot location. Additionally, the academy is fully funded by our Research Grants Program, so there is no cost to participants. We aim to create opportunities for students and recent graduates to address and mitigate climate change in Puerto Rico.

Podcast – ConCiencia

As part of our outreach efforts, we are now overseeing the third season of the ConCiencia Podcast. This season will focus on getting to know the people behind the science we sponsor, providing them with a platform to showcase their work and impact both on our island and beyond. We have started interviewing our grantees who research a variety of innovative areas, from identifying hypoxia in cancer cells to exploring unique methods for fish cultivation. These episodes aim to help our audience connect with the individuals behind the science and to explain complex scientific innovations in simple terms.

OTHER INITIATIVES

ACT 60

The Research Grants Program oversees processing and evaluating the applications of the Act 60 tax incentives. The purpose is to foster research and development activity conducted at local universities in Puerto Rico, allowing qualified Principal Investigators or a Co-Principal Investigator to seek tax exemptions for salaries earned from eligible R&D research grants. The main objective of this incentive is to attract and retain competitive researchers to strengthen Puerto Rico’s performance in science and technology and the Island’s position in the knowledge economy.

At the time of this report, for fiscal year 2023, a total of 76 incentive applications have been received. If approved, this will represent over 1.9 million in tax incentives for researchers.

Institution	Act 60 Applications	Incentive requested
PHSU - PRI	6	\$165,588.95
UCC	1	\$12,995.08
UPR-A	2	\$34,184.29
UPR-CCC	23	\$603,273.98
UPR-M	33	\$538,221.79
UPR-MS	11	\$604,686.19
Total	76	\$1,958,950.28

WHAT'S NEXT

Forward Research & Innovation Summit

35+ 114 384

Speakers Poster Exhibitors Attendees



Forward Research & Innovation Summit 2023



Forward Research & Innovation Summit 2023



Advanced Research Grant Recognition Event

Students Impacted

47 41

Undergraduate students Graduate students

Out of a total of

537 students impacted

since program inception.

Thesis and Dissertations

As a result of the funding provided by the Research Grants Program, one (1) MS thesis, and one (1) PhD dissertations were completed during this period. Also, one (2) MS thesis, and one (1) PhD dissertation are in progress.

External Funding

Since July 2023, the total amount of external funding secured that the active grantees reported is

\$1,954,867

Several grantees are awaiting responses from federal agencies to which they have submitted proposals.

*Out of \$60,021,220 since program inception

Publications

Since July 2023, our active grantees have successfully published

16 peer-reviewed articles

across various journals*.

*Out of 222 publications since program inception

We will enhance our Research Grants Program by increasing funding opportunities and launching initiatives like the Catalyzer Research Grant to support preliminary research and improve the competitiveness of local researchers. We aim to expand the Advanced Research Grant - Space Edition, enabling more Puerto Rican projects to reach the International Space Station.

Our collaboration with the Milo Space Science Institute will continue to address climate change through the Milo Climate Action Academy, leveraging satellite data to develop impactful environmental solutions for Puerto Rico. The BEACON platform will undergo significant updates to enhance user experience and foster greater collaboration across institutions.

We are committed to expanding our outreach and networking efforts by hosting events like Academix, connecting researchers, academic leaders, and industry experts to facilitate groundbreaking discoveries. Additionally, we plan to organize more forums and workshops to engage the scientific community and promote knowledge sharing.

We are excited to bring back the Forward Research & Innovation Summit, with a renewed focus on climate change. This summit will gather experts, policymakers, and innovators to address pressing environmental challenges and foster collaborations.

By investing in these initiatives, we aim to solidify Puerto Rico's role as a leader in scientific and technological advancements, driving economic growth and societal benefits for the island and beyond.





TECHNOLOGY TRANSFER OFFICE

WHAT WE DO

The TTO's mission is to identify, evaluate, protect, market, and transfer the most promising research discoveries from Puerto Rico's universities, institutions, and research institutes to the private sector for commercialization and to benefit the public. Our vision is to implement shared risk/shared reward partnerships that deliver best-in-class technology transfer services in order to identify and increase innovation opportunities for Puerto Rico's scientists and researchers, thereby improving Puerto Rico's overall innovation ranking.

HOW WE DO IT

The TTO process begins with inventors disclosing their invention via the TTO Inventor Portal, detailing development stage, public disclosures, supporting grants, publication plans, and potential commercial interest. The TTO conducts a thorough evaluation of technical aspects, patentability, and market potential, then provides recommendations to inventors and university partners. If suitable, the TTO files a patent application using expert law firms. Utilizing the IN-PART platform, the TTO connects technologies to over 6,000 global R&D companies and negotiates partnerships using best practices.

WHO WE CONNECT WITH

The TTO connects science to business by delivering technology transfer services to five university partners, representing 17 campuses, including four medical schools. These are the University of Puerto Rico campuses, Ana G. Mendez University campuses, Ponce Health Sciences University/Ponce Research Institute, San Juan Bautista School of Medicine, and Universidad Central del Caribe. Among these there are about 450 PIs/Co-PIs conducting sponsored research and the most recent official report NSF (FY2022) showed \$108 million in R&D expenditures. Our portfolio of active technologies consists of inventions and intellectual property from our university partners and mirrors the R&D activities of their scientists and researchers.



TTO METRICS

33 New Invention Disclosure	120 Active Technologies	26 New Patent Applications
108 Patents Under Management	13 Active Licenses	



Executive Summary

The Technology Transfer Office (TTO) was formally established in 2017 through an amendment to the Trust’s foundational law 214-2004, designating it as a regional technology transfer office. Since its inception, the TTO has evaluated approximately 185 promising discoveries from its partner institutions of higher education and researchers. In the current fiscal year, the TTO has maintained an active portfolio of 120 technologies and evaluated 33 new invention disclosures. The diversity among TTO inventors is exceptional; 42% (92 out of 217) are female, a figure significantly higher than the U.S. average of 13% for women inventor-patentees. Of the 61 inventors who submitted an invention disclosure this year, 64% did so for the first time. Our performance metrics indicate a continued increase in the quality of disclosures, engagement with new inventors, and global marketing penetration, attracting interest from companies. Each year, our overall managed portfolio grows, and our partnerships with universities become more productive.

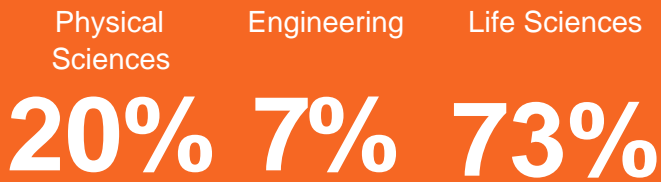
Research discoveries are typically at an early stage, requiring de-risking resources, investment in quality intellectual property protection, targeted marketing in a global economy, regulatory support, and best-in-class agreements. The TTO’s standard operating processes are designed to identify, evaluate, protect, market, and license technologies to existing companies and/or new startups created to develop these technologies.

De-risking technology is challenging and requires inventors to invest time in learning how to accelerate their research towards the market, alongside targeted resources and investment. To support this, we have continued our EnTRUST program for a fourth year, in partnership with Columbia University, to accelerate life science discoveries. Additionally, our XLerator Network effort has entered its sixth year, with new funding aimed at providing biomedical researchers with new learning opportunities, early-stage de-risking funding, and mentorship networks. We will align our efforts with other programs at the Trust that support life science initiatives.

This year we led three efforts to impact Puerto Rico’s biopharmaceutical ecosystem with substantial financial support from the NSF Engines and EDA Tech Hubs programs.

The Technology Transfer Office is connecting Science to Businesses

Portfolio by Field:



Active Portfolio Status: 120 Technologies

Status	Quantity	Percentage (%)
Licenced	11	9%
Marketing	45	38%
Screening and Assessment	27	23%
IP Protection	26	22%
POC/Validation	11	9%

Inventor Profiles: 218 total



INITIATIVES

EnTRUST: De-Risking Early-Stage Technologies

Established in 2021, EnTRUST is a Life Science “Lab to Market” bootcamp offered in collaboration with Columbia University’s Irving Institute for Clinical and Translational Research. Each year, a 12-week course introduces academic researchers to the key aspects of drug development, design, and commercialization. In partnership with the Trust’s Grant Program, research teams compete for pilot funding awards to de-risk their technologies. In 2024, EnTRUST supported seventeen research teams, comprising twenty-seven (27) researchers from four universities. External experts reviewed final proposals and team pitches, resulting in 5 teams receiving awards of \$75,000 each, totaling \$375,000. **National Science Foundation’s (NSF) Regional Innovation Engines.** We continued our effort under a \$1 million Type-1 award for “Advancing biopharmaceutical technologies and manufacturing practices (PR)” to engage public and private collaborators in cross-sector partnerships and stakeholders to align and propose longer-term solutions such as use-inspired R&D, translation innovation into practice, and workforce development.

New Patent Applications: 26

Type	Quantity	Percentage (%)
Provisional	14	54%
Non-Provisional	8	31%
PCT	3	12%
Foreign	1	4%

Patent Portfolio Under Management: 108

Type	Quantity	Percentage (%)
Provisional	16	15%
Non-Provisional	58	54%
PCT	19	18%
Foreign	15	14%

Patent Expenditures Since FY17 Expenditures by Year

FY	Expenditures
2017	\$22,282.07
2018	\$33,148.05
2019	\$125,901.90
2020	\$208,467.45
2021	\$67,451.78
2022	\$184,837.18
2023	\$295,352.58
2024	\$246,771.44

5 projects awarded



Economic Development
Administration's (EDA) Regional
Innovation and Technology Hubs
(Tech Hubs)

We were successful in receiving a \$551,510 Phase I award to engage public and private informing the “PRBio Tech Hub” Consortium to address critical gaps in the biopharma ecosystem and plan for a set of impactful “component projects”. This Phase I award led to the submission of an implementation plan for Phase 2.

Economic Development
Administration's (EDA)
Tech Hubs Designation

We were successful in being recognized as one of 31 “Designated Tech Hubs” by the Biden-Harris administration. This recognizes that Puerto Rico has the ability to leverage existing assets, including expertise in advanced manufacturing, strong pharmaceutical development partnerships among universities and industry, and biopharmaceutical incubators – to make the U.S. biotechnology supply chain more resilient and meet the public health and national security challenges of tomorrow. The U.S. Department of Commerce, EDA, and several federal Departments and agencies will provide technical assistance, network expansion, and access to other federal funding opportunities to support the designated Tech Hubs over the long term.

Executive Director

Dr. Gulley is Executive Director and founder of the Technology Transfer Office (TTO) and responsible for leading its professionals in implementing the TTO's vision and mission. He also serves as PI on the 2023-2025 NSF Engine Development Award “Advancing biopharmaceutical technologies and manufacturing practices (PR)”, the 2023-2025 EDA Tech Hub Phase 1 award “PRBio Tech Hub”, and the US Department of Commerce's EDA Designation by the Biden-Harris administration of Puerto Rico as one of 31 “Tech Hubs” in the U.S. Prior to joining the Trust he led a partnership between AUTM and Chile's CORFO to establish

NSF Engine Development Award

\$1 million

(2023-2025)

EDA Tech Hubs award

\$551,510

(2023-2025)



and reinforce Chile's technology transfer system. And, from 1989-2012 he served as Associate Vice President, Technology and Economic Development, University of Illinois System, Assistant Vice Chancellor for Research at the Chicago campus, and led key efforts in technology transfer, academic-industry partnerships, biotech research park development and startup incubation, and technology-based economic development in Illinois. His voluntary service includes Chair of the AUTM International Strategy Committee which engages and promotes the technology transfer profession globally. He holds a BA and PhD from Southern Illinois University and an MA from Virginia Tech. He is a Certified Licensing Professional and a Registered Technology Transfer Professional.

WHAT'S NEXT

“DE-RISK AND ADVANCE EARLY-STAGE
LIFE SCIENCE DISCOVERIES”

Given that we have accomplished our goals for FY24, including promoting participation and engagement through EnTRUST and XLN, mentoring funded project teams in de-risking early-stage discoveries, and expanding TTO's technologies while fostering university and scholar program engagement, TTO will focus on new priorities for FY25. Our efforts will center on de-risking and advancing early-stage life science discoveries through the EnTRUST program.

EnTRUST provides training and funding to researchers in the areas of therapeutics, cancer, and medical devices to accelerate their research projects by derisking them and taking them closer to the market.

Additionally, EnTRUST provides a platform from which researchers begin to think of their projects in entrepreneurial terms, and in the process, some of the researchers that participate in EnTRUST make the decision to form their own startups. We will also enhance our marketing of the robust patent portfolio via platforms like IN-PART, WIPO Green, AUTM Innovation Marketplace, and by participating in the BIO One-on-One Partnering™ event to identify potential partners. Positioned alongside other PRSTRT initiatives like BioLeap, P18, MSRC's Astre, and AAG, EnTRUST provides comprehensive support for innovation and research acceleration.

Additionally, TTO will offer paid internships to train students and graduates, expanding our capacity to manage and support the increasing number of high-quality invention disclosures while enriching students' and scholars' professional and academic experiences





CENTER FOR TROPICAL
BIODIVERSITY

WHAT WE DO

The Center for Tropical Biodiversity (CTB) was established in 2015 to guide the efforts of conservation and exploration of Puerto Rico's unique geography for benefits that can be scientific, societal or economic. Within the purview of the Center are the development of searchable collections of biological specimens, the conservation of biodiversity resources and the commercialization of biodiversity-derived products.

Over the last century, Puerto Rico has enjoyed a rich tradition of scientific research centered on its unique natural environment. There have been numerous projects aimed at observing and cataloging Puerto Rico's rich biodiversity with the goal of understanding how organisms interact with their surroundings. Lacking through the years has been a local policy to guide and coordinate these efforts, which were often driven by the curiosity of individual researchers in our many universities

HOW WE DO IT

The CTB has become an important facilitator for high-impact research in the areas of biodiversity and natural products. We make contact with the appropriate stakeholders to (i) enable their biodiversity research by ensuring access to high- end equipment, (ii) communicate important issues related to the preservation of critical ecosystems for biodiversity , (iii) facilitate the public availability of data pertaining to biodiversity and natural products and (ii) promote that biodiversity researchers fully benefit from other PRSTRT programs, such as PRCCI and the TTO.

WHO WE CONNECT WITH

Biodiversity research involves stakeholders at many levels: community organizations, environmental protection groups, scientific researchers, universities, commercial partners, government agencies and the media. The CTB has successfully connected several of these stakeholders for fruitful collaborations. We have (a) engaged with university researchers and placed them in contact with entrepreneurs and innovators, (b) engaged the media for the communication of important issues concerning the conservation of biodiversity, and (c) established links with the business development sector to ensure that Puerto Rico is promoted as a potential source of biodiversity-derived products.

\$10,350,000

in grants submitted
by CTB-driven projects

14

new compounds identified
in the Cuban Tree Frog alone

1

Invention Disclosure on behalf
of the PR Science Trust

118

compounds deposited in the
NatPORT Online Repository

A PROPOSAL TO THE DEFENSE
THREAT REDUCTION AGENCY HAS

This year, the CTB received a funding recommendation from the Defense Threat Reduction Agency (DTRA) with a proposed budget of \$2,991,860 over five years. The proposal describes the creation and integration of a dual analysis pipeline for: (a) the identification of natural products in a crude or unprocessed extract, with a highly accurate approximation of the chemical structures for the main components of the mixture, and (b) the identification of protein targets for natural extracts.

Toward this dual goal, we will:

- (i) Generate organic and aqueous extracts for plants, cyanobacteria and amphibians with known or documented toxicity. This will be done following strict BSL-2 guidelines with all the biosafety provisions for handling potentially hazardous environmental samples.
- (ii) Fractionate extracts using solid phase extraction equipment in our facilities.
- (iii) Infuse both crude extracts and solid phase fractions into a chromatography apparatus (HPLC) connected to a high-resolution mass spectrometer capable of bi-dimensional MS (MS-MS). Our facility has an Acquity UPLC coupled with a Xevo G2-S Quadrupole Time-of-Flight (Waters), which has been used to establish this pipeline.
- (iv) Process the resulting MS/MS files and raw data by applying quality filters to define the most relevant and reproducible signals in a data set. The data will then be converted to the appropriate format for uploading into the Global Natural Product Social Molecular Network (GNPS) data repository maintained by the University of California at San Diego (UCSD).
- (v) Identify the main components of the sample by comparing the mass spectrometric data and molecular fragmentation with those reported for known samples.

(vi) Apply the same extracts to a human proteome chip (HuProt, CDI Laboratories) and identify unknown protein targets of natural products by competition with fluorescent probes 8-analinonaphtahlene-1-sulfonic acid (ANS), Nile Red, and Congo Red. We will assess the capacity of a natural product mixture to compete with a non-specific fluorescent dye for the binding of 21,000 human proteins displayed on a chip surface. This part of the project will be carried out in collaboration with CDI Laboratories, a Puerto Rico-based company that designed and developed the HuProt chip.

A proposal to the NSF EPSCOR E-Rise
Program has also been recommended
for funding.

This effort, led by Dr. Riccardo Papa of UPR-Rio Piedras, has a proposed budget of \$7,000,000 over five years, with a substantial component destined for mass spectrometry and other analysis services provided by the CTB. The proposal is well aligned with the objectives of the Center for Tropical Biodiversity in that it aims to develop tropical insects as models for growth, development, and genetic variability. Insects have been singled out as valuable model organisms for research in developmental biology because of their genetic tractability, short generation times, well-established research tools, accessibility, and the potential for comparative and evolutionary insights. Insects share many conserved developmental processes with other organisms, including humans. The basic mechanisms of development, such as cell division, differentiation, and tissue morphogenesis, are often similar.

Among all insects, butterflies have emerged as prominent subjects for investigating evolution and development, since they provide a full spectrum of adaptations, colors, and genetic variation. Butterflies

represent a unique opportunity to investigate how development at the organismal level is the premise to generate an incredible phenotypic diversification among population and species. The PI of the proposal, Dr. Papa, has gained sizeable knowledge on this subject and extensive genomic resources that have generated preliminary data in support of the hypotheses of this proposal. Moreover, butterflies have proven to be extremely useful for outreach and education activities on various fundamental concepts in STEM that range from evolution, development, and genetics, including quantitative variation, behavior, ecology, and adaptation to climate changes.

In Dr. Papa’s proposal, two Nymphalid butterflies endemic to Puerto Rico will be studied: *Heliconius charithonia* and *Danaus plexippus*. These butterflies diverged around 90 million years ago and present distinct life histories. They have retained a conserved developmental architecture of body organization. The plan will use state-of-the-art omics approaches and a symmetrical experimental design to identify strict molecular developmental rules of organismal complexity and cell fate while filtering out individual, population, and species uniqueness and variability.

The CTB will engage this EPSCOR Proposal by **providing analytical services to probe secondary metabolism in butterflies**. Butterflies obtain secondary metabolites from the dietary consumption of plant material or associated microorganisms. These metabolites are incorporated into synthesizing various compounds, some of which become pigments or defense compounds. Herein, we propose a secondary metabolite analysis using the Global Natural Product Social Network, a data analysis workflow for un-targeted mass spectrometry-based metabolomics, to screen for known or related secondary metabolites. By isolating and analyzing these bioactive compounds, we can gain valuable knowledge of their chemical structures, properties, and possible functions to the organism or its environment.

A continuation of work with “apio
criollo” or *Arracacia xanthorrhiza*.

We have continued to progress in identifying compound families within the *Arracacia xanthorrhiza*, known as “apio” in Puerto Rico. The tuber is consumed for its very high nutrient and starch content. In addition to the well-known apio root, the green aerial portion of apio has been used in traditional medicine due to its calming effects and anti-inflammatory properties. This year, the CTB received the visit of Masters student Myrna Rodríguez from Interamerican University in Barranquitas. The work of Ms. Rodríguez has identified genes in the apio leaf that encode the production of polyphenols, a family of compounds with documented health benefits also found in green tea and red wine. The CTB is attempting to correlate the genetics of apio with the production and isolation of apio polyphenol compounds using state-of-the-art mass spectrometry and molecular networks. A total of 15 compounds with anti-oxidant properties have been found in the leaves of apio, potentially correlating with its properties.

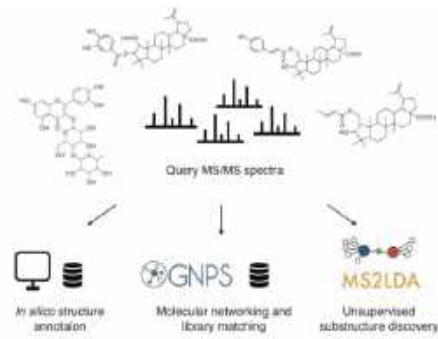
The Natural Product Online Repository
(NatPORT) makes a user’s manual.

The Natural Product Online Repository (NatPORT) continues to grow as more entries have been deposited. At the moment a total of 118 fully characterized compounds are in the database. It must be said that we expected a larger number of structures coming out of our Caribbean partners. The CTB continues to encourage researchers in this area to deposit as many structures as they can, by simplifying the process and producing a user’s manual for NatPORT.

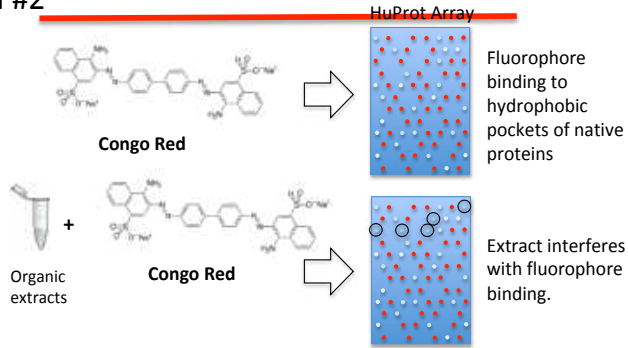


The work of Dr. Riccardo Papa has made it to the top scientific journals. Shown here is the cover of Science Magazine highlighting Dr. Papa's work as part of an international collaboration.

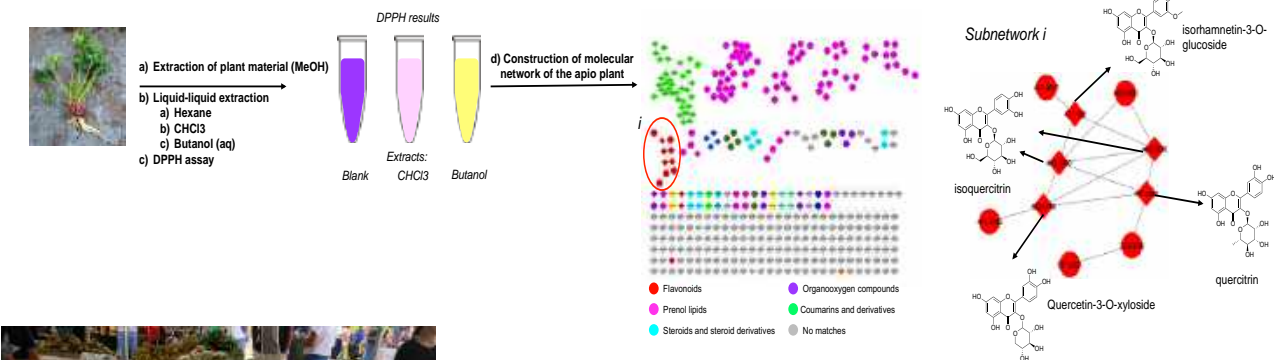
Method #1



Method #2



Summary of the proposed work to develop two different methodologies. Method #1 describes the use of LC/MS/MS metabolomics with molecular networking for the rapid identification of compounds. Method #2 describes the use of proteome chip containing >21,000 proteins to identify the protein targets of natural products.



The Puerto Rican apio (*Arracacia Xanthorrhiza*) is known for its use in traditional remedies against inflammation and malaise. A collaboration with Interamerican University in Barranquitas has uncovered some of the chemical details behind the benefits of consuming apio greens. Molecular networking analysis reveals the presence of potent antioxidants.

RE-VISIT GOALS FOR PUERTO RICO'S PARTICIPATION AT THE UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY

Biological diversity - or biodiversity - refers to the variety of life on Earth and the natural patterns it forms. The biodiversity we see today is the fruit of billions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. It forms the web of life on which we are integral and entirely depend. At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive “sustainable development” strategy to meet our needs while ensuring we leave a healthy and viable world for future generations. One of the key agreements adopted in Rio was the Convention on Biological Diversity (CBD). This pact among most of the world’s governments sets out commitments for maintaining the world’s ecological underpinnings as we go about economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits of using genetic resources.

This year, the CBD will celebrate its 16th meeting of the Conference of the Parties (COP 16), together with the eleventh meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety, and the fifth meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing, to be held concurrently from 21 October to 1 November 2024 in Cali, Colombia.

We intend for the Puerto Rico Science, Technology and Research Trust to attend this Convention as invited observers.

ASSIST DYNAMIKO PHARMACEUTICS LLC AND SEAMUST LLC

The CTB has continued to support companies attempting to enhance their value proposal toward SBIR or STTR funding. One of these companies is Dynamiko, which has received funds through the ENTRUST accelerator program. They have identified a need to characterize their natural product candidates as they enter their STTR submission. Another company that is interested in collaborating is SeaMust LLC, which is developing algae as nutritional supplements for fiber and other critical dietary compounds. We will continue to leverage our extensive analytical platform to benefit these promising ventures.

We are further engaging with natural products researchers in the Caribbean and Latin America. While promoting the use of NatPORT in other countries in the Caribbean region, we have found a need for high-end instrumentation to characterize compounds. We continue our efforts to engage scientists in the Dominican Republic, where there is a rich natural product scene and a great need regarding the availability of cutting-edge methodologies.



**Caribbean Center
for Rising Seas**

WHAT WE DO

We help prepare Puerto Rico and the Caribbean to adapt and thrive in the new era of increasing flood risk from storms, tides, and sea level rise. This program will further establish Puerto Rico's leadership and stature as a center of excellence and innovation. The comparable safety and wellbeing afforded by Puerto Rico's topographic elevation and geologic attributes will become a reference point for other small islands. The CCRS will become a research and education instrument through which capacity might be developed, thereby facilitating and unlocking competitiveness for coastal regions in the coming decades.

HOW WE DO IT

The Caribbean Center for Rising Seas ("CCRS") works to develop the knowledge and best practices so that buildings and infrastructure are designed and constructed to be resilient to traditional hurricanes, as well as accelerating sea-level rise this century resulting from climate change. While myriad efforts address many of the important challenges of climate change, the center focuses on the critical issue of sea level rise, an unstoppable effect of this crisis. This is an issue that will have a historically unprecedented impact generations into the future. The plan is for Puerto Rico to become a model for an adaptation approach in the Caribbean region and elsewhere.

WHO WE CONNECT WITH

The center works closely with professionals tasked with the stewardship, administration, or design of the natural and built environment such as engineers, architects, planners, and attorneys. They are key stakeholders in the decision-making process aimed at achieving sustainable practices within a legal framework of building codes and regulations' compliance. Other stakeholders we reach out to include community leaders, elected officials, business leaders, educators, and scientists. To this end, we have a diverse set of leaders in our advisory committee which includes a chair each for the Architects' and the Engineers' Guilds.



28 EVENTS

1,281

participants addressed

619

Professionals reached
(architects, engineers, attorneys, etc.)

26

Presentations delivered

ADVANCING ENVIRONMENTAL JUSTICE: SUPPORT AND COLLABORATION IN COASTAL COMMUNITIES IN PUERTO RICO

The Caribbean Center for Rising Seas is leading a vital initiative with the PRSTRT, NASA, and the Global Resilience Institute at Northeastern University to address environmental challenges in a community in southern Puerto Rico. This project, titled Leveraging Earth Observation Data to Support Environmental Justice: A Puerto Rico Coastal Community Case Study, uses earth observation data to strengthen environmental justice in coastal areas, combining advanced technology and local wisdom in efforts to improve resilience and resource management, and identify and mitigate environmental problems exacerbated by extreme weather and poor land use. The collaborative approach seeks to empower community residents by providing them with tools for better adaptation and planning.

In addition, preliminary findings of the project were presented at the American Geophysical Union (AGU) 2023 Conference, held from December 11 through 15 in San Francisco, California. Participation at AGU23 allowed project collaborators to share progress and explore future applications of Earth observation data in promoting environmental justice in vulnerable communities. This event provided a platform to discuss how technology and community integration can better support Puerto Rico’s coastal communities with data-driven decision-making in the face of environmental challenges.



Advancing Policy

During the past year we prepared policy position papers and participated in public hearings. We advocated for the consideration of Sea Level Rise as a key element for long term planning in the Puerto Rico Planning Board’s Plan de Inversiones a Cuatro Años (PICA), encouraging a review of existing Flood Insurance Rate Maps and other planning tools like budget allotments to consider this unrecognized risk. At the invitation of the Committee of Experts and Advisors on Climate Change we delivered commentary on the draft of the Mitigation, Adaptation, and Resilience Plan for Puerto Rico. Our observations focused on the impacts that natural and built critical infrastructure, communities, and our economy will suffer due to Sea level Rise. The committee incorporated our suggestions for adaptation and managed retreat. In September NOAA conducted public hearings on the performance of the Coastal Zone Management Program. We submitted our remarks stressing the need to develop adaptation plans, ecosystem-based projects, community stewardship groups, and easing the exchange of data and knowledge for smart decision-making. Each time we stressed the need to consider not just the environmental lens to understand threats and opportunities for improvement but also those of public health, infrastructure, economic development, security, and societal wellbeing.

The Caribbean Center for Sea Level Rise acted as co-host for an expedition to Puerto Rico by the International Committee of Floodplain Managers. The week-long visit, which extended to various regions of the island, aimed to facilitate discussions on current flood risk management practices. Meetings were held with officials, scientists, and private sector representatives in Puerto Rico to assess progress following Hurricanes Irma and Maria in 2017. Key topics of interest included an analysis of the current flood risk profile, ongoing mitigation and adaptation efforts post-hurricanes, and the exchange of knowledge and information on best practices and innovations.

This was followed by an invitation to participate at the ASFPM annual convention in Salt Lake City between June 23 and 27, where we delivered two presentations and explored potential paths for further collaboration including workforce development through the creation of a local chapter of floodplain managers.

As this conference is particularly focused on the field of flooding and floodplain management, these are natural topics that converge with the challenge of sea level rise. It presented an opportunity to gather lessons in risk management in communities and infrastructure. It was also an opportunity to better comprehend the challenges and particulars of flood management and network with researchers, practitioners, policymakers, and participants of like-minded organizations.

33

local and visiting specialists conducted deep dive discussions.

Engaged specialists from academia and entities like the Puerto Rico Planning Board and the US Army Corps of Engineers.

Led a visit to a flood prone community in southern Puerto Rico.

Puerto Rico Sea Level Rise and Storm Surge Impacts to Buildings Report + Arkly Platform

To advance our research agenda, we requested proposals and commissioned a study from HighTide Intelligence specializing in individual building economic impacts of flooding and sea level rise for all 44 coastal municipalities of Puerto Rico: a first phase Risk / Vulnerability Assessment and a second phase Mitigation Assessment Pilot. This is directly aligned with our strategic goal of publishing a cost-benefit analysis of potential pilot projects for safer housing during our second year. The study enabled the creation of a digital platform that depicts buildings in coastal flood-prone areas of Puerto Rico and estimates flood vulnerability using the latest NOAA Sea Level Rise report combined with the 1% chance storm surge potential flood. It has enlightened our work by unveiling the vulnerability to flooding of areas outside those depicted by the Flood Insurance Rate Maps and identifying hotspots. It further displays estimated monetary amounts that should be set aside by property owners to face a given year’s flood damage risk in 2024 US dollars through the year 2120. Despite the preliminary guidance offered by the study, there might be discrepancies between forward-looking statements and actual future conditions. With future funding, we expect to periodically update the platform and help mitigate this uncertainty.

Continuing Education for Professionals

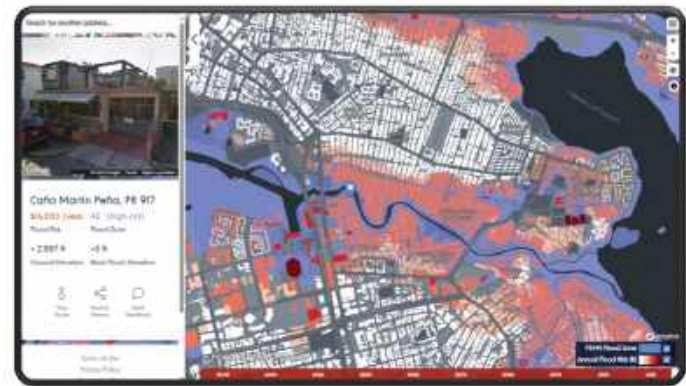
Our key educational task is redefining professional knowledge and understanding about the different kinds of floods, their hazards, and sea level rise. To do this, we engage with key actors involved with the design, management, or stewardship of the natural and built environment, in three major groups: designers and builders, regulators, and financiers. We have devised three levels of engagement to build awareness, understand different aspects of the challenge and start co-developing pathways to adaptation. A full cycle has been completed with local architects. We also maintain parallel efforts to educate stakeholders in the general public such as teachers, community leaders, and business leaders.

In August, our Policy and Legislation Manager delivered a presentation during the annual convention of the Colegio de Ingenieros y Agrimensores de Puerto Rico (CIAPR) followed by another delivered by our Engineering Specialist and the Program Director during the CIAPR’s Mega Civil Friday in April. Relevant aspects and considerations for decision-making were explored, including technological tools developed to conduct research and inform decisions in response to the changes accelerated by sea level rise. Together, these two events were attended by 102 professionals. In late April, we participated in the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR) Arquitectura Hoy Podcast and Radio Show hosted by architect Eliot Santos in a conversation with geologist Maritza Barreto, Ph.D.

We talked about the challenge of coastal erosion and preserving the use and enjoyment of our coastlines. In this episode we explored sustainable strategies, innovative technologies, and effective policies for managing these precious ecosystems in the face of climate change. In June, the CCRS team prepared and delivered a refresher presentation together with a discussion on risk disclosures through the Arkly platform, at the Annual Convention of the CAAPPR to another 30 professionals. We took these opportunities to refine our message and provide continuity to our past efforts.



Visit by the International Committee of the State Floodplain Managers Association (ASFPM)



Arkly Platform



Advanced Research Grant Recognition Event



Presentation during the annual convention of (CIAPR)

Advancing Climate Literacy for All

We periodically provide general presentations, especially at shopping centers thanks to EcoExploratorio, to connect the dots between mainstream knowledge and culture and the most recent scientific knowledge on global warming, climate change, and sea level rise. Each of these is attended by an average of 63 individuals. The Puerto Rico Research and Innovation Meetups program conducted in November an Agricultural Sustainability in the Face of Climate Change and Sea Level Rise Meetup (170 attendees). The organizers invited us to talk about the challenges and opportunities that sea level rise and climate change pose to agriculture in Puerto Rico and how these phenomena are affecting our land, our crops, and ultimately, the food security of our island. Furthermore, four special presentations to students and interns were attended by 94 persons. Other specialized audiences have been addressed at events such as the Ocean Surface Topography Science Team Meeting, the Simposio de Espeleología Puertorriqueño: El cambio climático y su impacto a nuestras islas Karso, Star Tides (Sharing To Accelerate Research – Transformative Innovation for Development and Emergency Support): Adapting to Climate Change, the Global Impact Leadership Summit organized by Holon IQ, and the Ocean Sciences Meeting of the American Geophysical Union.

Educational Material

To dispel common misconceptions and advance climate change literacy, our program has designed a series of educational materials in the form of posters, the first of which is complete. It describes the five flood factors and the five most relevant consequences of sea level rise. Together with other materials in development, these posters may stand alone or provide a basis for lesson plans that will ease curricular development on these topics. The posters will be deployed through the facilities of our collaborators such as Para la Naturaleza, the Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, and the Colegio de Ingenieros y Agrimensores de Puerto Rico.

New Collaborations

Key internal collaborations have been sought to leverage expertise and build strategic frameworks that advance common goals.

Our program was invited by the Puerto Rico Public Health Trust to join the Scientific Advisory Board of its Caribbean All-Hazards Program to Build Resilience and Climate Equity (CAPBRACE). We are honored by the opportunity to contribute to this initiative especially as our Center is committed to preparing our region to adapt and thrive amid increasing flood risks from storms, tides, and sea level rise. To start, we participated of a panel discussion titled “Puerto Rico’s Priorities for Climate Change and Human Health Educational Curriculum”. We brought our expertise in fostering resilience and adaptation in coastal communities as an added value to this discussion.

At the invitation of the Research Grants Program and the Milo Space Science Institute of Arizona State University, we are supporting the celebration of the First Milo Climate Action Academy for Puerto Rico between August and December using satellite data and remote sensing technology to advance innovative solutions for Puerto Rico’s pressing climate changes challenges. We are eager to see teams of college students and recent graduates pioneer applications that address floods, sea level rise, and other global warming concerns. This effort aligns with our plan to increase climate literacy among a diverse up and coming workforce.

A fundamental alliance

After initial exploratory conversations with Para la Naturaleza, we understood the necessity of collaborating to align efforts and resources in the development and implementation of strategies for the creation of public policy, education, and community outreach that safeguards a sustainable future for Puerto Rico. These three main collaborative objectives have been agreed to, namely, for the elaboration and distribution of educational materials, to develop a program of community outreach that promotes the development of resilient communities and alternative

solutions for adaptation and resilience that diminish the harmful effects of flooding and coastal erosion and that encourage the protection of natural habitats and biodiversity, and to promote public policy that catalyzes the implementation of adaptive solutions that secure Puerto Rico’s socio-economic development while upholding the conservation and protection of natural resources despite sea level rise.

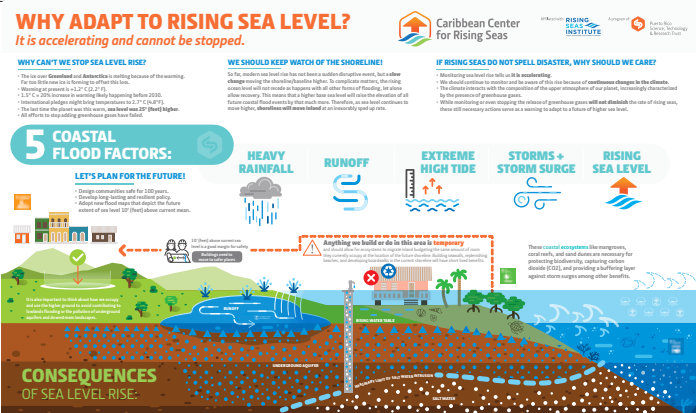
“...a la hora de impulsar una agenda investigativa educativa y de desarrollo de política pública responsable con el medioambiente, no nos queda la menor duda que Para La Naturaleza y su equipo comparten nuestros valores. Juntos construiremos un camino de adaptación conducente a una verdadera resiliencia ante los retos actuales y venideros. Nos da gran satisfacción aportar un granito de arena a esta gesta”. – Arq. Fernando Pabón.

Funding agenda

Besides submitting proposals this year, our funding agenda focused on lending a hand to other organizations and their respective projects with the long-term goal of building essential relationships to enable more competitive applications. We have identified valuable synergistic collaborations within and beyond the Trust in informing others of our capabilities and expertise. Our added value is being noticed as evidenced by increasing requests for meetings and information and ongoing interest in our collaboration. Ten percent (10%) of our operational expenses have been met by our ongoing collaboration with the Global Resilience Institute. We have pursued collaborations and grant applications that would derive mutual benefit. At the time of writing this summary, out of the 9 grant applications submitted over the past year, 6 were not awarded, 2 were awaiting notice of results, and 1 was successful. Despite this, we are excited about facilitating initiatives that benefit from some support on our part such as research projects, but also, we are eager to invest in pilot, demonstrative projects that can generate excitement and opportunities to advance our knowledge about how to build greater resilience and adaptation to current and future flood threats.



Advancing Climate Literacy for All



Educational Materials



New Collaborations



A fundamental Alliance

1

Commissioned risk and vulnerability report and digital platform

3

Memorandums of Understanding with Para La Naturaleza, Ciudadanos del Karso, La Maraña,

4

Submitted public commentary for 4 Public Hearings

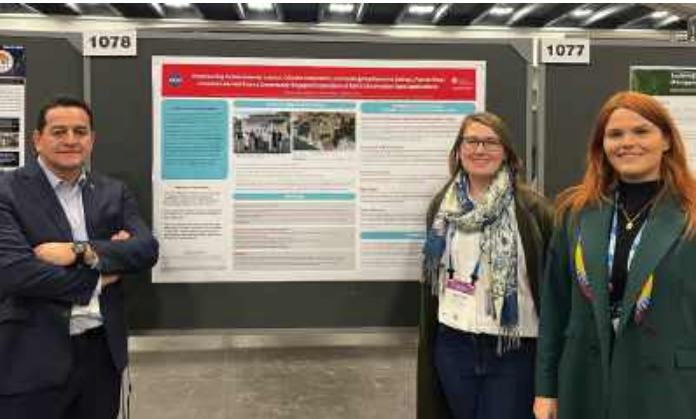
5

Additional coastal communities engaged

1

Research Project Funded covering 10% of our expenditures

+ 4,800 views of Documentary Trailer



Planner María Méndez presenting Salinas case study with NASA Representative and Dr. Kristin Raub



CCRS speaking to PRCCI interns



John Englander signing his book Moving to Higher Ground



CCRS Director Fernando Pabón addressing visitors of the ASFPM Flood Plain Dialogues Expedition

WHAT'S NEXT

BUILDING RESILIENCY AND ADVANCING ADAPTATION BY ADVANCING EACH OF OUR AGENDA FOCUSED ON EDUCATION, RESEARCH, AND PRAXIS

- Advance Key Capacity Building Indicators, specifically outreach to key professionals and stakeholders through talks, roundtable discussions, and symposia.
- Build up a local flood plain management workforce.
- Celebrate an innovative building design competition.
- Create and distribute further educational materials.
- Continue research projects on Puerto Rican coastal communities with the Global Resilience Institute and other organizations.
- Insert rising sea levels as key criterion in existing and proposed land use, zoning, and building regulations.
- Obtain additional funding to advance our agenda.
- Host a premiere for our first documentary: “When

the Sea Reaches Us” will take us on a journey from the majestic and icy lands of Greenland to the vibrant and changing shores of Puerto Rico, exploring the consequences of climate change. Through aerial footage, insights from local experts, and scientific data, this documentary shows us why it is crucial to adapt to the changes that are transforming our coasts. The trailer has been released and the full feature is coming soon!





WHAT WE DO

Mission:

The Research Institute (RI), under the auspices of the Puerto Rico Science, Technology, and Research Trust (PRSTRT), is committed to fostering a collaborative and diverse research community. Our mission is to support innovative basic and applied research into the fundamental biological mechanisms underlying diseases that disproportionately impact our population. We focus on developing potential therapies and interventions that can significantly reduce or eliminate health disparities across our archipelago. We encourage investigations into a wide range of diseases associated with significant morbidity and mortality in Puerto Rico, believing that accelerating biomedical research and improving human health requires a diverse community in terms of education, training, background, perspectives, interests, and identity.

Vision:

Our vision at the Research Institute is to serve as a beacon of health innovation and research excellence in Puerto Rico and beyond.

HOW WE DO IT

We aim to ensure that the benefits of all research outcomes are translated to our people, reaching all the way to the patient's bedside. We strive to create a tangible difference in the health and well-being of our community, transforming lives through the power of scientific discovery and its application. We envision a future where health disparities are significantly reduced, and every individual has access to the best possible healthcare solutions informed by cutting-edge research.

Impact Numbers

\$15.6 M

ARPA PRDOH

\$2.8 M

NIH U01CA26054

Highlights from the Puerto Rico COVID-19 Variant Surveillance Initiative (PRCVSI)

Total COVID-19 samples banked in our biorepository:

+32500

Total COVID-19 samples sequenced:

+15600

Total COVID-19 mutations of interest analyzed:

+9838

Total COVID-19 samples uploaded to GSAID:

+12388

Number of recombinant COVID-19 unique variants detected (not previously reported): 4.

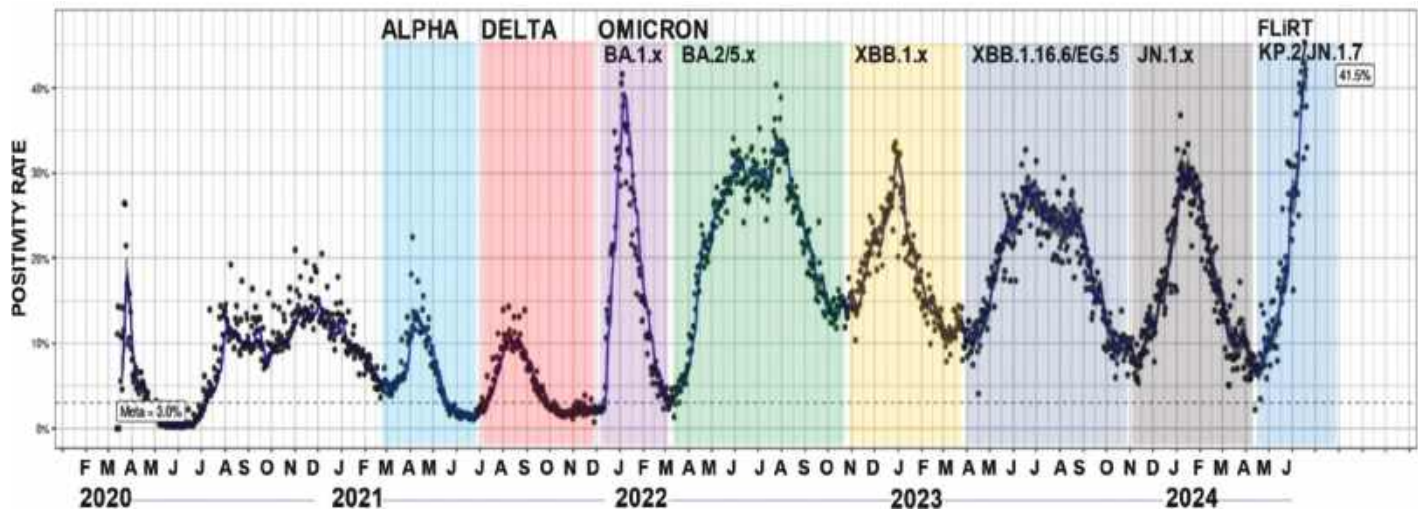
Number of recombinant COVID-19 variants described: 13

The number of COVID-19 surges fully described during the pandemic in Puerto Rico:

6 out of 8

WHO WE CONNECT WITH

The Research Institute primarily connects with educational institutions, both public and private, that are involved in scientific and medical research. Our program is designed for researchers, healthcare professionals, and students in Puerto Rico and beyond who are committed to advancing biomedical research and improving health outcomes. We also engage with the healthcare and biotechnology sectors, including hospitals, biopharmaceutical and biomanufacturing companies, and biotech startups. We collaborate with a variety of stakeholders, including government agencies, non-profit organizations, and private sector companies, to facilitate research, drive innovation, and translate scientific discoveries into practical healthcare solutions. Our partnerships span local, national, and international levels, fostering a diverse and dynamic research ecosystem.



| The figure presents the historical epidemiological curve of COVID-19 in Puerto Rico, beginning in March 2020. Since 2021, Puerto Rico has experienced eight significant surges, primarily driven by the Alpha, Delta, and Omicron variants. The Puerto Rico COVID-19 Variant Surveillance Initiative (PRCVSI) has comprehensively characterized six of these eight surges, providing critical insights into variant-driven dynamics on the island. The figure has been adapted from data available at: <https://rconnect.dfci.harvard.edu/covidpr/>.

PUERTO RICO COVID-19 VARIANT SURVEILLANCE INITIATIVE: SAFEGUARDING PUBLIC HEALTH THROUGH GENOMIC INSIGHTS AND EPIDEMIOLOGICAL PRECISION

The COVID-19 pandemic remains one of the leading causes of death in both the United States and Puerto Rico. During the past year Puerto Rico experienced two important variant-specific surges.

The first one was due to the Omicron sub-lineage JN.1.x and the second one due to the FLiRT Omicron variants KP.2/JN.1.7. The first surge reported a positivity of 28.4%, and the second 43.2%, one of the highest positivity reported so far. Altogether, last year, more than 255,000 people were infected. To date, over 7,600 Puerto Ricans have succumbed to this devastating virus. During this past year, 942 people, mostly over sixty, died. While the elderly, particularly those with pre-existing cardiovascular conditions, have borne the brunt of this disease, this past year, for the first time, it also claimed the life of an infant, underscoring the unpredictable and lethal nature of the virus. Despite these sobering realities, Puerto Rico has fared better than many jurisdictions with similar populations and more significant resources, thanks to the robust epidemiological surveillance efforts led by the Puerto Rico Department of Health in partnership with the Puerto Rico COVID-19 Variant Surveillance Initiative (PRCVSI).

During the 2023-2024 period, the Research Institute has played a pivotal role in shedding light on Puerto Rico’s epidemiological trends through state-of-the-art genomic analysis. Aligned with the Puerto Rico Science, Technology, and Research Trust’s vision of establishing Puerto Rico as a global innovation hub, the Research Institute, through the pioneering efforts of the PRCVSI, has sequenced over 15,600 COVID-19 samples. Furthermore, the Institute now houses one of the largest COVID-19 sample repositories in Puerto Rico, containing more than 32,600 specimens, a resource of immense scientific value. These efforts have led to identifying over 13 recombinant COVID-19 variants, including four variants that had never been reported before.

\$12.8 M

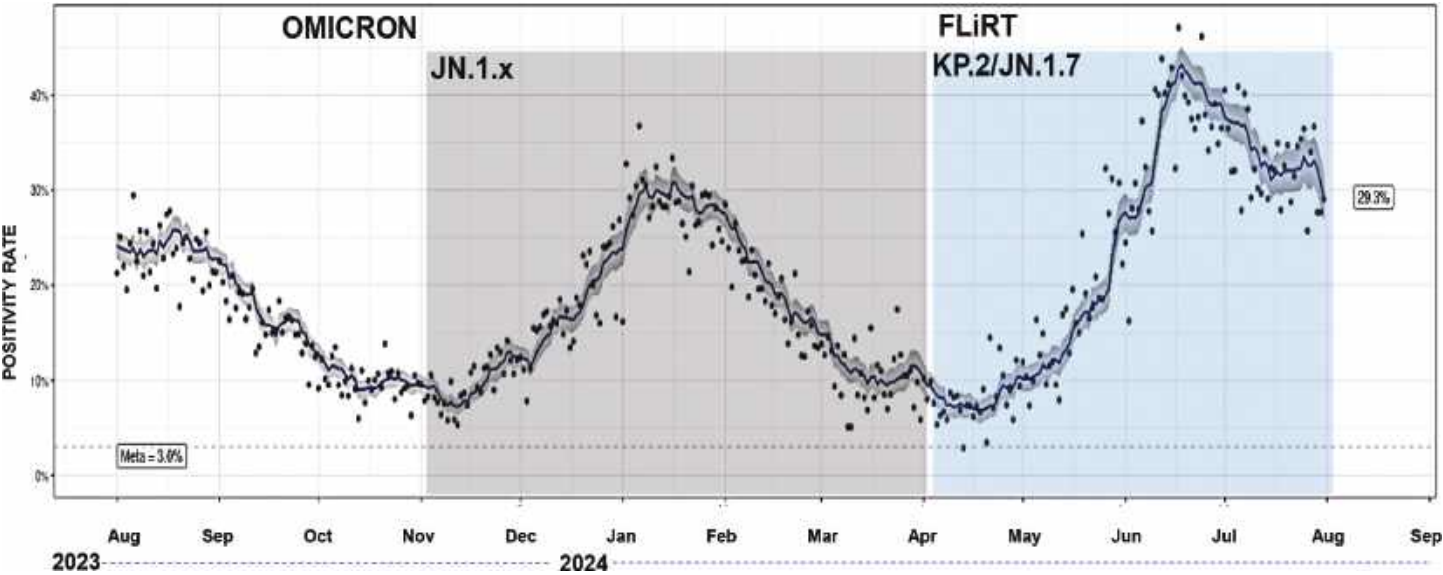
from NCI and NIH through the SeroNet initiative.

10

Direct jobs are supported.

Housing the most important genome sequencing infrastructure in Puerto Rico with sequencers from Illumina and Nanopore.

The PRCVSI's achievements are a testament to the expertise and dedication of its carefully selected team of scientists and the advanced next-generation sequencing infrastructure—the most sophisticated in Puerto Rico and the Caribbean. The PRCVSI remains a vital force in the fight against COVID-19, continuing its mission to protect public health in Puerto Rico through genomic insights and precise epidemiological data. This year, we will be presenting our work at the Now situated within the newly renovated Research Institute Core Laboratories of the Research Institute on the first floor of the Innovation Building, the PRCVSI continues to evolve. The Research Institute remains committed to supporting innovative basic and applied research into the fundamental biological mechanisms of diseases that disproportionately affect our population, ensuring that Puerto Rico stays at the forefront of scientific discovery and public health protection.



| Description of last year's two Omicron variant surges in Puerto Rico. The first one (gray) was due to the JN.1.x variant. The second (light blue) had the FLiRT sub-lineages as responsible for the surge. The figure has been adapted from data available at: <https://rconnect.dfc.harvard.edu/covidpr/>.

New rare variants detected

During this past year, our group was instrumental in detecting thirteen (13) recombinant Omicron variants in Puerto Rico. In addition, we have described four (4) new SARS-CoV-2 recombinant unique variants never reported before (from Puerto Rico). A recombinant COVID-19 variant is a strain of the SARS-CoV-2 virus that arises from the combination of genetic material from two viral lineages or variants. This recombination happens when a host is co-infected with two distinct virus strains. During replication, the genetic material from these strains can mix, resulting in a new hybrid variant. Recombinant variants are characterized by genetic mixing, containing sections of RNA from two separate viral lineages, which can lead to unique combinations of mutations do not present in the original variants. These new variants might exhibit changes in behavior, such as increased transmissibility, enhanced immune escape, or altered disease severity, depending on the combination of mutations they inherit.

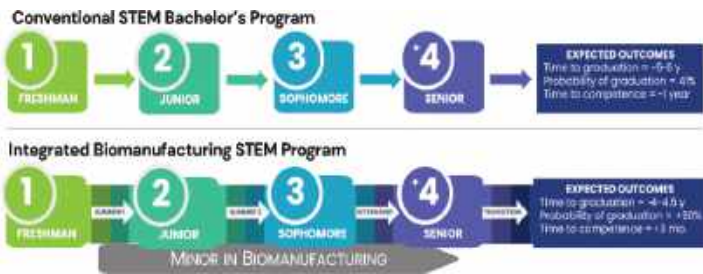
The importance of genomic surveillance in tracking recombinant variants cannot be overstated. Genomic surveillance is crucial for early detection of these variants, as it allows for identifying their unique properties and assessing their potential impact on public health. Monitoring changes in the behavior of recombinant variants is essential, as they may spread more easily, evade immunity from vaccines or previous infections, or cause more severe disease. Understanding the genetic makeup of recombinant variants is also vital for evaluating the continued efficacy of vaccines and treatments, as some recombinants may carry mutations that reduce the effectiveness of neutralizing antibodies or antiviral drugs. Surveillance data play a critical role in informing public health strategies, such as updating vaccines, adjusting treatment protocols, or implementing targeted measures to control the spread of these variants. Additionally, recombinant variants provide

valuable insights into the evolutionary dynamics of SARS-CoV-2, helping scientists understand how and why this recombination occur, which can aid in predicting future variants and preparing more effective countermeasures. In summary, recombinant COVID-19 variants are a significant aspect of the virus's ongoing evolution, and genomic surveillance is essential for monitoring these variants, understanding their impact, and guiding public health responses to mitigate their effects. Some examples of the rare recombinant variants reported are:

- (a) We are working on reporting a rare recombinant sample of XCH lineage. XCH is a previously described recombinant between GK.1.3 and XBB.1.9 (Report 144, sample collected on 12.05.2023)
- (b) Another rare recombinant sample was reported. A sample of the XDD sublineage was collected on 12.06.2023. The XDD sublineage is a relatively recent but previously described recombinant between JN.1 and EG.5 sublineages. (Report 143)
- (c) Another rare recombinant sample of the XCH.1 lineage was detected. The XCH.1 sublineage is a previously described recombinant between GK.1.3 and XBB.1.9 sublineages. We identified an amino acid (aa) substitution (i.e., S:P621S) not previously described in other XCH.1 samples. However, this substitution has been reported in BA.2.86 samples. (Report 141, the sample collected on 11.30.2023). Manuscripts are beign prepared. This work will be presented at the American Society for Microbiology specialized meeting on Rapid Applied Microbial Next-Generation Sequencing and Bioinformatic Pipelines (ASM NGS) on Oct. 13—16, 2024, in Washington, D.C.

EDA PRBio Tech Hub – Track 2 funding application

The Research Institute participated actively in the PRBio Tech Hub led by the Trust, Technology Transfer Office and colleague Dr. David Gulley. In collaboration with the North Carolina State University Biomanufacturing Training and Educational Center (NC BTEC), the Department of Chemistry of the University of Puerto Rico at Humacao (UPRH), INDUNIV, the Department of Economic Development of Puerto Rico (DDEC) and our colleagues from Accenture, we proposed the Puerto Rico Integrated Biomanufacturing STEM Program (PR-IBSP) aimed to create industry-ready students for the biomanufacturing industry. The program aims to establish the first minor in biomanufacturing and provide hands-on training to chemistry and microbiology students. In addition, we will create the first biomanufacturing technology associate degree to produce highly skilled biomanufacturing technicians. In direct collaboration with the Pharmacy School of the Medical Sciences Campus (Regulatory Education Center) and the biotech company DSquare LLC, (Drug Development Training Center), we crafted the final proposal submitted named: “Advancing NextGen Workforce”. Acknowledging that a skilled and diverse workforce is imperative to economic growth, resiliency, and national security, we understood that tackling workforce development is a multi-step process. Accordingly, this proposal aims to leverage collective knowledge and expand on established, successful education and workforce development strategies crucial to biotechnology innovation. The proposal component was submitted with more than 15 commitment letters. Our budget with a matching from DDEC and the UPR-MSC of ~1.8 M was \$18.3 M for five years. Overall, the multicomponent proposal requested \$79.3 M. The Workforce Project will support the Hub’s established ecosystem, in coordination with the NSF Engine Development Award 2305699 Advancing Biopharmaceutical Technologies and Manufacturing Practices PR, to leverage the EDA’s KTFAs #7 which include biotechnology, medical technology, genomics, and synthetic biology.



Contrasting traditional STEM BS programs with our cutting-edge Integrated Biomanufacturing STEM Program (IBSP), we forecast a swift graduation timeline of 4-4.5 years with a graduation rate exceeding 90%. Additionally, our goal is to drastically shorten the journey to industry proficiency from years to under three months.

+32,500
Total COVID-19 samples banked in our biorepository

+15,600
Total COVID-19 samples sequenced

+9,838
Total COVID-19 mutations of interest analyzed

+12,388
Total COVID-19 samples uploaded to GSAID

Puerto Rico Biomanufacturing Apprentices Program (PRBAP)

We created the Puerto Rico Biomanufacturing Apprentices Program (PRBAP) to democratize access to well-paid careers in sectors foundational to our economy and well-being for individuals who may not wish to follow the conventional college route. The programs aim to provide hands-on experience and training in specific skill sets directly applicable to the biomanufacturing workforce, effectively bridging the gap between theoretical education and practical application. The PRBAP is designed to meet this critical demand head-on, offering rigorous training and hands-on experience for aspiring biomanufacturing process operators.

Biomanufacturing process operators are crucial throughout the biotechnology product manufacturing lifecycle, ensuring efficient production of pharmaceuticals, chemicals, and biotech goods. They manage, monitor, and regulate complex equipment for packaging and labeling, perform meticulous cleaning and sterilization, prepare solutions and media, and

blend active ingredients for various finished products like tablets and syrups. The PRBAP is a multi-unit single course certificate program that will provide the foundational skills needed to begin a career as a biomanufacturing process technician for a biotechnology, pharmaceutical, or chemical manufacturing company. The lecture/lab program, as shown in the image below, is designed to be completed in 15 weeks. An optional version that will include competencies of Emerson’s Manufacturing Execution System (MES) Syncade will be available. Upon completion, participants will continue paid training at a designated biopharmaceutical industry in Puerto Rico for a full year. The project was presented to the DDEC and members of the biopharmaceutical industry. The project fully aligns with the DDEC PROpósito initiative and the 21st Century Techforce via the short credentials program. Supported by a generous \$50 million grant, the “21st Century Techforce” initiative is dedicated to three key projects to revolutionize education for youngs and adults. It will be presented to the upcoming request for proposals from the DDEC.

- Chapter 01: Foundations of Pharmaceutical Quality and cGMP
- Chapter 02: Principles of Workplace Safety and Health Protocols
- Chapter 03: Techniques for Measuring and Monitoring Process Parameters
- Chapter 04: The Role of Chemical Processes in Biotechnological Manufacturing
- Chapter 05: Introduction to Biomanufacturing Equipment and Materials Handling
- Chapter 06: Strategies for Effective Process Control in Biomanufacturing
- Chapter 07: Manufacturing Facilities and Optimizing the Production Environment
- Chapter 08: Advanced Concepts in Biomanufacturing Production Processes



Fifteen-week course modules of the Biomanufacturing Apprenticeship Program and its integration with Syncade ® MES from Emerson. This integration will allow participants to be ready to visualize, produce and control the biomanufacturing process.

Presentations given, panels and abstracts submitted

- MRSC SBIR/STTR Panel—Dr. Marcos López, Research Institute Director and member of the NIH ZRG1 EMS-K (11) SBIR review panel participated in an SBIR panel organized by our SBIR program and the Puerto Rico SBTDC on January 23rd, 2024, at the Molecular Science Research Center.
- Caribbean Agriculture: Nourishing Resilience for Sustainable Food Security Symposium. Senior Research Scientist Dr. Lorraine Rodríguez Rivera was one of the keynote speakers at the ISBiot amphitheater symposium at the Inter-American University of Puerto Rico – Barranquitas on January 26th, 2024.
- NCI SeroNet Meeting: Our two submitted abstracts for the NCI SeroNet Meeting were accepted and presented at the NY Academy of Sciences on March 24-26, 2023 (Marcos López and Lorraine Rodríguez). This is part of the NIH grant from Dr. Lopez (NIH U01CA26054). Dr. Lopez also participated in the LongCOVID-committee meeting at the venue.
- ASM Conference on Rapid Applied Microbial Next-Generation Sequencing and Bioinformatic Pipelines (ASM NGS) Meeting Abstracts Accepted. Recently, all members of the PRCVSI submitted abstracts portraying seven important scientific stories coming from our daily operations. In addition, Attending the ASM Conference on Rapid Applied Microbial Next-Generation Sequencing and Bioinformatic Pipelines (ASM NGS) in October 2024 will offer a unique opportunity to stay at the forefront of advancements in next-generation sequencing (NGS) and its transformative applications in microbial sciences. By participating, we will gain deep insights into cutting-edge research and technologies that are revolutionizing fields like microbial ecology and clinical diagnostics. This conference is a must for anyone looking to be part of the discussions that are shaping the future of microbiology and genomics, providing a platform to connect with leading experts and drive innovation in these rapidly evolving disciplines. All our group will be attending this meeting on October 13-16, 2024.

Grants Submitted/In Preparation

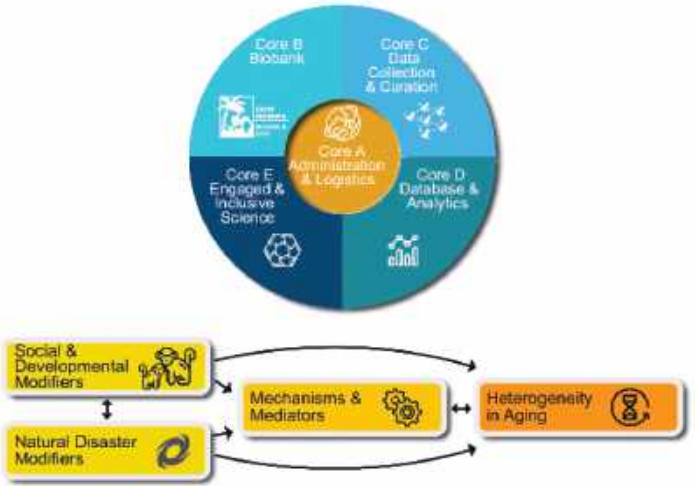
- DDEC – “Empowering Biomedical Innovation in Puerto Rico: A Strategic Investment for Enhancing Research & Development.” In collaboration with Andreica Maldonado and the Research Grants Program, we requested \$4MM from the DDEC to fund strategic startup packages for new investigators (3) for the Research Institute and Catalyzer Research Grants (10). Submitted on 11.20.2023 to DDEC.
- National Institutes of Health – National Institute of Aging U19 grant. Collaborating with the Cayo Santiago researchers worldwide, we are submitting a U19 multicomponent grant named “Causes, consequences, and modifiers of heterogeneity in aging in a naturalistic nonhuman primate model.” This collaborative, interdisciplinary U19 project aims to explore the complex aspects of aging in one of our nearest primate cousins, revealing how social and environmental factors influence aging, health, and disease. This vital data will contribute to extending human healthspan by identifying protective factors and understanding the mechanisms behind aging. This knowledge will guide the creation of specific interventions to lower the risk of diseases and disabilities linked to aging. By pinpointing the factors that cause variations in aging, we aim to devise personalized approaches to enhance health and extend the period of life spent in good health, ultimately benefiting overall population health, and lessening the impact of conditions associated with aging. The expected funding to be requested is 40MM. Multiple subawards will be coming.

Collaborations with other programs:

- Research Grants Program—Advanced Grants—In collaboration with the Research Grants Programs, we assisted in running one of the review panels on January 10 and, as part of the Advisory Board, helped choose the final grantees on February 2nd.
- Acércate al Grant – Colmena66 – we participated in various “Acércate al Grant” meetings to support with SBIR/STTR knowledge and questions. This is ongoing.
- BioLeap: A Life Sciences Innovation Incubator Program – In collaboration with Parallel 18, we submitted a funded grant to EDA. This grant gave birth to BioLeap, the first life sciences innovation incubator program. Dr. Marcos Lopez is a co-investigator. This is ongoing.

THE PUERTO RICO SCIENCE, TECHNOLOGY AND RESEARCH TRUST NOW IS A BONAFIDE NON-PROFIT ORGANIZATION MEMBER OF THE NATIONAL INSTITUTE FOR INNOVATION IN MANUFACTURING BIOPHARMACEUTICALS (NIIMBL).

During the Biotechnology 2024 Meeting in San Diego, PRSTRT CEO Eng. Lucy Crespo, Dr. Marcos Lopez from the Research Institute, and Dr. David Gulley from the Technology Transfer Office held productive discussions with NIIMBL executives regarding PRSTRT’s entry as a non-profit member. NIIMBL, the National Institute for Innovation in Manufacturing Biopharmaceuticals, is a prominent public-private partnership dedicated to advancing the biopharmaceutical manufacturing sector, addressing critical industry challenges, and cultivating a skilled workforce prepared for the future. NIIMBL’s core mission is to accelerate innovation in biopharmaceutical manufacturing by fostering the development and adoption of cutting-edge technologies. It is pivotal in establishing standards that enable more efficient, scalable, and rapid production processes. In addition to technological advancements, NIIMBL



4

Number of recombinant COVID-19 unique variants detected (not previously reported):

3

Number of recombinant COVID-19 variants described

The number of COVID-19 surges fully described during the pandemic in Puerto Rico:

6 out of 8

is committed to educating and training a world-class biopharmaceutical manufacturing workforce, positioning the United States as a global leader in this critical industry.

Given our EDA Tech Hub designation and our upcoming application to the NSF Regional Innovation Engines, which focus on biomanufacturing and biopharmaceuticals, becoming a member of NIIMBL aligns seamlessly with our strategic goals. This membership strengthens our commitment to leading and advancing the development and adoption of next-generation biopharmaceutical manufacturing technologies that contribute to patient well-being and Puerto Rico’s economic growth. Furthermore, NIIMBL membership directly supports the Puerto Rico Science, Technology, and Research Trust’s (PRSTRT) vision of transforming Puerto Rico into a global innovation hub. As official members of NIIMBL, we now have access to a broad range of opportunities for collaboration and industry growth. Membership enables you to collaborate with a network of professionals across the biopharmaceutical sector, fostering the exchange of diverse expertise and innovative solutions to complex industry challenges.

Participation in NIIMBL-led programs and cutting-edge technical innovation projects allows us to contribute directly to advancements in biomanufacturing while simultaneously engaging in talent development and workforce initiatives that are vital to the industry’s future. By participating in these initiatives, you’ll be positioned at the forefront of innovation, gaining early access to emerging technologies and ideas within the NIIMBL community. These opportunities are beneficial and exciting, as they allow us to be part of the future of biopharmaceutical manufacturing.

Additionally, NIIMBL membership offers intellectual property (IP) advantages, ensuring that members’ contributions are recognized, protected, and can be leveraged for future growth. Members also benefit from exclusive access to high-level workshops, events, and the National Meeting, all focused on key industry topics, providing invaluable opportunities



for networking, partnerships, and collaboration. These benefits drive progress and innovation in biopharmaceutical manufacturing, aligning perfectly with our mission to enhance Puerto Rico’s role in the global biotech ecosystem.

Strategic Planning

The Research Institute continues to evolve significantly, reflecting our commitment to advancing scientific discovery and public health. This semester, we are set to complete the execution of the genomic surveillance initiative we have diligently supported since 2021, a milestone that will result in sequencing thousands of samples. Furthermore, for the first time, we will establish and measure the neutralizing antibody responses to SARS-CoV-2 across the Puerto Rican population, analyzing more than 1,000 samples representative of the entire island. This groundbreaking effort will provide critical insights into the population’s immunity and resilience against the virus.

However, we need to evolve. We aim to transform the Research Institute’s current efforts into an ecosystem in which research and innovation meet excellence. Accordingly, the Research Institute must be positioned to attract the best talent. Then, we must nurture an ecosystem where possibilities flourish. Appropriately, we aim to assemble an advisory board that will help us guide the next steps of the Research Institute. We will align entirely with the Trust’s vision of transforming Puerto Rico into a global innovation hub. To achieve success, the Research Institute must serve as a dynamic ecosystem that is at the forefront of advancing the life sciences sector in Puerto Rico. This vision entails creating an environment where cutting-edge research, innovation, and collaboration thrive, positioning the institute as a central hub for scientific excellence. The institute is envisioned as a kaleidoscope of resources—an ever-evolving blend of state-of-the-art laboratories, advanced technologies, and comprehensive support services that empower researchers, entrepreneurs, and industry leaders to push the boundaries of what is possible in life sciences.

What sets the Research Institute apart is its distinctive academic environment, which fosters intellectual growth and creativity and serves as a crucible for nurturing the next generation of scientific leaders. The institute’s proximity to leading academic institutions ensures a continuous influx of

fresh ideas and perspectives, fueling a remarkable talent pool of highly skilled professionals ready to tackle the most pressing challenges in biomedicine, biotechnology, and related fields.

By integrating these elements, the Research Institute becomes more than just a research facility; it catalyzes Puerto Rico’s economic growth. The innovations and breakthroughs that emerge from this ecosystem will drive the development of new industries, attract investment, and create high-quality jobs, transforming Puerto Rico into a global leader in the life sciences. The institute’s impact will ripple through the local economy, elevating Puerto Rico’s position on the global stage as a beacon of scientific progress and economic resilience.

Workforce Development Initiatives

As part of our broader mission to contribute to Puerto Rico’s transformation into a global innovation hub, we have undertaken significant initiatives under the Economic Development Administration’s (EDA) Regional Technology and Innovation Hubs (Tech Hubs, PRBioTech Hub) program. One of our critical efforts involves developing cutting-edge workforce development programs tailored to the biomanufacturing industry. This initiative is a collaborative effort involving key partners, including INDUNIV, the Department of Economic Development and Commerce (DDEC), leaders from the biopharmaceutical sector, and educational institutions like the University of Puerto Rico at Humacao (UPRH). We are ensuring that our programs are aligned with industry demands, fostering economic growth and enhancing Puerto Rico’s competitive edge in the global market.

The cornerstone of this initiative is the Puerto Rico Integrated Biomanufacturing STEM Program (PR-IBSP). This project was submitted as part of the EDA PRBio Tech Hub Track 2 funding application. This program, developed in collaboration with the North Carolina State University Biomanufacturing Training and Educational Center (NC BTEC) and Accenture, aims to create industry-ready students by establishing the first minor in biomanufacturing at UPRH. Additionally, the program will offer hands-on training in chemistry and microbiology and create the first associate degree in biomanufacturing technology, specifically designed to produce highly skilled biomanufacturing technicians. This program is a crucial component of our multi-step approach

to workforce development, recognizing that a skilled and diverse workforce is essential for economic growth, resiliency, and national security. We aim to fund this initiative via the NSF Regional Engines program.

WHAT’S NEXT

A new home for research and innovation: Nexus Research and Innovation Center (NRIC)

We are undertaking an ambitious collaborative project with Parallel18 and the Puerto Rico Consortium for Clinical Investigation (PRCCI) to establish a state-of-the-art research, training, and economic development center. This new facility, which will serve as the home for our Research Institute, is much more than just a physical space—it represents a visionary leap forward in creating an environment that fosters innovation, collaboration, and economic growth. Located adjacent to the Forward Building, this annex will be a beacon of scientific progress, designed to meet the needs of independent investigators while also housing a cutting-edge biomanufacturing training and educational center.

The facility is envisioned as a dynamic, multifaceted space that encapsulates the essence of community and collaboration. It will include an Industrial Biomanufacturing Workforce and Training Center, the P18 Innovate Labs (featuring BSL1 and BSL2 wet lab spaces), and advanced laboratory facilities dedicated to the Research Institute of the Trust. Strategically situated in the heart of Science City, this center will be a testament to our unwavering commitment to revitalizing Puerto Rico’s research and innovation landscape, following the significant challenges of recent natural disasters.

This Nexus Research and Innovation Center (NRIC) is more than just a building; it symbolizes Puerto Rico’s resilience and ambition to become a global leader in science and technology. The facility is designed to serve as a hub where research, training, and economic development intersect, driving forward

Puerto Rico’s transformation into a global innovation hub. By fostering a vibrant ecosystem that supports life sciences research and biomanufacturing, the center will play a crucial role in attracting top talent, advancing cutting-edge research, and creating high-paying jobs.

This facilities is central to our vision, addressing the economic and infrastructural challenges exacerbated by Hurricanes Irma, Maria, and Fiona. Situated in San Juan, the NRIC is conceived as a transformative initiative that leverages Puerto Rico’s unique strengths, including its strategic geographic location, multicultural society, and globally connected diaspora. The NRIC will be a cornerstone of Puerto Rico’s recovery and long-term resilience strategy, providing the resources and infrastructure needed to elevate the island as a biotechnology Tech Hub, a designation recognized by the Biden-Harris administration.

The NRIC will feature several key components that align with our mission to drive innovation and economic development. The Industrial Biomanufacturing Workforce and Training Center will be a cross-disciplinary instructional facility aimed at developing a highly skilled workforce tailored to the demands of the biomanufacturing industry. This center will offer specialized programs for high school graduates, undergraduates, graduate students, and working professionals, ensuring that Puerto Rico produces top-tier biomanufacturing professionals. The BioLeap Laboratories, an extension of the EDA Build To Scale Program Venture Challenge, will provide critical laboratory space for early-stage startups, addressing the current gap in R&D infrastructure on the island.

Moreover, the new Research Institute facilities will significantly enhance Puerto Rico’s research capabilities by providing state-of-the-art BSL-2/3 lab spaces, core labs, conference rooms, and office areas that promote interdisciplinary collaboration. This evolution of the Research Institute is essential for attracting top talent in biomedical sciences and increasing investigator-initiated research, thereby fostering innovation and driving economic growth.

Additionally, the Center for Personalized Medicine, powered by the PRCCI and PRSTRT Programs, will be a groundbreaking facility dedicated to advancing equity in healthcare, particularly for underserved and marginalized populations. This facility will offer tailored interventions based on individuals’ unique genetic profiles and characteristics, providing comprehensive care that includes prevention, diagnosis, and treatment of diseases.

The NRIC’s emphasis on equity, recovery, and resilience aligns closely with the EDA’s investment priorities. By prioritizing traditionally underserved populations and incorporating climate-resilient principles into its design, the center will ensure that Puerto Rico is well-prepared to withstand future disruptions and continue its path toward sustainable economic growth. The co-location of the Research Institute, biomanufacturing training center, and BioLeap Labs within a single facility will create a unique ecosystem where ideas can transition seamlessly from research to commercialization. This integrated approach will accelerate the development and deployment of new technologies, driving economic growth and job creation while positioning Puerto Rico as a leader in the global biotechnology landscape.

Through these efforts, we are not just building a new home for research and innovation; we are laying the foundation for a brighter, more resilient future for Puerto Rico, where science, technology, and economic development are intertwined in a dynamic and thriving ecosystem.



ENTREPRENEURSHIP



What we do

Colmena66 facilitates entrepreneurship by connecting and building the entrepreneurial community. Our vision is that everyone in Puerto Rico can start and grow a successful business. We are an entrepreneurial ecosystem builder and integrator. Colmena66 is the one-stop shop to help entrepreneurs navigate community resources, fostering connections to enable entrepreneurs to reach their goals. We identify and analyze gaps in the entrepreneurial ecosystem and work hand in hand with the Entrepreneurial Resource Network to build the invisible infrastructure that supports entrepreneurs.

How we do it

As the main resource hub for entrepreneurs, we provide guidance through our call center, interactive resource directory, action plans, event calendar and educational resources. We help find answers to any business question and connect entrepreneurs with the right resource at the right time so that they can start or grow a successful business.

Colmena66 convenes and builds community among Entrepreneurship Support Organizations (ESOs) in the Resource Network. They can leverage our events, communication channels, and data to amplify their reach and better serve entrepreneurs. ESOs benefit from opportunities to network, educate their staff, and join ecosystem-wide efforts such as the Resource Network Meetups, the Boricua Empeñe Fest, Tu Camino Empresarial regional events, the Status Report of the Entrepreneurial Community in Puerto Rico and Levanta tu Negocio crisis recovery platform.

Who we connect with

To fulfill our role of entrepreneurial ecosystem builder and integrator, we work with entrepreneurs and connect them with the right ESOs to address their needs. We are the only organization in Puerto Rico that works with all types of businesses, at any stage. The ESOs that make up our Resource Network include non-profit organizations, service providers, academia, government agencies, and others. With this network we have been able to develop system-wide initiatives related to public policy, innovation and R&D, capacity building, disaster recovery, and much more.

IMPACT NUMBERS

5,009

Entrepreneurs assisted in 2023
(a 36.9% increase compared to 2022).

20,000

Total entrepreneurs assisted since 2016.

3,019

Referrals of entrepreneurs to the
right resource at the right time.

10,031

Total interactions with
entrepreneurs in 2023.

200+

Business resources on
our Resource Network.

9/10

Entrepreneur's rating
of Colmena66's services.


Levanta Tu Negocio

Levanta Tu Negocio is the crisis recovery platform supporting small and medium-sized enterprises (SMEs) in crisis preparedness and response. Led by Colmena66, this collective effort aids SMEs in overcoming disasters. We developed a self-diagnosis quiz for entrepreneurs to assess their crisis and disaster preparedness, a critical component of our proactive crisis recovery strategy in Puerto Rico, especially after Hurricane Fiona. With 129 entrepreneurs having used the tool, results show 93% remain vulnerable to such challenges. Colmena66 and other Resource Partners were recognized by the PR & USVI SBA District Office for their relief efforts post-Hurricane Fiona, receiving a District Director Award in May 2024.

Key actions included:

- Establishing a Working Group with the Business Emergency Operations Center, PRiMEX, and the Puerto Rico Department of Economic Development and Commerce.
- Hosting a Network Meetup focused on crisis preparedness, emphasizing “precovery.”
- Referring entrepreneurs, that according to the crisis preparedness quiz needed contingency plan support, to PRiMEX.

1st position



In comparison to 80+ other SourceLink affiliates across the US, regarding the number of entrepreneurs seeking assistance and the number of counseling hours provided.

36.6% of the entrepreneurs surveyed indicated that they made the decision to start a business after contacting Colmena66.

Boricua Emprende Fest

The Boricua Emprende Fest is Puerto Rico’s largest entrepreneurship event, designed to be the most inclusive and accessible annual celebration of business education. Featuring over 70 business resources and 50+ educational sessions with industry-recognized speakers, it drew 1,871 participants in 2023, an increase of 56% when compared to 2022. Of these, 42% had an established business, 59% were women, and 56% were aged 25-44. The event provides a unique opportunity for attendees to connect with business support resources in one place. In 2023, 98% of participants reported improved access to these resources. The BE Fest facilitated over 10,000 connections between entrepreneurs and resources. Additionally, the number of participants traveling to Puerto Rico for the event tripled compared to the previous year (3.4x)



| Entrepreneurs, Boricua Emprende Fest



| Coffee Talks session, Boricua Emprende Fest

Pulso

PULSO is part of SBA's Community Navigator Pilot Program, designed to equip small businesses with essential tools and resources for survival, growth, and expansion. Collaborating with Foundation for Puerto Rico, INprende, Latino Economic Development Center, Brands of Americas, and Centro para Emprendedores, our collective efforts secured \$1 million in funding and disbursed over \$160,000 in grants. We assisted 49 businesses in securing capital, impacting 62 of Puerto Rico’s 78 municipalities. Through workshops, we reached 1,305 entrepreneurs and over 641 companies, while 191 companies received mentorship and support. These efforts helped retain or create 605 jobs.

Global Entrepreneurship Week

Global Entrepreneurship Week (GEW) celebrates entrepreneurs and innovators who dream big and launch startups that bring ideas to life. GEW reaches millions of people of all ages and backgrounds through local, national, and global events and activities. Each November, the business support organization, Young Entrepreneurship Education System (Yees!) leads the celebration, and as co-organizers, we collaborate with our business support resources to invite organizations to participate. Alongside other global partners, we lead the campaign of inviting organizations and resources to host events and competitions to celebrate and support local entrepreneurs. We centralize all these activities on our Entrepreneurship Calendar and share them with the community. In 2023, Puerto Rico positioned #1 in the Leaderboard for United States and Top 10 in the Global Leaderboard creating more than 140 local events.

Tu Camino Empresarial Tour

Tu Camino Empresarial is a map that helps entrepreneurs easily identify resources available for starting or growing your business, according to their business type and stage. After three years, in 2023, we relaunched the Tu Camino Empresarial Tour events, this time in Mayagüez. These regional events connect entrepreneurs with business support resources in real time. The Mayagüez event had a satisfaction rate of 4.9/5, with over 190 participants. We closed the year with 1,330 new users of the Tu Camino Empresarial and Tu Camino Agroempresarial maps.

Relaunch of our Website

We completely redesigned our website by enhancing the navigation of our Resources Directory searches, adding a new Entrepreneurship Calendar, and improving the overall user experience.

These updates resulted in:

8,305
calendar visits
a 13% increase form 2022.

867,794
website visits since 2016,
124,531 in 2023 alone.

18,266
open calls page visits since 2021,
4,952 in 2023.

82,818
engagements across the website in
2023.

Launch of the Status Report of Puerto Rico’s Entrepreneurial Community

With the goal of continuing to inform the ecosystem and provide actionable data, we launched the first Interactive Status Report of Puerto Rico’s Entrepreneurial Community, an interactive dashboard on Power BI. We are the first non-profit organization in Puerto Rico to use this tool to gather and present the collective impact and development of the entrepreneurial ecosystem. In this 2023 interactive dashboard, we include impact metrics for the year, results and data from our entrepreneurship and business support organizations annual surveys, and recommendations for the following years. With this report we expect to continue highlighting the stories and challenges our community faces and how we have all been working together to drive equitable and inclusive entrepreneur-led economic development. [See the report here: colmena66.com/reporte-de-la-comunidad-2023/](https://colmena66.com/reporte-de-la-comunidad-2023/)

Ecosystem Building Leadership Network

Colmena66 was selected as one of thirteen members of the first Leadership Council establishing the Ecosystem Building Leadership Network, dedicated to advancing entrepreneurship ecosystem building at a national level.

Advising the Consumer Financial Protection Bureau

Colmena66’s Executive Director, Denisse Rodríguez, was nominated by the President of the Federal Reserve Bank of NY to be part of the Consumer Advisory Board of the Consumer Financial Protection Bureau, becoming the first Puerto Rican living in Puerto Rico to do so.

Acércate al Grant

Acércate al Grant (AAG) is designed to help researchers and entrepreneurs transition innovative technologies from the lab to the market. Funded by the

Growth Accelerator Fund Competition 2023 (\$200k SBA GAFC23 Award), the Trust through Colmena66 is one of 40 nationwide winners. The program aims to boost the number of successful SBIR/STTR awards from Puerto Rico, with a target of having at least 80% of participants complete the program and submit competitive proposals. In its second cohort, AAG is supporting 16 selected projects, integrating 8 grant writing advisors, processed 82 applications, and reached 516 entrepreneurs and researchers through its outreach events.

SBIR/STTR Grants Program

Top Impact Numbers:

16

outreach events and webinars.

3

SBIR Awards for Puerto Rico.

29

projects assessed and 5 supported for submission.

\$200,000

matched by our Matching Funds Program for two Phase 1 awards.

Organized historic visit from DARPA’s SBIR/STTR program.

Supported the SBIR Road Tour and Federal Labs Consortium events in 2024.

Supporting 16 projects in the “Acércate al Grant” Program.

SBIR/STTR Awards in Puerto Rico

The major program achievement is the number of awards, four (4), and continuing at least one award every fiscal year since the Trust assumed leadership of the SBIR program in Puerto Rico. These projects have received over \$11.7M for R&D work and through the Trust’s Matching Funds they accessed an additional \$3.25M.

Fiscal Year	Awards	Award Amount	Matching Funds	Contribution To Puerto Rico Economy
2016	1	\$150,000	\$300,000	\$150,000
2017	4	\$1,423,916	\$400,000	\$1,723,916
2018	3	\$675,000	\$400,000	\$1,075,000
2019	6	\$2,287,352	\$800,000	\$2,687,352
2020	4	\$2,617,251	\$149,998	\$3,417,251
2021	1	\$49,998	\$400,000	\$149,998
2022	5	\$3,570,685	\$200,000	\$3,970,685
2023	3	\$480,999	\$500,000	\$680,999
2024 YTD	1	\$292,486	\$100,000	\$492,486
Grand Total	28	\$11,547,687	\$3,249,998	\$14,397,685

During FY23, 3 SBIR/STTR grants, totaling \$677,094, were awarded to Puerto Rico from NIH and DoD. The Trust matched \$100,000 each for 2 of the projects’ Phase I.

Company	Agency	Award Date	SBIR-STTR Award	Matching funds	Phase	Total Funds
Lifegene-BioMarks Inc	NIH	9/20/2023	\$300,000	\$100,000	SBIR Phase I	\$392,486
INKIT Worldwide LLC	DoD (USAF)	5/10/2023	\$400,000	\$-	SBIR Phase I	\$74,999
INKIT Worldwide LLC	DoD (USAF)	5/17/2024	\$400,000	\$100,000	SBIR Phase I	\$209,609
Total						\$677,094

LifeGene-BioMarks, Inc.’s mission is to inspire communities and individuals to take control of their health and well-being through innovative DNA tools for the early detection of cancer. This company has won 5 SBIR/STTR awards since 2019, with the most recent award designated for a Precision DNA methylation test to reduce oral cancer disparities in African American patients residing in low-resource settings.

Inkit is the only Secure Document Generation (SDG) software that allows users to generate, sign, and retain documents in total privacy. Inkit received its first award in 2021 and has *won a total of 6 SBIR/STTR awards to date*. Their 2023 awards focused on a Document Generation Platform (DGP) and Medical Records Management and Security with the DOD US Air Force.

Outreach and Education Efforts

We hosted and participated in various events to reach entrepreneurs and researchers, aiming to increase the pipeline of qualified SBIR/STTR candidates and awards in Puerto Rico.

In late 2023, we engaged in key activities to promote SBIR/STTR programs. In November, we hosted DARPA SBIR-STTR managers, who presented opportunities and held a roundtable to strengthen local collaboration. Shortly after, our team presented at the Forward Summit, sharing our SBIR-STTR Grant program and resources with Dr. Michelle Martínez highlighting her entrepreneurship journey.

In December, we organized two workshops. The first, at UPR-Mayagüez, covered SBIR/STTR basics and grant writing with insights from Dr. Juan Figueroa and Dr. Thomas Allnutt. The second, at the Trust, focused on crafting award-winning proposals and reviewing successful examples.

In early 2024, we continued our outreach. On January 23, we collaborated with PR SBTDC for an SBIR Reviewer Panel at the MSRC, supporting the 2024 SBIR Road Tour. We then joined the SBA Innovation & Technology Roundtable, preparing for the Road Tour. In February, we hosted a webinar on filling out Quad Charts, helping candidates prepare for agency meetings during the Road Tour. On February 8, Valentina Pirazzi presented our resources at the FLC T2 Event.

On February 9, during the SBA SBIR Road Tour, we played a key role in increasing participation in one-on-one meetings with program managers. On the same day, Dr. Figueroa presented our programs to UPR-Río Piedras students.

We presented at the Elevate Summit on February 26, further expanding our reach. In March, we participated in the Access to Capital Panel, enhancing participants' understanding of capital opportunities.

In April, we presented the SBIR-STTR grant program at AcadeMix, connecting with academic researchers. In May, we contributed to the UPR-M Research Symposium and the Angel Investor Insights Event, highlighting our programs' potential to bridge the gap between research and market success.

Finally, in June, we hosted NIH/HHS, where we discussed opportunities to enhance support for our participants and the ecosystem.

Throughout these events, we focused on expanding awareness, providing support, and fostering collaboration within Puerto Rico's innovation ecosystem.

Acércate al Grant (AAG) program support

The SBIR/STTR program supports Acércate al Grant (AAG) to serve participants throughout their proposal development process:

- Identify qualified SBIR/STTR experts to serve as Grant Writing Advisors. Currently 8 are working with the program.
- Evaluate project fit for SBIR/STTR and commercialization potential, ensuring a rigorous selection process.
- Providing scientific, technical, and commercialization advisory throughout the grant writing process.
- Helping connecting participants with other experts and resources to strengthen their proposals. These experts include academic researchers, past SBIR/STTR awardees, ecosystem contacts and more.
- Review proposals to provide feedback and develop letters of support to competitive submissions.
- For awarded companies, conduct due diligence to qualify them for the Matching Funds program, approval processes, and funds disbursement.

New collaborator: Federal Labs Consortium

Following the Federal Lab Consortium's FLC: T2 event, the visit sparked an opportunity to expand its reach to Puerto Rican entrepreneurs and researchers while strengthening relationships in the local innovation ecosystem. We signed a Memorandum of Understanding with the FLC at the Trust to increase awareness and access to their resources. We have already organized a virtual meeting with ecosystem partners to learn about the FLC's tools, such as [FLC Business](#). We plan to host more education sessions to teach the community about the FLC, and with Colmena66, we will be hosting part of the FLC team during the Boricua Emprende Fest.

WHAT'S NEXT

Colmena66 will continue building Puerto Rico's entrepreneurial ecosystem, strengthening relationships and expanding our initiatives.

We will host the Boricua Emprende Fest 2024 at the Complejo Ferial in Ponce. This event includes the "El BemBÉ del BE Fest", expanding it beyond a one-day event, a full-day education agenda, and more. Our goal is to reach more entrepreneurs outside San Juan, facilitate inter-regional connections and grow the community.

We will maintain partnerships, such as with Yees! during Global Entrepreneurship Week in November, aiming to position Puerto Rico among the top three globally with over 100 events. We also collaborate with Donativos Ambientales Ford to support nonprofit environmental projects, crafting unique storytelling and sharing it with our 48,900+ followers through newsletters, blogs and social media.

We will continue collecting data through the Annual Entrepreneurship Survey in collaboration with the Resource Network, targeting 800 responses from individuals with business ideas or established ventures, and 85 responses from business support resources on the Entrepreneurship Support Organizations Annual Survey. The data will help us update and improve the interactive dashboard showcasing our community's

impact and development, featured in our annual Status Report of Puerto Rico's Entrepreneurial Community.

With the rise of innovation-focused programs, we aim to increase SBIR/STTR awards in Puerto Rico. Through Acércate al Grant, the SBIR/STTR Grants Program has begun a transformative transition. We are improving how we deliver technical assistance and consolidating our efforts within the Trust. We will continue to implement an outreach campaign and expect to support 30 companies with their submissions.

By integrating sustained outreach efforts with support from other vital programs—such as the Research Grants' Catalyzer and Advanced Research grants, the Technology Transfer Office's EnTrust program, Parallel18's P18 accelerator and BioLeap life science incubator, Grupo Guayacan's I-Corps PR, and partnerships with other stakeholders—we are expanding the pipeline of SBIR/STTR-ready projects. We are also streamlining the Matching Funds program as we support and secure more SBIR/STTR awards. This includes updating guidelines to meet the needs of newly awarded projects, enhancing due diligence processes, and offering support through the performance period. These efforts aim to increase the Trust's investment in innovation-based businesses to foster economic growth and fuel Puerto Rico's knowledge economy.





parallel¹⁸

Parallel18 is a top-level, performance-driven international innovation hub focused on providing funding, mentorship, business connections, and investment to underrepresented founders around the globe.

The program is part of the Puerto Rico Science, Technology, and Research Trust, a private non-profit organization created with the goal of maximizing Puerto Rico's participation and creation of jobs in the global knowledge economy by promoting investment and financing of science, technology, research and development. The organization manages and hosts over a dozen initiatives that range from grants and technical support to meetups and educational resources for researchers, entrepreneurs, farmers, investors, and other groups.

MISSION & VISION

We are changing the narrative of Puerto Rico's economy by promoting a diverse business community. We believe in creating opportunities for entrepreneurs of underrepresented groups in the innovation ecosystem and support their dreams of building a high-impact business with a global reach. Our mission is to support founders' entrepreneurial journey while working to position Puerto Rico as a unique hub for innovative businesses and technological advancement.

We nurture globally-minded startups with strong roots in their local communities and encourage the development of solutions to problems with a global outlook, providing access to exceptional resources tailored to streamline the way to their utmost potential.

We leverage Puerto Rico's advantages as a multinational business hub that offers the structures and protections of U.S. legal frameworks with cultural connections to Latin America and the Caribbean and a bilingual highly-trained workforce.

IMPACT NUMBERS

498

Graduated companies in all programs
in seven years.

123

Partnerships formed.

60

Graduated companies in all programs.

P18 Gen. 11, pre18 Gen. 6,
Xpand Gen. 3, BioLeap Gen. 1

24

Investments deployed in companies.

P18 + Matching Fund + Xpand



P18 Gen.11 DemoDay

P18 Gen. 11

Our international acceleration program P18 has been welcoming companies from across the globe for eight (8) consecutive years. This program fosters a diverse ecosystem that not only supports the local business landscape but also provides invaluable opportunities for global expansion. Last fiscal year our dedicated team was committed to offering top-notch business education, facilitating business connections, and paving the way for investment opportunities for all our startups. Through these efforts, we strive to not only accelerate the growth of individual businesses but also position Puerto Rico as a hub for innovation and entrepreneurship on the world stage.

In just five months, 19 startups from P18 Gen. 11 achieved remarkable milestones. With 73 closed deals, this cohort showcased its ability to effectively cater to clients' needs. Moreover, its users witnessed significant growth, welcoming over 64,000 new ones who were eager to engage with their offerings. Demonstrating substantial progress, the eleventh cohort experienced a remarkable 2.6x increase in revenue.

Beyond its commercial success, our #P18ners made a positive impact on the community, with 829 individuals benefiting from its Giveback program during this period. These accomplishments underscore the program's effectiveness and its commitment to both business growth and societal betterment.

The P18 Gen. 11 results are as follows:

- \$760,000 in grants distributed among 19 startups from 9 countries
- \$380,000 deployed as investment capital
- \$1.3M revenue generated by participants
- \$83M enterprise valuation as reported by the cohort
- \$675,000 in private capital raised during the program by participants.

IMPACT NUMBERS

\$1,322,500

Grants Distributed (Pre18 & P18)

\$15,662,500

Cumulative Grants Distributed in 7 years

\$1,025,692.90

**Non-Paid Publicity Value
(1,260,453 Media Impressions)**



Founder Story: Juan Pablo Ortega, co-founder of Rappi



P18 Gen.11 Orientation Day

Pre18 Gen. 6

Our local pre-acceleration program, Pre18 Gen.6, consisted of 23 startups in industries such as Artificial Intelligence, Consumer Goods, FoodTech, E-Commerce, AgroTech, Logistics and Supply, Health, Education, Real Estate, Human Resources, Business Automation, LegalTech, among others.

After 12 weeks, our startups had their products in the market reporting increases in market adaptation and sales during their time in our program. As part of the curriculum for this cohort, the founders received over 38 mentorship sessions and engaged in more than 18 GiveBack sessions that impacted over 785 individuals, mostly university students. With a total of over 96 hours of direct contact with mentors, participants also forged valuable business connections, enriching their entrepreneurial journey and expanding their network within the industry.

This cohort's results are as follows:

- \$562,500 in grant funding distributed
- \$2,929,730 total revenue since inception reported
- 25 jobs created as reported



Pre18 Gen.6 Orientation



Pre18 Gen.6 Orientation



Pre18 Gen. 6 Mentor Session - Causa Local

Xpand

Xpand is a post-acceleration program supported by Banco Popular de Puerto Rico to assist innovative companies in advanced growth stages in Puerto Rico, ready to expand towards sustainable growth and scale into new markets.

During 2023, Gen.3 of Xpand (10 companies) participated in 25 hours of specialized mentorship and engaged in 18 sessions or workshops tailored to their needs. The founders had access to a diverse pool of 27 internal and external resources/mentors, providing comprehensive support.

Through these interactions, 50 connections were established, enriching the participating companies' networks and opportunities. This cohort represented seven industries, reflecting a broad spectrum of expertise and perspectives. Additionally, their ambitions extended across the oceans for export, spanning: México, Colombia, and mainland USA, focusing on regions such as Florida and California.

During Xpand Gen.3, parallel18 had the opportunity to allocate \$100,000 in seed capital investment in up to three companies: Konti Designs, Libros787, and PProduce who joined the Trust's investment portfolio by receiving this funding. With these three companies the portfolio sums up to 84 ventures.

As of 2024, the program started on May 6, 2024, with 18 companies that are looking to keep growing and export to other markets. This group represents 11 industries ranging from manufacturing, software development, entertainment, and medical devices, among others. Their ambitions extended across several jurisdictions for export, spanning: Mexico, mainland USA (Alaska, Florida), the Dominican Republic, and Chile.

*Gen. 4 is currently on going at the time of reporting and is estimated to end in November 2024.

XPAND RESULTS

28

Participating companies
(Gen. 3 and Gen. 4*)

16M+

Cumulative revenue reported
(Gen.3 and Gen.4*)

7

New jobs reported (Gen. 3)

\$100,000

In private capital invested by the Trust (Gen. 3)



| Xpand Gen.3 Closing Event



| Xpand Gen.4 Kick-Off Event

BioLeap

In January 2024, parallel18 launched BioLeap, the first life science incubation program specialized in assisting life sciences projects to increase economic development through innovation and entrepreneurship in key focus areas such as biotechnology, AI-driven medical technologies, and genomics, among others. The incubator's curriculum aims to close the gap between innovative local scientific research and its commercialization, while advancing the establishment of a local and inclusive ecosystem.

This first generation completed the program's capacity-building phase this summer. Now, these eight Puerto Rican companies are progressing to the next phase working on technologies in areas such as Agrotech, HealthTech, Digital Health, Pharmaceuticals, and AI-driven platforms. Startups in Gen. 1 are Cultimar Technologies, Let's Burble, GENOS LLC, REOF Tech (EC Care), Dynamiko Pharmaceuticals, LUDI, ImmunoVations, and AVID Data.

BioLeap provided its participants with a single point of access to educational and relevant resources to commercialize projects focused on life sciences. Founders received technical assistance, access to capital, and coworking space. The program gave them a supportive environment where entrepreneurs structured their businesses, launched a working prototype, and developed patentable technologies intending to commercialize them for exports around the world.

*The program is on-going at the time of reporting.

BIO LEAP BY THE NUMBERS

8

Graduating companies

3

New job created

+655k

In cumulative capital
raised by participants*

\$8M

In cumulative
valuation reported
by participants



| BioLeap Gen.1 Showcase



| BioLeap Gen.1 Showcase



| BioLeap Gen.1 Showcase

Challenge to Innovate: Project Switch (CTI)

In May 2024, we launched the incubation initiative Challenge to Innovate: Project Switch, an effort possible thanks to the Energy Program for Innovation Clusters (EPIC) Prize Round 3, sponsored by the U.S. Department of Energy Office of Technology Transitions (OTT). The OTT EPIC Round 3 incentivizes incubators that implement high-impact ideas to support energy startups.

Ten (10) participants were selected and for 12 weeks will have virtual access to industry-specific mentors from the parallel18 mentor network. These participating solutions are focused on the development of products, services, or technologies within the clean energy industry. These mentoring and training sessions aim to assist participants in developing their projects or technologies towards future commercialization.

Showcase is expected to occur during the BeFest 2024, the biggest entrepreneurship event in Puerto Rico, during August at the city of Ponce.

Parallel18: El Podcast

Last year, we promised to launch parallel18: El Podcast, a podcast to inspire, educate and accelerate entrepreneurial minds. This initiative came to life in July, 2023 where we provided an in-depth look at the unique challenges and opportunities faced by entrepreneurs in Puerto Rico, setting the stage for future discussions. To date, we have aired 14 episodes giving a voice to the entrepreneurial ecosystem in Puerto Rico. During our episodes, we’ve talked about a variety of topics that resonate deeply with our entrepreneurial community. We explored “Meet the Founders,” where we spotlight the journeys and insights of startup creators. Also, “From a Mentor’s Perspective,” we gained valuable wisdom from experienced mentors guiding the next generation of entrepreneurs. Innovation and inclusion were also key themes during this year, emphasizing the importance of diverse and forward-thinking approaches in business.



CTI: Project Switch, Kick-Off



CTI: Project Switch Kick-Off

Parallel18: El Podcast has garnered a total of 5,062 streams since its inception, with listeners tuning in from 32 different countries, with Puerto Rico and the United States being the two main audiences. The diverse international audience highlights the podcast’s broad appeal and reach across borders. Among the guests we’ve had are Laura Cantero from Guayacan; Nerma Albertorio from Centro para Emprendedores; Sofía Stolberg, founder of Piloto 151; Jorge A. Rodríguez, founder of PACIV; Laura and Francisco Tirado, founders of UVA; Sebastián Vidal, former Executive Director of parallel18; Manuel Cidre, DDEC Secretary; Rafi and Carlos Moreno from Hello Media; Dr. Miguel Vázquez, from True Self Foundation; and Enidsa Colón, Human Resources Expert, among others.

Parallel18 in the News

The exposure in local and international media is very important to us since this outreach helps us spread the word on our calls and important announcements and also help us position parallel18 as a top-level, performance-driven international innovation hub that provides support to founders all over the globe.

Last fiscal year parallel18 reached a non-paid publicity value of \$1,025,692.90 with 1,260,453 impressions in local and international media.



parallel18 el Podcast



parallel18 in the news

WHAT'S NEXT

On July 1st, 2024, we welcomed Gen. 12 in a brand-new space, the Forward Building at the Puerto Rico Science Trust Science City! Twenty-three (23) international startups representing fintech, cleantech, advertising, music, and healthcare, among other industries, will join us for 20 weeks. In this edition of the acceleration program, startups from Puerto Rico, mainland United States, Argentina, Brazil, Mexico, Chile, Colombia, Norway, Poland, Spain, and the United Kingdom will be participating.

These companies will receive an economic contribution of \$60,000 divided into two parts: a \$40,000 equity-free grant and a \$20,000 investment through a Simple Agreement for Future Equity (SAFE).

The participating companies are ATC, BioSnap, Buzzly, Fincrick, Flutter Labs, Heimdal, HighTide Intelligence, IAController Spa, IncentivesPro, Landa Club, Lets Fuel, MK Care, MyCloud Menu, No Limbits, Roam Stay, Inc., Toggle Communications, Topdoerr, uTripper, Wallbit, Watermelon, Wealth2B, WeavAir, and Xertify. The program cohort is expected to finish its activities in November 2024.

For pre18 Gen. 7, we plan to start our open call process for local startups in mid-September this year. We are aiming for the local entrepreneurial ecosystem (organizations, universities, associations, and the diaspora) and hope to surpass the number of applications submitted once again. The pre-acceleration program will start in January 2025.

Our post-acceleration program, Xpand, will continue supporting innovative companies in advanced growth stages in Puerto Rico, ready to expand to sustainable growth and scale into new markets. We expect to finish the program in November as well.

BioLeap will launch its open call for its second generation in October. We are aiming at 15 life sciences solutions this time. We continue our mission of increasing economic development through innovation and entrepreneurship in the life sciences sector in key focus areas such as biotechnology, AI-driven medical technologies, genomics, and more.

Furthermore, BioLeap is entering into a dual partnership facilitated by the Department of Economic Development and Commerce of Puerto Rico (DEDC) with the Molecular Sciences Research Center to offer laboratory space, free of charge, at their ASTRE center laboratories for BioLeap participants. In addition, as part of the DEDC efforts of supporting life sciences ventures and development in Puerto Rico, BioLeap participants will have access to non-dilutive funding to purchase supplies, consumables, and core laboratory services to scale their technological advancements to the next level.

The parallel18 Ventures team continues to scale these new initiatives and add partner organizations to strengthen our resources for our founders. We will continue evolving parallel18 Ventures based on the capital needs of our entrepreneurs while positioning venture capital as an accessible and validated asset class for potential investors in Puerto Rico.

Challenge to Innovate: Project Switch initiative will celebrate its Showcase at the 2024 Boricua Emprise Fest in Ponce.

In August 2024, the Economic Development Bank of Puerto Rico (BDE) announced the launching of the Puerto Rico Venture Capital Access Program (VCAP) in collaboration with the Puerto Rico Science, Technology and Research Trust and parallel18.

The VCAP aims to improve access to capital for underrepresented entrepreneurs in Puerto Rico and address emerging topics unattended in the local innovation ecosystem. The inaugural funding source for the VCAP is the State Small Business Credit Initiative (SSBCI), authorized by the American Rescue Plan Act of 2021.

The Economic Development Bank of Puerto Rico has been designated by the U.S. Treasury as the implementing entity for the \$30M allocation destined to the VCAP, with the support of the Puerto Rico Science, Technology, and Research Trust, through parallel18.

We know that the main factor limiting the potential for business growth in Puerto Rico is the lack of access to capital. Through the Venture Capital Access Program, we seek to fill that gap and promote access to venture capital that will impact startups on the island.

Applications for the Puerto Rico Venture Capital Access Program were made available in August 7, 2024 and remain open.



| P18 Gen.12 Welcome Event



| P18 Gen.12 Welcome Event



| CTI: Project Switch Kick-Off



| CTI: Project Switch, Kick-Off



What we do

Fase1 is our incubation program designed specifically for entrepreneurs in the idea/concept stage. It has two primary objectives: firstly, to offer accessible education in key concepts, tools, and methodologies of entrepreneurship, and secondly, to guide individuals in successfully transforming their ideas into thriving startups. The name ‘Fase1’ represents our commitment to providing new entrepreneurs and those with innovative ideas the fundamental knowledge and a structured approach for idea generation, validation, and product development. Fase1 serves as the starting point for any local aspiring to be part of the Puerto Rico business community, enabling them to gradually turn their creative ideas into tangible startups, one step at a time.

How we do it

Fase1 is divided into two steps, Fase1 Lab and Fase1 Intensive. Fase1 Lab is the foundation of our program, offering a comprehensive online academy. It features training modules covering various entrepreneurial topics that are based on current trends and industry needs. Each module consists of a compilation of short videos that include discussions on technical concepts and real-life experiences from “boristartups”. This simple yet resourceful educational tool aims to provide new and upcoming entrepreneurs with the knowledge and skills they need to succeed.

Participants who have completed at least the first three modules of Fase1 Lab can apply for Fase1 Intensive. This 12-week incubator program focuses on guiding 50 new ideas each year. It provides a structured and guided curriculum, drawing on both internal and external resources. The main objective of Fase1 Intensive is to enhance the capabilities of new founders and increase the success rate of their business endeavors.

To accommodate participants who may have other commitments, such as full-time employment or studies, and to ensure accessibility for those from different parts of the island, Fase1 Intensive is primarily conducted on Saturdays. Our hybrid format allows for both virtual and in-person participation, providing flexibility for individuals to choose the mode that best suits their needs. Fase1 Intensive is laser-focused on developing minimum viable products and meeting the requirements of pre18.



IMPACT NUMBERS

1,800+

Registered in our Fase1 community (as of 6/30/2024)

820+

Participants (events)

9

Entrepreneurial modules

42

Outreach events

Who we connect with

Fase1 was tailor-designed for new and upcoming boricuas emprendedores. That is why both, Fase1 Lab and Fase1 Intensive, are 100% in native-Spanish, for cultural and language accessibility. However, it is made available to everyone in Puerto Rico who wants to generate and develop new innovative ideas with a business mindset and vision.

We welcome new ideas from all sectors, genders, beliefs, and backgrounds. Our incubator seeks to ease the way people connect with and integrate into our unique and seasoned ecosystem of startups, mentors, and resources to contribute to a sustainable economic recovery and to the much-needed reconstruction of our island.

Fase1 is also part of the Small Business Incubators & Accelerators program in collaboration with the Puerto Rico Department of Housing under the Community Development Block Grant for Disaster Recovery (CDBG-DR) funding initiative.



Fase1

In our third year, our commitment to providing accessible education and nurturing new ideas has yielded impressive results. Our Fase1 community has experienced consistent growth, now reaching over 1,800 members. During the past fiscal year, there were 578 new registrations in our online academy, Fase1 Lab, with 270 entrepreneurs beginning the modules and 144 completing the first 3 modules, one of the requirements to apply to our incubator, Fase1 Intensive.

As part of our community engagement, Fase1 Lab active members continue to benefit from individualized support from our Startup Specialist team at every stage of the modules. We also maintained dynamic and consistent communication with our community to offer them additional educational materials and new opportunities available in our entrepreneurial ecosystem.

In the past year, we produced and launched two new educational modules—Transforming my Idea into a Minimum Viable Product and PRecovery for Your Business, the latter launched during the start of the 2024 hurricane season to bring awareness and readiness to entrepreneurs about the importance of having contingency and recovery plans in place for their businesses. Both modules include supporting work tools that help entrepreneurs put into practice what they have learned.

Our impact in rural and underrepresented communities is evident, inclusive and diverse: Fase1 Lab has supported entrepreneurs in 77 municipalities, with 55% of participants being from outside the metropolitan area. Additionally, 68% of our registered participants are women, 43% are millennials and 6% are members of the LGBTQIA+ community.

IMPACT NUMBERS

1,800+

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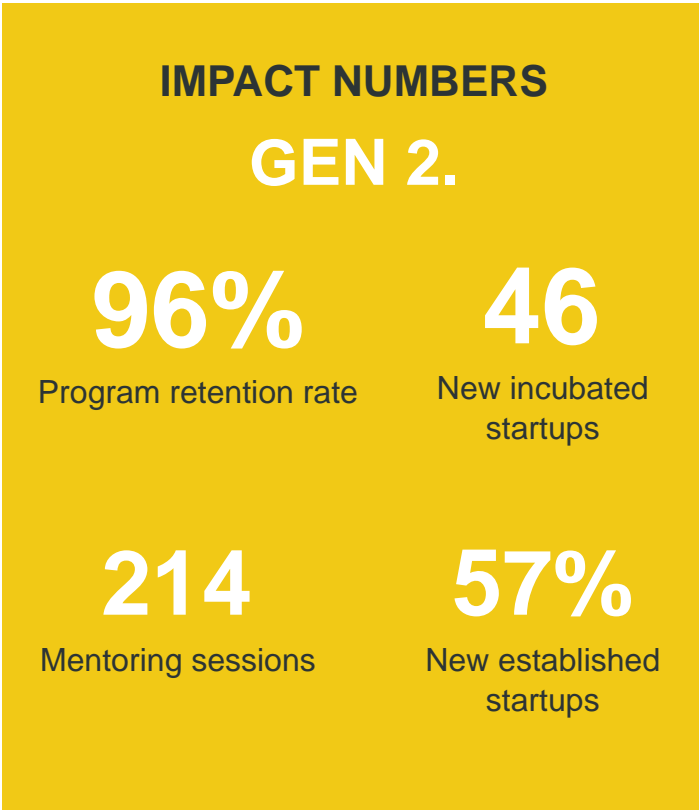
Outreach events

Fase1 Intensive Gen. 2

The second cohort of Fase1 Intensive was a resounding success maintaining a remarkable accumulated program retention rate of 96%. Gen.2 concluded with our second Demo Day held on September 9th, 2023, where 46 participants presented their startups to a room full of collaborators from the entrepreneurial community and friends. We were accompanied by a distinguished panel of 7 judges representing the PR Science Trust board, our sister programs Colmena66 and parallel18, as well as collaborators such as awakenR, Unicorn Academy and Microsoft. The judges evaluated the pitches and selected winners across six categories, including the Commitment Award, given to a participant who attended 100% of the program sessions. These winners received cash grants totaling \$10,000, sponsored by the Trust. The judges' evaluations also identified the top 30 startups, which were referred to the pre18 evaluation committee for consideration for the next generation selection. As a result, ten startups from Fase1 Intensive Gen. 1 and 2 were chosen for pre18 Gen. 6, granting them access to a pre-acceleration program and seed funding.

With the support of our extensive network of partners and startups developed by the Trust and our sister programs, we were able to offer Gen. 2 participants access to a diverse mentor network comprising over 30 local and international experts. This robust network of mentors played a crucial role in supporting our participants throughout the program, providing them with tailored guidance, valuable insights, and strategic advice through one-on-one sessions designed to help the participants refine their ideas and navigate the challenges of entrepreneurship.

We are profoundly grateful to these mentors for their unwavering commitment, expertise, and inspiration. Their dedication to fostering our entrepreneurs' growth has been instrumental in our program's success.



Fase1 Intensive Gen. 2 DemoDay



Fase1 Intensive Gen. 2 DemoDay

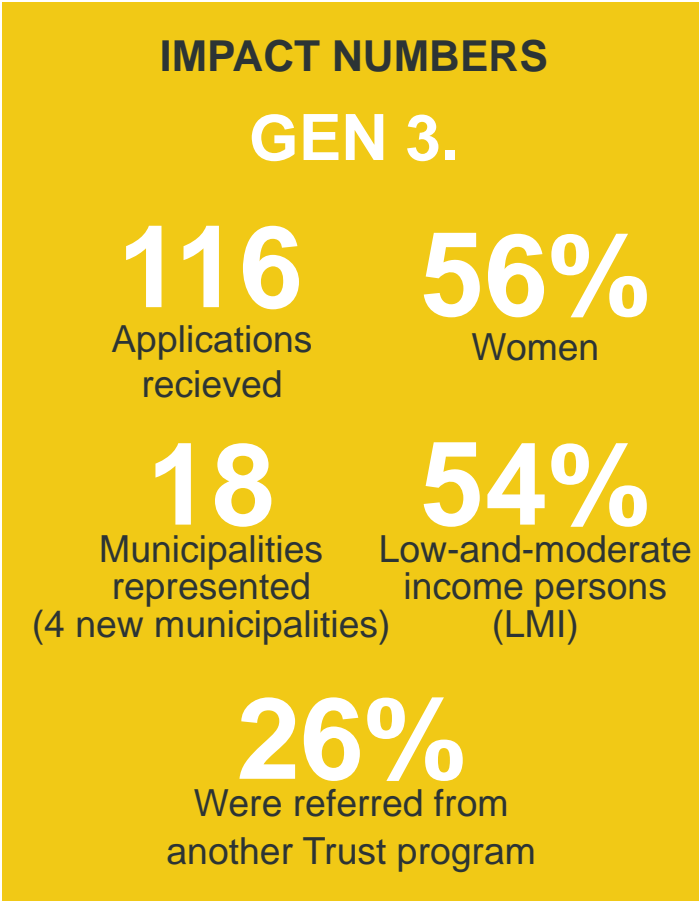
Fase1 Intensive Gen. 3

In January 2024, we launched the application for the third generation of Fase1 Intensive and received 116 submissions. After a thorough multi-step evaluation process involving an external committee, Fase1 selected 50 new ideas to join our Intensive incubation program, which began on June 15th, 2024. The top 3 industries for this cohort are Health and Social Assistance, Manufacturing and Creative Industries. We want to highlight that 26% of the selected participants were referred to us by another program within the Trust, showcasing the strong interconnections and collaborative spirit among our programs.

Gen. 3 participants represent 18 municipalities, including Guánica, Salinas, Santa Isabel and Vega Baja, municipalities we had not impacted before. This cohort is comprised of 58% women led projects and 54% of participants fall into the low- and moderate-income category, as defined by the US Housing and Urban Development Department (HUD).



Fase1 Intensive Gen. 3 Kick Off Event



Fase1 Intensive Gen. 3 Kick Off Event



Fase1 Intensive Gen. 3 Kick Off Event

Fase1 Keeps Building Community

Fase1 is committed to making entrepreneurship accessible to everyone. To support this mission, we have implemented a comprehensive outreach strategy across Puerto Rico to promote our program and enhance access to entrepreneurial education. Through our outreach initiatives, our aim is to reach diverse demographics, showcasing the opportunities and benefits of our program while expanding knowledge on key aspects of early-stage business development, including idea generation, validation, and marketing.

During the last year, Fase1 organized or participated in 42 events, primarily in-person, and impacted 17 municipalities mainly through its Fase1 Tour, including previously visited locations such as Adjuntas, Barceloneta, Bayamón, Caguas, Carolina, Ceiba, Mayaguez, Naranjito, Ponce, San Juan, and Utuado, as well as new destinations like Fajardo, Guaynabo, Humacao, Las Marías, Orocovi, and Toa Baja. As we opened our application period for Fase1 Intensive, we focused on engaging low- and moderate-income individuals, college students, women, and anyone with an interest in entrepreneurship. Through our efforts, we reached over 800 people across various regions and communities, proving to be an effective outreach strategy, helping us connect with new and existing collaborators, educate future entrepreneurs and increase program awareness.

For the second year in a row, Fase1 hosted the Coffee Talks, during the 2023 BE Fest. The 8-session track was a hit, ranging in topics such as the realities of being an entrepreneur, and the power of connections to the importance of universities in the entrepreneurial ecosystem. Some of our panelists included Mentores en Línea, Salón Boricua, Homecooking Therapy, Mujer Emprende Latina, and Enactus to name a few. BE Fest attendees ranked Fase1 Coffee Talks as their second favorite track of the day!

But that's not all! As we continue to grow, building and sustaining strong collaborations is fundamental to our program's culture and success. Our community is not only comprised of entrepreneurs, but also of the people that support our program. This year, we emphasized growing the network of resources that

support our entrepreneurs and our program. Every event and interaction are an opportunity for us to connect with possible mentors, speakers and even sponsors. By participating in events such as the Ecommerce Growth Caribbean Conference, the SME Digital Innovation Summit and the 17th edition of the Americas Competitiveness Exchange, we have been able to broaden our network and identify new resources for Fase1 Intensive and all our program initiatives.

Also, for the first time, Fase1 has welcomed two dynamic interns to the team, marking a significant step in enhancing our outreach and business development efforts. These interns will play a key role in expanding our network, engaging with potential entrepreneurs, and advancing our mission to foster innovation and growth. At the same time, this experience will support their professional development and ignite their entrepreneurial spirit, cultivating talent that will continue to benefit our future entrepreneurs. Their fresh perspectives and dedication will strengthen our capacity to connect with the community and drive the ongoing success of our incubator.



Fase1 Coffee Talks at the Be Fest



Fase1 Coffee Talks at the Be Fest

WHAT'S NEXT

In this coming year, Fase1 aims to expand its footprint by adding 50 new participants to our business incubator, Fase1 Intensive, providing them with the same robust curriculum and support system that has become synonymous with our brand. Our third Intensive cohort (Gen.3) started on June 15, 2024, with a diverse group of entrepreneurs that come from 18 different municipalities, includes a 58% of women participation, and their ideas are mostly in the health, manufacturing, creative and education industries envisioning to expand our ecosystem capabilities while tackling palpable challenges for more and better opportunities. Following previous year's trend, our Gen.3 participants are also diverse in age having all different generations represented, with a strong 40% of Millennials and a 26% of Generation X.

The new Intensive Gen.3 also marks an important milestone in Fase1 since we just reached the total program goal of 150 ideas or businesses that started the Intensive incubator looking to begin or continue their entrepreneurial journey with us. We certainly look forward to getting to know more of our new participants, engaging with them and seeing first-hand the transformation of these ideas into new innovative and successful startups.

To further enhance our outreach efforts and expand our support network for our boristartups, this past year we added a new role in Fase1 to focus on forging stronger connections with our entrepreneurial community, educational institutions and new collaborators.

Thanks to this great addition to our team, this year we will be more intentional in outreach initiatives to increase awareness of Fase1, organize targeted community events, and establish new partnerships that can provide valuable resources and opportunities for our incubated startups. By proactively engaging with our community, we aim to attract a diverse array of new and aspiring entrepreneurs from across the island to continue fostering a vibrant ecosystem of innovation and opportunities. One key mechanism to do that is our online entrepreneurial academy, Fase1 Lab, which has consistently served as a useful and accessible tool to provide high-quality educational materials and interactive courses through expert-led modules designed to address the evolving needs of early-stage startups. Our goal is that next year we can keep adding new modules on trendy and high-demand topics to empower local entrepreneurs to navigate the complexities of building and scaling their businesses. By leveraging our Lab, we can extend our reach and impact, ensuring that business knowledge is available to a broader audience to build our complement existing and new efforts contributing to a sustainable economy.

Additionally, we are poised to extend our relationship with our partner agency, the Puerto Rico Department of Housing, by requesting an agreement extension for one or two additional years to continue Fase1 through the CDBG-DR framework and support. This continued collaboration will provide critical support and resources, enabling us to enhance our program offerings and deliver greater value to our startups. Through these strategic initiatives, Fase1 is committed to advancing our mission of nurturing and empowering the next generation of entrepreneurs.



PUBLIC HEALTH



Puerto Rico
Public Health Trust

What we do

The Puerto Rico Public Health Trust (PRPHT), a Public Health Institute, has been in service since 2019. Since then, PRPHT has launched over 20 projects and initiatives in public health to promote evidence-based public health practices, increase access to health programs, promote developments that impact health outcomes and reduce inequalities in the communities of Puerto Rico.

Our Mission

To serve as a trusted ally working with public and private partners to identify and execute community led, evidence-based solutions.

Our Vision

To achieve sustainable health in Puerto Rican communities and improve their quality of life through innovation, collaboration and community participation.

How we do it

At the PRPHT, our values of collaboration, equity, excellence, inclusion, innovation, integrity, respect and social justice drive our work. These values guide our efforts to ensure we maintain and establish strategic alliances and partnerships to achieve our objectives. We use knowledge, research, technology and data to drive innovative initiatives. Through a strong network of community leaders, we center the needs of our communities to increase health promotion and preparedness. We provide training and education for health professionals and community members and leaders to build capacity in chronic disease management, emergency and climate change preparedness, telehealth, community organizing, behavioral health and social determinants of health.

TOP IMPACT NUMBERS

3

Health networks
established with 307
Members

43

Community
health workers
in 29 municipalities

1,243

Health and social referrals

416

Collaborations
established

710

Outreach and
educational
activities held

212

Resources
developed

214

SDoH committed
members

100,113

Health prevention and preparedness
materials distributed

36

Oral and poster presentation

\$229,192

Non-paid publicity

The Puerto Rico Public Health Trust (PRPHT), established in 2019, serves as a public health institute for Puerto Rico with the purpose of promoting innovative and evidence-based public health practices to achieve systematic improvements, increasing access to health programs and reducing inequities in communities of Puerto Rico. Our initiatives are focused on three programmatic divisions: Community Engagement, Environmental Health, and Social Epidemiology and Evaluation. All divisions are supported by our Communications team.

During this year, we touched thousands of people's lives through over 700 outreach and educational initiatives, including webinars, workshops, educational tables, health fairs, among other events. As part of our commitment to serve as an ally, develop collaborations to ensure efficiency, and avoid duplication of efforts, we have established over 400 formal and informal collaborations with all major academic institutions of the archipelago, subject matter experts, federally qualified health centers, community-based organizations, nursing homes, among many others.

Our Community Health Workers (CHWs) initiative established the PRPHT as a strong partner to increase access to services and develop solutions based on our communities' needs. With 43 CHWs in 29 municipalities, we have been able to provide 1,243 social and health referrals during this year alone, to ensure those more vulnerable have access to the services they need. We supported the Puerto Rico Department of Health (PRDoH) in the Medicaid re-certification process by connecting 189 patients to the appropriate offices and services that otherwise might not have been able to complete the process due to their limited health and technological literacy. We also advocated for recognizing the CHWs as an integral part of our health system resulting in a proclamation by the Puerto Rico Senate to recognize their work and the development and approval of a Bill.

Through our environmental health initiatives, we developed strategies to protect our most vulnerable residents from climate change. Efforts have been directed to develop resources, educate about extreme heat, and increase emergency preparedness. We have increased access to specialized training for rural health professionals in topics such as the impacts of climate change on mental health, emerging topics such as the dengue epidemic, diabetes among others through 32 educational sessions that followed the Project ECHO – Extension for Community Health Outcomes methodology.

Finally, we have created awareness about the Social Determinants of Health (SDoH)--the drivers of health in our communities-- as the health outcomes of our communities are directly linked to their economic and social status, level of education, access to healthcare and their community and environmental context. We are committed to advocate and educate to increase access and promote health equity for all Puerto Ricans, but we cannot do it alone. Webinars and educational sessions on SDoH have reached hundreds of participants. An interest group in SDoH was established last year and now has 214 members committed to continue advocating on this topic.

More of our key accomplishments for each of our divisions are described in the sections below. All the resources and materials generated by our team can be found under the Resources section of our website and YouTube Channel.

Community Engagement Division

The Community Engagement Division works to ensure that community voices are integrated into the planning and execution of public health initiatives. We are committed to the co-creation, planning and implementation of programs and initiatives focused on the identified needs and priorities established by the populations we serve.

The Community Health Workers project, funded by the Centers for Disease Control and Prevention (CDC), aims to transform the community health system in Puerto Rico by recruiting, training, and deploying CHWs across the archipelago. CHWs know firsthand the strengths and challenges of the communities they serve, make social and clinical referrals based on identified needs and advocate for their health rights. During this year, the team grew significantly with 43 CHWs representing 29 municipalities of the archipelago, including Vieques and Culebra. The team developed a structured capacity building and training program for CHWs based on the core competencies and common roles established by the CHWs Core Consensus (C3) project. The program includes 12 training sessions for 50 contact hours of basic training alone plus continuous education sessions. CHWs have been able to use the skills acquired to implement 498 outreach and educational activities (health fairs, vaccination events, house visits, etc.), 1,243 social and health referrals and develop and distribute over 91,971 educational materials.

Key highlights of this important work include the participation of four CHWs and other key staff in the CHW Sustainability Summit last April 2024, where they showcased their work and learn firsthand the latest practices and innovations in the field. Another important success is the appointment of the CHWs Israel Román and Wilma Rivera as Ambassadors of the National Association of Community Health Workers.

As part of our commitment to recognize and promote the role of the CHW as an integral component of our health system, the CHW alliance was formed in 2022. This year, we recruited 89 more members to the coalition, increasing to 142 members (69 CHWs and 73 ally organizations). One important success was the introduction and approval of the Senate bill PS 1303 by the Puerto Rico Senate and House of Representatives which officially defines the role of the CHW and recognizes August 30, as the CHW Day. To commemorate this important achievement, we will host the first CHW Symposium, on this date, in 2024.

¡Ponte al día!

¡Ponte al día! is a digital and health literacy project for older adults, initiated in Naguabo, at the request of a community-based organization, Naguabo somos todos. The purpose is to teach participants how to use technology, particularly their cell phones, to reduce the digital gap. The pilot project, funded by the CDC in collaboration with the PRDoH, impacted 88 participants through 146 group and individual educational activities. Results showed a 9-fold increase in the number of participants who achieved the highest literacy category. Additionally, the post-test for isolation and loneliness, a key predictor of health, indicated an 8 % increase in reduction of loneliness. The project generated several resources including a cellphone user manual for older adults and four videos, featuring program participants, that can now be found on the PRPHT website and YouTube Channel. The project is extending to four additional municipalities (Culebra, Guánica, Humacao and Vieques) with continued support from the CDC Community Health Workers initiative.

Health Literacy, COVID-19 and Mental Health Project

Health Literacy, COVID-19 and Mental Health Project aims to develop resources to address issues related to Covid-19 and mental health on trauma. An interdisciplinary team developed two trauma-informed storybooks and one activity book based on information collected during children’s focus groups in Loíza. The books were launched during an event called Cuentos que Sanan, where 6,000 copies of the books were distributed to schools, Head Start Centers, community and governmental organizations, and community leaders. The event included a book reading by reporters Milly Méndez and Julio Rivera Saniel, with their daughter Milena, and by Tanisha Gaspar, community leader and the director of the organization Piñones Aprende y Emprende (P.A.Y.E.).

The project also included the collection of community rumors about COVID-19 and resulted in the development of the COVID [Hechos] card deck. This educational resource can be used in games and to guide discussions about the topic.

Initial funding for the project, from the Puerto Rico Fiscal Agency and Financial Advisory Authority, concluded in May 2024. The critical work is now integrated with a train-the-trainer initiative for CHWs to provide support to organizations and schools interested in utilizing these books as a trauma-related tool for their communities.



One of our CHWs, Miriam Matos, during a workshop about community aqueducts in her community in Caguas.



Young community health workers and staff showing older adults how to use their cellphones during a digital literacy workshop.



Children completing one of the interactive and educational activities offered during the “Cuentos que sanan” community event in Loíza.

Environmental Health Division

The Environmental Health Division provides environmental research, resources, education, evidence-based training, community engagement and technical assistance throughout Puerto Rico. Our work helps communities to prepare for health impacts from climate change and from the stressors of emergencies and disasters in rural and underserved communities.

CAPBRACE

Caribbean All-Hazards Project to Building Resilience and Climate Equity (CAPBRACE) is funded by the CDC’s Climate Ready States and Cities Initiative and aims to protect human health from sensitive climate exposures through two adaptive actions. The first facilitates community access and focuses on resource assistance, using a participatory approach to identify priorities and needs. This includes the co-design of emergency plans and the identification of essential resources for climate events with a focus on health consequences from extreme heat. The second develops an educational curriculum for secondary schools, improving knowledge and behavior regarding climate exposures and their health consequences.

Key accomplishments for this year include a workshop led by the UNESCO Chair of Education for Peace at the University of Puerto Rico, titled “How to Apply Adaptive Management in the Context of Extreme Heat in School Environments”. It aimed to engage participants in brainstorming group activities to identify concerns about extreme heat in school environments, propose mitigation or adaptation interventions, determine necessary data for effective community solutions, and establish monitoring methods for these interventions. The team also facilitated a workshop

about management of extreme heat for Puerto Rico’s emergency response workforce with an emphasis on recognizing the effects of climate change. The event, titled “Take Action Now!” was coordinated by the Puerto Rico Emergency Management Bureau (PREMB) and Caribbean Climate Adaptation Network (CCAN) and included representatives of the White House. These events were also supported by the Social Epidemiology Division.

Telemedicine

The Telemedicine Project provided critical infrastructure in Puerto Rico related to telemedicine and was supported by various funding sources including the US Department of Agriculture Telemedicine Distance Learning Grants (TDL) and Coronavirus Aid, Relief, and Economic Security (CARES) Act. These projects’ goal was to distribute telemedicine equipment to Rural Clinics (TDL) and Nursing Homes (CARES Act). This year, we successfully completed the training and delivery of telemedicine equipment to 45 clinics and 200 nursing homes.

CRESe

Project CRESe (Comunidades Resilientes en Sequías) is a community-based research project addressing the cumulative health effects of drought on 12 rural communities that operate drinking water aqueducts in Puerto Rico. The goal of the US Environmental Protection Agency (EPA) funded project is to use climate change information, citizen science data, and community-based participatory approaches to understand and predict the impact of global climate change on freshwater quantity and quality for small potable water supply systems of remote populations.

During this year, a Community Advisory Council (CAC) was formed serving as experts to develop resilience plans for drought periods in communities and includes members of eight of the 12 participating communities. Through regular meetings, research methods are explained and feedback is received to increase engagement and apply the communities' perspectives and voice to the research process. Among the topics discussed are the microbiological aspects of the project, importance of rain gauges and climate data collected through community weather stations, knowledge, attitudes and practices related to water use and security, and the impact of change in precipitation on the land and water of the small water systems.

Other community members from the participating small water systems, water operators and external collaborators were interviewed to identify community needs, perspectives and climate change impacts on water quality and quantity. This participatory project has increased the trust from community leaders and identified opportunities for mutual learning.

TTELP

Telemedicine Technology Enabled Learning Program (TTELP), funded by the Health Resources and Services Administration (HRSA), connects specialists from academic medical centers and subject matter experts with primary health care providers in rural areas. This fulfills the goal of facilitating best practices, discussing emerging health issues, building a community of practice for health professionals in rural, medically underserved areas and increasing patient access to quality health services.

During this year, we facilitated three educational series, using the ECHO methodology: (1) Diagnosis, Prevention and Control of Dengue for healthcare professionals in response to the dengue epidemic, with 445 unique attendees and offered by six Subject Matter Experts (SMEs), (2) Mental Health: The Use of Telemedicine and Telementoring to Improve Access and Quality of Services in Rural Areas of Puerto Rico for Health Professionals, with 139 unique attendees offered by four SMEs, and (3) Diabetes Mellitus: A Review of American Diabetes Association Standards and the Use of Telemedicine, with 86 unique attendees offered by one SME.

A digital library for organizing the more than 400 educational and training resources developed through work on the TTELP project was created. It can be found on the PRPHT website under Resources and is searchable by resource format (video, course, scientific article, user guide, etc.) or topic.

Currently, a study is underway on the use of telemedicine in Puerto Rico from the perspective of patients, physicians and administrative staff of homes for the elderly and health clinics. Twenty-five semi-structured interviews have been conducted by our telemedicine technicians throughout Puerto Rico.



CDC Site Visit to the community of Piñones in Loíza. This community was selected to implement the CAPBRACE project since it is greatly impacted by the effects of hurricanes and other natural disasters.



Members of the CRESe research team and the community advisory council during their first meeting this year.



Telemedicine technicians offering a hands-on training to nursing home participants on the use of telemedicine equipment.



One of our participants revising the "Guide to addressing social determinants of health in clinical settings" developed by our team.



ECHO session on Dengue offered in collaboration with the Puerto Rico Vector Control Unit focused on the management of mosquito breeding sites.



Community meeting to introduce the CRESe project at Comunidad Santas Pascuas, Ponce.

Social Epidemiology and Evaluation Division

The Social Epidemiology and Evaluation Division creates awareness about the drivers of health, health disparities, and health equity. We seek to achieve health equity, among the residents of Puerto Rico, through education, research, and public policy. We provide technical assistance and tools to improve the public health workforce capacity and promote equity best practices within the public health sector.

NNPHI

Addressing Social Determinants of Health in Clinical Settings and for Hispanic populations is a project funded by an agreement with the National Network of Public Health Institutes (NNPHI) through their CDC Covid-19 Health Equity Program. The purpose of this initiative is to address and increase public health knowledge about SDoH and create opportunities to connect patients with the social resources that community-based organizations (CBOs) offer. We coordinated and offered 10 educational sessions using the Project ECHO methodology. Attended by 450 people, these sessions were offered by eight SMEs on topics related to health literacy, reasonable accommodation in clinical settings, and Puerto Rico’s transportation challenges and their impact on health. In response to the need of our participants, we created a CBOs Directory and a Patient Community Resource Connection Flowchart for the participants.

In addition, a webinar “The Role of Health Professionals in Identifying the Social Needs of Hispanic Patients” was developed and implemented, discussing how health professionals can improve people’s health outcomes by using a social needs questionnaire addressing the SDoH. 77 participants attended this webinar.

An educational campaign on SDoH and health equity was developed and implemented, creating 11 new

educational resources. This effort reached out to Spanish speaking people in Puerto Rico and the United States. The campaign had 266,820 impressions and 77,299 engagements.

Social Determinants of Health and Health Equity Interest Group

The Social Determinants of Health and Health Equity Interest Group was designed and established in collaboration with the Community Engagement Division to develop initiatives and strategies that aim to understand and address the social and health impacts of vulnerable communities in Puerto Rico at a systemic level.



Members of the Interest Group on Social Determinants of Health and Health Equity participating in the talk: “Women, HIV and Gender Ideals” offered by Dr. Karolyn González from the Northeast Caribbean AIDS Education and Training Program, of the University of Puerto Rico.



PRPHT Public Health Infrastructure team with USVI colleagues during a regional convening in Philadelphia.

We successfully launched the following webinars: (1) Women, HIV and Gender Ideals, with a total of 281 participants, (2) Digital Inclusion in collaboration with the Metro Technology Services of Kentucky, (3) Traditional and Digital Literacy in Older Adults, with a total of 103 participants, (4) Stigma in People Who Use Controlled Substances, with 284 participants. Currently, we have 214 members in the interest group committed to learning topics related to the SDoH and Health Equity in Puerto Rico.

PHiG

The Public Health Infrastructure Grant (PHiG) Initiative, funded by CDC through an agreement with the Public Health Management Corporation, provides technical assistance to public health departments in the United States and the territories to strengthen their workforce and infrastructure.

During this year, we successfully coordinated administrative training for a group of PRDoH employees. Also, we developed and submitted a Remote Work Standard Operating Procedure Guide for the PRDoH. A site visit to the United States Virgin Islands Department of Health was conducted to understand their needs and priorities. As a follow-up, a white paper was developed addressing the spectrum of services offered by the PRPHT in support of those priorities.

Communications & Dissemination Efforts

The Communications and Marketing Division aims to share and distribute accomplishments and opportunities of the PRPHT programs, services and leaders. We do this through the development of specific campaigns and quality content, integrations on traditional media and strategic investments in social media platforms.

Health and Research Congress

On November of 2023, the Health and Research Congress was one of the key events of the year developed in collaboration with the Puerto Rico Vector Control Unit and the Puerto Rico Consortium for Clinical Investigation. It was a multi-sector gathering of experts aiming to explore issues in public health, exchange knowledge, and promote innovation, research, and well-being. With over 580 attendees, the sold-out event, included the participation of the ex-president of Costa Rica, Carlos Alvarado Quesada, as well as extraordinary public health experts from Puerto Rico and mainland US. The main topics discussed were mental health, vector management and clinical research. assistance to public health departments in the United States and the territories to strengthen their workforce and infrastructure.

5th Anniversary of PRPHT

PRPHT celebrated five years with the social media campaign Cumplimos 5 de la mano por tu salud. As part of the anniversary celebration, we hosted a conversational panel on “Emergency Preparedness for People with Functional Diversity”, moderated by Dr. Marianyoly Ortiz. The in-person panel streamed live on Facebook, reaching 2,400 views.

Local and national conferences

Participation in multiple local and national conferences was critical to share our work. This included the IV Puerto Rican Public Health Conference with a total of seven presentations and the NNPHI Annual Conference 2024, where our Communications Manager, Leslie Ortiz, participated in the plenary session “Navigating Tomorrow: Leveraging Public Health Institutes to Address Climate & Crisis Preparedness”. Our team also participated in the American Public Health Association Annual meeting with one poster (Rachel Millán – Ponte al día!), one oral presentation (Leslie Maas – Telehealth), one round table (Dr. Marianyoly Ortiz - PRPHT Initiatives) and two featured videos about our emergency preparedness and CHWs work.

Several media efforts were also accomplished including participation on the PrimeTime television program about Cuentos que sanan, a column in the magazine Be Health about vaping featuring one of our CHWs, an interview by El Nuevo Día about emergency preparedness, as well as interviews by Revista Medicina y Salud to our Executive Director.

We created over 600 publications for social media to share our work and educate on diverse public health topics with an average engagement of over 30,000 interactions per month. Over the past year, we saw notable growth on all our social media platforms: Facebook with a 33.5% increase, LinkedIn with 58.5%, and Instagram with 60.5%. The total follower count across all our platforms grew by 24%, with Facebook leading in new followers, adding 2,054.

HEALTH & REASEARCH CONGRESS

540
Attendees



Panel “Health Initiatives and Priorities of the Government” during the Health and Research Congress, moderated by our Executive Director, Dr. Marianyoly Ortiz, with panelists Dr. Gabriela Paz-Bailey from CDC Dengue Branch and doctors Melissa Marzán and Iriz Cardona from the Puerto Rico Department of Health.

PRPHT 5TH ANNIVERSARY STREAMED LIVE ON FACEBOOK

2,400
Views



Conversational Panel on Emergency Preparedness for People with Functional Diversity with panelists (left to right) Yarett Piñero, ASLES Corp. President, Mildred Gómez, Associate Director of Movimiento para el Alcance de Vida Independiente, Gilberto Guevara, Senior Manager of the Trust and Dr. Marianyoly Ortiz.

WHAT’S NEXT

The Puerto Rico Public Health Trust envisions the transformation of our health system driven by health equity and based on the needs of our communities. In the coming year, PRPHT will continue advocating for the recognition and integration of the CHWs into health programs. To accomplish this, we will identify new sources of funding and develop sustainability strategies to continue providing services and support to our communities. The extension of our current projects into other municipalities will also be a key step during the coming year, to ensure that other regions can benefit from successful initiatives such as the trauma books and the digital literacy tools.

Climate change will continue to be one of the principal areas of focus as we develop and implement the climate adaptation strategies in Loiza. This pilot project will serve as a model to replicate in other regions and increase emergency preparedness and readiness. More focus will be given to data analysis and evaluation efforts to strengthen our projects’ quality and generate evidence-based data that further demonstrates our initiatives’ impact. Mental health and data modernization efforts will be part of new initiatives that we will be focusing on, as are areas of greater need in Puerto Rico and where we see opportunities to contribute.





What we do

Mission and vision

The Puerto Rico Consortium for Clinical Investigation (PRCCI) has a clear vision which is to become the preferred partner for the implementation of clinical trials in Hispanics.

Our mission is to promote and expand clinical research activities optimizing the quality and speed of execution; leveraging strategic partnership (in and outside of Puerto Rico); establishing best practices to conduct clinical trials; building capacity and creating new job opportunities; and educating patients, sponsors and research professionals. These combined efforts result in a direct and indirect impact in inclusion of Hispanics in clinical trials.

How we do it

Our value proposition focuses on the continuous growth of clinical research to deliver safe, timely, effective, efficient, equitable patient-centered clinical trials. PRCCI has access to a large network of strongly committed and experienced investigators in Puerto Rico; serves as one-point of contact for sponsors for quick and effective start-up processes; offers an array of local services such as quality assessment and validation, study monitoring, patient recruitment strategies, contract and budget negotiations, invoice and billing, clinical trials management system, regulatory and staffing support; educational and capacity building for healthcare professionals and other staff to share best practices and tailored sessions for advocacy groups.

TOP IMPACT NUMBERS

33

Active studies

7

Participation in
Patient Advocacy
Activities

20

Certified CRCs

1

Grant Award Renewal
(All of US)

5

Webinars

260

New followers in social media

The fiscal year 2023-2024 was a landmark period for PRCCI, highlighted by the inauguration of our state-of-the-art Clinical Research Center in August 2023. The facility boasts technologies and a team of highly qualified professionals prepared to support clinical trial investigations. PRCCI leverages its expertise, advanced facilities, and diverse pool of research volunteers to facilitate the successful conduct of clinical research projects. This new facility has already secured three clinical trials and seven active partnerships, significantly enhancing our research capabilities and infrastructure.

Our Clinical Research Operations team achieved notable progress, with over 30 active studies and more than 25 presentations to sponsors and research sites, promoting the benefits of conducting clinical trials in Puerto Rico. The addition of Dr. Wilfredo De Jesús-Monge as Clinical Research Director has further strengthened our team, bringing valuable expertise and leadership.

In business development, we generated over 50 leads, converting 28 into qualified opportunities. We executed contracts for three Phase III trials, formed seven active partnerships, and are negotiating four more. Our presence at the BIO International Conference in San Diego yielded 16 new leads. Additionally, we partnered with Yale University on the NIH AoURP, forming the Coast-to-Coast Consortium to advance biomedical research and innovation.

Our dedication to education and community outreach was evident through the certification of 20 new Clinical Research Coordinators, reaching 211 professionals through workshops, and engaging over 471 community members. Our efforts in patient advocacy and clinical research education continue to grow, fostering a robust pipeline of future research professionals.

Marketing and communications efforts have successfully shifted focus from a consortium to a clinical research center, generating new study leads through organic strategies and achieving significant growth in our digital presence. Our content reached over 76,000 accounts on social media, with earned media placements generating over 47 million impressions.

Complementing these efforts, Dr. Silva was a key participant in the Annual Pharmaceutical Industry Association of Puerto Rico (PIA) annual meeting 2024, where she delivered a compelling presentation on the future of clinical research on the island. Her insights underscored the potential growth and innovation in the field. Additionally, Dr. Silva joined a panel discussion alongside prominent leaders from the Puerto Rican pharmaceutical industry, engaging in a meaningful dialogue on the sector’s challenges and opportunities. Her contributions demonstrated our organization’s active involvement in shaping the future of clinical research and the broader pharmaceutical landscape in Puerto Rico.

In October 2023, PRCCI collaborated with the PRSTRT Public Health Pillar programs at the sold-out “Congreso de Salud e Investigación.” This collaboration highlighted our joint efforts to advance public health and research initiatives. The event was a resounding success, demonstrating the strong partnership and shared commitment to improving health outcomes and promoting research excellence in Puerto Rico.

Overall, PRCCI remains committed to advancing clinical research in Puerto Rico, providing innovative treatment options, and enhancing our clinical research capabilities. Our achievements this year lay a strong foundation for continued growth and success in the coming years.



Clinical Research Operations

The Clinical Research Operations team achieved notable progress for the fiscal year 2023-2024, with a primary emphasis on PRCCI's newly inaugurated clinical research center. This year, we successfully secured the first 3 clinical trials for the center, marking a significant milestone in our expansion efforts.

Our clinical research center, equipped with advanced technology and a skilled team, is pivotal in enhancing PRCCI's research capabilities and attracting more sponsors. Alongside these achievements, we also provided essential operations support to our consortium sites, including negotiating new study agreements.

PRCCI oversees over 30 active studies across the clinical research center and the consortium division, reflecting our robust pipeline and commitment to advancing clinical research.

Additionally, the team conducted over 25 presentations to Sponsors, CROs, and research sites, effectively promoting our services and the benefits of conducting clinical trials in Puerto Rico. These efforts have strengthened PRCCI's reputation and showcased the unique opportunities available in our region.

As we move forward, our focus remains on expanding the capabilities of our clinical research center and fostering valuable collaborations.

Business Development & PRCCI Clinical Research Center

Since PRCCI Clinical Research Center's inauguration in August of last year, targeted lead generation and a robust sales funnel have yielded over 50 leads, converting 28 into qualified opportunities. We have successfully executed contracts for 3 Phase III clinical trials, fostered 7 active partnerships focused on bringing clinical research opportunities to Puerto Rico, and are currently negotiating 4 additional opportunities. These trials aim to address migraines and obesity in both adult and pediatric populations. In our ongoing commitment to expanding research opportunities across various therapeutic areas, we are continually exploring new leads and possibilities.

This proactive search for new opportunities is bolstered by the expertise of the 10 medical investigators who have joined our team over the past year. Their specialized knowledge in fields such as Gastroenterology, Pediatrics, Pneumology, Endocrinology, and General Medicine enhances our ability to identify and pursue relevant research initiatives. This synergy furthers our mission to advance medical research in Puerto Rico and provide patients with accessible, effective treatments.

During this year our most relevant participation in a US meeting was the Biotechnology Innovation Organization (BIO) International held in San Diego in June 2024. Our purpose was to identify, attract, and establish new partnerships and business opportunities. Our attendance was also part of our commitment to support InvestPR and the more than 20 entities included in the Puerto Rico convention booth. BIO 2024 provided us with a valuable platform for networking, knowledge sharing, and collaboration among attendees. We identified 16 leads, including 7 for potential study opportunities.

Our goals remain focused on bringing more clinical trial opportunities to Puerto Rico, continuing to provide a space for investigators to perform their trials with the support of PRCCI, leveraging our experience since 2016, and making trials more accessible to patients. We remain committed to advancing medical research in Puerto Rico and providing innovative treatment options to our diverse patient population.



Clinical Studies Execution

PRCCI is pleased to announce the recruitment of Dr. Wilfredo De Jesús-Monge, a distinguished physician with extensive research experience. Dr. De Jesús-Monge currently serves as PRCCI's Clinical Research Director and PRSTRT's Chief Medical Officer. In these roles, he is instrumental in evaluating and overseeing research opportunities, ensuring their successful implementation and alignment with PRCCI's strategic goals.

In pursuit of advancing clinical trial inclusivity, PRCCI has taken a significant step by applying for a key funding opportunity. On May 31, 2024, Dr. Wilfredo E. De Jesus-Monge submitted a funding application to the Association of Clinical Research Organizations (ACRO) for their Diversity and Inclusion (D&I) Site Resource Grants Program, requesting a \$50,000 award. The ACRO D&I Site Resource Grants Program is designed to support sites that are committed to enhancing trial inclusivity and have the potential to boost diverse enrollment. This program provides seed funding to help sites acquire the resources and skills necessary to be selected for studies and to extend the reach of clinical research into underrepresented communities. The grants are intended to serve as proof-of-concept for projects aimed at increasing diversity. Applications are currently under review.

Research Program Grant

The All of Us Research Program (AoURP) officially launched on October 2nd, 2023, at Mindful Medical Research Center and on November 14th, 2023, at PRCCI's Clinical Research Center, following diligent efforts throughout all the administrative phases of the implementation process.

Since launch day, we have established relationships with various organizations that have invited us to their community activities and professional conventions. Thanks to these relationships, we attended 20 activities this year, leading to the enrollment of more than 350 participants. For instance, we participated in “Relevo por la Vida” by the American Cancer Society, and health fairs in the municipalities of Juncos, Las Piedras, and Naguabo through a collaboration with the Puerto Rico Public Health Trust (PRPHT), and professional conventions like the PR Rheumatology Association, the Puerto Rican Association for Diabetes, and the Pharmaceutical Industry Association of Puerto Rico.

In our first award year, the team surpassed its goal, having achieved a 110% subject enrollment rate by the year's end on April 30th, 2024. Under the new award, we have a goal of enrolling 330 or more participants.

This year, PRCCI joined forces with Yale University for the new National Institutes of Health (NIH) AoURP to establish the Coast-to-Coast Consortium (C2C). PRCCI collaborates with C2C members to represent a diverse and dynamic network committed to advancing biomedical research and innovation. The second awarded budget is \$298,817.00, covering allocations for equipment, supplies, key program personnel and other expenses. The award period began May 1st, 2024 and will run until April 30th, 2025.



Patient Advocacy & Clinical Research Education Program

Last year was full of opportunities to prove our commitment to professional development activities in the clinical research field. 20 new Clinical Research Coordinator (CRC) certifications were granted, increasing the total of persons certified by PRCCI to 231. For the first time, PRCCI hosted the practicum required to certify new CRCs. We also reached 211 professionals through our in-person workshops. Likewise, community outreach efforts were a success, reaching over 471 people throughout Puerto Rico. For instance, we participated in two symposia, the Pan American Society of Neuroepidemiology (SPNE), and with the ELI Foundation and its 2nd Symposium on Rare Diseases in Puerto Rico.

Since the clinical research center's inauguration in 2023, PRCCI worked for it to comply with the Health Insurance Portability and Accountability Act (HIPAA), before any participants were received. Each area of the clinic was evaluated, considering the following aspects: technical protection, such as access control, protection of monitors, encryption; physical protection, such as access to restricted areas, security cameras, among others.

We are excited to have recently reached a new milestone this summer. A group comprised of six students from the San Juan Bautista School of Medicine, the University of Puerto Rico (UPR) – Cayey Campus, the UPR – Rio Piedras Campus, and Boston University will have completed their summer internships in PRCCI. One of the interns is undergoing a paid internship thanks to our relationship with the non-profit organization Puerto Rican Minds in Action, and their Program for the Empowerment and Retention of Agents of Change (PARACa).

To continue our task of educating and developing new clinical research professionals, clinical research training will be offered to physicians in need of Continuing Medical Education credits. And, as always, we will organize more in-person activities for advocacy groups, patients, and the public, aligned with the improvement and growth of clinical research and quality of life within and without Puerto Rico.

20

new Clinical Research Coordinator (CRC) certifications

231

total of persons certified by PRCCI



Marketing & Communications Efforts

PRCCI's strategic marketing shift from a consortium to a clinical research center has yielded impressive results. Through a strategic mix of organic content marketing, targeted campaigns, and leveraging earned media, we obtained these results without paid advertising. This creative approach bypassed traditional advertising costs yet generated over 50 leads, showcasing the power of a well-crafted organic media strategy.

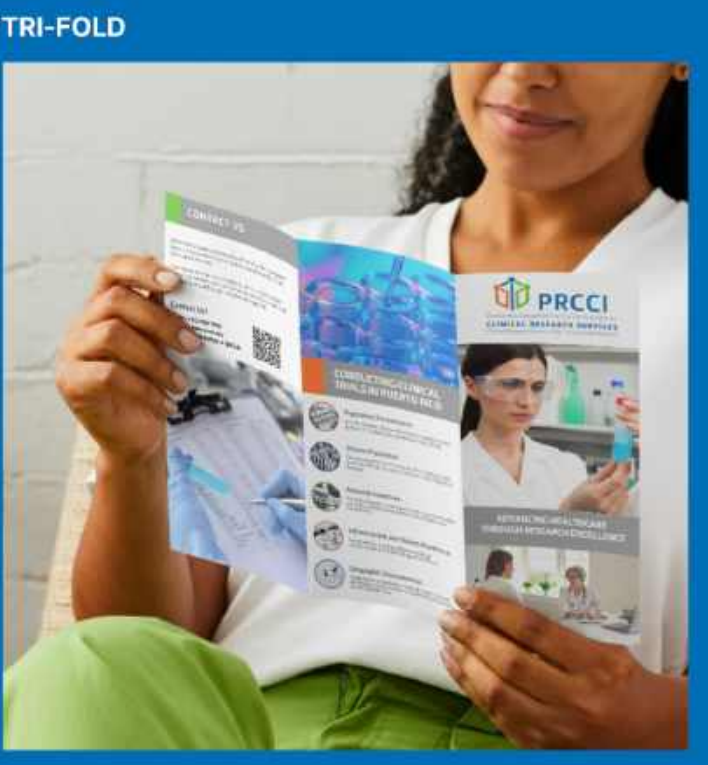
Brand enhancement included a new logo, bilingual marketing materials, and a revamped website to cater to a global audience. The website traffic surged 160.9% YoY, while user engagement doubled. A monthly newsletter and a focused LinkedIn strategy have also expanded PRCCI's reach and solidified our industry thought leadership.

Our LinkedIn strategy shifted to English content, which increased our follower base by an average of over 40 new followers per month, reaching over 2,000 followers currently. This helped expand our reach, generate leads, and establish ourselves as a thought leader within the clinical research industry.

As noted, PRCCI's primary objective has been to expand our professional presence on LinkedIn, and we are proud to report significant progress in this area. However, it's equally important to acknowledge the continued growth observed across our other social media platforms. Both our Facebook and Instagram accounts have seen organic increases in their respective audiences, including 258 new followers during the year. In addition, these pages have received over 6,800 distinct visits during this period, and our content has reached over 76,000 accounts across the region. This holistic growth underscores how our content continues to attract interest and resonate with diverse audiences across multiple channels.

Earned media secured placements in Forbes, The Association of Clinical Research Professionals, and Telemundo, generating over 47 million impressions and an estimated non-paid publicity value of \$54,050.

These data-driven marketing and communication efforts have demonstrably supported PRCCI's business development goals, positioning ourselves for continued growth within the clinical research industry. PRCCI's outstanding work has been recognized as a finalist nomination in the Multicultural Healthcare Advertising category of the Portada Awards.



WHAT’S NEXT

Development Plan for PRCCI Clinical Research Center: First Three Years

The PRCCI Clinical Research Center is poised to become a pioneering hub for innovative clinical research. This development plan outlines our strategic approach to establishing and advancing a premier investigation site over the next three years. Our goal is to create an environment that fosters groundbreaking research, supports high-quality data collection, and ultimately contributes to the advancement of medical science.

Year 1: Establishing the Foundation

1. Infrastructure and Facilities

Site Selection and Renovation: Secure and renovate a state-of-the-art facility, ensuring it meets the highest standards for clinical research. This includes compliance with Good Clinical Practice (GCP) and relevant regulatory requirements.

Technology and Equipment: Invest in cutting-edge research technology and equipment. Implement a robust data management system to support efficient data collection and analysis.

2. Recruitment and Training

Staffing: Recruit a team of highly skilled professionals, including clinical research coordinators, clinical research associates, and data analysts. Prioritize diversity and experience to ensure a well-rounded team.

Training Programs: Develop and deliver comprehensive training programs for staff, focusing on GCP, ethical considerations, and the latest research methodologies.

3. Regulatory Compliance and Certifications

Regulatory Approvals: Obtain necessary certifications and approvals from relevant regulatory bodies. Establish protocols for ethical review and compliance with local, national, and international regulations.

4. Initial Study Setup

Pilot Studies: Initiate pilot studies to test and refine operational procedures. Use these studies to establish standard operating procedures (SOPs) and identify areas for improvement.

Year 2: Building Capacity and Expanding Reach

1. Operational Excellence

Process Optimization: Analyze and optimize research processes based on feedback from pilot studies. Implement continuous improvement strategies to enhance efficiency and accuracy.

Quality Assurance: Strengthen quality assurance protocols to ensure adherence to research standards and enhance data integrity.

2. Study Recruitment and Partnerships

Research Portfolio Expansion: Expand the center's research portfolio by initiating new studies and trials. Foster partnerships with pharmaceutical companies, research organizations, and academic institutions to diversify research opportunities.

Patient Recruitment: Develop and implement effective patient recruitment strategies. Establish community outreach programs to raise awareness and engage potential participants.

3. Staff Development and Retention

Professional Growth: Provide ongoing training and development opportunities for staff. Encourage attendance at relevant conferences and workshops to stay abreast of industry advancements.

Retention Strategies: Implement programs to ensure staff satisfaction and retention, including competitive compensation, career advancement opportunities, and a supportive work environment.

4. Performance Evaluation

Metrics and Feedback: Establish key performance indicators (KPIs) to measure progress and success. Regularly review performance and solicit feedback from stakeholders to drive improvements.

Year 3: Strengthening Impact and Sustainability

1. Innovation and Research Excellence

Advanced Studies: Launch advanced and high-impact studies that push the boundaries of current research. Aim to position the center as a leader in specialized research areas.

Innovation Hub: Create an innovation hub within the center to explore and integrate emerging research technologies and methodologies.

2. Community and Industry Engagement

Collaborative Initiatives: Strengthen relationships with industry partners and research institutions. Participate in collaborative research projects and contribute to scientific publications and conferences.

Community Involvement: Enhance community outreach efforts to build public trust and support for research activities. Host educational events and workshops to promote the center's work and its impact on public health.

3. Sustainability and Growth

Financial Stability: Develop strategies for financial sustainability, including securing grants, funding, and investment. Optimize resource allocation to support long-term growth and success.

Expansion Planning: Assess the potential for expanding the center's capabilities and facilities. Explore opportunities for new research areas and additional sites.

The PRCCI Clinical Research Center is dedicated to becoming a trailblazer in clinical research. Our strategic development plan for the first three years sets a solid foundation for excellence, growth, and innovation. By fostering a culture of collaboration, investing in cutting-edge technology, and committing to continuous improvement, we will drive impactful research and contribute to the advancement of medical science. Together, we will transform the landscape of clinical research and achieve extraordinary outcomes.



Puerto Rico Vector Control Unit

What we do

The Puerto Rico Vector Control Unit (PRVCU) was established in September 2016 as part of a cooperative agreement between the Centers for Disease Control and Prevention and the Puerto Rico Science, Technology, and Research Trust. The PRVCU aims to leverage Puerto Rico's capacity to control the *Aedes aegypti* mosquito, the vector for the diseases Zika, chikungunya, and dengue.

Mission:

To protect the people of Puerto Rico from the *Aedes aegypti* mosquito, while educating and empowering everyone to reduce mosquito populations across Puerto Rico dramatically and sustainably.

Vision:

Has a modern and dynamic territory-wide integrated vector management program that serves as a local and regional research, evaluation, and training center.

How we do it

The unit's non-profit organizational structure makes it unique among vector management programs, all of which are associated with a state or local government. The PRVCU, thus, has flexibility, independence, and nimbleness that other programs lack. We use these advantages in working with municipalities, health regions, and PR Department of Health to implement those management practices most locally appropriate. We are also active in competing for grants and awards at all levels and, as our reputation and recognition has grown, so has our award success grown. Finally, we strongly emphasize the evaluation and adoption of new technology for vector management.

During this period, the Puerto Rico Vector Control Unit (PRVCU) continues to perform the activities for awards from Centers for Disease Control and Prevention (CDC) and US Department of Housing and Urban Development (HUD). Table 1 shows the details of these awards, and the additional funding received this year. However, more detail and progress will be presented in the following sections.

TOP IMPACT NUMBERS

\$2,853,478.00

New Funds

1,372

Surveillance traps deployed

46,270

Total pools tested for arbovirus

237

Total pools positive for dengue

30

Dengue clusters intervened

133

Outreach and education activities

12,300

Educational and prevention materials distributed

60

WALS application

430

Members of the PRVMA

Table 1. PRVCU Awards received during this reporting period.

Award Project Title	Agency or Organization	Period of Performance	Description	Original Award	Additional Funding
Enhancing Global Health Security: Strengthening Public Health Surveillance Systems and Preparedness Globally	CDC	September 30, 2021 – September 29, 2026	Establish and evaluate the use of <i>Wolbachia</i> in the <i>Aedes aegypti</i> population throughout the urban areas of El Salvador.	\$5,754,654.00	\$1,250,000.00
Enhancing Regional Capacity for Vector Surveillance and Control in the US territories in the Caribbean	CDC	September 30, 2022 – September 29, 2026	Develop a dengue hotspot response protocol, Advanced Molecular Detection (AMD) applications, professional networks, among others.	\$11,704,710.00	\$853,478.00
Lead and Healthy Homes Technical Studies (LHHTS) Grant Program	HUD	December 1, 2022- December 1, 2025	Evaluate how effective are the screens in doors and windows to prevent virus borne diseases by <i>Aedes aegypti</i> in Ponce, Puerto Rico	\$925,000	N/A
Strengthening Training, Evaluation, and Partnerships in the Prevention and Control of Vector-Borne Diseases	CDC	July 1, 2023 – June 30, 2028	Develop the Tropical Island Training and Evaluation Center (TITEC) for vector-borne disease to provide training, evaluation, and partnerships in the prevention and control of vector-borne diseases in the US territories and freely associated states.	\$750,000.00	\$750,000.00
Total of awards during this period				\$19,184,363.40	\$2,853,478.00

Recognitions and presentations

PRVCU staff had the opportunity to represent us at different conferences as speakers, panelists, awardees, among others. The photos below show the recognitions and presentations during this period



Nexilianne Borrero-Segarra, Project Manager in Ponce, participated in the American Society of Tropical Medicine and Hygiene (ASTMH) Conference in Chicago, Illinois. She had the opportunity to participate as a speaker and poster presenter.



Dr. Grayson Brown, Executive Director, and Joanelis Medina, Laboratory Manager, participated in the Entomological Society of America Annual Convention in National Harbor, Maryland. Dr. Brown was a judge in student competitions and participated in meetings with leaders, while Joanelis received her first training as a Science Policy Fellow.



Dr. Julieanne Miranda-Bermúdez, Associate Director, participated in the Annual Conference of the American Public Health Association where she had the opportunity to present a poster about the PRVCU and our projects.



Noemí Martínez, Training Coordinator, and Dr. Grayson Brown participated in a seminar about mosquito management coordinated by the National Association for County and City Health Officials (NACCHO) and CDC in Florida.



Joanelis Medina, Laboratory Manager, received the Lab Manager Leadership Excellence Award in Denver Colorado, from the Lab Manager Magazine.



Katherine Torres and Javier Córdova, Vector Management Technicians, participated in the Dodd Short Courses at the Southeastern Center of Excellence in Vector-Borne Disease in Gainesville, FL.



Joanelis Medina, Laboratory Manager, as part of the Science Policy Fellowship from the Entomological Society of America visited Washington, D.C.

PRVCU Student Program

During the year, the PRVCU had the opportunity to have three (3) students from the Southeastern Center of Excellence in Vector Borne Diseases and eight (8) students from the Interamerican University, Metro Campus. The interns had the opportunity to participate in each area of the PRVCU and provide support for the implementation of our projects.

Dengue Epidemic Response

A public health emergency was declared due to a dengue epidemic in Puerto Rico on March 25, 2024. This declaration was extended until December 31, 2024, to promote prevention and control measures. By the end of June 2024, the number of accumulated cases of dengue was 1,596 with the highest numbers of reported cases in San Juan (383), Carolina (158), Rincón (95), Bayamón (81), and Canóvanas (78). During this year, the Puerto Rico Department of Health published a collaborative plan that includes PRVCU as key partner for its implementation. The plan can be accessed at: salud.pr.gov/CMS/DOWNLOAD/8731. To continue the collaboration between the PRVCU and the Department of Health, the Memorandum of Understanding was extended until December 31, 2026, and 19 PRVCU members renewed their Category 9 licenses. This license provides the PRVCU with the ability to use pesticides in the control of mosquitoes in Puerto Rico. PRVCU continues strengthening the collaboration between the PRDH and the Puerto Rico Department of Agriculture to implement modern technologies and the use effective pesticides to control the *Aedes aegypti*. Also, PRVCU continues to provide support of entomological expertise to both agencies.



Rafael Saavedra, Project Manager, participated in a panel about climate change with the Department of Health organized by Emergency Management and Disaster Administration Bureau.



Julianne Miranda-Bermúdez, Associate Director, participated in the IV Public Health Puerto Rican Conference.



Nexilianne Borrero, Noemí Martínez, Rafael Saavedra, Marla García, Raiza Alvarado, Dr. Julianne Miranda and Dr. Grayson Brown participated in the American Mosquito Control Association (AMCA) Meeting 2024 in Dallas, Texas. The team presented our initiatives, promoted the AMCA2025 which will be in Puerto Rico, represented the AMVPR and Marla received the Boyd Ariaz Grassroots Award.



PRVCU Managers and Supervisors participated in a Dengue Tabletop Exercise organized by the Department of Health.



Raiza Alvarado, Vector Management Team Lead, and Dr. Grayson Brown, Executive Director participated in the ACMA Conference in Washington, D.C.

Vector Surveillance

Laboratory capacities were established in San Juan and Ponce and working at full capacity since 2018 and 2019, respectively, to support surveillance activities as well as testing for alternate control technologies. As part of the PRVCU mosquito surveillance, female *Ae. aegypti* are collected, identified, and submitted for arbovirus testing weekly. This surveillance system has expanded to include samples from all our main projects, including samples from Bayamón, Caguas, Canóvanas, Carolina, Cataño, Culebra, Guaynabo, Juncos, Ponce, Rincón, San Juan, Toa Baja, and Trujillo Alto, some are not currently part of the surveillance system. Up to June 2024, a total of 1,372 AGO traps get processed weekly (Table 2).

The PRVCU laboratory uses the Triplex assay developed by the CDC-Dengue Branch. This is a multi-target molecular assay intended for the qualitative detection and differentiation of RNA from dengue, chikungunya and Zika viruses in mosquito samples. If dengue is detected, the DENV1-4 assay is then used to determine the dengue serotype (DENV-1, 2, 3, 4). From January 2018 through June 2024, 235,732 capture chambers have been processed, with 2,648,539 *Ae. aegypti* females captured. Table 3 shows a summary of the mosquitoes processed and the number of pools evaluated for arboviruses. We also provide mosquito testing to Pacific islands as a service.

Table 2. Number of active/processed AGO traps as part of the surveillance system until June 2024.

Municipality	No. of AGO Traps	Project/Purpose
Bayamón	473	Many positive Cases, Bayamón Program
Caguas	240	DoD Project
Canóvanas	33	Dengue Hotspot
Carolina	98	Dengue Hotspot
Cataño	10	Dengue Hotspot
Culebra	37	Rotary Club Project
Guaynabo	34	Dengue Hotspot
Juncos	30	Dengue Hotspot
Ponce	266	HUD Project
Rincón	11	Dengue Hotspot
San Juan	203	Many positive cases and some hotspots
Toa Baja	150	AMCA Project
Trujillo Alto	27	Dengue Hotspot

Table 3. Summary of mosquito samples processed in the PRVCU laboratory for this period.

Description	Jul 2023 - Jun 2024	To date (Jan 2018-June 2024)
AGO Captured chamber processed	23,581	235,732
Total <i>Aedes aegypti</i> females captured	358,359	2,648,539
Total pools tested for arbovirus	46,270	181,153
Total pools positive for dengue	237	1,313

Since July 2021, PRVCU agreed to start deploying AGO traps in municipalities around the Island considered, by members of CDC, Department of Health and PRVCU, as hotspots that should be consider as priority in molecular testing for arbovirus surveillance detection. The municipality hotspot selection was based on areas with high incidence of dengue human confirmed cases and mosquito positive traps. Female *Ae. aegypti* are collected from AGO traps, identified, and submitted for weekly testing in PRVCU Molecular Laboratory. Most of those positives are DENV-1, 163 are DENV-2 and 79 is DENV-3. Table 4 shows the historical overall positive pools detected in the hotspot’s areas.

Insecticide resistance assays

During this reporting period, the Insecticide Resistance Assay (IRA) was performed in December 2023. All assay procedures, diagnostic times and diagnostic doses were documented and reported based on CDC-CONUS protocol. The municipalities tested were the following: San Juan, Caguas, Bayamón, Culebra, San Germán, and Ponce. The active ingredients analyzed were permethrin, deltamethrin, entofenprox, phenothrin, lambda-cyhalothrin, malathion, chlorpyrifos, alpha-cypermethrin, and beta-clyfluthrin. Table 5 shows that the mosquitoes *Ae. aegypti* exposed to the active ingredients evaluated in those municipality. These results, like all the others before, show that *Ae. aegypti* is highly resistant to the adulticides most used to control this mosquito in Puerto Rico.

Table 4. Historical overall positives pools detected per hotspot zone considering Dengue serotype identification.

Dengue Serotype	Dengue virus positive pools
Dengue 1	1,071
Dengue 2	163
Dengue 3	79
Dengue 4	0

Table 5. Results of insecticide resistance testing for *Ae. aegypti* resistance against 9 insecticides at 6 different locations in Puerto Rico



Project in Caguas to determine mosquito thresholds necessary to spread disease

In collaboration with the CDC Dengue Branch, a Department of Defense-funded program began to determine the minimum numbers of Ae. aegypti mosquitoes required to maintain outbreaks of arboviruses such as dengue, chikungunya and Zika. The three-year project (2021 – 2024) received \$900,000 and ended during this period. In this project, four (4) treatments were established (with 3 replicates of each treatment) in 12 areas of 300 houses in the urban area of the municipality of Caguas. The treatments consisted of placing 3, 2, 1 or 0 AGO traps per house to control the number of Aedes aegypti. The percentage of houses with traps in each area ranged between 70 – 79%. To monitor the effect of the treatments in each area, the changes in the number of mosquitoes throughout the year and the presence of the dengue virus in the mosquitoes, a surveillance system was established in which 20 traps per area were monitored weekly.

With the data obtained weekly, it was determined that the number of mosquitoes per area significantly declined by increasing the number of traps per house. The number of mosquitoes in the area reduced by 41% (1 trap/house), 58% (2 traps/house) and 77% (3 traps/house). The average number of mosquitoes captured per trap in these areas was 9.1 (0 trap/house), 6.0 (1 traps/house), 4.5 (2 traps/house), and 3.0 (3 traps/house). Throughout the study, 35 pools of mosquitoes infected with dengue were identified. 82% of the dengue pools were collected in areas that had 0 or 1 trap per house.

During 2022 and 2023, serology tests were performed to determine if residents of areas with traps had had a recent infection with the dengue virus and to determine if there was greater protection from Dengue transmission in areas with a greater number of traps. Dengue antibody tests were performed on 600 residents (50 residents/area). Due to the low transmission of the Dengue virus in PR during that period, it was not possible to determine if there was a difference between the areas. In February 2024, the control traps were removed from the houses that participated in the study and the CDC maintained 180 surveillance traps in 9 of the 12 clusters.

Dengue hotspot response and municipal support for vector control

Since July 2021, PRVCU agreed to start deploying AGO traps in municipalities around the Island that are identified, by members of CDC, PRDoH and PRVCU, as hotspots that should be considered as priority in molecular testing for arbovirus surveillance detection and surveillance and control efforts in coordination with different agencies. The municipality hotspot selection was based on areas with high incidence of dengue human confirmed cases and mosquito positive traps. In responding to dengue hotspots as defined above, we have evaluated combinations of vector management tactics that could be combined into a manageable strategy. The protocol involves: Wide Area Larvicide Sprays (WALS), house-to-house community engagement, larvicide spot applications, debris cleanup (usually in collaboration with the municipality) and debris prevention (e.g. additional and/or upgraded dumpsters, debris prevention campaigns, etc.), trapping out with AGO traps. We have had mixed success with these approaches. The most successful strategy is one which combines all the above which is very labor intensive – especially the AGO traps and community engagement.

The PRVCU can sustain the intensity of effort required for this program, but only for a small number of hotspots at a time – 2 or 3. With the declaration of a dengue outbreak in Puerto Rico, the number of clusters with active dengue cases increased. During this period, a total of 31 dengue clusters were intervened in Trujillo Alto, San Juan, Guaynabo, Bayamón, Carolina, and Canóvanas, where surveillance, control, and community engagement activities were conducted.

As part of the collaboration with the PRDoH and local municipalities, PRVCU provided support on the use of WALS in various hotspots’ areas (Figure 1). During this period, more than 60 WALS applications were conducted. Table 6 shows the areas that were served during the last year. To continue supporting these efforts, the Department of Agriculture agreed that PRVCU and PRDoH can use other insecticides to which the Aedes aegypti mosquito is not completely resistant such as Merus, DeltaGuard, Nyguard, Vectobac, and Natular.

Table 6. Results of insecticide resistance testing for Aedes aegypti resistance against 9 insecticides at 6 different locations in Puerto Rico

Start Date	Serotype	Area	Activities	Result
September 2023	Dengue 2 and 3	Area Urb. Pacífica, Trujillo Alto (TRU-HS1)	10 AGO surveillance traps 121 AGO control traps WALS applications	No more cases of Dengue 2 and 3 were reported.
September 2023	Dengue 3	Urb. Riachuelos, Trujillo Alto (TRU-HS2)	8 AGO surveillance traps 127 AGO control traps WALS applications Community and education activities	No more cases of Dengue 3 were reported.

Start Date	Serotype	Area	Activities	Result
September 2023	Dengue 3	Urb. Entreríos, Trujillo Alto (TRU-HS3)	9 AGO surveillance traps 51 AGO control traps WALS applications Community and education activities	No more cases of Dengue 3 were reported.
Ocotober 2023	Dengue 3	Puerto Nuevo, San Juan (SJU-HS4)	10 AGO surveillance traps Breeding sites source reduction	No more cases of Dengue 3 were reported.
November 2023	Dengue 2	Cond. Cádiz, San Juan (SJU-HS6)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
November 2023	Dengue 2 and 3	Cond. Venus Plaza A, San Juan (SJU-HS6)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 and 3 were reported.
November 2023	Dengue 2	Cond. Torre Alta, San Juan (SJU-HS7)	4 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
November 2023	Dengue 2	Cond. Venus Plaza B, San Juan (SJU-HS8)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
November 2023	Dengue 2	Cond. El Bilbao, San Juan (SJU-HS9)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.

Start Date	Serotype	Area	Activities	Result
November 2023	Dengue 2	Cond. Caribbean Sea, San Juan (SJU-HS10)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
January 2024	Dengue 2	Res. San Agustín, San Juan (SJU-HS11)	5 AGO surveillance traps Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
March 2024	Dengue 3	Res. Jardines del Paraíso, San Juan (SJU-HS12)	12 AGO surveillance traps 187 AGO control traps WALS applications Community and education activities	Active Cluster
March 2024	Dengue 2	Urb. San Agustín, Bayamón (BAY-HS3)	8 AGO surveillance traps WALS applications Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
March 2024	Dengue 2	Urb. Villa Verde, Bayamón (BAY-HS4)	4 AGO surveillance traps WALS applications Breeding sites source reduction Community and education activities	No more cases of Dengue 2 were reported.
March 2024	Dengue 2	Urb. Vista Mar (CAR-HS5)	15 AGO surveillance traps Community and education activities	No more cases of Dengue 2 were reported.
March 2024	Dengue 2 and 3	Res. Jesús T. Piñeiro, Canóvanas (CAN-HS2)	6 AGO surveillance traps Community and education activities	No more cases of Dengue 2 and 3 were reported.

Start Date	Serotype	Area	Activities	Result
April 2024	Dengue 2 and 3	Jardines de Palmarejo, Canóvanas (CAN-HS3)	9 AGO surveillance traps	No more cases of Dengue 2 and 3 were reported.
April 2024	Dengue 2 and 3	Jardines de Canóvanas, Canóvanas (CAN-HS4)	6 AGO surveillance traps	No more cases of Dengue 2 and 3 were reported.
April 2024	Dengue 2 and 3	Quintas de Canóvanas, Canóvanas (CAN-HS5)	5 AGO surveillance traps	No more cases of Dengue 2 and 3 were reported.
May 2024	Dengue 2 and 3	Sector Ensanche, Carolina (CAR-HS6)	15 AGO surveillance traps	Active Cluster
May 2024	N/A	Ave. San Patricio, Guaynabo (GUY-HS2)	6 AGO surveillance traps	Closed
May 2024	Dengue 2	Urb. Luis Muñoz Rivera, Guaynabo (GUY-HS3)	7 AGO surveillance traps	No more cases of Dengue 2 were reported.
June 2024	Dengue 3	Res. Las Dalias, San Juan (SJU-H13)	10 AGO surveillance traps Breeding sites source reduction Community and education activities	Active Cluster
June 2024	Dengue 2	Res. Alejandrino, San Juan (SJU-9)	10 AGO surveillance traps 139 AGO control traps Breeding sites source reduction Community and education activities	Active Cluster
June 2024	Dengue 3	Jardines de Country Club, Carolina (CAR-HS7)	11 AGO surveillance traps	Active Cluster
June 2024	Dengue 3	Colinas de San Juan, Carolina (CAR-HS8)	11 AGO surveillance traps	Active Cluster
June 2024	Dengue 3	Veredas del Parque, Carolina (CAR-HS9)	8 AGO surveillance traps	Active Cluster

Start Date	Serotype	Area	Activities	Result
June 2024	Dengue 3	Altos de Escorial, Carolina (CAR-HS10)	8 AGO surveillance traps	Active Cluster
June 2024	Dengue 3	Terrazas Parque Escorial, Carolina (CAR-HS11)	6 AGO surveillance traps	Active Cluster
June 2024	Dengue 3	Parkview Terrace, Canóvanas (CAN-HS6)	7 AGO surveillance traps	Active Cluster
July 2024	Dengue 3	Villa Andalucía (SJU-H14)	6 AGO surveillance traps	Active Cluster



Figure 1. WALs application in a hotspot area.

Advanced Molecular Diagnostics (AMD)

The AMD-funded project “Tracking emerging dengue virus variants in the context of new vaccine and vector control interventions in communities at risk in Puerto Rico” aims to establish a deployable Dengue Virus detection system in mosquitoes. This method could offer a more sensitive and timely virus detection than human surveillance, aiding in early intervention. The project involves two sampling strategies: long-term surveillance in historical hotspots and reactive real-time surveillance around recent dengue cases in San Juan. The goals are to determine the effectiveness of mosquito virological surveillance compared to human case surveillance, establish virus detection duration in mosquito’s post-human cases, and conduct genomic characterization of circulating viruses. Mosquito collection occurs in two scenarios: around confirmed dengue cases and at sentinel sites in historical hotspots. Technicians use AGO traps to capture female Ae. aegypti mosquitoes, then evaluated for DENV. Positive samples are sequenced for further analysis. Initial results show 30 positive pools from 2,139 mosquito pools collected between ten communities in San Juan, Trujillo Alto and Carolina, with Dengue 2 being the most predominant serotype among the other serotypes 1 and 3 detected.

Evaluation of Wolbachia replacement in El Salvador

PRVCU received a grant from the CDC in 2023 to conduct a vector control project in El Salvador. The objective of this project is to establish and evaluate Wolbachia in the Ae. aegypti population throughout the urban areas of the municipalities of Santa Ana, San Sebastian Salitrillo, and Chalchuapa in El Salvador. This project involves collaboration between several disparate organizations working in partnership: PRVCU, World Mosquito Program (WMP), El Salvador’s Ministry of Health (MINSAL).

These three collaborators also work in close association with the CDC Dengue Branch in San Juan, Puerto Rico, CDC’s Central American Regional Office in Guatemala, and the municipality of Santa Ana, El Salvador. The PRVCU and CDC are implementing a parallel surveillance to evaluate diverse factors to monitor the populations of Ae. aegypti, the presence of arbovirus in adult mosquitoes, and the replacement of the native Ae. aegypti population with Wolbachia-infected mosquitoes that would block dengue virus transmission in western El Salvador.

WMP conducted a control and monitoring program to evaluate the rate of mosquito population replacement using household aspirations during short periods of time during implementation and sporadically afterwards, within the five-year observational period of the project.

During this reporting period, PRVCU has been working with the collaborators in the implementation phase (Figure 2):

- Training and socialize the project to different stakeholders and project launch in El Salvador.
- All traps and other equipment were purchased/ shipped or made on-site, PRVCU office in Santa Ana was established and all the personnel of the project were hired to conduct the mosquito parallel surveillance.
- Establishment of the parallel surveillance in the three areas in Santa Ana, El Salvador using 101 AGO traps.
- During this period, WMP established and equipped their office in Santa Ana to produce and perform the mosquito releases on time, acquired all the permits necessary to import and export the mosquito eggs, obtained the IRB, and other administrative tasks were performed. The general release program and protocol will follow the WMP model, which has been effective in other locations worldwide. The first release of mosquitoes was on January 13, 2024, in Santa Ana and ended in June 2024.
- To learn more how the mosquito with Wolbachia releases has been conducted in other areas and with other partners, a visit was conducted to Tegucigalpa, Honduras to observe and learn about Doctors without Borders’ (Médicos sin Fronteras) approach. Also, PRVCU staff received training in Colombia and El Salvador about this technology.
- At this moment, WMP are in the monitoring phase of the presence and spread of Wolbachia-infected mosquitoes in the three areas of releases. PRVCU will continue the monitoring on December 2024 and provide support to MINSAL to continue the long-term monitoring.
- An application to approve the use of this technology in the US (or at least, Puerto Rico) has been submitted to the US Food and Drug Administration (FDA). It is pending an expedited review. Once approved, we will begin implementation of this technique in Puerto Rico.



Figure 2. Pictures of the project’s activities.

Integrated Vector Management Project in Bayamon

Collaborating with Bayamón Municipality, the CDC-Dengue Branch, and the PRDH, the PRVCU is launching an Integrated Vector Management (IVM) program in Bayamon from 2024 to 2026. The municipality of Bayamón, with a population of about 185,000 people, is the second most affected municipality by arboviruses in Puerto Rico. The program aims to reduce *Ae. aegypti* mosquito-borne arbovirus transmission, with scalability for other municipalities.

The objectives of the projects includes monitor female *Ae. aegypti* mosquitoes to determine what viruses are in the community and whether mosquito control is working, and evaluate the acceptability, viability, and long-term sustainability of the project in the community. The strategy involves targeting a high-risk “hot spot” within Bayamon year-round rather than reacting to case clusters. The IVM program will focus on environmental management, community education, mosquito trapping, larviciding, spatial repellents, and residual spraying.

Community engagement will involve educating residents, inspecting breeding sites, and conducting clean-up campaigns. Vector control measures will be tailored for public housing, schools, and general community areas. Program evaluation will assess the reduction in dengue cases, mosquito population changes, stakeholder feedback, costs, cost-effectiveness, and community support for program continuation. We are working with residents and community leaders to educate them on ways to control mosquitoes and protect themselves and their families from mosquito bites.

In February 2024, we began activities in the communities, installing AGO traps around the buildings in housing projects to begin monitoring for mosquitoes. We have also conducted listening sessions with residents, community leaders and other key informants to introduce them to the project, get to know their community leaders, project acceptability and preferred forms of communication.

More than 290 surveillance traps have been installed in housing projects and communities. Mosquito aspirations and yard inspections were conducted in 14 schools to determine which areas have the highest number of mosquitoes. To reduce the mosquito population, more than 400 traps have been installed and yard inspections are being conducted in schools and housing projects.

SíScreens Project, Ponce, Puerto Rico

PRVCU, the Ponce Health Science University (PHSU) and the PRDOH established a collaborative project funded by the US Department of Housing and Urban Development to prevent dengue using house screens against *Ae. aegypti* mosquitoes in Puerto Rican housing. The implementation of the study started in August 2023 and the evaluation will be over 2 years. The study site is in Ponce, Puerto Rico through the Communities Organized for the Prevention of Arboviruses (COPA) project; a cohort study of 38 clusters in Ponce with over 5,000 participants.

The project is composed of four key components: 1) pre-intervention screening of arboviruses in homes and among residents of selected neighborhoods in Ponce, Puerto Rico; 2) surveying community members concerning screening as a preventative measure against vector borne diseases; 3) screening of 250 homes; and 4) comparing outcomes of screened homes versus a control group to determine efficacy of screens. Outcomes that are measured include differences in mosquito numbers and species composition, dengue prevalence, and seropositivity. Surveys will show satisfaction with screening, attitudinal shifts before and after screening. Economic measures will show the cost effectiveness of the screening. Finally, new screening microenterprises will continue to function at the end of the project, and they will provide continuing service in the Ponce area. The recruitment goal is 500 households: 250 households as intervention group with screen installation in doors and windows and 250 households as control group. As of June 2024, the household recruitment has resulted in 377 households recruited with 194 control houses and 184 intervention houses, with 164 measured and 145 installed with screens.

The household follow-up 6-month visits have been initiated, with progress of 108 follow up visits. Figure 4 shows a summary of household recruitment and Figure 3 pictures of the activities conducted. A testimonial video of Yalitza M. López Torres, a Puerto Rican entrepreneur dedicated to pest control, was produced. She told us how the screens workshops under the SíScreens project have transformed her approach and skills in response to the dengue epidemic in Puerto Rico. youtu.be/wVbXk9o_VqI



Figure 3. Pictures of some activities conducted on the SíScreens Project.

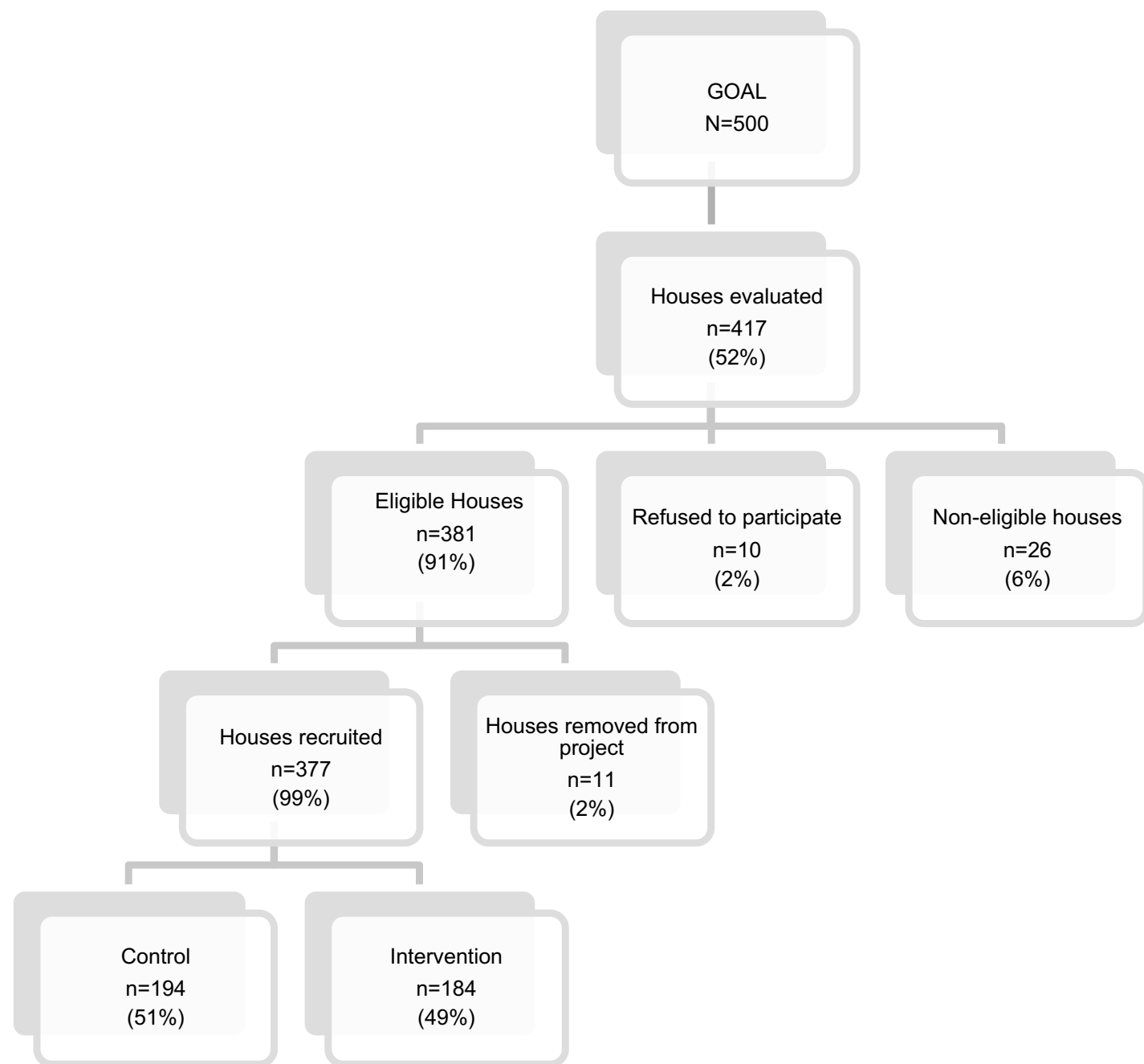


Figure 4. Summary of household recruitment.

Community outreach and education activities

The PRVCU Community Mobilization Program continues participating in the proactive program. Table 6 shows a summary of the outreach and education activities during this period and since 2017. A total of 133 activities were conducted and a total of 5,544 educational materials and 6,763 mosquito repellents were distributed (Table 7 and Figure 5).

Table 7. Summary of outreach and education activities conducted during this period.

Activity/ Material	Jul 2023 – Jun 2024 Number of activities/ materials	Total to date since September 2017 Number of activities/ materials
Educational Booths	51	707
Educational talks (general public)	30	425
Educational Talks (schools)	35	612
Community Visits	16	9,361
Informational Visit	1	400
Workshop or training	0	24
Summer Camps	1	32
Distribution of repellents	6,763	139,750
Distribution of larvicides	42	7,010
Distribution of educational material	5,544	186,807
Distribution of activity books	96	19,750
Mosquito nets	0	1,331



Figure 5. Pictures of education and community outreach activities

Mosquito Day 2023

World Mosquito Day is recognized annually on August 20th to commemorate that day in 1897 when British doctor Ronald Ross discovered that female mosquitoes transmitted malaria. In 2019, the governor of Puerto Rico signed a proclamation to declare August the Awareness Month against the Mosquito *Ae. aegypti* in Puerto Rico.

During this year, the objective of the campaign was to invite citizens to participate in the reduction of breeding sites through the Criadero Challenge Contest. This consisted of registering, using the Mosquito application to register the breeding sites found and eliminated during the month of August. The person with the most breeding sites eliminated (with evidence) was the winner of a \$100 gift card. In addition, from this initiative, people, entities, groups, organizations, among others, could register and organize educational activities, such as: educational booths and talks, house-to-house visits, yard inspections, among others to carry the message of prevention and the elimination of breeding sites.

At the end of the campaign, there was an approximate participation of 360 people (adults and children) in 13 educational activities (educational booths and talks). These activities were conducted in 10 municipalities. Among all the activities, a total of 1,317 educational and prevention materials were delivered. A total of six people from the following municipalities were registered in the Criadero Challenge: Ponce, Peñuelas, San Juan, Bayamón, Carolina and Yabucoa. Through the contest, a total of 58 breeding sites were reported. The six most common breeding sites found were: trash cans, animal waterers, bottles, buckets, pots, and tires.

Puerto Rico Vector Management Association (PRVMA)

In 2021, the PRVCU founded the Puerto Rico Vector Management Association (PRVMA): <https://prvectorcontrol.org/amvpr/>. The Association had its first annual meeting in September 2021 of that year attracting about 100 attendees. Its second annual meeting in September 2022 attracted a 3-day attendance of 500. During this period, the annual meeting held in conjunction with other large units to form a Health Congress of Puerto Rico that attracted 520 individuals (Figure 6).

The PRMVA membership is currently well over 430 individuals from different sectors (municipal, private, academic, among others) have become members of the Puerto Rico Vector Management Association (PRVMA) representing 74 local municipalities and eight additional countries (Australia, Brazil, Chile, Colombia, El Salvador, Ecuador, Spain, United States, Mexico, and Perú).



Figure 6. Pictures of the Health Congress of Puerto Rico

Tropical Islands Training and Evaluation Center (TITEC)

The Tropical Islands Training and Evaluation Center (TITEC) was created to provide training, evaluation, and partnerships in the prevention and control of vector-borne diseases in the US territories and freely associated states through a partnership between the PRVCU, the PIHOA, and the Navy Entomology Center of Excellence (NECE). The general objective of this project is to improve vector management activities in the United States tropical Islands. During this period, we completed the organizational phase and started the operations of TITEC.

A needs assessment was developed and implemented for vector control personnel to understand training and vector control needs. TITEC, in conjunction with the PRMVA, provides calibration and training tours that consist in visits to individual municipalities of Puerto Rico to (1) inspect, repair, and calibrate insecticides application equipment, and (2) provide a short training on mosquito biology, control, and proper use of the equipment.

At the end of the calibration process, a label is affixed to each piece of spray equipment that showed the calibration date, flow rate, droplet volume means diameter (VMD), diluent used, and the next calibration date. Seven (7) calibrations tours were performed during this period, with 55 municipal personnel trained and 14 equipment calibrated. A “Train the Trainer” was created and implemented by the CDC-Dengue Branch to train vector control personnel that will continue training other people, as PRVCU personnel. The training is designed to take 4.5 days, including three days of lectures and one day and a half of

field practice. The TITEC, in collaboration with the CDC-Dengue Branch, modified the current training and adapted it to the needs of the municipalities’ staff; a two-day training was modified.

The implementation of this course will be in July 2024. To respond to the dengue epidemic declaration, more training and calibration tours were scheduled for the coming months and PRDH is requesting more of these activities to increase the capability and capacity of Puerto Rico municipalities to respond to the epidemic.



Figure 7. Shows pictures of the activities conducted.

Quality Assurance Division

During this period, the Quality Control team worked on the planning of trainings given to the personnel selected to work in the separate phases of the *Wolbachia* Project in El Salvador and key personnel working in the communities on behalf of the MINSAL. These trainings took place in August 2023. During the past year, we have worked with the implementation of the project, answering queries on how to proceed based on the protocol and the evaluation and correction of data.

About 20 virtual and face-to-face sessions have been given on the discussion of the project protocol, basic knowledge of the *Ae. aegypti* mosquito, management of the AGO and BG surveillance traps, the use of data collection tools, among others.

Earlier this year, two Data Specialists were added to the Quality Control team to collaborate in the review and analysis of data on all our projects. For the vector management team here in Puerto Rico, about 10 training sessions have been offered on the use of the traps and monitoring equipment used by PRVCU.

WHAT'S NEXT

The TITEC is now fully operational. It has trained hundreds of vector management staff in Puerto Rico during the first 6 months of 2024. In its 2nd year, it will now include training activities in the US Virgin Islands and the Pacific Islands. The PRVCU is now introducing new and effective adulticides to the municipalities. All the larger municipalities in Puerto Rico have adulticide application equipment but they have been using ineffective products. We expect that vector control island-wide will improve by adopting the newer products.

The PRVCU and the Trust are planning to construct a large mosquito factory this year. This factory will be capable of producing about 10 million *Wolbachia* mosquitoes/week and should be ready once we receive FDA approval for the *Wolbachia* replacement technique. The PRVCU will host the Annual Meeting of the American Mosquito Control Association in San Juan, March 2025. This will be the world's largest meeting of vector management professionals in 2025 and will clearly establish the PRVCU as a pre-eminent vector control program. Other exciting developments are in the works for this year but, the main message is that the PRVCU is now a world-class vector management program.



The background is a solid green color with various white geometric patterns. In the top left, there is a complex, interlocking line pattern resembling a stylized maze or a circuit board. Below this, there are several thin white lines and small hexagonal shapes. In the bottom right, there is a network of lines connecting circular nodes, resembling a molecular structure or a data network. The overall design is modern and technical.

EDUCATION



WHAT WE DO

Global economies, innovation, science, and technology require adaptable, skilled workforces to navigate 21st-century challenges. The STEM Education & Workforce Development Program fosters formal and informal approaches to sustain a healthy K-12 and lifelong learning pipeline through meaningful partnerships, innovative programs, and educational policy advocacy to revolutionize the region's educational and employment systems. It focuses on equity and diversity in STEM opportunities for K-12 students and skills-building in emergent technologies open to interested stakeholders, thereby enabling for the success of the island's prime asset - its people.

Our mission is to advance, connect, expand, and sustain key initiatives that drive STEM education & Workforce Development as key components of Puerto Rico's economic development.

WHO WE CONNECT WITH

As a strategic partner for the innovation, science, technology and research ecosystem, the program connects with a multitude of stakeholders to deliver high quality STEM education content, programs, and services, as well as workforce development programs specialized in emerging technologies.

HOW WE DO IT

Connecting with key education, technology and innovation projects, communities and organizations, engaging in meaningful work that advances our mission.

Collaborating with key stakeholders to ensure successful STEM, CTE and Workforce Development initiatives.

Designing informal and formal approaches to learning, training, and capacity building.

Advocating on behalf of innovation, lifelong learning and professional development as the keys to long-term socioeconomic development in Puerto Rico.

IMPACT NUMBERS

75.5% Retention Rate in all Programs
100% Target Goal for PR Ready

\$170k Contracted Services
378 New Students that Completed our STEM Boxed Kit Experience

\$76,000
Philanthropic Sponsorships Toward Education in Puerto Rico

\$80,000
Direct Investment Towards Free STEM Activities for Local Students



Program Highlights

This year has been an exciting opportunity to expand our program offer, not only diversifying activities and program avenues. It has also seen the creation of new strategies to enhance high-quality informal STEM learning opportunities throughout Puerto Rico. With a \$15,000 donation, Fundación Ángel Ramos sponsored the keystone for Hexagon, the program's 3D printing studio in Ponce. Hexagon's operation will be supported by the Assur Foundation's kind support for the following five years. It's \$300,000 commitment towards STEM education will provide 100 teachers with free professional development, as well as recognize future STEM scholars with the introduction of the Azmat Assur Future STEM Scholar Prize competition.

We are happy at the prospect of the work we are doing in Puerto Rico; the program strives hard to improve the STEM education and workforce development ecosystem while leveling the playing field for access to those who, traditionally, wouldn't have access to high quality STEM learning. This report highlights the year's efforts.

STEM Boxed Kit Experience: Programming and Microbits

The project, which began with kind consideration and funding from the Medtronic Foundation and collaborations with local organizations like Fundación Atención Atención and Terminal 34, concluded its last mile with 378 new students receiving hands-on learning in the form of the STEM Boxed Kit (SBK). Throughout its lifetime, the SBK served 500 students who received a box filled with learning resources, this time focused on programming fundamentals.

During the five-week program, students focused on learning coding and computer science fundamentals by engaging in microcontroller projects that included variables, conditional statements, algorithms, and live interactions with the code. The \$200,000 investment yielded 33.7% females, and 66.3% males served: 66% of these were public school students.



HackLab Academy

As a tool to capture interest in projects addressing real-world applications of computer programming, in February, the program kicked off its HackLab Academy. This 10 Saturday programming academy helps youth develop computational thinking, basic programming concepts, problem-solving algorithms, and the development of user-oriented software/hardware solutions.

The initiative saw eighteen (18) teens from across the island develop step counters, altimeters, velocimeters, and the integration of sensors into their computer codes. The program also had incredible visitors like astronomer and educator Dr. Wanda Díaz Merced, who demonstrated her use of sensors to develop sounds that characterize features in space. In the end, 100% of the participants received their certifications in Hardware Programming Fundamentals and were left with the pleasure of more activities.

21st Century Techforce Partner

With an assignment of \$1.8 million, the Program led procurement efforts for the nine (9) Lighthouse Schools under the Puerto Rico Department of Economic Development and Commerce's 21st Century Techforce initiative. Techforce aims to fund equipment, content development, and professional development for teachers that will impact public school students and their exposure to high-quality learning opportunities in technology. As Techforce seeks to engage more than 20,000 new professionals in technology during the next ten years, the Lighthouse project is the first step into the gateway of career exploration in the field. Primary and secondary schools in Bayamón, Cayey, Juana Díaz, Juncos, Lajas, Santa Isabel, Toa Baja y Vieques participated in the program.

The STEM Education & Workforce Development Program became a pivotal strategic and operational partner to deliver the project on time and within budget within the agreed 6-months of duration. The program delivered on value, meeting its scope 21% below budget. This was achieved by leveraging the Trust's expertise in high-tech and laboratory procurement experience combined with its network of providers, suppliers, and business allies. Activities included purchasing computers and hardware, rehabilitating classroom and technology laboratory space, procurement of teacher professional development and skill development workshops, as well as capacity building in new technologies to school staff.

Despegue Científico: Taller de Cohetes y Aeronáutica

As part of the White House Space Initiative, the STEM Education & Workforce Development Program, NASA, ESTES Rockets, and a cohort of volunteers from Notre Dame High School (Caguas) celebrated National Space Week with its own Despegue Científico. The event allowed 44 participants to receive high-quality informal education on aerospace, space careers, aeronautics, and rocket science. Throughout the day, students covered rocket assembly, safety, and launching procedures before closing the afternoon with their rocket launch.

This activity will become a staple at the Puerto Rico Science, Technology, and Research Trust as we are committed to promoting engagement with careers in the aerospace industry.

ConCiencia Podcast

2023 saw the birth of ConCiencia, a podcast dedicated to science communication and facilitating educational entertainment to hundreds of listeners inside and outside Puerto Rico. The program produced the first 12 episodes, creating a concept, developing a visible resource for the Trust, and exposing local scientists' research to the world.

Starting in late 2024, the podcast will be under the Research Grants Program, as it has become a voice for local scientists to communicate their work.

EV Challenge

For a second year, the STEM Education & Workforce Development Program, in collaboration with the National Energy Education Development Project, supported the LUMA Electric Vehicle Challenge 2024. This time, 73 female students from local public schools participated in capacity-building workshops to broaden their knowledge of energy topics while working on their electric vehicles. The events took place in Guaynabo and Ponce, where teams faced off in their EVs while testing their skills and capabilities in implementing electrical power concepts.



WORKFORCE DEVELOPMENT

Puerto Rico Ready 2023-2024

The third and final cycle of certifications in Drone Pilot, GIS and IT Support Specialists was completed with the last 61 participants closing the coursework phase of the Community Development Block Grant – Disaster Relief (CDBG-DR) awarded in 2021.

Since its inception, Puerto Rico Ready has provided workforce training in Information Technology, Public Health, and Manufacturing Fundamentals to 272 low to moderate-income participants from across Puerto Rico. The project, which will be sunset in December 2024, will roll out a Talent Showcase Platform that will allow program graduates and other potential employees to create personal profiles that will allow employers to contact and source their talents directly without the need for third-party job sites.



WHAT'S NEXT

As we embark on the strategic planning for next year, we face the future satisfied with the range of experiences and the network of collaborators gathered along the way. We look forward to delivering great ideas already in the pipeline.

During the first trimester of 2025, the program will also unveil the Trust's first learning management platform, featuring self-paced and instructor-led courses in Information Technology, Emerging Tech, Health, Research, and Teacher Professional Development. This learning option will broaden access to high-quality learning to thousands of Puerto Ricans interested in improving their marketable skills.

Finally, the program will lead industry, academia, and K-12 school collaborations in an initiative from the Puerto Rico Department of Economic Development and Commerce that will serve high schools across educational regions, providing early access to IT and Emergent Technology fundamentals as well as after-school time learning in biotechnology and entrepreneurship.





Meetups has become a dynamic platform to identify a variety of issues, from pressing social concerns, like waste management and the protection of our environment, to promising scientific and technological advancements, like in the bioeconomy. We identify, reach out, and engage scientists, researchers, inventors, academics, teachers and students, subject matter experts, as well as leaders from civil society and the private and public sectors, and hone our guest lists to ensure top quality speakers. Our pre-production research allows us to curate topics to enhance a facilitated dialogue that allows us to share and learn by way of the comparison and contrast of ideas that affect our communities and businesses as we identify challenges and give shape to solutions.

VISION

A robust knowledge economy based on a community that thrives on its diversity and creativity as the pillars of our social wellbeing and economic prosperity.

MISSION

To foster productive dialogues that lead to innovative solutions, ultimately enhancing the well-being of citizens and driving sustainable economic development.

IMPACT NUMBERS

6 Meetups Events (2023-24)	795 Total Meetups Attendees
51 Subject Matter Experts	23 Entrepreneurial Ecosystem Referrals
18 Participants B-Corp Certification Cohort	13 External Program Collaborations
4 Special Projects	7 Trust Program Collaborations



Program Highlights

Since 2015, The Puerto Rico Research and Innovation Meetups Program celebrates a successful outreach and dialogue with a rich and diverse audience composed of scientists and researchers, academic educators and students, as well as leadership from the business and public service sectors. This wide range of stakeholders is vital to the growth of emerging ecosystems that have the potential to drive new scientific, business, and civic activities, geared at improving conditions for citizen well-being and economic development. The program has expanded its impact by promoting innovative business practices, increasing social capital, fostering shared leadership, and facilitating collaboration across Puerto Rico’s emerging ecosystems.

This past year, the program successfully produced six dynamic meetups and engaged in impactful special projects focusing on food security, wellbeing economy, creative economy, AI, sustainability, and the circular economy. These initiatives have significantly contributed to aligning Puerto Rico’s economic growth in line with the United Nations Sustainable Development Goals.

Meetup Events (2023-2024)

PRCCI Meetup: Collaborative Discussion on Advancing Clinical Investigation in Puerto Rico

The PRCCI Meetup focused on strengthening Puerto Rico’s clinical investigation ecosystem by bringing together clinical researchers, healthcare professionals, and industry leaders. Attendees identified key action items, including defining criteria for promoting Puerto Rico’s clinical investigation capabilities and developing citizen and legislative awareness campaigns. These efforts aim to foster public support and create a favorable legislative environment in increase clinical research activity in Puerto Rico. In addition, the persisting need for executive education and awareness was emphasized to engage business decision-makers in recognizing and preparing to seize the opportunities within the clinical investigation sector.

The meetup also highlighted the importance of identifying existing and potential clinical researchers to expand a comprehensive network in Puerto Rico. A shared calendar for networking and capacity-building activities was proposed to enhance stakeholder relations and collaborative growth. Finally, creating an on-boarding information packet for medical professionals interested in clinical investigation was recommended to provide essential resources and support. The combined result of these initiatives aims to strengthen Puerto Rico’s position as a hub for clinical research, by fostering innovation and collaboration within the sector.

AI & Creatives: Challenges and Opportunities for Creators

The AI & Creatives Meetup explored how artificial intelligence is reshaping creative industries, highlighting both opportunities and challenges. One of the key conclusions was that AI can significantly enhance creativity and productivity across various fields. However, human oversight is essential to maintain an ethical approach to its development, as well as authenticity, quality, and cultural relevance. The discussions emphasized the need for education systems to evolve by integrating AI, promoting critical thinking, ethical considerations, and foundational skills alongside advanced technologies. This adaptation is crucial to prepare future generations for the ever-changing landscape shaped by AI.

Additionally, the meetup underscored the importance of developing ethical guidelines and updated legal frameworks to navigate AI’s challenges, ensuring responsible use and protecting intellectual property. Business transformation was another focus of attention, as AI innovative nature is revolutionizing operations around the globe. That being said, participants continued to stress the importance of ethical adoption and proper training to harness AI’s full potential effectively. Overall, the AI & Creative Meetup provided valuable insights into the symbiotic relationship between AI and the creative sector, encouraging stakeholders to embrace AI responsibly to drive innovation and growth.

Science Communications Meetup

The Science Communication’s Meetup focused on enhancing the effectiveness of science communication by addressing key challenges while approaching the future with a strategic mindset. One of the primary observations was the need to foster continuous education among scientific journalists, researchers, and educators. Emphasizing cultural humility and using colloquial language without sacrificing rigor were highlighted as essential for effective scientific communication. The event underscored the importance of storytelling as a tool to convey complex scientific concepts in a relatable and impactful manner to scientific neophytes, as well as the general audience.

Understanding the particularities and needs of different audience groups is crucial for strategizing how to communicate effectively with them, as there was a call to action for scientific communicators to build bridges to help audiences grasp complex issues simply and practically while guiding them toward actions to enable their prospective wellbeing. Strengthening intersectoral collaboration was another significant point of focus, with a particular emphasis on the reinforcement of ties between the scientific community, media outlets, and government in order to improve coherent data sharing and narratives aimed at raising public awareness and citizen education. The braiding of the above mentioned recommendations will yield transparency in processing, validating, interpreting, and publishing scientific data. Last but not least, building a robust network to create more opportunities for collaboration and entrepreneurship was discussed, with the goal of fostering talent and forming dedicated working groups around these themes with the promise of this engagement in a broader, more in-depth and far reaching event.

Meetup Closing: “First Empresas B en Formation Cohort”

This meetup marked the closing of the first cohort of Empresas B en Formación, which celebrated the achievements and progress of businesses working towards attainment a B Corporation certification. During the event, participants were coached on using the Impact Assessment Tool, a key instrument for measuring and managing social and environmental impact. The event also provided a platform for participants to share their experiences, challenges, and successes, and to network with other entrepreneurs committed to social and environmental responsibility.

Agricultural Sustainability and Climate Change Meet Up

The Agricultural Sustainability and Climate Change Meetup highlighted a strong commitment and interest in Puerto Rico’s agricultural sector, as evidenced by the high attendance and diverse participant base. This engagement reflects a significant focus on sustainable practices and climate change adaptation. However, the event also revealed a need for increased education and training, as a substantial portion of participants lacked knowledge about sustainable agricultural practices. This gap presents an opportunity to enhance educational efforts in the sector.

The diversity of participants showcased many opportunities for interdisciplinary and intersectoral collaboration, crucial for addressing the complex challenges facing agriculture in Puerto Rico. Furthermore, the meetup’s balanced gender representation was noted as a positive aspect, contributing to a more diverse and inclusive perspective in decision-making and agricultural practices. By fostering collaboration and education, the meetup aimed to drive innovation and resilience in Puerto Rico’s agricultural sector, promoting sustainable practices that can withstand the impacts of climate change.



Meetup Working Session on Evaluation and Design of Composting Systems in Puerto Rico

This working session was dedicated to evaluating and designing effective composting systems in Puerto Rico. Participants, which included experts in waste management, environmental science, economics and agriculture, collaborated to develop practical solutions for organic waste management aimed at increasing sustainability while reducing the environmental footprint of waste in Puerto Rico.

Salient Achievements of the Meetups Program

The Meetups Program’s mission objectives continue to yield successful outcomes, presented below.

- Increased Stakeholder Engagement: Expanded our stakeholder base to include a diverse and inclusive community of researchers, entrepreneurs, policy-makers, and industry professionals.
- Meaningful Dialogue: Facilitated constructive discussions, knowledge sharing, and collaboration, thus contributing to the development of innovative solutions to local challenges.
- Ecosystem Mapping and State of Development: Continued to map and assess emerging ecosystems in Puerto Rico, gaining valuable insights to guide strategic resource allocation and support.
- Knowledge Dissemination and Awareness Building: Played a vital role in disseminating knowledge, promoting best practices, and creating opportunities for networking and partnerships among stakeholders.

PRSTRT Program Support

Our program has provided value-added support to various PRSTRT programs, by driving communication, alignment, collaboration, and innovation across multiple initiatives. The following is a detailed overview of our support efforts during the 2023-2024 year:

Colmena 66 Collaboration: Content curation for BeFest 2024

In collaboration with Colmena 66, we curated content for the upcoming BeFest 2024 edition. Our efforts focused on aligning the event’s agenda with global trends and local priorities while ensuring a diverse and engaging experience for attendees. This collaboration was aimed at fostering innovation, entrepreneurship, and sustainable business practices in Puerto Rico.

PRCII Meetup on Clinical Trials

With our support, the Puerto Rico Consortium for Clinical Investigation (PRCII) collaborated to produce and facilitate the Meetup on Clinical Trials, focusing on strengthening Puerto Rico’s clinical investigation ecosystem. The meetup brought together researchers, healthcare professionals, and industry leaders to address key challenges and opportunities in clinical research. Key action items included establishing guidelines to effectively market the island as a hub for clinical research, developing strategies to foster public understanding and support for clinical investigations, engaging business decision-makers through tailored educational programs, and identifying and connecting existing and potential clinical researchers to strengthen collaboration. In addition, a shared networking calendar was created to enhance stakeholder engagement, and onboarding information was provided to medical professionals interested in entering the field.

Caribbean Rising Seas Institute: Agro and Climate Change Meetup

We collaborated with the Caribbean Rising Seas Institute to organize the Agricultural Sustainability and Climate Change Meetup. This event focused on sustainable agricultural practices and climate change adaptation strategies. Key insights included the importance of education and training, the need for interdisciplinary collaboration, and the positive impact of gender balance in decision-making processes. The meetup provided a platform for stakeholders to exchange ideas and develop solutions for the complex challenges facing Puerto Rico’s agricultural sector.

Science Communication's Meetups

Our partnership with the University of Sagrado Corazón, in tandem with the collaboration of PRSTRT's Marketing and Communications Team and the Research Grant Program led to the successful delivery of the Science Communication Meetups, which aimed to enhance the effectiveness of science communication by identifying and addressing key challenges and strategies.

These events emphasized the importance of continuous education for journalists and researchers involved in science communication, highlighting ongoing training as essential for those in the field. The meetups also focused on cultural humbleness and storytelling techniques as encouragement to use accessible and easy to understand language to convey complex scientific concepts. Furthermore, we strategized communication efforts based on audience understanding, tailoring approaches to meet the specific needs and characteristics of different audiences. Improving stakeholder relations leading to increased intersectoral collaboration was another major point of agreement, as the meetups aimed to foster stronger ties between the scientific community, media, and government to promote education and cross-sector collaboration. Through these collaborative efforts, the PRSTRT continues to play a crucial role in advancing Puerto Rico's research, science, and technology sectors, by bridging leadership in favor of innovation and our sustainable development.

Special Projects Report

The Puerto Rico Research and Innovation Meetups Program has been actively engaged in several special projects, driving forward initiatives that have significant impacts on Puerto Rico's sustainable development. Below are the highlights of these special projects for the 2023-2024 year.



B Corps initial efforts:

- Be Fest 2023 Keynote Speaker: The program featured the CEO of B Lab US & Canada as a keynote speaker, enhancing the Be Fest 2023 event. This visit also included meetings with the directors of the entrepreneurial pillar of the Trust, exploring opportunities for the development of B certification programs in Puerto Rico.
- First Empresas B en Formación Cohort: Launched in October 2023, this first cohort included 18 participants, which resulted in 12 participants completing the entire program and 5 other submissions of final certification applications by B Lab. This cohort signifies a major step towards embedding social and environmental responsibility within the business community in Puerto Rico.
- B Local Chapter Launch: The program was instrumental in launching the first B Local chapter in Puerto Rico, with the Trust serving as a facilitator. This chapter aims to support and promote B Corporations within the region, fostering a community of businesses dedicated to sustainable practices and positive impact.

Waste Residue Management:

- Generación Circular Multisectorial Working Group: Continued engagement with this working group has focused on devising strategies for circular economy solutions in Puerto Rico. Efforts include educational campaigns to highlight opportunities within the circular economy and promotion of sustainable practices.
- Invest Puerto Rico and New Lab Waste to X Program: The program played a key role in the design and evaluation of this initiative, which seeks to transform waste into valuable resources by supporting innovation and sustainable development.
- Puerto Rico Recycling Partnership Annual Event: Participation in this event included discussions on public policy to promote the circular economy in Puerto Rico, highlighting the program's commitment to fostering sustainable waste management practices.

Food Security:

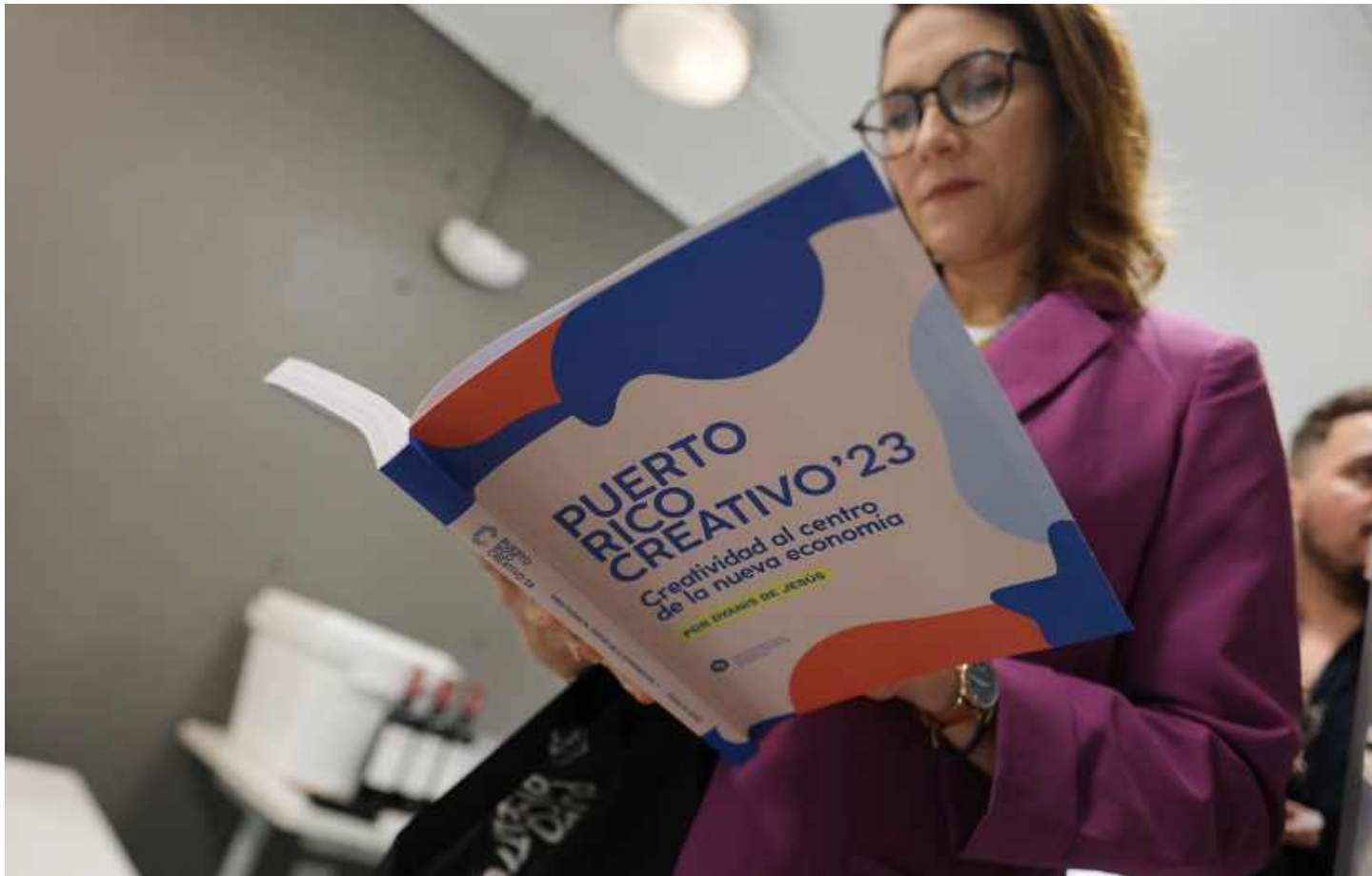
- Sustainable Composting Projects: The program has been instrumental in facilitating discussions and devising solutions to create sustainable composting projects in Puerto Rico. In collaboration with Para la Naturaleza and the Peter Alfond Foundation, these projects aim to support farmers by providing local quality compost to improve farming performance.
- Collaborations: Partnered with the Municipality of San Lorenzo, Engine 4 Agro Brain, and the first PR Agro Technology Forum to promote and develop innovative agricultural solutions.
- Collaboration with La Colaborativa: We have partnered with this team of food security experts, to develop an online platform that helps farmers access critical information to enhance their farming operations. This platform is designed to support farmers in becoming more successful by providing valuable resources and insights tailored to their specific needs.

Creative Economy:

- Collaborations: Worked with the DDEC, Invest Puerto Rico, the Institute of Puerto Rican Culture, and Puerto Rico Creativo to develop solutions for advancing the creative economy in Puerto Rico.
- Study Commission: Provided foundational data through the study commissioned to Abexus by the Trust, "Convergencia Creativa," which will be used for workforce development programs.
- Events and Representation: Participated in the Música Exporta, a DDEC event, and represented the Trust at the nascent private sector initiative Alianza Creativa.

Salient Achievements of Special Projects:

- Enhanced Stakeholder Engagement: Successful collaboration with diverse stakeholders, including government, private sector, and civil society, to advance the objectives of the special projects.
- Educational Campaigns: Development and implementation of educational campaigns to raise awareness on the benefits and opportunities of the circular economy in Puerto Rico.
- Strategic Program Design: Instrumental in the strategic design and evaluation of innovative programs such as the Waste to X initiative, demonstrating the program's leadership in promoting sustainability.
- Agricultural Support: Effective collaboration to support local farmers with sustainable composting solutions, enhancing agricultural productivity and sustainability.
- Creative Economy Development: Key contributions to the development of the creative economy through collaboration with major cultural and economic institutions, providing data and participating in significant events to foster growth in the sector.



WHAT'S NEXT

As we move forward into the next phase of the Puerto Rico Research and Innovation Meetups Program, we remain dedicated to addressing critical challenges and fostering collaboration within Puerto Rico's emerging ecosystems. Building on the successes of the past year, we will continue to organize impactful meetups and undertake special projects that support the development of the creative economy, waste management, food security, and the social and solidarity economy, among others.

For the upcoming year (2024-2025), we are expanding our focus to include a range of emerging topics that align with global trends and have significant implications for Puerto Rico's development. These topics include:

- **Technological Advancements and Digital Transformation.** Transformation of industries and job markets, presenting opportunities and challenges across various sectors. We aim to explore the continuous developments on how AI, Blockchain and other technologies can be leveraged to drive innovation, enhance productivity, and create new economic opportunities in Puerto Rico.
- **Sustainability and Climate Change.** As climate change continues to impact Puerto Rico, we will examine innovative solutions and technologies to mitigate and adapt to its effects, focusing on infrastructure, research facilities, cultural built heritage, and natural ecosystems.
- **Precision Agriculture and Controlled Environment Farming:** We plan to delve deeper into advanced agricultural techniques and technologies that enhance productivity and sustainability, ensuring food security and resilience against climatic challenges.

- **Well-being Economy:** Our discussions will include promoting a holistic approach to economic development that prioritizes well-being, sustainability, and social impact, in alignment with the United Nations Sustainable Development Goals.
- **B Corporation Certification Expansion:** Following the success of our first B Corporation certification cohort, we will continue to support entrepreneurs and business owners in their B Corp certification efforts, promoting socially responsible business practices.
- **In-Depth Review of Emerging Ecosystems:** We will continue a comprehensive review of emerging ecosystems previously addressed, assessing their development, identifying opportunities for future support, and providing targeted assistance to foster their continuous growth and success.
- **Labor Market Dynamics, Workforce Changes, and Skill Development:** There is an increasing emphasis on reskilling and upskilling the workforce to adapt to technological changes and new industry demands.

By focusing on these emerging topics and conducting in-depth ecosystem reviews, the program aims to stay at the forefront of global trends and contribute to the sustainable development of Puerto Rico's research, science, and technology sectors. We express our gratitude to all participants, partners, and supporters for their contributions to the success of the program and look forward to another year of meaningful engagement and impactful initiatives.



Anexes

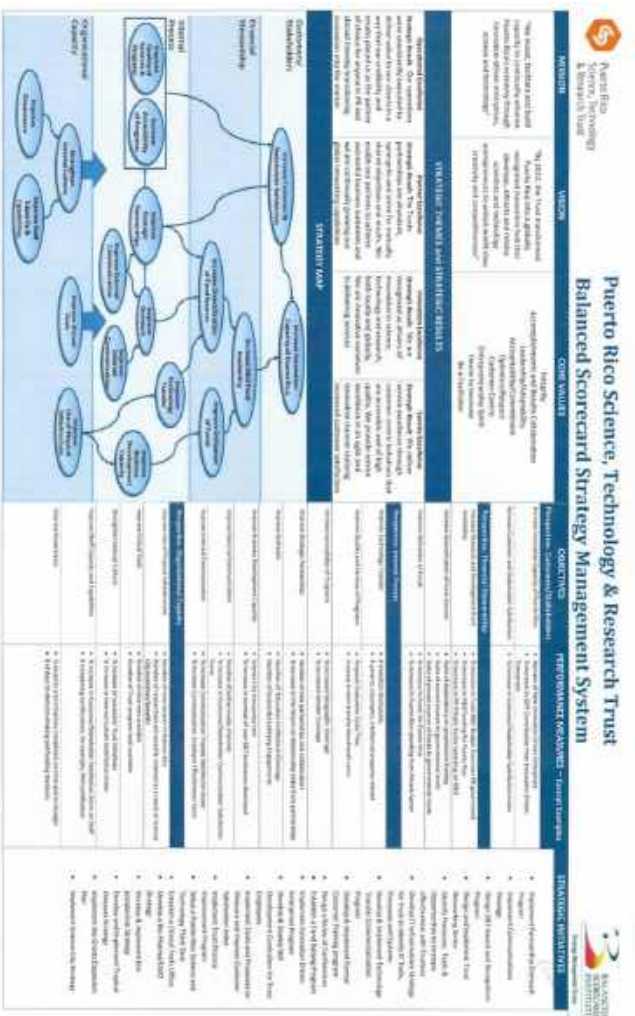


Also the PRSTRT's most recent
STRATEGIC PLAN,
applicable from 2022 through 2025
can be reviewed in these attachments

Executive Summary

In 2015 the Puerto Rico Science, Technology & Research Trust completed its first Strategic Plan 2015-2022. The key strategic objective of the plan was to increase the innovation capacity of Puerto. This plan that was developed with ample participation from the different communities we serve: researchers, entrepreneurs, and partner organizations. We also used the plan as the foundation to set the Trust's human and system infrastructure as well as to guide the development and deployment of the Trust's existing programs.

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Strategic Plan 2022 - 2025

Puerto Rico Science Technology & Research Trust

June 17, 2022



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Trust level KPIs: fed by the Strategic Pillars



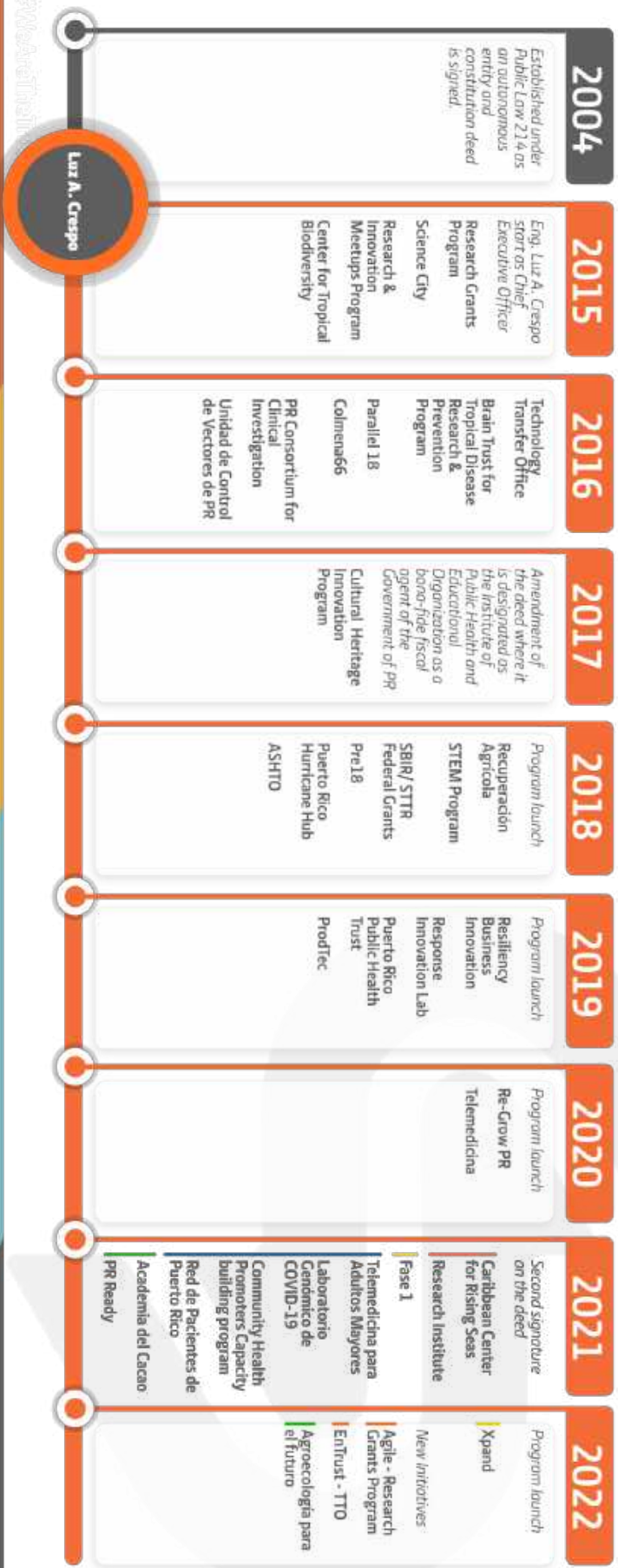
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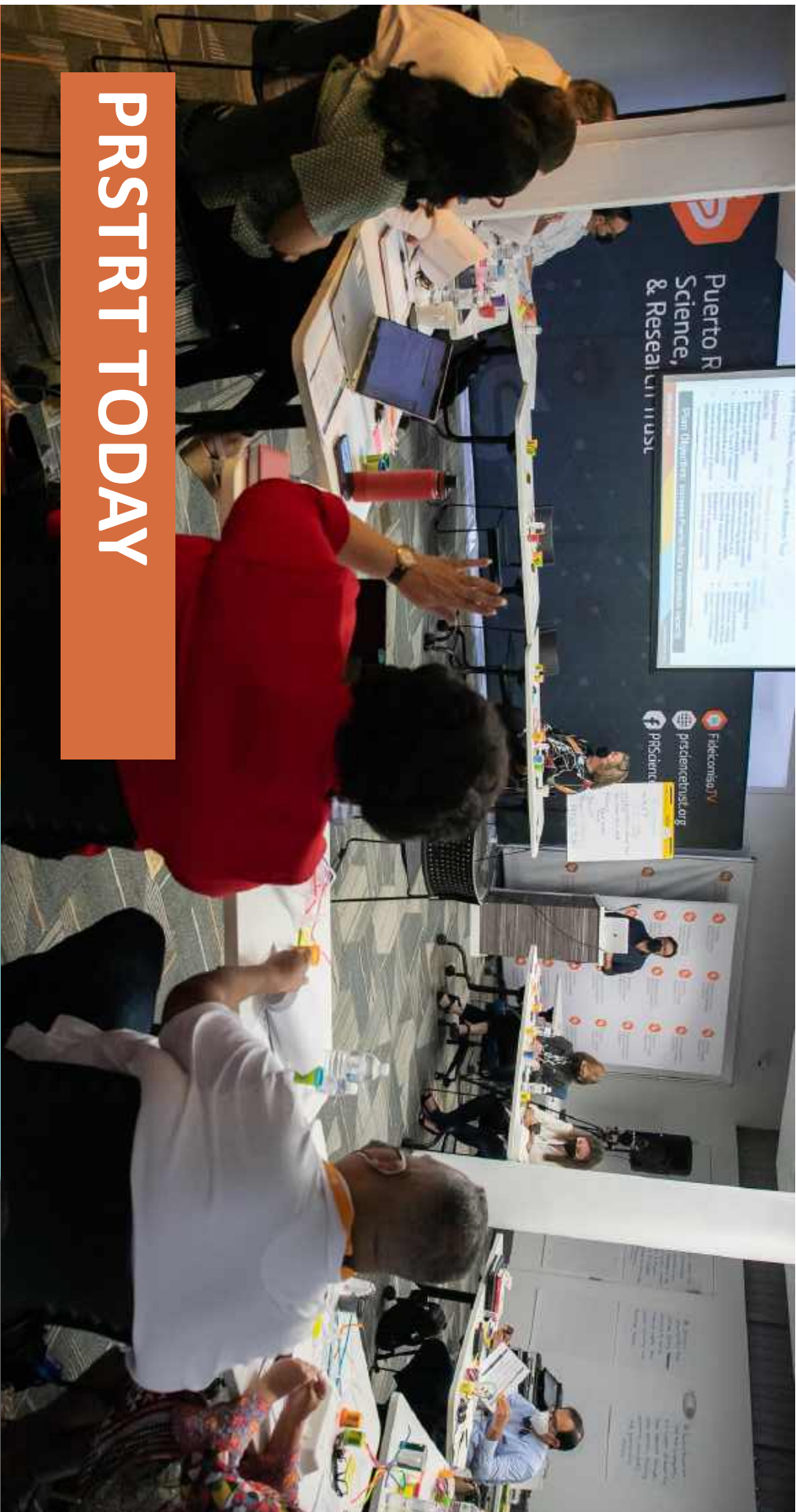
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Timeline



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PRSTR TODAY

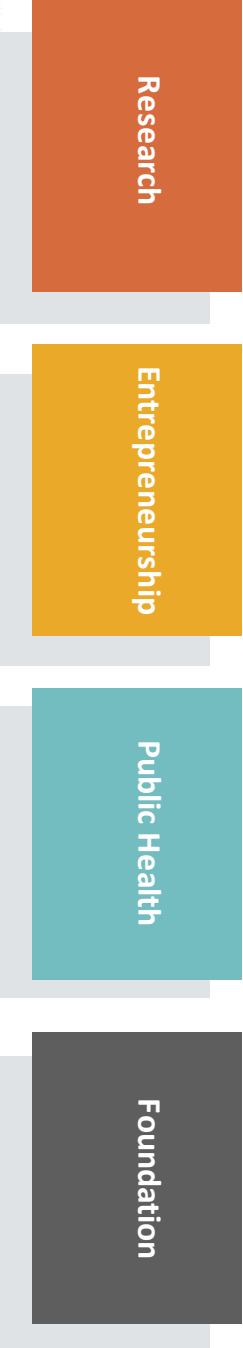
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Effective and results driven

The Puerto Rico Science, Technology, and Research Trust is a reputable and effective organization that has complied with its mandate: keep driving research, innovation, entrepreneurship, public health policies, and more, on the island. After experiencing accelerated growth in the last six years, it is time to start thinking about the next six and setting up the right structure to maximize its impact.

The organization has 20+ programs under its umbrella. To define its purpose and messaging it has begun to group them into four main pillars:



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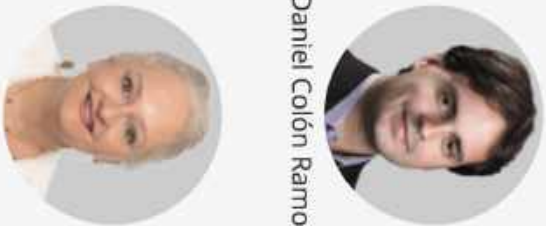
Strategic Plan Summary

Roadmap of the Science Trust evolution and strategies:



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Daniel Colón Ramos



Salvador Moncada



Alfredo Casta



Gualberto Medina



Ubaldo Córdova



Dara Schuster



Esther Alegria



Manuel Cidre



Enrique A. Volckers Nin



Edith A. Perez, MD



Frances Santiago-Schwarz,
Ph.D.

Trustees

Our Council of Trustees is composed of distinguished professionals who support and oversee our work and provide guidance to ensure that the Trust us managed within its mission and vision.

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Who we are

We are a private non-profit organization created in 2004 to encourage and promote innovation, transfer and commercialization of technology and creation of jobs in the technology sector. We are responsible for Puerto Rico’s public policy for science, technology, research and development.

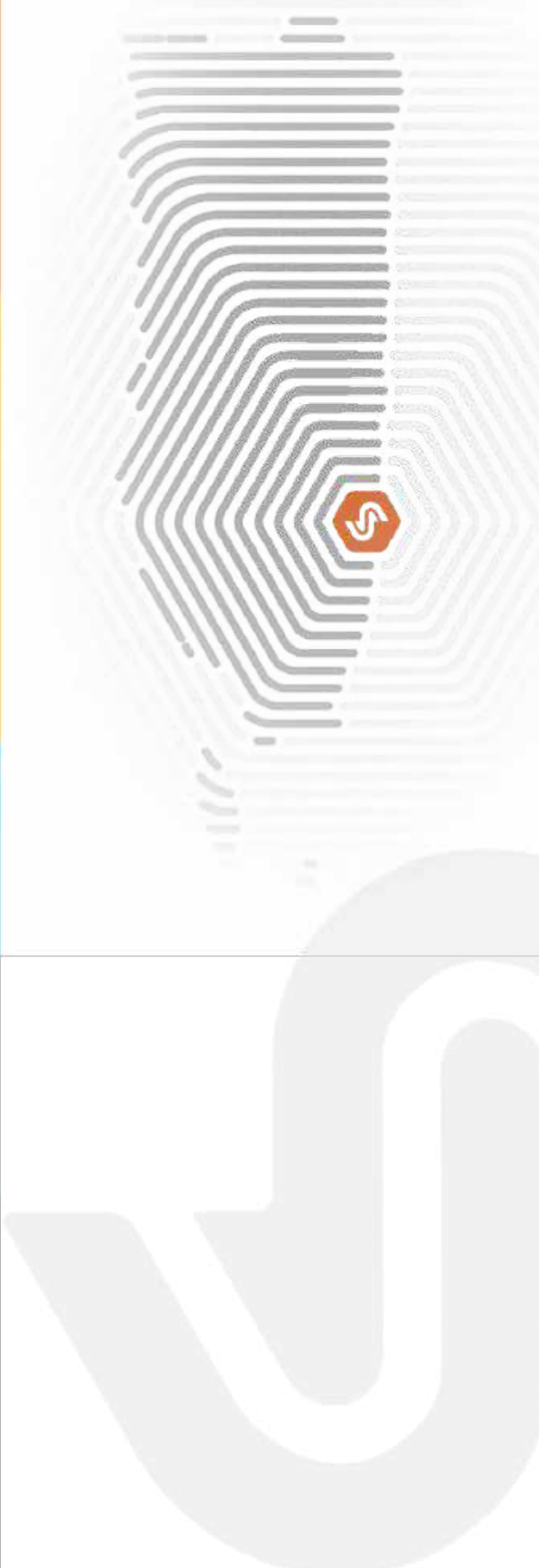
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Strategic Plan 2022 - 2025

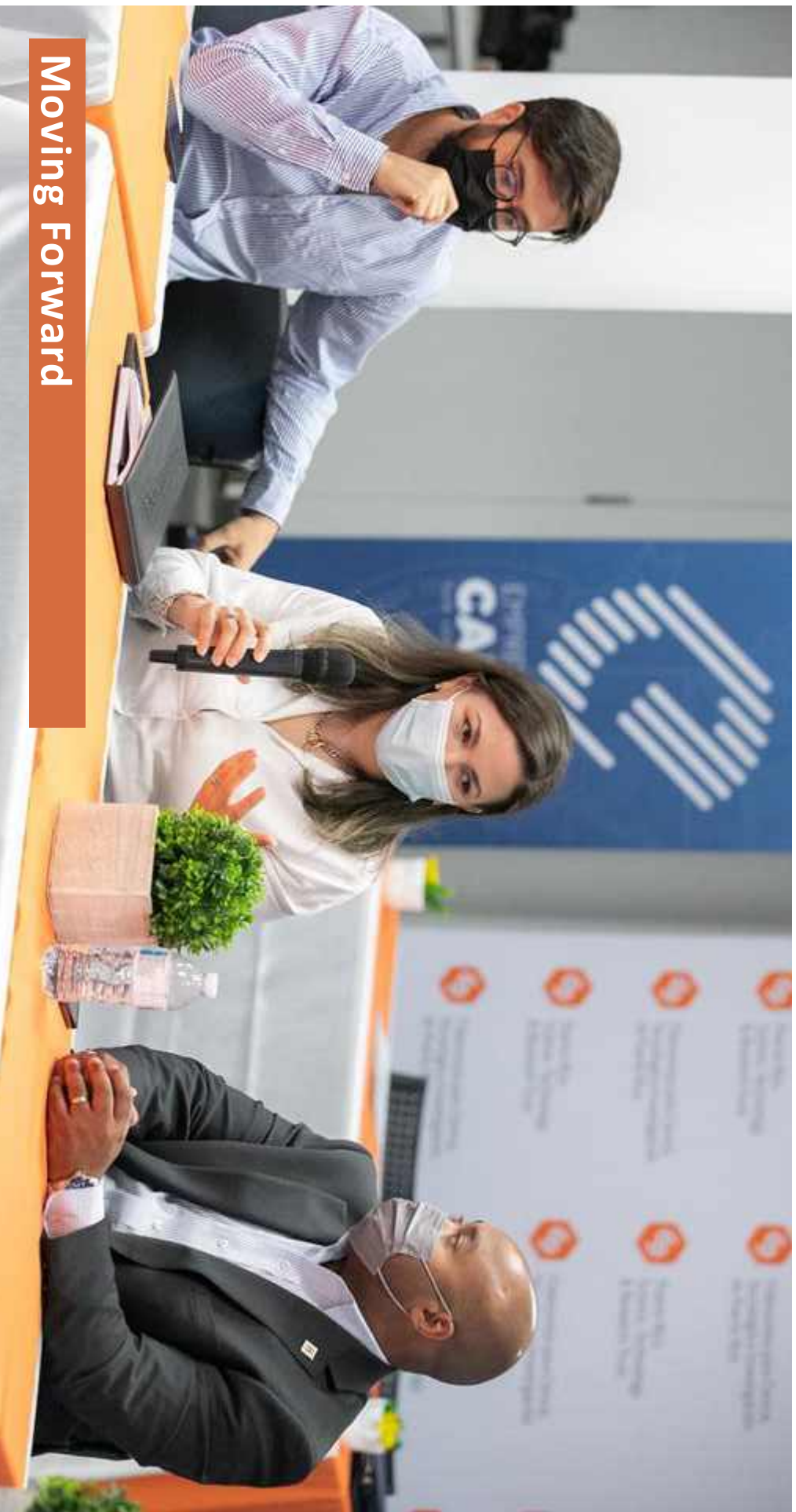
Puerto Rico Science Technology & Research Trust

June 17, 2022



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Moving Forward

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Vision

Puerto Rico is a globally recognized innovation hub.

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Mission

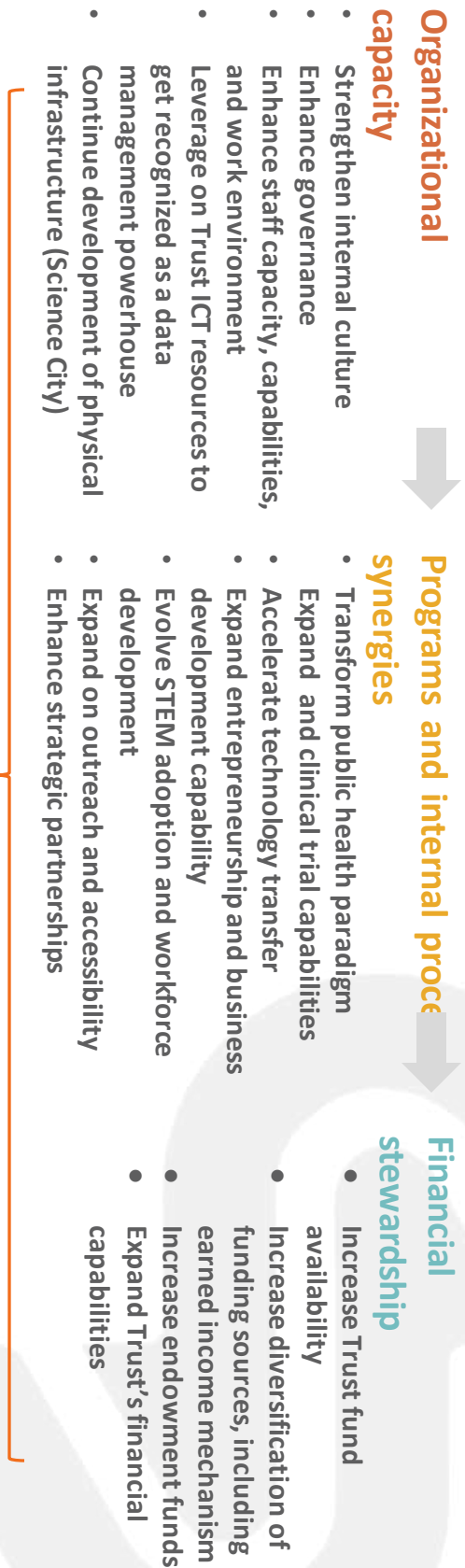
We invest, facilitate, and build capacity to continually advance Puerto Rico's economy and its citizens' well-being through innovation-driven enterprises, science, research, public health and technology.

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Strategy Map

Puerto Rico Science, Technology, and Research Trust



Plan Objective: Increase Puerto Rico's innovation capacity

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Core Values

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RESEARCH GRANTS
P R O G R A M
PASS TO GROW



TTO TECHNOLOGY
TRANSFER OFFICE



Caribbean Center
for Rising Seas



CENTER FOR TROPICAL
BIODIVERSITY



PRSTRT
RESEARCH
INSTITUTE



Colmena66
Ya Camina Emprendedor



parallel¹⁸



SBIR/STTR
Federal Grants



Faseo
1



xpand



Puerto Rico
Public Health Trust



Puerto Rico Vector
Control Unit



PRCCI
Puerto Rico Consortium
in Clinical Investigation



STEM EDUCATION &
WORKFORCE DEVELOPMENT



Science City



PR & INNOVATION
Meet-ups



The strategic pillars come to life

The strategic pillars have created a more comprehensive structure to incorporate new initiatives and enhance existing ones consolidating in units that have a common pattern. It is important to mention that one of the highlights across the board of the pillars has been an investment in our governance by including a complete compliance infrastructure and a safety department

Research

- Increased reach with new COVID Programs
- TTO with new record patents and Life Science Accelerator
- Beginnings of Climate with Caribbean Center for Rising Sea
- Exposing inventions and research is still a challenge
- Collecting funds for research it is a growing opportunity

Entrepreneurship

- Solid infrastructure with tangible results with Colmena66 and Parallel18
- New Programs to increase pipeline: Fase1, pre18, and Investment
- Deep tech startups through SBIR/STTR
- space to grow
- Exportation for a startup is still a challenge

Public Health

- Successful Federal funding raise
- Strategic talent attraction
- Community driven approach across the island
- Telemedicine Pilots
- COVID19 SME and communication
- Vector Control performance
- CDC, HHS and Department of Health relationships

Foundation

- STEM program to strengthen critical thinking and scientific skills from the early days of the school journey
- Science City used to find specific real estate projects and host the Science Trust
- administration and special projects
- Research Meet ups key events and discussions around critical island challenges

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Program Strategic Plan Scientific Research Institute

What do we want to achieve?

Build an ecosystem that works for the researcher and to bridge opportunities for collaboration and evolution

How do we want to achieve it?

- We are going to use all powers of Law 214
- Designate Scientific Advisory Board
- Commission an assessment of the current state of research in PR
- Create the perfect administrative support
- Deploy unique research infrastructure
- Attract merit-based intramural & extramural affiliated researchers
- Establish educational and training programs

How are we going to measure it?

of research assets (publications, patents, students impacted, PhD projects and \$
strategic relationships dissertations, companies that promote funded)
R&D and attract more funds to PR

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Program Strategic Plan Research Grants Program

What do we want to achieve?

Empower local scientists and researchers to take Puerto Rico's knowledge economy to a higher level of excellence.

How do we want to achieve it?

Provide seed funding and incentives to advance locally developed R&D projects to become more competitive for federal and private funding and/or commercialization.

How are we going to measure it?

funded research projects
of external grants secured after receiving Trust's funds (ROI)
of research assets (publications, patents, students impacted, PhD dissertations, companies funded, participation in local/international conferences to present findings)
of female researchers participating in the program
strategic relationships that promote R&D and attract more funds to the island
of active researchers with a complete profile in BEACON
of research administrators trained in the pre & post award grants cycle **process**.

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Program Strategic Plan **Caribbean Center for Rising Seas**

What do we want to achieve?

1. Redefine Professional Knowledge and Understanding of Sea Level Rise + Flooding
2. Update Building Codes, Zoning, and Land Use in Puerto Rico
3. Change Urban Development Practices

How do we want to achieve it?

1. Outreach, Community Engagement, Education, and Professional Training Program
2. Rising Seas Policy Reference and Resource Center
3. Advisory Service Program

How are we going to measure it?

- # of Stakeholders Contacted and Level of Engagement in Puerto Rico >>> (Workforce Development)
- # of Legislation/Policy/Planning/Educational Standards/Building Standards addressed and modified (**Opportunity Development**)
- # of Publications, Literacy Tools, Key Reference Documents/Instances >>> (**Knowledge Transfer, Outreach**)
- # of Coastal Communities Engaged in Puerto Rico and Level of Engagement>>> (**Mental Health, Research, Economic Development**)
- Tracking public and private building projects and level of built-in resiliency and adaptation measures to flooding and SLR >>>

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Program Strategic Plan **Technology Transfer Office**

What do we want to achieve?

Advance innovations from the lab to the marketplace in order to benefit the public.

How do we want to achieve it?

Provide best-of-class technology transfer services in partnership with our academic partner institutions.

How are we going to measure it?

Performance is measured by using our profession's standards regarding research funding, technology transfer activities, and impact of innovation.

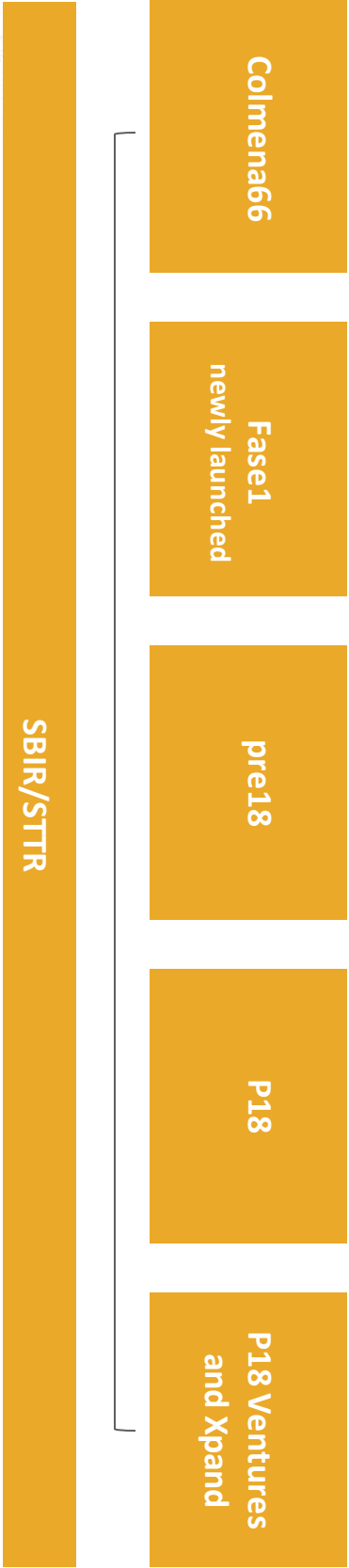
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Entrepreneurship

Since 2015, entrepreneurship has been in the DNA of the PRSTRT with programs like parallel18 and Colmena66. They have been paving the way for a stronger entrepreneurial culture in the island, broader access to capital and technical resources, retention and repatriation of talent, and regional an international reputation.

With this background and its current status, the Entrepreneurship pillar has a clear new approach of building a innovation platform



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Program Strategic Plan Center for Tropical Biodiversity

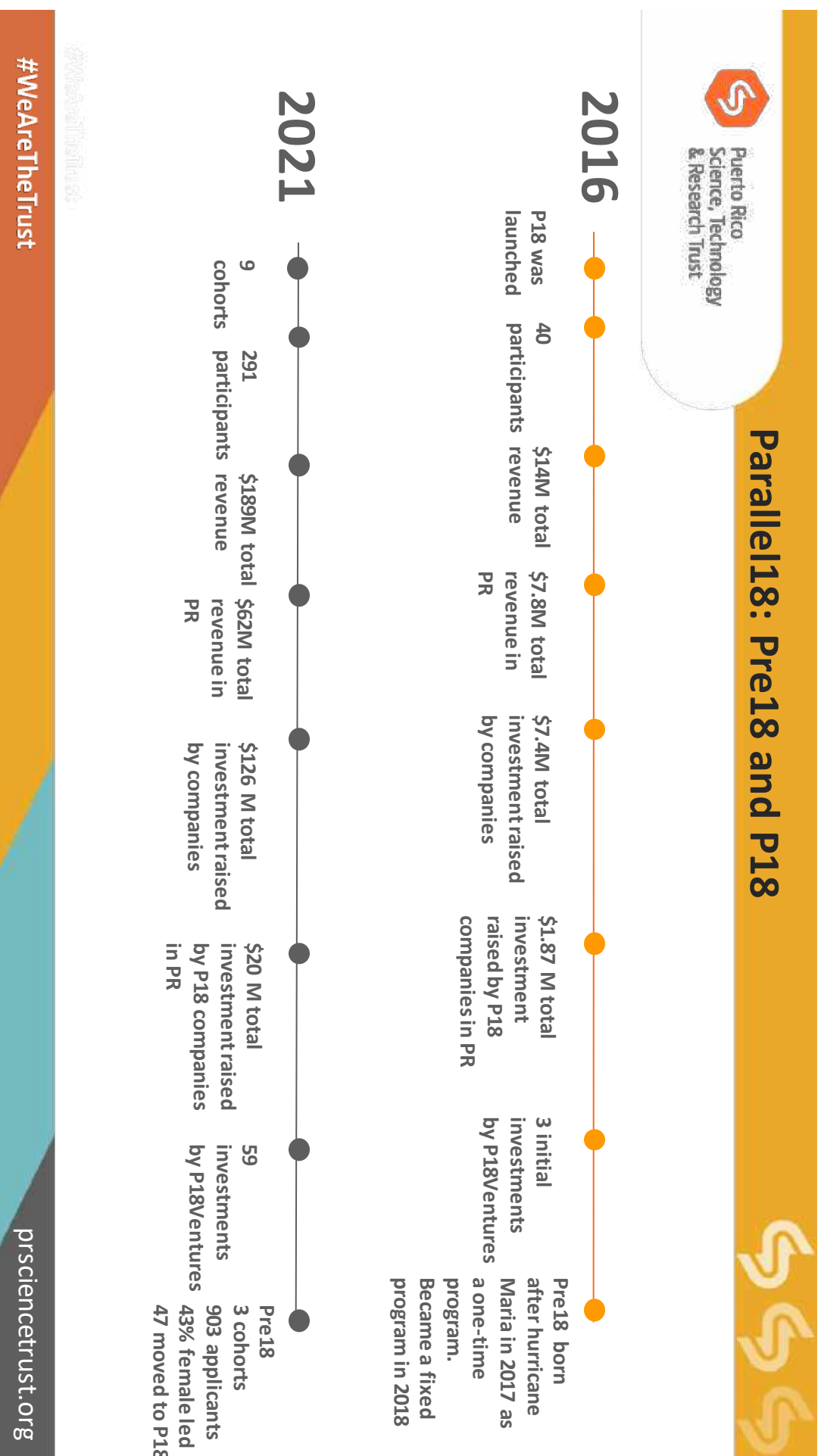
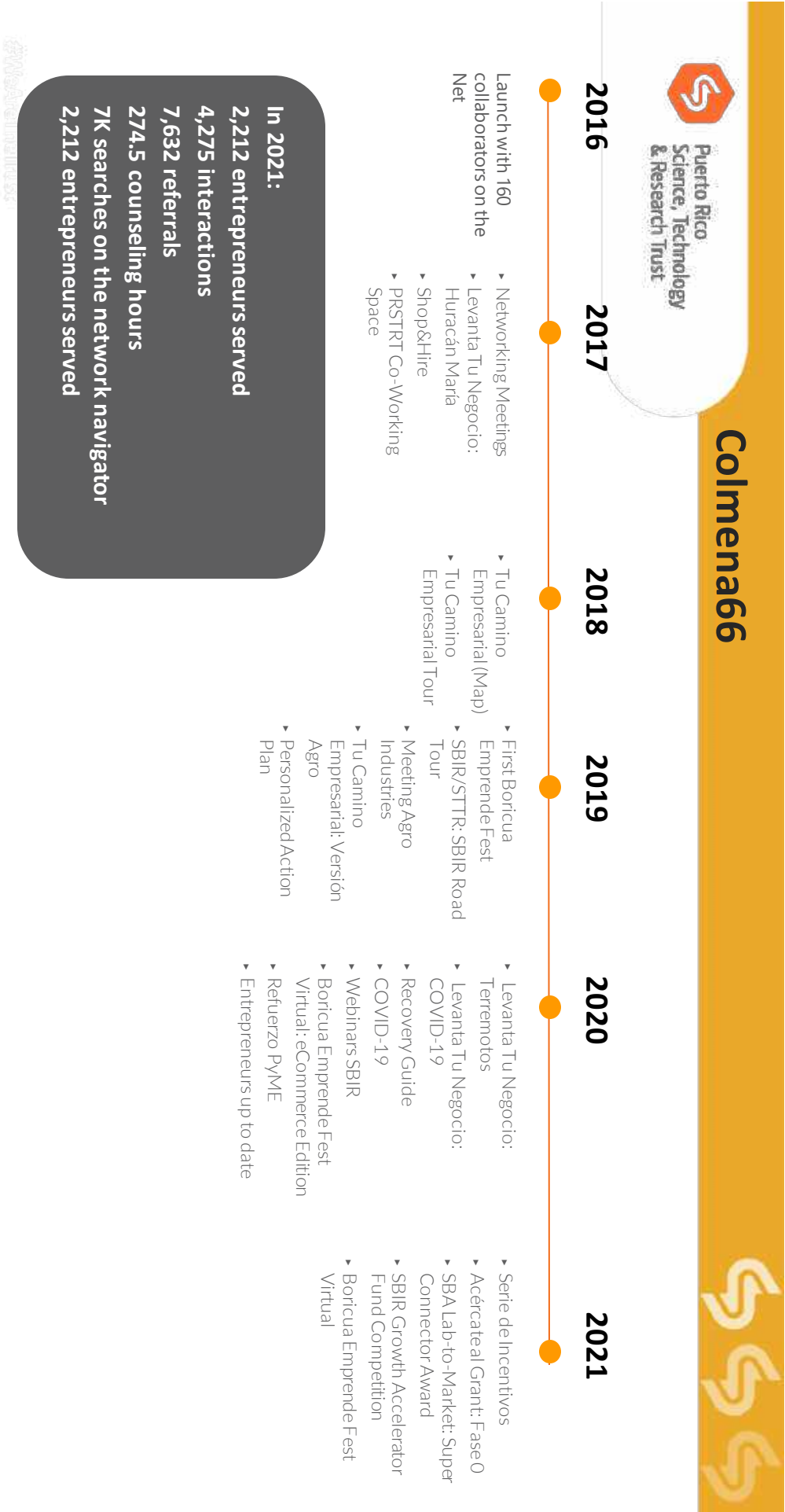
- 1) To establish Puerto Rico as the regional leader in the development of biodiversity products.
- 2) To make biodiversity protection a major component of the regional agenda for economic development.
- 3) To increase the local portfolio of biodiversity-related companies

- 1) Providing key services to companies that develop (or seek to develop) biodiversity products.
- 2) Increasing the scope and value of existing research on biodiversity-related products.
- 3) Building a catalog of biodiversity assets for Puerto Rico and the Caribbean

- 1) Number of biodiversity-related products entering the IP protection or licensing pipelines of the TTO.
- 2) Number of companies developing biodiversity-related products, seeking SBIR support.
- 3) Number of users and depositors for the Natural Product Online Repository (NatPORT).

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Program Strategic Plan Colmena66

What do we want to achieve?

Everyone in Puerto Rico can start and grow a business.

How do we want to achieve it?

Colmena66 facilitates entrepreneurship by connecting and building the entrepreneurial community.

We:

Catalyze and facilitate access and resources
Build and connect the entrepreneurial community
Create and Drive innovation

How are we going to measure it?

We have a series of 17 measurable objectives to measure (1) business development, (2) network navigation, (3) communications and marketing, (4) data, and (5) innovation.

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SBIR

43
Winning
proposals

37
SBIR

6
STTR

35
STTR

8
Phase II

\$9M
Total of
obtained funds

51% of funds generated are part of the Trust's efforts since 2015.
35% of total awards belong to this period as well.
16 total awards were received during this period.

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Program Strategic Plan for parallel18

What do we want to achieve?

To become the leading player involved in the Global Startup Incubation Program by providing mentorship, and investment to underrepresented founders around the globe to turn their ideas into market leading startups.

How do we want to achieve it?

- Raising outside capital from Limited Partners to create a sustainable and profitable program
- Adding corporate partners to fund the cohorts and Studio companies

How are we going to measure it?

- # of new startups funded and created by parallel18 programs
- # of private capital raised by parallel18 programs
- # of jobs created by starts created and funded by parallel18 programs
- # of underrepresented founders funded.
- # of companies created by parallel18 programs

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Program Strategic Plan: Fase1

What do we want to achieve?

Facilitate and transform new idea generation into proper innovative businesses (start-ups), and thus creating a stronger base of successful companies in Puerto Rico.

How do we want to achieve it?

With a dual approach:

Fase1 Lab – an entrepreneurial virtual academy to: 1) change the mindset of participants into an entrepreneurial mindset 2) provide a framework and validated knowledge for idea generation 3) provide tools and resources to facilitate the transformation of ideas into business ventures; 4) track performance; 5) transform traditional business ideas into scalable ones.

Fase1 Intensive – our 12-weeks curriculum ideas incubator program to

- 1) develop ideas into services or products (MVP); 2) to provide individual, targeted support to increase successful start-ups generation; and 3) provide structured tracking of milestones achievements.

How are we going to measure it?

- # of individuals that participate in Fase1 Lab: 500
- # of projects selected to pass to Fase1 Intensive: 50
- # of businesses that get into pre18 selection committee: 30 at least
- # of training modules developed: 3 permanent, 4+ additional content per year
- # of businesses established
- # Number of people hired
- Revenue generated & Capital Raised

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The Puerto Rico Public Health Trust (PRPHT)

The PRPHT has experienced a major positive growth in the last two years, driven primarily by the pandemic. The organization has been able to successfully leverage its expert positions, building a knowledgeable innovative reputation that has attracted experienced talented staff, secured key grantors and funding opportunities, and generated impact by increasing access to health by empowering communities and formalizing strategic alliances with external an internal partners

After a significant 2020 the PRPHT decided to begin year 2021 designing how they want to move forward the next three years, organizing a week long workshop involving all the leadership team of the organization, where they came up with the most critical goals and strategies.



Program Strategic Plan **SBIR/STTR Federal Grants**

- Increase the number of SBIR/STTR awards in Puerto Rico.
- Create jobs
- Bring funding to support our entrepreneurship community

- Recruiting small businesses and individuals located in Puerto Rico to participate in the program
- Recruiting companies from outside Puerto Rico to establish on the island
- Providing support to companies considering the program
- Providing support to companies working on proposals

- Number of awards
- Amount of funding brought to Puerto Rico
- Number of jobs created



Public Health

Puerto Rico Public Health Trust (PRPHT)

Goals and Strategies Operational

- Improve and create effective processes for operations and management
- Create and maintain PRPHT as a place to work where one is valued and successful

Organizational Outputs Operational

- One needs assessment report; One operational improvement plan; One sustainability plan.
- One cultural assessment; One culture management plan; One performance management process; Individual goals for all staff and contractors; Goals based performance reviews for all staff.

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Public Health

Puerto Rico Public Health Trust (PRPHT)

Goals and Strategies Programmatic

- Increase presence in our communities for health promotion, increase preparedness, and decrease disease burden
- Obtain, collect, and use data to drive our work and create initiatives
- Promote, inform the creation of public health policy, informed by evidence, focused on enhancing health equity and social justice.
- Increase research and opportunities for research of chronic and infectious disease in public health.
- Effectively create, implement, and distribute telemedicine and telehealth technology.

Organizational Outputs Programmatic

- Health promotion/education curriculums on chronic disease; CHW training/certification program; All Hazards Center established at PRPHT
- Centralized data hub for all PRPHT programs data;
- Two position papers; Two (per year) public health policy issues promoted; Attend three discussions/formal legislative hearings on public health policy
- One report on five most prevalent chronic diseases in Puerto Rico; One community based participatory research project conducted.
- One strategic plan to increase telemedicine utilization; One promotion plan for telemedicine and telehealth adoption; One plan for technology use in chronic disease health education;

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Outcomes Driven



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OUR FOUNDATION

Vision

Achieve sustainable health equity in Puerto Rican communities and improve their quality of life through innovation, collaboration, and community engagement.

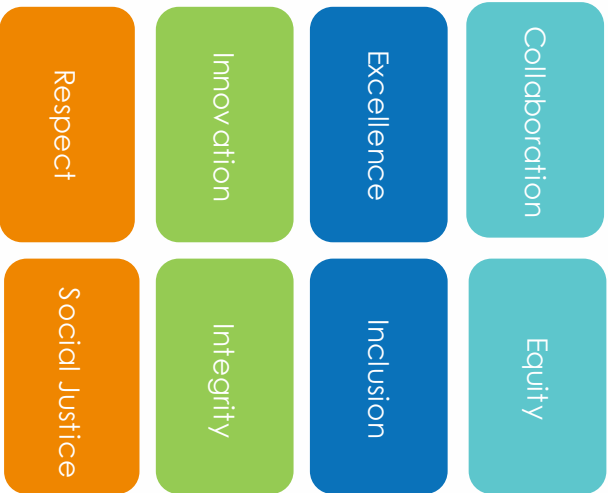
Mission

Serve as a trusted ally working with private and public partners to identify and execute community-led, evidence-based solutions.

Priorities



Values



Divisions & Projects



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Public Health

Puerto Rico Vector Control Unit (PRVCU)

The PRVCU has done a titanic work all over the island controlling the biggest mosquito outrage in the United States. The key to their success is the generation of close and trustful relationship with local municipalities, the Department of Health, and the CDC.

The latter has laid down the road to continue to find financing, formalize a collaboration with PRDoH, strengthen their relationship with municipalities, PRVCU authority for IVM plan development

Develop an entrepreneurial applied R&D arm, industry funded, capitalizing on our unique situation.

Shift operational emphasis on vector control to the municipalities.

External approach: Research institutions and Center of Excellence; Building program with USVI; Collaborations with Latin America.

Path to PRVCU financial sustainability

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Program Strategic Plan Puerto Rico Public Health Trust

What do we want to achieve?

Achieve sustainable health equity in Puerto Rican communities and improve their quality of life through innovation, collaboration, and community engagement

How do we want to achieve it?

Serve as a trusted ally working with private and public partners to identify and execute community-led, evidence-based solutions.

How are we going to measure it?

We have a series of 28 measurable objectives to measure organizational, programmatic, and operational strategies.

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Foundations

STEM Education and Workforce Development

These efforts began with STEM programs impacting younger generations and were aligned with the Research and Development pillar of the organization. Today the Education pillar of the PRSTRT is evolving to focus on Public Policy, Strategic Partnership, and equitable access to STEM and Workforce Development. Today, the STEM and Workforce Development program is not only serving an external audience, but the PRSTRT as a whole.

STEM	Workforce Development
<ul style="list-style-type: none">• STEM training Teachers• Resuvelo Boricua• STEM KIT BOX, funding through MEDTRONIC. (Online component)• Partnership Departamento de Educación	<ul style="list-style-type: none">• ISACA Certifications• Academia del CACO• Puerto Rico Ready (PR-READY): CDBG-DR Workforce Development Grant• Good Jobs Challenge

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Program Strategic Plan Puerto Rico Vector Control Unit

What do we want to achieve?

Striving together for a Puerto Rico free from mosquito-borne disease.

How do we want to achieve it?

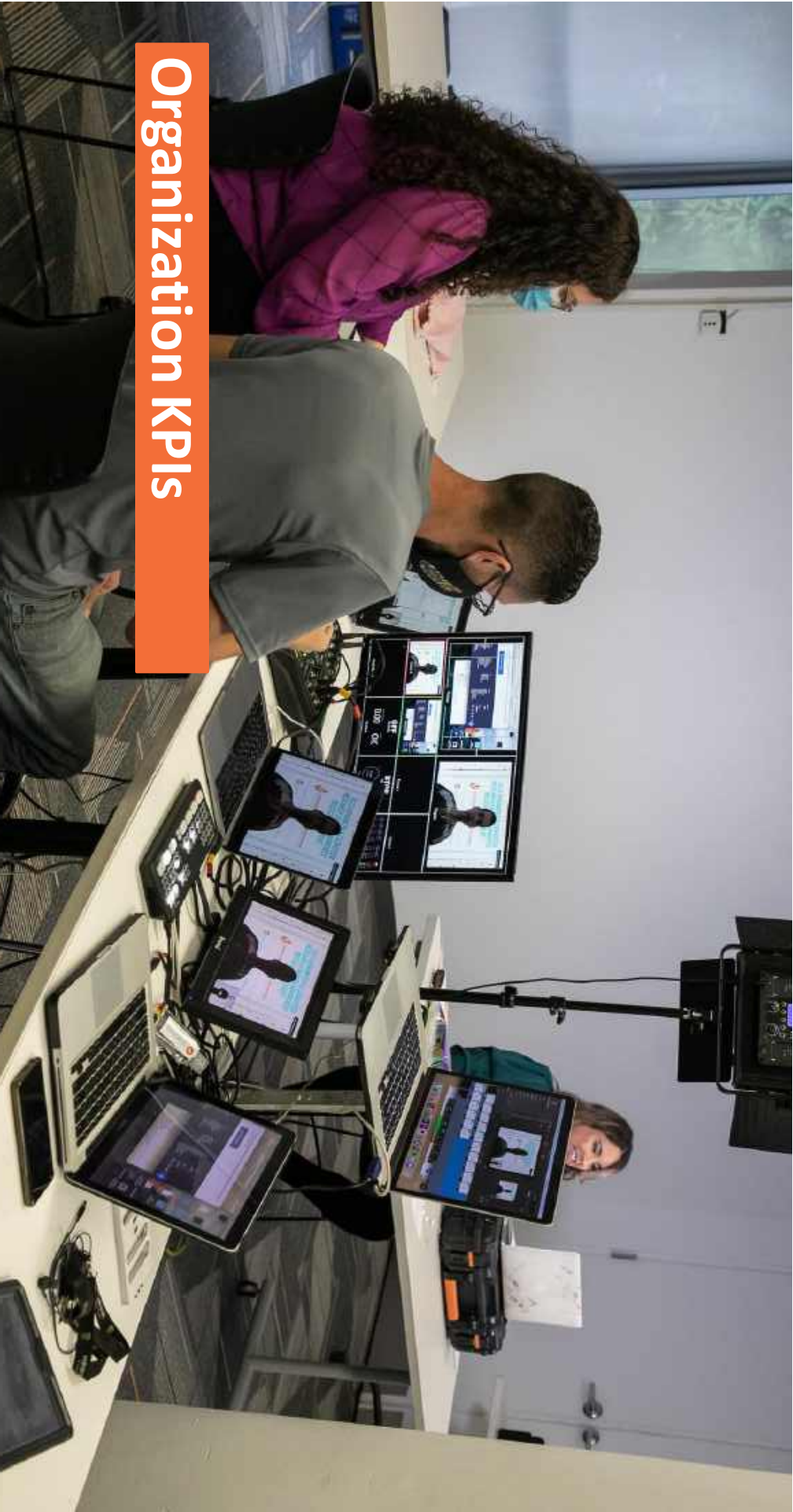
Protect the people of Puerto Rico from the Aedes aegypti mosquito, while educating and empowering everyone to dramatically and sustainably reduce mosquito-borne disease across Puerto Rico.

How are we going to measure it?

Continuing our surveillance system to provide accurate data to stakeholders; strengthening the collaboration with the municipalities and provide plans for vector management; and completing evaluations and implementation of vector control techniques. PRVCU laboratory is currently conducting dengue serotype assays (# of assays); # of traps deployed (on-demand); # of mosquitoes and # of human dengue cases; % of participants completing community assessments (pre and post tests, questionnaires); # of people, schools, communities, municipalities, collaborators reached/trained/impacted; # of people/municipalities enrolled in the Puerto Rico Vector Management Association.

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Organization KPIs

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Program Strategic Plan **STEM Education & Workforce Development**

What do we want to achieve?

STEM Education

- We want the STEM Ed Program to become a source for public policy leadership and relevant STEM data to inform such public policy.
- That the program can provide high-quality informal STEM learning for grades K-12.
- That the program includes relevant professional development opportunities to STEM educators on the island.

Workforce Development

- To lead the public policy on workforce development on the island.
- To become the leading program in emergent technology certifications for the island.
- To be the leader organization in upskilling the IT/Innovation workforce

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How do we want to achieve it?

STEM Education & Workforce Development

- By developing appropriate frameworks and practices for public policy.
- By developing programs with best practices and innovative component.
- By establishing effective partnerships.
- By accessing funding that enables it.

How are we going to measure it?

STEM Education & Workforce Development

- By establishing clear KPIs
- By developing SMART objectives
- By conducting formal program evaluations:
 - Formative assessments (customer surveys)
 - Evaluative assessments (aligning KPIs and execution)



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Trust level KPIs: fed by the Strategic Pillars

Research:

#funded/supported research labs that consequently are capable of supporting their research through other sources, including corporate, non-profit, and governmental entities.

#research assets that result in (a) technologies disclosed, protected, and transferred from research labs (differentiate academic v private) to the market for the public benefit; and (b) knowledge transfer outputs (e.g., publications, research collaborations, consulting).

#strategic opportunities that informs funding decisions to leverage research assets and support technology and knowledge transfer.

Entrepreneurship:

new companies created through any of the Trust programs including the companies registered and referred by Colmena66

#Private and public Capital raised and revenue generated in Puerto Rico by the companies graduated from the Trust programs

#Employees hired by the companies supported by the Science Trust infrastructure

Public Health:

resources and funding to support public health activities in Puerto Rico

public health programs and efforts in Puerto Rico through formalized partnerships with the Department of Health and other governmental entities

#Puerto Rican communities through capacity building and training to increase positive health status for citizens

Foundation:

individuals trained by the Puerto Rico Ready program, STEM and eventually Good Jobs Challenge

individuals placed in different labor opportunities presented by the Trust workforce initiatives

#quality of labor: Increasing income of participants, improving in perceived working conditions

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KPIs Logic

Trust level KPIs: fed by the Strategic Pillars

Research & Development

of strategic opportunities created and protected

of funded and supported research

Entrepreneurship

of new companies

of capital and revenue

of jobs

Public Health

of communities /people reached

of Funding Opportunities

of new public health programs

Foundation

of people trained

of people placed

Quality of Labor

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Basic Consolidated Financial Statements 2023-2024

PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES
(A Puerto Rico Not-For-Profit Organization)

Basic Consolidated Financial Statements
June 30, 2024 and 2023

INDEPENDENT AUDITORS' REPORT

To: The Board of Trustees of
Puerto Rico Science, Technology and Research Trust

Opinion

We have audited the consolidated financial statements of Puerto Rico Science, Technology and Research Trust, a Puerto Rico not-for-profit organization, and its Subsidiaries, which comprise the consolidated statements of financial position as of June 30, 2024 and 2023, the related consolidated statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Puerto Rico Science, Technology and Research Trust and its Subsidiaries as of June 30, 2024 and 2023, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Puerto Rico Science, Technology and Research Trust and its Subsidiaries and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Puerto Rico Science, Technology and Research Trust and its Subsidiaries' ability to continue as a going concern within one year after the date that the consolidated financial statements are available to be issued.



Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Puerto Rico Science, Technology and Research Trust and its Subsidiaries' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Puerto Rico Science, Technology and Research Trust and its Subsidiaries' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

San Juan, Puerto Rico
October 31, 2024.

Stamp No. E591380 was affixed to
the original of this report.

PUERTO RICO SCIENCE, TECHNOLOGY AND RESEARCH TRUST AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION June 30, 2024 and 2023

	2024	2023
ASSETS:		
Cash and cash equivalents	\$ 18,517,760	\$ 21,109,811
Accounts receivable, net of allowance for credit losses of \$82,516 and \$58,337, respectively	702,207	488,982
Prepaid expenses	115,601	45,037
Due from governmental entities	2,913,529	1,649,372
Investments	4,368,712	4,176,405
Notes receivable, net	247,148	419,415
Other assets	18,278	27,261
Endowment fund	51,837,920	47,201,182
Property and equipment, net	2,078,976	2,278,702
Right-of-use asset for operating lease, net of accumulated amortization of \$119,962 and \$34,198, respectively	130,175	215,939
Building, net	15,855,113	14,517,984
Land and property for research, development and infrastructure project related to science and technology	18,100,307	18,100,307
Land development costs	12,029,600	11,794,958
Construction in progress - Science City	11,148,357	11,148,357
	<u>\$ 138,063,682</u>	<u>\$ 133,173,712</u>
LIABILITIES AND NET ASSETS		
LIABILITIES:		
Program service payable	\$ 607,126	\$ 1,280,348
Accounts payable	2,369,473	2,385,558
Refundable advances	636,832	2,753,965
Accrued expenses	488,481	479,296
Operating lease liability	132,314	216,086
Other liabilities	178,544	178,618
	<u>4,412,770</u>	<u>7,293,867</u>
NET ASSETS:		
Without donor restrictions:		
Undesignated	53,695,191	49,601,974
Designated by the Board of Trustees for endowment	51,837,920	47,201,182
	<u>105,533,111</u>	<u>96,803,156</u>
With donor restrictions:		
Purpose restrictions	10,017,494	10,976,362
Perpetual in nature	18,100,307	18,100,307
	<u>28,117,801</u>	<u>29,076,889</u>
	<u>133,650,912</u>	<u>125,879,845</u>
	<u>\$ 138,063,682</u>	<u>\$ 133,173,712</u>

The accompanying notes are an integral part of these consolidated statements of financial position.

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



CONSOLIDATED STATEMENTS OF ACTIVITIES
For the years ended June 30, 2024 and 2023

	2024		
	Without donor restrictions	With donor restrictions	Total
REVENUES, SUPPORT AND OTHERS:			
State grants and assessments	\$ 16,425,402	\$ -	\$ 16,425,402
Federal grants	15,560,797	-	15,560,797
Private grants and sponsorships	2,025,474	199,680	2,225,154
Donations and contributions	83,524	-	83,524
Clinical trials	105,184	-	105,184
Rental income	323,276	-	323,276
Interest Income	571,930	-	571,930
Net return on investments	3,537,871	502,888	4,040,759
Net return on endowment fund	931,766	-	931,766
Other income	204,063	-	204,063
	<u>39,769,287</u>	<u>702,568</u>	<u>40,471,855</u>
Net assets released from restrictions:			
Satisfaction of program restrictions	<u>1,661,456</u>	<u>(1,661,456)</u>	<u>-</u>
	<u>41,430,743</u>	<u>(958,888)</u>	<u>40,471,855</u>
OPERATING EXPENSES:			
Program and services:			
Research and data	4,736,811	-	4,736,811
Public health initiative	13,567,970	-	13,567,970
Technology transfer and commercialization	6,868,873	-	6,868,873
Science City development	332,237	-	332,237
	<u>25,505,891</u>	<u>-</u>	<u>25,505,891</u>
Supporting services:			
Management and administrative	7,194,897	-	7,194,897
	<u>32,700,788</u>	<u>-</u>	<u>32,700,788</u>
CHANGE IN NET ASSETS	<u>8,729,955</u>	<u>(958,888)</u>	<u>7,771,067</u>
NET ASSETS , beginning of year	<u>96,803,156</u>	<u>29,076,689</u>	<u>125,879,845</u>
NET ASSETS , end of year	<u>\$ 105,533,111</u>	<u>\$ 28,117,801</u>	<u>\$ 133,650,912</u>

Continues...

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



CONSOLIDATED STATEMENTS OF ACTIVITIES
For the years ended June 30, 2024 and 2023

Continued...

	2023		
	Without donor restrictions	With donor restrictions	Total
REVENUES, SUPPORT AND OTHERS:			
State grants and assessments	\$ 7,285,080	\$ -	\$ 7,285,080
Federal grants	10,596,966	1,532,478	12,129,444
Private grants and sponsorships	768,048	1,368,831	2,136,879
Donations and contributions	26,684	-	26,684
Clinical trials	91,014	-	91,014
Rental income	282,279	-	282,279
Interest Income	493,695	-	493,695
Net return on investments	170,610	80,719	251,329
Net return on endowment fund	2,099,356	-	2,099,356
Other income	249,179	-	249,179
	<u>22,062,911</u>	<u>2,982,028</u>	<u>25,044,939</u>
Net assets released from restrictions:			
Satisfaction of program restrictions	<u>1,633,780</u>	<u>(1,633,780)</u>	<u>-</u>
	<u>23,696,691</u>	<u>1,348,248</u>	<u>25,044,939</u>
OPERATING EXPENSES:			
Program and services:			
Research and data	4,131,052	-	4,131,052
Public health initiative	11,005,778	-	11,005,778
Technology transfer and commercialization	6,684,998	-	6,684,998
Science City development	108,396	-	108,396
	<u>21,930,224</u>	<u>-</u>	<u>21,930,224</u>
Supporting services:			
Management and administrative	5,840,608	-	5,840,608
	<u>27,770,832</u>	<u>-</u>	<u>27,770,832</u>
CHANGE IN NET ASSETS	<u>(4,074,141)</u>	<u>1,348,248</u>	<u>(2,725,893)</u>
NET ASSETS , beginning of year	<u>100,877,297</u>	<u>27,728,441</u>	<u>128,605,738</u>
NET ASSETS , end of year	<u>\$ 96,803,156</u>	<u>\$ 29,076,689</u>	<u>\$ 125,879,845</u>

The accompanying notes are an integral part of these consolidated statements.

PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES



CONSOLIDATED STATEMENTS OF FUNCTIONAL EXPENSES
For the years ended June 30, 2024 and 2023

	2024				
	Program and services			Supporting services	
	Research and data	Public health initiative	Technology transfer and commercialization	Science City development	Management and administrative
Program support:					
Capacity building and sponsorships	\$ 15,000	\$ -	\$ -	\$ -	\$ 118,760
Research and development grants	454,833	-	299,990	-	-
Matching grants	-	-	50,000	-	-
Parallel 18 grants	-	-	1,509,329	-	-
Other program initiatives	161,333	3,516,651	1,438	-	-
	631,166	3,516,651	1,860,757	-	118,760
Personnel costs:					
Salaries and wages	1,068,085	3,907,044	1,954,742	-	2,293,386
Benefits and payroll taxes	515,458	1,797,914	706,830	-	906,030
	1,583,543	5,704,958	2,661,572	-	3,199,416
Professional services	496,253	1,967,219	1,696,803	134,842	889,864
Occupancy expenses:					
Depreciation and amortization	40,122	1,299,543	5,184	35,364	562,153
Rent	1,040	25,345	119,201	-	61,002
Repairs and maintenance	2,561	-	-	46,757	409,286
Security	-	-	-	-	144,164
Other	24,253	12,100	-	81,814	712,061
	67,976	1,336,988	124,385	163,935	1,888,666
Travel	48,865	186,283	107,403	493	89,193
Other	1,909,008	855,871	417,953	32,967	1,008,998
	4,736,811	13,567,970	6,868,873	332,237	7,194,897
Total operating expenses	\$ 4,736,811	\$ 13,567,970	\$ 6,868,873	\$ 332,237	\$ 32,700,788

Continues...

PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES



CONSOLIDATED STATEMENTS OF FUNCTIONAL EXPENSES
For the years ended June 30, 2024 and 2023

Continued...

	2023				
	Program and services			Supporting services	
	Research and data	Public health initiative	Technology transfer and commercialization	Science City development	Management and administrative
Program support:					
Capacity building and sponsorships	\$ 184,982	\$ -	\$ 62,650	\$ -	\$ -
Research and development grants	864,059	-	324,188	-	-
Matching grants	-	-	412,500	-	-
Parallel 18 grants	-	-	2,204,787	-	-
Other program initiatives	387,913	3,561,627	780	-	-
	1,436,954	3,561,627	3,004,905	-	-
Personnel costs:					
Salaries and wages	1,277,888	2,965,572	1,645,678	17,538	2,197,879
Benefits and payroll taxes	497,560	1,312,069	573,674	3,965	1,029,077
	1,775,448	4,277,641	2,219,352	21,503	3,226,956
Professional services	429,537	1,194,968	779,238	66,264	685,577
Occupancy expenses:					
Depreciation and amortization	27,446	1,331,921	3,705	1,816	300,536
Rent	-	1,000	212,090	-	74,446
Repairs and maintenance	1,123	-	1,165	16,356	286,977
Security	-	-	-	-	185,313
Other	3,964	28	14,172	-	495,100
	32,553	1,332,949	231,132	18,172	1,342,372
Travel	54,318	102,363	115,233	-	63,813
Other	402,242	536,230	335,138	2,457	521,890
	4,131,052	11,005,778	6,684,998	108,396	5,840,608
Total operating expenses	\$ 4,131,052	\$ 11,005,778	\$ 6,684,998	\$ 108,396	\$ 27,770,832

The accompanying notes are an integral part of these consolidated statements.

**PUERTO RICO SCIENCE, TECHNOLOGY AND
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CONSOLIDATED STATEMENTS OF CASH FLOWS
For the years ended June 30, 2024 and 2023

	2024	2023
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	\$ 7,771,067	\$ (2,725,893)
Adjustments to reconcile change in net assets to net cash provided by (used in) operating activities:		
Credit losses	223,526	295,399
Unrealized (gain) loss on investments	(312,956)	88,476
Realized loss on investments, net	75,000	187,401
Capitalized income on Endowment fund	(931,766)	(2,099,356)
Unrealized gain on Endowment fund	(3,406,342)	(139,021)
Depreciation and amortization	1,856,602	1,631,226
Amortization of right-of-use asset for operating lease	85,764	34,198
Changes in operating assets and liabilities-		
Decrease (Increase) in assets:		
Accounts receivable	(237,404)	(26,212)
Prepaid expenses	(70,564)	(29,651)
Due from governmental entities	(1,264,157)	(646,007)
Other assets	8,983	(1,000)
Increase (decrease) in liabilities:		
Program service payable	(673,220)	225,296
Accounts payable	(16,085)	(1,072,015)
Refundable advances	(2,117,133)	(2,065,798)
Accrued expenses	9,185	33,962
Operating lease liability	(83,772)	(34,051)
Other liabilities	(72)	(1,803)
Net cash provided by (used in) operating activities	916,656	(6,344,849)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Net repayments (advances) under notes receivable	(27,080)	134,050
Proceeds from sale and redemption of investments	515,649	301,062
Purchase of investments	(470,000)	(475,000)
Contributions to Endowment fund	(298,630)	(169,808)
Purchase of property and equipment	(1,205,357)	(831,238)
Additions to building	(1,788,647)	(3,129,880)
Additions to land development	(234,642)	(228,096)
Net cash used in investing activities	(3,508,707)	(4,398,910)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(2,592,051)	(10,743,759)
CASH AND CASH EQUIVALENTS, beginning of year	21,109,811	31,853,570
CASH AND CASH EQUIVALENTS, end of year	\$ 18,517,760	\$ 21,109,811

The accompanying notes are an integral part of these consolidated statements.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

1) Organization and summary of significant accounting policies:

A) Organization – Puerto Rico Science, Technology and Research Trust (the Trust) is a not-for-profit organization created on August 18, 2004 by Act No. 214, as amended (the Act 214), of the Legislature of the Commonwealth of Puerto Rico (the Commonwealth). The purpose of the Trust is to foster, and fund research, development and infrastructure projects related to science and technology that will promote the economic, social or educational development of the Commonwealth and to operate exclusively for charitable, educational and scientific purposes. The Act 214 also designates the Trust as a Public Health Institute, an Educational Organization and allows the Trust to act as fiscal agent to pursue certain federal funding opportunities on behalf of the Commonwealth. The Act 214 also enables the Trust to establish a research institute through which researchers from public and private research institutions might affiliate with and enables the Trust to evaluate competitive grant proposals and/or act as fiscal sponsor to pursue funding opportunities on behalf of these institutions.

The projects of the Trust are financed as follows: (i) the greater of \$6,340,000 or 31% out of the monies deposited in the Special Fund for Economic Development (FEDE for its Spanish acronym) managed by the Puerto Rico Industrial Development Company (PRIDCO) for the fiscal years ended June 30, 2017 through 2019, (ii) the monies of Scientific Investigation Fund for the Centenary of the University of Puerto Rico (Centenary Fund), (iii) \$5,000,000 annually from the balance of collections of federal excise taxes in accordance with Section 7652(a)(3) of the United States Internal Revenue Code of 1986, as amended, and (iv) private grants and donations, other government funds, and legislative appropriations. During the fiscal year ended June 30, 2020, FEDE was superseded by the Economic Incentive Fund (EIF), created under Act 60 titled “Código de Incentivos de Puerto Rico”. Section 5010.01 of Act 60 bestows upon the Secretary of the Department of Economic Development and Commerce (DEDC) total discretion upon the use of the EIF.

The Act 214, as amended in August 2017, provides that the Board of Trustees is to be composed of eleven (11) trustees, two (2) of whom shall be members *ex officio* including the Secretary of the DEDC and other government agency representative to be appointed by the Governor of the Commonwealth; and nine (9) members from the private sector.

Since September 2016, the Trust has been awarded, as prime recipient and subrecipient, with federal funds from the US Department of Health and Human (DHHS) - Center for Disease Prevention and Control, the DHHS - National Institutes of Health, the US Department of Commerce – Economic Development Administration, the US Department of the Treasury, and the US Department of Agriculture. In addition, the Trust has been the primary recipient, or acted as fiscal sponsor, for the implementation of privately funded initiatives, mostly related to recovery efforts after the passing of Hurricane Maria in Puerto Rico in September 2017, and the organization's Public Health Institute initiative.

Subsidiaries – The Trust has established the following subsidiaries by virtue of Article 5(26) of Act 214, as amended, whereby the Trust may organize subsidiaries or affiliates subject to its total or partial control to carry out any assignment from the Trust's Board of Trustees for the best interest of the Trust:

- The Puerto Rico Consortium for Clinical Investigation, Inc. (PRCCI) – A not-for-profit entity organized on January 20, 2016. PRCCI began operations on April 1, 2016 and its purpose is to improve the impact, quality, and speed of clinical research activity conducted in Puerto Rico, especially in the fields of oncology, infectious diseases, neurological disorders and cardio-metabolism. To achieve its mission, PRCCI partners with clinical research sites across Puerto Rico to ensure access to a diverse patient population. PRCCI's operations are sustained through a combination of revenues obtained from clinical research sponsors, grants and contracts with state and private entities, and contributions from the Trust.

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- PRST, Inc. (PRST) – A not-for-profit entity organized on December 28, 2016. The purpose of PRST is to act as a Qualified Promoter as defined in Section 2034.01 of the newly enacted Incentives Code of Puerto Rico. A Qualified Promoter is authorized by the Department of Economic Development and Commerce to engage in the promotion of new companies established in Puerto Rico and to obtain decrees under Act No. 20 of 2012, to establish and expand their export services. During the years ended June 30, 2024 and 2023, no operations were conducted by this subsidiary.
- Innovation Financial Solutions, Inc. (IFS) – A not-for-profit entity organized in November 2023. The purpose of IFS is to manage programs to increase the Trust's portfolio of investments in ventures. During the year ended June 30, 2024, no operations were conducted by this subsidiary.

These consolidated financial statements include the accounts of the Trust and its Subsidiaries (collectively referred as the Trust and its Subsidiaries) as of and for the years ended June 30, 2024 and 2023.

- B) Summary of significant accounting policies – The Trust and its Subsidiaries prepare its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) for not-for-profit organizations. The significant accounting policies used by the Trust and its Subsidiaries are as follows:

Principles of consolidation – The accompanying consolidated financial statements include the accounts of the Trust and its Subsidiaries, as described in Note 1A. Intercompany transactions and accounts have been eliminated in consolidation.

Basis of presentation – The consolidated financial statements of the Trust and its Subsidiaries report information regarding its financial position and activities according to the following net assets classifications:

- Net assets without donor restrictions – Net assets that are not subject to donor-imposed restrictions and may be expended for any purpose in performing the primary objectives of the Trust and its Subsidiaries. These assets may be used at the discretion of the Trust and its Subsidiaries' management and the Board of Trustees.
- Net assets with donor restrictions – Net assets that are subject to stipulations imposed by donors and some grantors. Some donor restrictions are temporary in nature; those restrictions will be met by actions of the Trust and its Subsidiaries or by passage of time. Other donor restrictions are perpetual in nature, whereby the donor has stipulated the funds be maintained in perpetuity.

Donor restricted contributions are reported as increases in net assets with donor restrictions. When a restriction expires, net assets are reclassified from net assets with donor restrictions to net assets without donor restrictions in the statements of activities. However, if a restriction is fulfilled in the same period in which the contribution is received, the Trust and its Subsidiaries report the support as without donor restrictions.

As of June 30, 2024 and 2023, the Trust and its Subsidiaries' net assets with donor restrictions include the following:

Purpose restrictions:

- Federal funds that are restricted for the implementation of programmatic initiatives, and funds from private sources that are restricted for the implementation of public health and venture creation initiatives.

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- Monies for the Scientific Investigation Fund for the Centenary of the University of Puerto Rico. This fund was created to improve the infrastructure, activities and environment of investigative activities of the University of Puerto Rico, and to facilitate the commercialization of the innovations that are developed there. Among the activities to be supported are the recruitment and retention of researchers and the promotion of technology transfer.
- Restricted portion of the Forward Center Building from funds received from the US Department of Commerce Economic Development Administration (EDA). This amount is presented net of accumulated depreciation.

Perpetual in nature:

- Consist of a land, described in Note 11 that was contributed with the restriction of using it for the purpose described in Act 214, as amended, through the implementation of a Master Plan.

Use of estimates – The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities, at the date of financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and cash equivalents – Cash equivalents are short-term, highly liquid investments with original maturities of three months or less at the time of purchase. Cash equivalents include cash in investment-managed accounts such as money markets and mutual funds.

Allowance for credit losses – The Trust and its Subsidiaries offset gross accounts receivable with an allowance for credit losses. The allowance for credit losses is the Trust and its Subsidiaries' best estimate of the amount of probable credit losses in the existing accounts receivable and is based on management's evaluation of current status of donor pledges, contributions and grants, and any other factors that deserve current recognition. Receivables are charged-off against their respective allowance accounts when deemed to be uncollectible.

Estimating credit losses based on risk characteristics requires significant judgment by the Trust and its Subsidiaries. Significant judgments include but are not limited to assessing current economic conditions and the extent to which they would be relevant to the existing characteristics of the Trust and its Subsidiaries' financial assets, the estimated life of financial assets and the level of reliance on historical experience in light of economic conditions. The Trust and its Subsidiaries review and update, when necessary, its historical risk characteristics that are meaningful to estimating credit losses, any new risk characteristics that arise in the natural course of business and the estimated life of its financial assets. Actual results could differ from these estimates.

Investments – Investments represent a Puerto Rico government bond, private equity securities and Simple Agreements for Future Equity (SAFE) investments, which are recorded at its fair value. Net investment return (loss) is reported in the consolidated statements of activities and consists of interest and dividend income, realized and unrealized capital gains and losses, less external and direct internal investment expenses.

Fair value measurements – Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The valuation techniques are based upon observable or unobservable inputs.

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Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the entity's market assumptions. Market or observable inputs are the preferred source of values, followed by assumptions based on hypothetical transactions in the absence of market input. These two types of inputs create the following fair value hierarchy:

- Level 1 – Quoted prices for identical instruments in active markets.
- Level 2 – Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-derived valuations whose inputs are observable or whose significant value drivers are observable.
- Level 3 – Significant inputs to the valuation model are unobservable.

The Trust and its Subsidiaries maintain policies and procedures to value financial instruments using the best and most relevant data available.

Property and equipment – Property and equipment are stated at cost, or if donated, at the fair value at date of receipt. Maintenance and repair costs that do not improve or extend the useful life of the respective assets are expensed as incurred. Costs of renewals and betterments which extend the useful life of the respective assets are capitalized. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets, as follows:

Description	Estimated Useful Life
Furniture and fixtures	5 years
Computer and laboratory equipment	3 to 5 years
Leasehold improvements	Lease term

At the time property and equipment is sold or otherwise disposed of, the cost and related accumulated depreciation or amortization are removed from the books and the resulting gain or loss, if any, is credited or charged to operations.

Building – Is carried at cost less accumulated depreciation. Depreciation is provided on a straight-line basis over the useful life of 35 years. Maintenance and repair costs that do not improve or extend the useful life of the building are expensed as incurred while the costs of renewals and betterments which extend its useful life are capitalized. When the asset is sold or disposed of, the cost of the asset and the related accumulated depreciation are removed from the books and the resulting gain or loss, if any, is credited or charged to operations.

Accounting for the impairment or disposal of long-lived assets – The Trust and its Subsidiaries' long-lived assets held and used in operations are tested for recoverability whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Assets are considered to be impaired if the carrying amount of the asset exceeds the sum of the undiscounted cash flow expected to result from the use and eventual disposition of the asset.

If such assets are impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds its fair value. Assets to be disposed of, other than by sale, continue to be classified as held and used until they are disposed of. Assets to be disposed of by sale are classified as held for sale in the period in which certain criteria are met and reported at the lower of the carrying amount or fair value. At the time such criteria are no longer met, such assets are reclassified as assets held and used in operations.

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Land development costs – Represent costs for a land site consultation approval, certification of environmental compliance, architectural design, and other costs incurred in connection with land received by the Trust and its Subsidiaries for the construction of its facilities.

Contributions and support revenue – The Trust and its Subsidiaries mainly derive its revenues from state and federal grants, contributions received from the government, corporations, sponsors and individuals. The Trust and its Subsidiaries recognize contributions when cash, securities or other assets; an unconditional promise to give; or a notification of a beneficial interest is received. Grants, contribution, and conditional promises to give with a measurable performance or other barrier and a right of return are not recognized until the conditions on which they depend have been met. All revenues and contributions are considered to be available for unrestricted use, unless specifically restricted by the donor. Amounts received that are designated for future periods or restricted by the donor for specific purposes are reported as donor-restricted support that increases the net assets with donor restrictions class. However, if a restriction is fulfilled in the same period in which the contribution is received, the Trust and its Subsidiaries report the support as an increase in net assets without donor restrictions. The Trust and its Subsidiaries also report donor restricted contributions that were initially conditional as increases in net assets without donor restrictions if both the donor-imposed restriction and the condition are met in the same period. The Trust and its Subsidiaries has a similar policy for reporting gains and investment income that are limited to specific uses by donor-imposed restrictions and the restrictions on the gains and income are met in the same reporting period as the gains and income are recognized.

A portion of the Trust and its Subsidiaries' revenue is derived from cost-reimbursable federal and state contracts and grants, which are conditioned upon certain performance requirements and/or the incurrence of allowable qualifying expenses. Amounts received are recognized as revenue when the Trust and its Subsidiaries have incurred expenditures in compliance with specific contract or grant provisions. Amounts received prior to incurring qualifying expenditures are reported as refundable advances in the consolidated statements of financial position.

In-Kind contributions – Contributed nonfinancial assets include donated professional services, donated equipment, and other in-kind contributions which are recorded at the respective fair values of the goods or services received. There were no in-kind contributions during the years ended June 30, 2024 and 2023.

Leases – The Trust and its Subsidiaries adopted the Accounting Standards Codification (ASC) Topic 842, *Leases* effective July 1, 2022, as allowed, using the modified retrospective.

The Trust and its Subsidiaries elected the practical expedients of not reassessing whether any expired or existing contracts are or contain leases, not reassessing the lease classification for any expired or existing leases and not reassessing any initial direct costs for existing leases. In addition, the Trust and its Subsidiaries elected the practical expedient to not separate lease and non-lease components for all its asset classes. A permitted accounting policy election was made to not apply the new guidance to leases with an initial term of 12 months or less. Those lease payments are recognized in the consolidated statements of activities on a straight-line basis over the lease term. As of July 1, 2022, the adoption of the standard did not result in the recognition of a lease liability or a right-of-use (ROU) asset. A lease entered during the year ended June 30, 2023, however, was recognized under the new accounting standard resulting in the recognition of a ROU asset and a lease liability for \$250,137 at the inception of the lease. The standard does not materially affect the changes in net assets, cash flows and liquidity. See Note 14 for further information.

In addition, under Topic 842, lessors will only capitalize incremental direct leasing costs. As a result, starting July 1, 2022, the Trust and its Subsidiaries no longer capitalize non-incremental direct costs. These costs are expensed as incurred and are included within general and administrative expenses on the consolidated statements of activities.

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Functional allocation of expenses and operational expenditures – The costs of providing the Trust and its Subsidiaries' programs and other activities have been summarized on a functional basis in the accompanying consolidated statements of activities. The consolidated statements of functional expenses present the natural classification detail of expenses by function. During the years ended June 30, 2024 and 2023, certain costs have been allocated among the following programs and support activities:

- *Research and data:* includes expenses aimed to improve, analyze and/or strengthen the local research and development (R&D) infrastructure and the breadth of science and technology activity in Puerto Rico. It also includes support activities to strengthen science, technology, engineering and mathematics (STEM). Expenses within this function include: clinical trials, grants to support laboratory infrastructure, research grants, research institute and educational organization initiatives, grants to attract or retain distinguished researchers, studies to determine R&D, innovation, knowledge economy activity in the Island; and, salaries and professional services to support this area.
- *Public health initiative:* includes expenses incurred regarding the *Puerto Rico Public Health Trust*, an initiative established by the Trust and its Subsidiaries to act as Public Health Institute (PHI). Acting as a PHI, the Trust implements programs which aim is to improve public health capacity, systems and outcomes by fostering innovation, leveraging resources and building partnerships to improve the public's health. Expenses within this function include: integrated vector management initiatives, farmers support, health-outcome-and-measures research and studies, and salaries and professional services to support this area.
- *Technology transfer and commercialization:* includes expenses incurred in initiatives to support technology transfer and commercialization and direct investments in technology development projects which have a clear commercialization aim. Expenses within this function include: intellectual property assistance, sponsorship, grants for technology developments; investment in technology commercialization accelerators and startup incubators, salaries and professional services to support this area.
- *Science City development:* includes non-capitalizable expenditures necessary for the on-going development and construction of sites at the Science City. These expenditures include salary and professional services to support this area, planning and assessment projects, security services to enable construction work, etc.
- *Management and administrative:* includes all administrative expenses incurred to support all functional areas as described above which are not directly allocable to any of them. These expenses include administrative staff salaries, accounting fees, depreciation and amortization, utilities, etc.
- *Fundraising:* includes expenses incurred in soliciting contributions, gifts, grants, etc. These expenses include publicizing and conducting fundraising campaigns, soliciting grants from foundations and government agencies, costs of participating in federated fundraising campaigns, preparing and distributing fundraising manuals, instructions and other materials. The Trust and its Subsidiaries did not engage in any fundraising activity during the years ended June 30, 2024 and 2023.

Certain categories of expenses are attributed to more than one program or supporting function. Therefore, expenses require allocation on a reasonable basis that is consistently applied. The expenses that are allocated include mainly salaries, fringe benefits and payroll taxes, which are allocated on the basis of time and effort.

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Income taxes – The Trust and its Subsidiaries are exempt from Puerto Rico income taxes under the provisions of Act 214, as amended, and from federal taxes under the provisions of Section 501(c) of the Internal Revenue Code. Accordingly, no provision for income taxes has been recorded in the accompanying consolidated financial statements.

The Trust and its Subsidiaries follow the guidance for uncertainty in income taxes issued by the Financial Accounting Standards Board (FASB). Management evaluated the Trust and its Subsidiaries' tax positions and concluded that the Trust and its Subsidiaries had taken no uncertain tax positions that require adjustments or disclosure in the consolidated financial statements.

All applicable tax returns have been appropriately filed by the Trust and its Subsidiaries. The Trust and its Subsidiaries' open audit periods are fiscal years ended June 30, 2020 to 2024.

Advertising and promotion – The Trust and its Subsidiaries charge to operations advertising and promotion costs as they are incurred. During the years ended June 30, 2024 and 2023, the Trust and its Subsidiaries incurred in advertising and promotion expenses of approximately \$293,000 and \$181,000 respectively.

Recently adopted accounting standard – Effective January 1, 2023, the Trust and its Subsidiaries adopted the Accounting Standards Update (ASU) No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13) issued by the FASB in June 2016, as well as the clarifying amendments subsequently issued. The pronouncement creates a new credit impairment standard for financial assets measured at amortized cost and available-for-sale debt securities. The ASU 2016-13 requires financial assets measured at amortized cost (including loans, trade receivables and held-to-maturity debt securities) to be presented at the net amount expected to be collected, through an allowance for credit losses that are expected to occur over the remaining life of the asset, rather than incurred losses.

The ASU 2016-13 requires that credit losses on available-for-sale debt securities be presented as an allowance rather than as a direct write-down. The measurement of credit losses for newly recognized financial assets (other than certain purchased assets) and subsequent changes in the allowance for credit losses are recorded in the consolidated statements of activities as the amounts expected to be collected change.

Upon adoption of the standard, there was no immediate impact to the Trust and its Subsidiaries' financial position, changes in net assets or cash flows.

3) **Concentrations of credit risks:**

Financial instruments, which potentially subject the Trust and its Subsidiaries to concentration of credit risks, consist of cash and cash equivalents and accounts receivable.

The Trust and its Subsidiaries maintains its cash deposits in various financial institutions. The cash deposits, at times, may exceed the amount insured by the Federal Deposit Insurance Corporation (FDIC) of \$250,000 per financial institution or the amount protected by the Securities Investor Protection Corporation (SIPC) of \$250,000 per brokerage firm. As of June 30, 2024 and 2023, the Trust and its Subsidiaries' cash deposits exceeded the insured limits of FDIC and SIPC by approximately \$18,000,000 and \$19,407,000, respectively.

For the years ended June 30, 2024 and 2023, grants and contributions from state and federal entities represent approximately 79% and 78%, respectively, out of total revenues. The balance due from these state and federal entities represents approximately 81% and 75%, respectively, of total accounts receivable.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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4) Liquidity and availability:

As of June 30, 2024 and 2023, financial assets available for general expenses, that is, without donor restriction or other limiting their use, within one year of the financial position date, comprises the following:

Description	2024	2023
Cash and cash equivalents	\$ 18,517,760	\$ 21,109,811
Accounts receivable	702,207	488,982
Due from governmental entities	2,913,529	1,649,372
Investments	4,368,712	4,176,405
Endowment fund	51,837,920	47,201,182
Less amount not available to be used within one year: Net assets with donor restrictions	78,340,128 (4,429,835)	74,625,752 (5,224,382)
Financial assets available to meet general expenditures over the next twelve months	<u>\$ 73,910,293</u>	<u>\$ 69,401,370</u>

5) Investments:

As of June 30, 2024 and 2023, investments consisted of the following:

Description	2024	
	Cost	Fair value
Fixed income:		
Puerto Rico government bond	\$ 1,528,588	\$ 1,489,905
Private equity securities	1,798,807	1,798,807
SAFE investments	1,080,000	1,080,000
	<u>\$ 4,407,395</u>	<u>\$ 4,368,712</u>
Description	2023	
	Cost	Fair value
Fixed income:		
Puerto Rico government bond	\$ 2,044,237	\$ 1,692,598
Private equity securities	1,783,807	1,783,807
SAFE investments	700,000	700,000
	<u>\$ 4,528,044</u>	<u>\$ 4,176,405</u>

6) Fair value measurement:

For certain of the Trust and its Subsidiaries' financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, the carrying amounts approximate fair market value due to their short-term maturities.

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Below is a description of the methodology used for instruments recognized at fair value, including the classification of such transactions in accordance with the valuation hierarchy.

Puerto Rico government bond – The fair value of this bond is obtained from third party pricing service providers that use a pricing methodology based on an active exchange market and quoted market prices for similar securities. This bond is classified as Level 2.

Private equity securities and SAFE investments – The objective of these investments is to achieve current income by providing debt and equity financing alternatives to targeted privately-held companies that are mostly organized or engaged in trade or business in Puerto Rico. These investments are classified in Level 3 since its market value was determined based on unobservable inputs that are significant to the market value measurement.

As of June 30, 2024, and 2023, the Trust and its Subsidiaries' investments are classified as follows:

Description	2024			
	Level 1	Level 2	Level 3	Total
Fixed income:				
Puerto Rico government bond	\$ -	\$ 1,489,905	\$ -	\$ 1,489,905
Private equity securities	-	-	1,798,807	1,798,807
SAFE investments	-	-	1,080,000	1,080,000
	<u>\$ -</u>	<u>\$ 1,489,905</u>	<u>\$ 2,878,807</u>	<u>\$ 4,368,712</u>
Description	2023			
	Level 1	Level 2	Level 3	Total
Fixed income:				
Puerto Rico government bond	\$ -	\$ 1,692,598	\$ -	\$ 1,692,598
Private equity securities	-	-	1,783,807	1,783,807
SAFE investments	-	-	700,000	700,000
	<u>\$ -</u>	<u>\$ 1,692,598</u>	<u>\$ 2,483,807</u>	<u>\$ 4,176,405</u>

The change in carrying values associated with investments measured at fair value on a recurring basis using significant unobservable inputs (Level 3), are as follows:

Description	2024		
	Private equity securities	SAFE investments	Total
Balance at July 1, 2023	\$ 1,783,807	\$ 700,000	\$ 2,483,807
Purchases	15,000	455,000	470,000
Realized losses	-	(75,000)	(75,000)
Balance at June 30, 2024	<u>\$ 1,798,807</u>	<u>\$ 1,080,000</u>	<u>\$ 2,878,807</u>

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

Description	2023		
	Private equity securities	SAFE investments	Total
Balance at July 1, 2022	\$ 1,636,208	\$ 450,000	\$ 2,086,208
Purchases	175,000	300,000	475,000
Conversion of SAFE investments to private equity securities	50,000	(50,000)	-
Conversion of note receivable to private equity securities	110,000	-	110,000
Realized losses	(187,401)	-	(187,401)
Balance at June 30, 2023	\$ 1,783,807	\$ 700,000	\$ 2,483,807

The table below presents qualitative information for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3), as of June 30, 2024 and 2023:

Description	Valuation Technique	Unobservable Input
Private equity securities	Acquisition cost	None
SAFE investments	Acquisition cost	None

7) Notes receivable:

As of June 30, 2024 and 2023, the Trust is the holder of the following promissory notes:

Description	2024	2023
5% interest bearing promissory note, due in December 2024.	\$ 25,000	\$ 25,000
5% interest bearing promissory notes, convertible to shares of common stock of the issuers. The notes were due in December 2023. Some of these notes are currently in the process of payment or reserved in the allowance for credit losses.	87,148	125,000
5% interest bearing promissory notes, convertible to shares of common stock of the issuers. The notes were due in August 2022. Some of these notes are currently in the process of payment or reserved in the allowance for credit losses.	175,000	175,000
5.25% interest bearing promissory note, due on June 30, 2024.	74,329	74,329
5% interest bearing promissory note, due on July 5, 2023.	-	6,000
5% interest bearing promissory note, due on June 30, 2023.	-	14,086
5% interest bearing promissory note, convertible to shares of common stock of the issuer. The note is due in December 2024.	25,000	25,000

Continues...

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

Continued...

Description	2024	2023
3% interest bearing promissory note, convertible to shares of common stock of the issuer. The note was due in December 2023 and was reserved in the allowance for credit losses.	75,000	75,000
7% interest bearing promissory note, convertible to shares of common stock of the issuer. The note was due in December 2023 and a repayment agreement is currently in process.	75,000	75,000
10% interest bearing promissory note, convertible to shares of common stock of the issuer. The note was due in August 2022 and was reserved in the allowance for credit losses.	50,000	50,000
5% interest bearing promissory note, convertible to shares of common stock of the issuer. The note was due in January 2021 and was reserved in the allowance for credit losses.	75,000	75,000
7% interest bearing promissory note, convertible to shares of common stock of the issuer. The note is due in February 2026.	35,000	-
10% interest bearing promissory note, convertible to shares of common stock of the issuer. The note is due in February 2026.	50,000	-
	746,477	719,415
Less: Allowance for credit losses	(499,329)	(300,000)
	\$ 247,148	\$ 419,415

8) Endowment fund:

During the year ended June 30, 2020, the Trust and its Subsidiaries established an investment fund that has a perpetual investment horizon and is tax exempt. Its main purpose is to provide for long-term sustainable growth, while addressing any current operational expenses and those public financial responsibilities established by applicable law, rules and regulations.

The endowment fund includes funds designated by the Board of Trustees to function as endowments, including reserves created by the Trust and its Subsidiaries to assist in assuring its sustainability and its projects into perpetuity. The endowment fund might be nurtured as well of donations from individuals, private corporations and the U.S. government. Net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The Trust and its Subsidiaries have adopted an investment policy for endowment assets, as approved by the Board of Trustees, that attempts to provide a predictable stream of funding while seeking to maintain their purchasing power. Under this policy, total investments' return should exceed the rate of inflation, as measured by the Consumer Price Index plus 3%, net of fees, expenses and taxes. This objective should be achieved in such a manner that the fund is protected from unwarranted market risk. Actual returns in any given year may vary from this amount. To satisfy its long-term rate-of-return objectives, the Trust and its Subsidiaries rely on a total return strategy in which investments' return is achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The Trust and its Subsidiaries targets a diversified asset allocation and provides its managers appropriate guidelines to achieve its long-term objective within prudent risk constraints. The preferred asset mix, expressed in lower-upper limits, is: 10%-70% global equities, 10%-40% global fixed income, 0%-25% alternative investments and 0%-5% cash and cash equivalents.

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

As of June 30, 2024 and 2023, the endowment fund is presented in the net assets without donor restrictions as designated by the Board of Trustees. Changes in the endowment fund for the years ended June 30, 2024 and 2023, consisted of the following:

Description	2024	2023
Endowment fund at beginning of year	\$ 47,201,182	\$ 44,792,997
Investment return:		
Investment income, net	931,766	2,099,356
Net appreciation	3,406,342	139,021
Total investment return	4,338,108	2,238,377
Contributions	298,630	169,808
Endowment fund at end of year	\$ 51,837,920	\$ 47,201,182

9) Property and equipment:

As of June 30, 2024 and 2023, property and equipment consisted of the following:

Description	June 30, 2024		
	Cost	Accumulated depreciation and amortization	Book value
Furniture and fixtures	\$ 715,074	\$ 244,313	\$ 470,761
Computer and equipment	5,620,535	4,032,273	1,588,262
Leasehold improvements	829,068	828,427	641
Vehicle	59,025	39,714	19,311
	<u>\$ 7,223,702</u>	<u>\$ 5,144,727</u>	<u>\$ 2,078,975</u>

Description	June 30, 2023		
	Cost	Accumulated depreciation and amortization	Book value
Furniture and fixtures	\$ 346,281	\$ 159,092	\$ 187,189
Computer and equipment	4,896,498	2,839,156	2,057,342
Leasehold improvements	829,068	826,013	3,055
Vehicle	59,025	27,909	31,116
	<u>\$ 6,130,872</u>	<u>\$ 3,852,170</u>	<u>\$ 2,278,702</u>

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

10) Building:

As of June 30, 2024 and 2023, building consisted of the following:

Description	2024	2023
<i>Innovation Center Building</i> - A three-story building that houses the Trust's headquarters and provides space for both, the incubation of local hi-tech startups and strategic service providers, creating a synergistic effect to accelerate the commercialization of technologies.	\$ 4,688,362	\$ 4,632,321
<i>Puerto Rico Environmental Quality Board's Laboratory</i> - Building that houses the laboratory facilities of the Puerto Rico Environmental Quality Board and the laboratory facilities of the Puerto Rico Vector Control Unit.	3,574,428	3,558,446
<i>Forward Center Building</i> - A three-story building partially funded by EDA grant. In connection with the EDA grant-imposed restrictions, the property shall only be used to provide space to high-technology ventures to conduct research and development and manufacturing activity for a period of 20 years from the date of its completion.	9,401,032	7,684,408
	17,663,822	15,875,175
Less: Accumulated depreciation	(1,808,709)	(1,357,191)
	<u>\$ 15,855,113</u>	<u>\$ 14,517,984</u>

11) Land and property for research, development and infrastructure project related to science and technology:

On October 22, 2007, the Trust received prime real estate in the metropolitan area of San Juan, which includes the former Rio Piedras Correctional Facilities (Oso Blanco State Penitentiary). The land and property were valued based on a market appraisal opinion report, dated October 20, 2008.

As established by Act 214, as amended, the Trust and its Subsidiaries plan to develop the land of Oso Blanco State Penitentiary site into a research park, which combines residential, retail, educational, and civic facilities with laboratory and research and development facilities with the purpose of facilitating the development of infrastructure favorable to the research and development of science and technology. Costs related to the design, development and improvements of the campus are capitalized as incurred.

As of June 30, 2024 and 2023, the land was restricted by donor for research, development and infrastructure project related to science and technology.

12) Construction in progress - Science City:

The Trust and its Subsidiaries' main infrastructure-related initiative is the Science City, located in a 69-acre mixed-use land located in San Juan, in a dense concentration of hospitals, universities, and other science and technology resources. The aim for the development of the Science City is to strengthen Puerto Rico's research infrastructure and enable its use as a tool to develop, attract, and retain a vibrant research ecosystem.

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

Since the year ended June 30, 2016, the Trust and its Subsidiaries are executing a plan of action with the ultimate goal of facilitating such an innovation ecosystem, including the identification of a Master Development Partner (MDP) to lease, finance, develop, and manage the Science City project. To facilitate the identification and attraction of a MDP, the Trust and its Subsidiaries have invested approximately \$11,150,000 in critical infrastructure comprised of the construction of the Laboratory Road and major improvements for the interconnection of Highway 21 and 28 to the Science City. These projects will be further developed and finalized after the identification of the MDP.

13) Rental income:

The Trust and its Subsidiaries lease building spaces under operating lease agreements. The lease agreements are for periods of one year with a renewal option for an additional year on a month-to-month basis.

In addition, the Trust and its Subsidiaries lease a facility for two (2) years expiring during the year ending June 30, 2025. The monthly rental payments are approximately \$21,000.

Future minimum lease collections for the remaining non-cancellable term of these agreements subsequent to June 30, 2024, are approximately \$252,000.

For the years ended June 30, 2024 and 2023, revenues from rental agreements amounted to approximately \$323,000 and \$282,000, respectively.

14) Leases:

The Trust and its Subsidiaries lease an office space located in Ponce, Puerto Rico, under an operating lease agreement expiring on December 31, 2025. The remaining term of the agreement calls for monthly rental payments of \$7,500.

For the years ended June 30, 2024 and 2023, the components of the lease cost were as follows:

Description	Financial Statements Classification	2024	2023
Operating lease cost	Program and services- Public health initiative	\$ 90,000	\$ 37,648

As of June 30, 2024 and 2023, the weighted average remaining lease term and discount rate for the Trust and its Subsidiaries' operating lease were as follows:

Description	2024	2023
Weighted-average remaining lease term in years	1.5	2.5
Weighted-average discount rate	3.5%	3.5%

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

As of June 30, 2024, maturities of lease liability for the operating leases are as follows:

Year ending June 30,	Amount
2025	\$ 90,000
2026	45,000
Total lease payments	135,000
Less: Imputed interest	(2,686)
Present value of lease liability	\$ 132,314

For the years ended June 30, 2024 and 2023, total rent expense amounted to approximately \$615,000 and \$603,000, respectively.

15) Retirement plan:

The Trust and its Subsidiaries have established a defined contribution retirement plan (the Plan) that covers all full-time employees who have reached 21 years of age, without requiring eligibility service requirements. Under the Plan, participants may contribute an amount not exceeding \$15,000 per year. The Trust and its Subsidiaries is not required to make matching contributions but reserves its right to start making matching contributions based on a maximum of 3% out of each dollar contributed by the employee, up to 10% of compensation. The Trust and its Subsidiaries may contribute a discretionary amount in addition to the matching contribution for all eligible participants. Amounts contributed by the Trust and its Subsidiaries are 100% vested after an employee completes one (1) year of service.

Total contributions made by the Trust and its Subsidiaries during the years ended June 30, 2024 and 2023, amounted to approximately \$263,000 and \$220,000, respectively.

16) Commitments:

The Trust has entered in certain commitments to invest in various private equity funds. These commitments and the investment as of June 30, 2024, are as follows:

Entity	Commitment	Investment
Semillero Investment Fund I, LLC	\$ 500,000	\$ 499,620
Semillero Investment Fund II, LLC	1,000,000	474,552
Bluhaus Small Business Fund, L.P.	250,000	187,500
Grupo Guayacán, Inc.	1,000,000	145,613
	\$ 2,750,000	\$ 1,307,285

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

17) Supplemental disclosures for the statements of cash flows:

A) Non-cash from investing and financing transactions – During the years ended June 30, 2024 and 2023, non-cash investing and financing activities consist of the following:

Description	2024	2023
Retirement of fully depreciated property and equipment	\$ 112,527	\$ -
Adoption of ASC 842:		
Right-of-use asset for operating lease	\$ -	\$ 250,137
Lease liability	\$ -	\$ 250,137
SAFE investments converted in private equity securities	\$ -	\$ 50,000
Note receivable converted into investment in private equity securities	\$ -	\$ 110,000
Unpaid additions to building charged against accounts payable	\$ -	\$ 368,638
Unpaid additions to land development charged against accounts payable	\$ -	\$ 226,403

B) Other cash flows information – During the years ended June 30, 2024 and 2023, the Trust and its Subsidiaries make no interest payments.

18) Reclassifications:

Certain reclassifications were made to the June 30, 2023 consolidated financial statements to conform them to the June 30, 2024 consolidated financial statements presentation. The reclassifications had no effect on the reported change in net assets for the year ended June 30, 2023.

19) Subsequent events:

In August 2024, the Government of Puerto Rico, through the DDEC, awarded an agreement of \$1,436,400 to implement an initiative titled *TecLab Puerto Rico*. The aim of this project is to provide better access routes to careers in technology sectors for high school students in Puerto Rico for the alignment in intersectoral collaborations that benefit public school students. The program expires in June 2025.

In September 2024, the US Department of Health and Human Services (US DHHS)'s Health Resources and Services Administration (HRSA) awarded a yearly grant amount of \$350,000 to implement a project titled *Integrating Behavioral Health into Primary Care through Telehealth Evidence-Based Telehealth*. The program expires in September 2029.

In September 2024, the US Department of Health and Human Services (US DHHS)'s Health Resources and Services Administration (HRSA) awarded a yearly grant amount of \$474,953 to implement a project titled *Technology-Enabled Learning Collaborative Program*. The program expires in September 2029.

In September 2024, the US Small Business Administration (SBA) awarded a yearly grant amount of \$199,589 to implement a project titled *Federal and State Technology Partnership Program*. The program expires in September 2029.

**PUERTO RICO SCIENCE, TECHNOLOGY AND
RESEARCH TRUST AND ITS SUBSIDIARIES**



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024 and 2023

Subsequent events were evaluated through October 31, 2024, the date on which consolidated financial statements were available to be issued.



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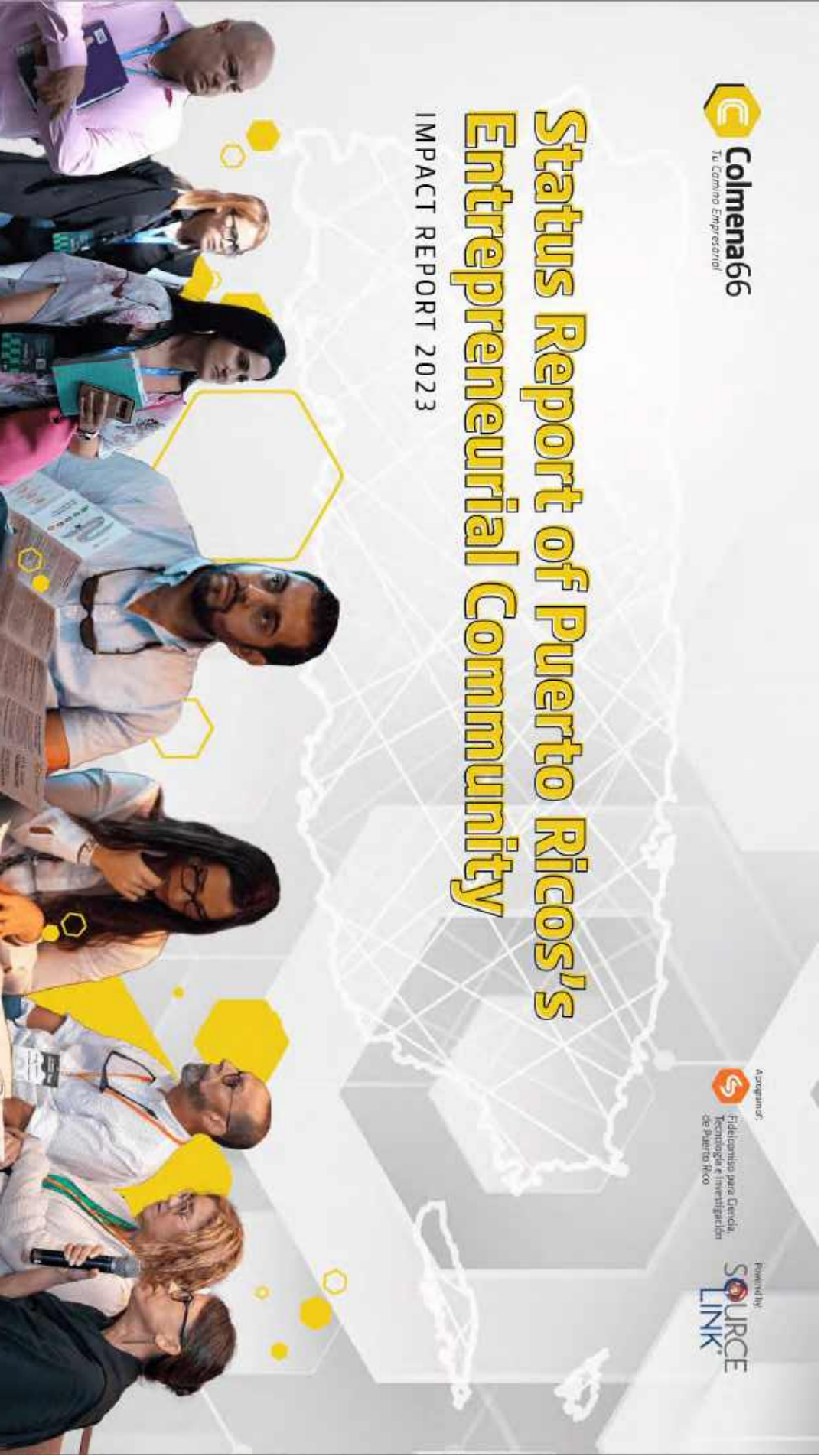
Impact Report

2023-2024

In This Report

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An Essential Part of The Hive:



Denise Rodríguez
Executive Director



Samuel Merced
Program Manager



Gian Ortiz
Strategic Development Specialist



Natalia Alicea
Senior Marketing Strategist



Nadya Solá
Entrepreneurship Strategist



Nacktra Castro
Lead Graphic Designer



Jamie Ortiz
PARACa Vista Fellow



Noriana Meléndez
Community & Content Specialist



Ibanaliz Santoni
Entrepreneurship Strategist



Bridgette Padilla
Lead Entrepreneurship Strategist



Camila Pérez
Entrepreneurship Strategist

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4

About Us!

Colmena66 is an award-winning program which makes entrepreneurship easier by connecting entrepreneurs with the vital, just-in-time, on-the-ground resources they need to accelerate their ideas and turn those into sustainable businesses that create jobs.

We are the only organization in Puerto Rico that works with all types of entrepreneurs at any stage.

Our network of resources includes:

- Entrepreneurship Support Organizations (ESOs)
- Government
- Entrepreneurs
- Media
- Non Profits
- Academia
- Access to Capital



Puerto Rico
Science, Technology
& Research Trust



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Colmena66 It is part of the entrepreneurship pillar:



parallel¹⁸



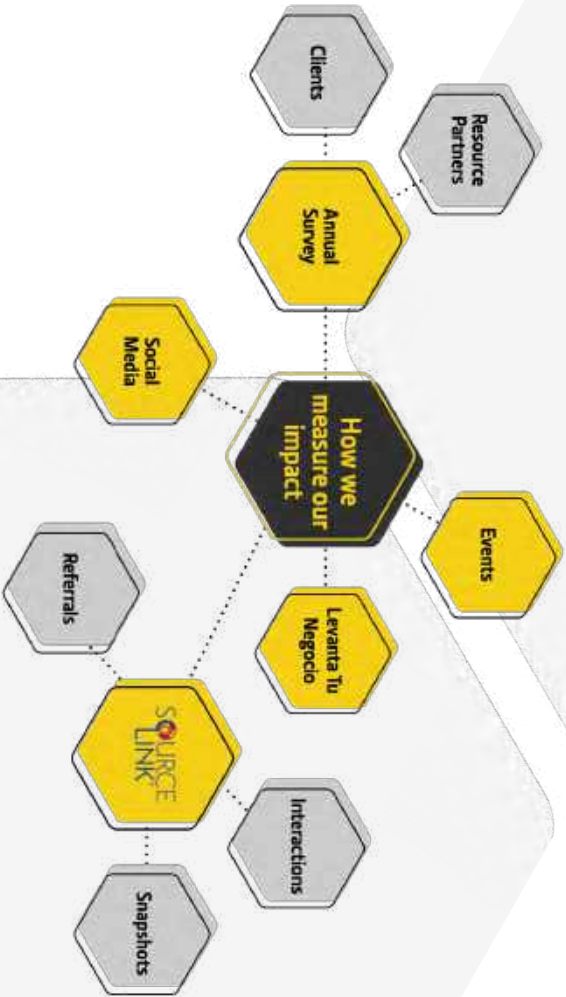
3

How We Gather Data

Our Data Sources

One of our top priorities for Puerto Rico's ecosystem is collecting and sharing actionable data.

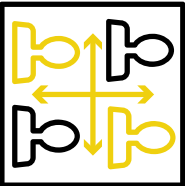
This report provides insights into the entrepreneurial community and the impact of our partners. Using our CRM, social media, events, and surveys, we've gathered data on 20,000+ entrepreneurs since 2016.



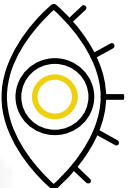
Why a Status Report of Puerto Rico's Entrepreneurial Community?



Call for multi-sector collaboration for the development of an economic development strategy focused on entrepreneurship



Address the Entrepreneurship Data Gap



Increase visibility of the needs of people who start and grow businesses and the organizations that we serve

Novel Interactive Report

Visualize accessible data that's relevant to you and learn about ecosystem gaps and report highlights.



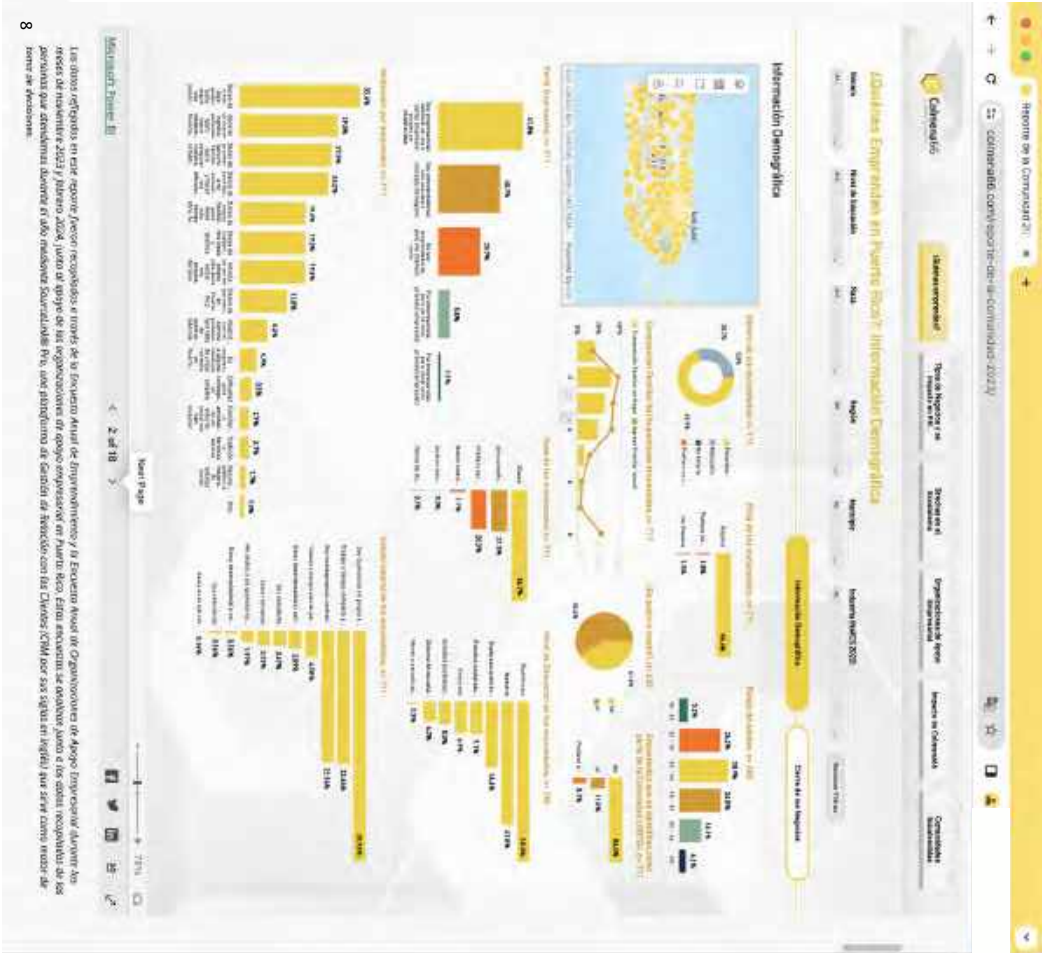
Visit our dashboard and get a comprehensive view of the ecosystem.

Special thanks to Cesar A. Narvaz, Data Specialist at P.R. Vector Control Unit and the Caribbean Center for Rising Seas, both programs of the Puerto Rico Science, Technology & Research Trust for their contribution to improve the user experience and data visualization on our Interactive Report.

Sponsored by:



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How We Gather Data

Survey Design

Every year, in a joint effort with the business community, we administer Puerto Rico's most comprehensive surveys to both entrepreneurs and Entrepreneurship Support Organizations to understand the needs and trends in our ecosystem.

From November 2023 to February 2024, our targeted outreach campaign included social media, email, and text messaging campaigns, supported by our resource network. This allowed us to increase our samples for each survey in comparison to 2022.

Who is starting businesses in Puerto Rico?

What types of businesses exist in Puerto Rico?

What impact do these businesses have?

What do we need to work on as an ecosystem?

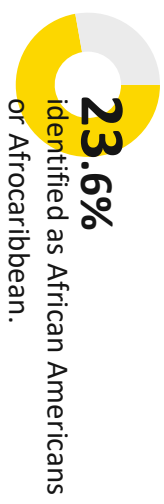


For 2023 we reached **711 entrepreneurs** (a 28% increase compared to 2022).

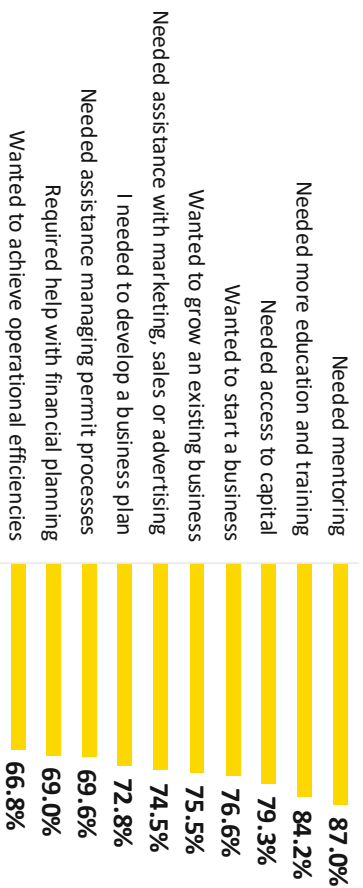
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Our Pollination: How We Did It At The Beehive

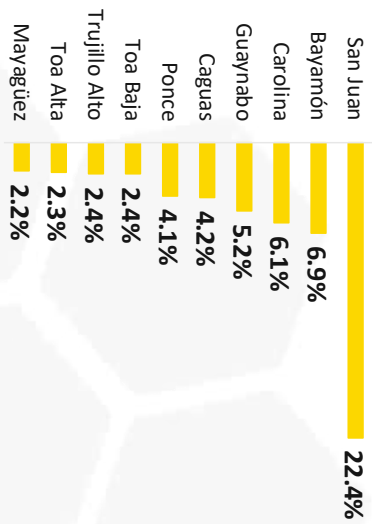
These datapoints are of the 5,009 people assisted during 2023, gathered using Sourcelink Pro.



Top Areas of Assistance Requested



Top Municipalities Served



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10

Our Pollination: How We Did It At The Beehive



3,019
Referrals to the right resource at the right time

10,031
Total interactions with entrepreneurs

5,009+
Entrepreneurs assisted

7,958
Searches on our Resource Network

Powered by:

These results are analyzed alongside data collected from the people we serve throughout the year using Sourcelink® Pro, our Customer Relationship Management (CRM) platform that serves as a decision-making engine.

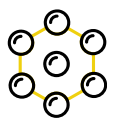
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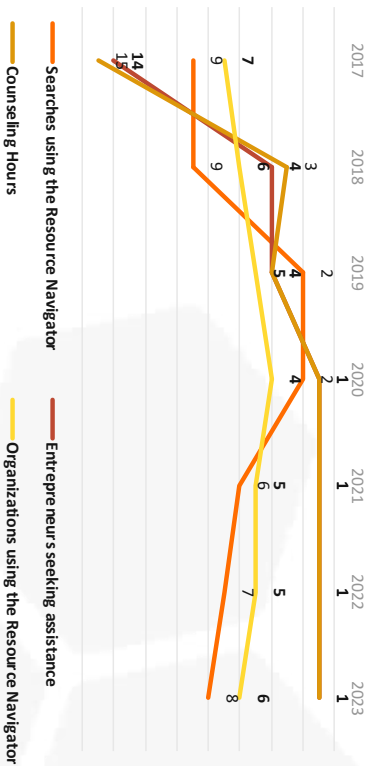
12

How Was Our Buzz?



In comparison to other Sourcelink affiliates, **Colmena66 remains at the 1st position** regarding the number of *entrepreneurs seeking assistance* and the number of *counseling hours provided*.

Ranking through the years



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During 2023, our team provided over 100 counseling hours and 300 hours of preparation time developing documents and referrals to entrepreneurs.

We also continue to grow our Resource Network, now including **over 200 organizations and programs**.



9.0/10 Entrepreneurs' average rating of Colmena66 services
9.6/10 ESOS would recommend Colmena66 to entrepreneurs
9.5/10 Entrepreneurship Support Organizations would recommend another to join the network

11



Tu Camino Empresarial

Tu Camino AgroEmpresarialSM



A map where you can easily identify the resources available to start or grow your business, according to the type of business and business stage.

4.9/5

Satisfaction rate in the
Tu Camino Empresarial Tour:
Mayagüez

190+

Participants in Tu Camino
Empresarial Tour: Mayagüez

1,330

New users of the Tu Camino
Empresarial and Tu Camino
Agroempresarial maps

Auspiciado por: **Oriental**

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14



Download yours!



This is Puerto Rico's largest entrepreneurship event. It is designed to be the most inclusive and accessible annual business education and celebration event.



1,871

Participants

9.4/10

Participants would
recommend attending a
future BE Fest event



We had a 56% increase of participants from 2022 making over 10,000 connections with other entrepreneurs and Resource Partners.

In 2023 the number of participants that traveled to Puerto Rico to participate at the BE Fest tripled (3.4x).



\$186K+

Non-paid publicity value



771K+

Social Media Reach



Acércate al GRANT

Designed for researchers and entrepreneurs to bring their innovative technologies **from the lab to the market**.

16

888

82

516

selected projects grant writing advisors applications to the program

entrepreneurs and researchers reached through the events

The Acércate al Grant's program goals are to increase the number of successful SBIR/STTR awards from Puerto Rico, with at least 80% of participants completing the program and submitting competitive proposals.



Fidelicomiso para Ciencia, Tecnología e Investigación de Puerto Rico



Colmena66
Tu Camino Empresarial



\$200k SBA GAFC23 Award

AAG is funded by the Growth Accelerator Fund Competition 2023, Colmena66 is 1 of 40 winners nationwide.



16

LEVANTA TU NEGOCIO

Levanta Tu Negocio is a crisis recovery platform to support small and medium-sized businesses (SMEs) in their preparedness and response to the impact of a crisis or disaster. It is a collective effort of the business support community, led by C66.

27

Business support organizations received data to deploy resources and help affected entrepreneurs following Hurricane Fiona.



Colmena66, along with other Resource Partners, was recognized by the PR & USVI SBA District Office for our relief efforts in the aftermath of Hurricane Fiona in 2022, receiving a District Director Award in May of 2024.



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Actions Taken:



Working Group created with the Business Emergency Operations Center, PRIMEX and the Puerto Rico Department of Economic Development and Commerce.



Network Meetup focused on crisis preparedness with working teams focusing on "precovery".



Entrepreneur referrals to PRIMEX for support with contingency plans.



We have developed an innovative self-diagnosis quiz for entrepreneurs to assess their crises and disaster preparedness. This is key to our proactive strategy to enhance crisis recovery in Puerto Rico, particularly in the aftermath of Hurricane Fiona. **With 129 entrepreneurs having used the tool, our findings reveal that a significant majority remain vulnerable to such challenges.**



levantatunegociopr.com

15

Cross Pollination: our Ecosystem Building Efforts



Trust and action are at the center of successful entrepreneurial ecosystems. We organize periodic meetups with the Resource Network to foster open dialogue, collaboration, and collective action.

In 2023 we held 4 meetups to share resources among partners and continue strengthening relationships within the ecosystem.



100+

Unique entrepreneurs support organizations represented in the events.

3.8/4

Participant satisfaction rate of the Meetups

189

Individuals participating in our 4 Resource Partners Meetups.

4

Resource Partner Meetups: North region, South region, Entrepreneurship Adults 50+, and Crisis Preparedness.

40+

New connections between the Resource Partners.

Auspiciado por:



In collaboration with AARP, we kickstarted the development of a support network for entrepreneurs 50+ composed of 20+ entrepreneurship support organizations.

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18



PULSO
Small Business Support Program

PULSO is part of SBA's Community Navigator Pilot Program, designed to provide small businesses with tools and resources to survive, grow and expand.



Our Collective Impact:

\$1 million

in approved funding, and over \$160,000 in grants disbursed, assisting 49 businesses secure capital for their businesses.

62 of the 78

municipalities of our archipelago impacted.

1,305

entrepreneurs and over 641 companies reached through workshops.

156.26 hrs

of training open to communities in the northern region.

605 jobs

retained or created.

191

companies received accompaniment and mentoring.

2,220 hrs

in technical assistance and individualized accompaniment.

63.7%

of the companies assisted through individualized accompaniment are owned by women.



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17

Cross Pollination: Plugging into the National Ecosystem



Advising the Consumer Financial Protection Bureau

Furthermore, C66's Executive Director was nominated by the President of the Federal Reserve Bank of NY to be part of the Consumer Advisory Board of the Consumer Financial Protection Bureau, becoming the first Puerto Rican living in Puerto Rico to do so.



Outreach Efforts with the U.S. Census Bureau

Colmena66 was invited by the US Census Bureau to join outreach efforts of the Economic Census 2022 that further insert Puerto Rico in the national data gathering efforts.

Cross Pollination: Plugging into the National Ecosystem



Sourcelink Summit 2023

During April 2023, we hosted the national Sourcelink Summit in San Juan, PR. The event agenda focused on sharing experiences and best practices with 35 Ecosystem Building Organizations and affiliates of the National Sourcelink Network.



Ecosystem Building Leadership Project

Ecosystem Building Leadership Network

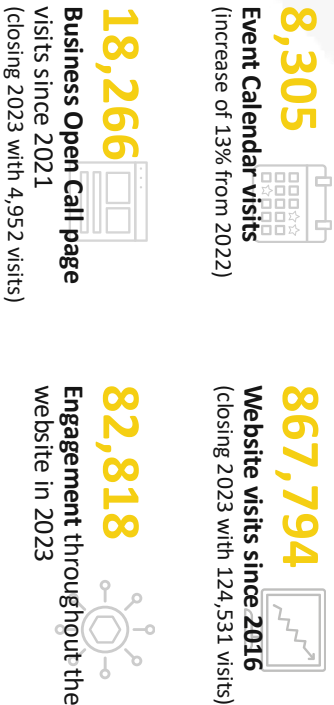
Colmena66 was selected as one of thirteen members of the first Leadership Council that is establishing the Ecosystem Building Leadership Network, dedicated to advancing the field of entrepreneurship ecosystem building.

Improving The Bee's Access To Resources

We redesigned our website!

We improved how we make our honey:

- Better navigation of our Resources Directory searches
- New Entrepreneurial Calendar
- Improved user experience throughout the website



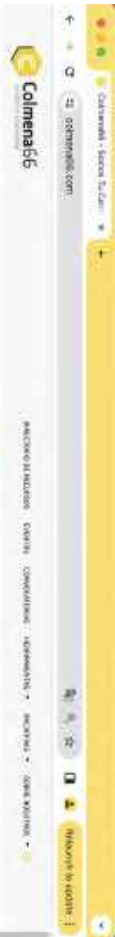
Expanding Our Collaboration With Other Bees



Colmena66
la ciencia empieza aquí



Fideicomiso para Ciencia,
Tecnología e Investigación
de Puerto Rico

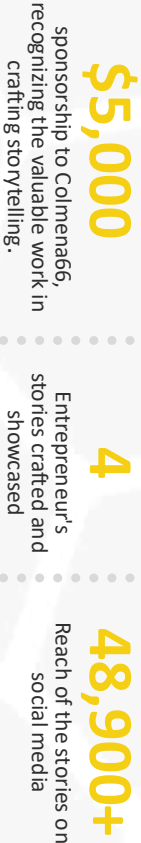


En Colmena66, nos gusta el proceso de emprendimiento y la idea de apoyar a las personas que quieren crear su propio negocio. Por eso, creamos un espacio donde se reúnen emprendedores y empresarios para compartir experiencias y conocimientos. Este espacio es el punto de encuentro de la comunidad emprendedora de Puerto Rico.

DATOS DEL PANAL



Visit our website!



Annual Entrepreneurship Survey – 2023

We reached a sample of 711 responses (28% more than in 2022 when we obtained 555 responses).

Special thanks to these contributors who provided feedback on the survey design:

- Dr. Segundo Castro, UPR
- Dra. Theany Calderon, UPR
- Dra. Arleen Hernandez, UPR
- Francisco Montalvo, New Ways Consulting



Pollination Channels (Media Reach)



18,400+
Newsletter
Subscribers



4,170,656
Impressions across our
social media*



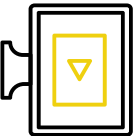
35,611
Followers across our
social media*



80+
Resource Partner events we
participated in.



\$387,667
Non-paid Publicity



378,207
Estimated views on media
coverage pieces



96
Media coverage

*Social medias: Facebook, Instagram, LinkedIn and YouTube

The Entrepreneurial Journeys of...



Visit our dashboard!



Jessica Morales
Founder



Business Type: Merchant

Stage 3: Launch

Caguas



Michelle Villegas
Founder



Business Type: Microenterprise

Stage 2: Market Entry

Guaynabo



Myrnaty Sepúlveda
Founder



Business Type: Merchant

Stage 3: Launch

Ponce



Omar Maldonado
Founder



Business Type: Second Stage Company

Stage 4: Growth

Cayey



Chelsea Serrano y Jorge Pérez
Founders



Business Type: Innovation Based Company

Stage 3: Launch

Bayamón



The companies highlighted in this report were chosen through their responses in the 2023 Annual Entrepreneurship Survey. An extensive analysis was carried out to highlight the stages of development, sector and industry, challenges, opportunities and the support received from business organizations.

Highlights of our Underserved Bees

Women



Of women rely primarily on their personal savings as a source of financing.

Adults 50+



Of older adults mention Affected Credit as a personal factor hindering business development, 5.5% more than other groups.

Afro-Caribbeans



Of Afro-Caribbeans indicate facing obstacles with Budgeting and Accounting for their business, 11% more than other groups.

LGBTIQ+



Of individuals who are part of this community, point out insufficient financial skills as a personal factor affecting hindering business development, 15.4% more than other groups.



Visit our dashboard and get a comprehensive view of the ecosystem.

The Entrepreneurial Journey of La Cocina de Mammu



Michelle Villegas
Founder

Challenges faced



Financing

The biggest challenge we have and are facing on a daily basis is the financial support needed to take La Cocina de Mammu to the next level. This has affected the launch of the product because it starts from the permits to the purchase of material for production.



Regulations

They have been working for 3 years on the necessary permits, licenses and tests that are required of the product to be able to launch it on the market in 2024.



Tu Camino Empresarial



Microenterprise

Acceso a Capital (via verde)



© 2024 Colmena66

The Entrepreneurial Journey of Meliora Centrum



MelioraCentrum

Challenges faced



Physical Location

Know the regulations and permitting, along with finding construction employees to design the desired structure. It was achieved through education on the pertinent topics in business programs and mentoring, along with an exhaustive search for a contractor, a lot of patience and perseverance.



New business model

The application and integration of new technologies may lead to resistance from patients or other health professionals due to a lack of familiarity with their benefits and usefulness. For this reason, our goal has been aimed at educating and raising awareness about the benefits of this new therapeutic tool through practical demonstrations, talks, success stories and test sessions.



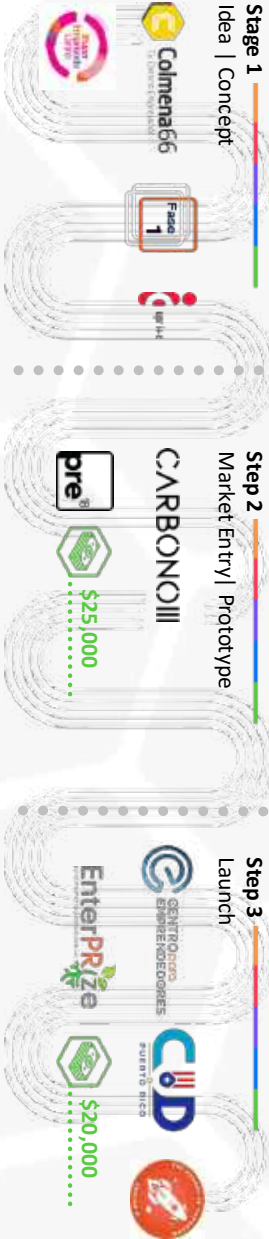
Lcda. Chelsea Serrano y Jorge Pérez
Founders

Tu Camino Empresarial



Innovation-based company

Acceso a Capital (via verde)



© 2024 Colmena66

The Entrepreneurial Journey of ConVida Cocktail Lounge



Jessica Morales
Owner and founder

Challenges faced



Financing

To declare the bar as the first and only specialized gin bar in Puerto Rico. Stand out in an industry dominated by men.

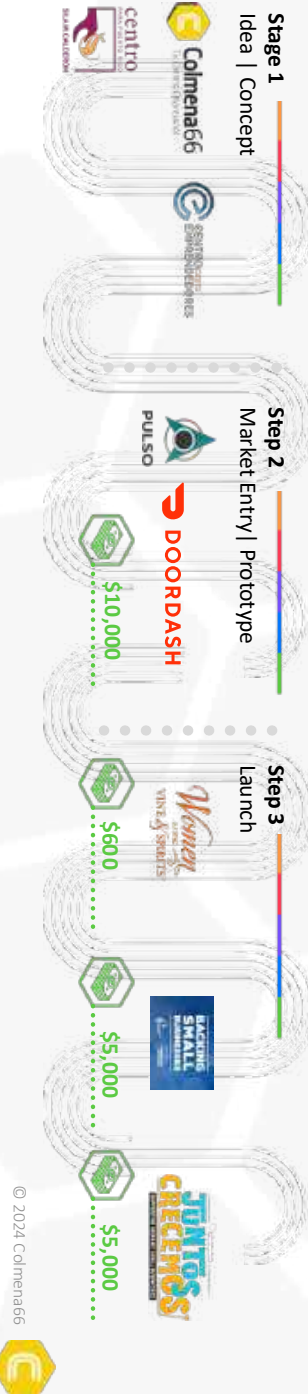


Crisis Preparedness

The kitchen of the business burned down in 2023 being a total loss. It took time for them to recover and acquire capital to face this new challenge.



Acceso a Capital (via verde)



© 2024 Colmena66

The Entrepreneurial Journey of Woody's Packaging Resources



Omar Maldonado
Founder

Challenges faced



Leadership

Just because you are the owner of the business does not mean that you are a leader or that you can lead. How we were able to cope with this was with education, change of perception and acceptance of reality.



Standardization of systems and processes

Through a lot of education over the years, documenting processes and assigning tasks, we have been able to automate the processes that have helped us streamline production in the business.



© 2024 Colmena66



Annual Entrepreneurship Support Organizations Survey – 2023

A total of 84 Entrepreneurship Support Organizations (ESOs) (17% more than in 2022) from the nonprofit, private, and government sectors, participated in this effort.



The Entrepreneurial Journey of Dema Lab Services



Myrnaty Sepúlveda
CEO & Founder

Challenges faced



Capital

It began with the need of the customers and not because it was decided to set up a business, everything was developed little by little, working with the money that came in from the services.



Regulations

Certain events during the time I was out of work affected my credit, so without capital, and without being able to apply for loans, lines of credit or other aid, it was quite difficult to manage the economic part of the business.



Crisis Preparedness

Between the atmospheric events and electrical failures we had problems where we could not work for several days. We decided to acquire the solar panels in my home, because at the time we were working without commercial premises.

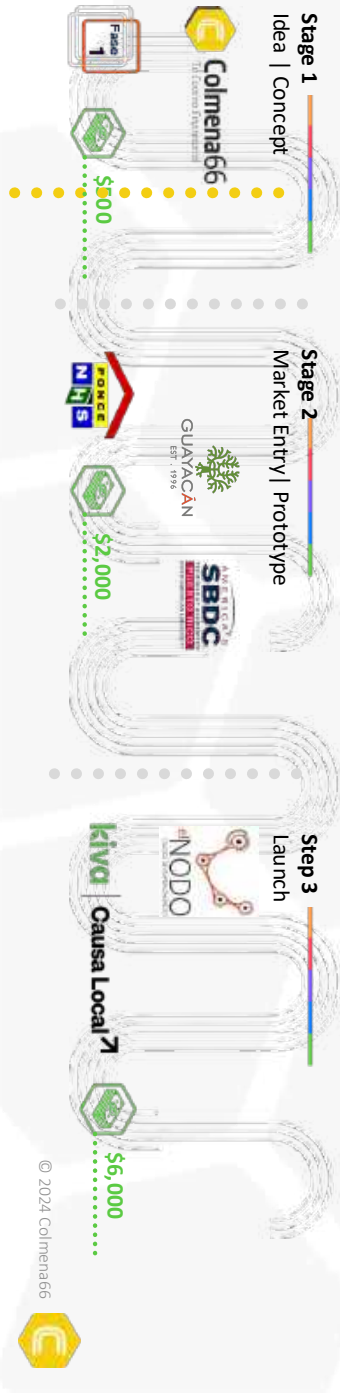


Tu Camino Empresarial



Merchant

Acceso a Capital (vía verde)



© 2024 Colmena66



The Journey Of Our Resource Partners...



Visit our dashboard!



Laura Cantero
Executive Director

Grupo Guayacán



Stephanie Figueroa Figueroa
Director of Programs & Services

Centro Para Puerto Rico



Fernando García
Executive Director

Centro Para Emprendedores

The ESOs highlighted in this report were chosen by entrepreneurs responses in the 2023 Annual Entrepreneurship Survey. We are grateful to all the organizations that supported our efforts to share actionable data for the benefit of the community.

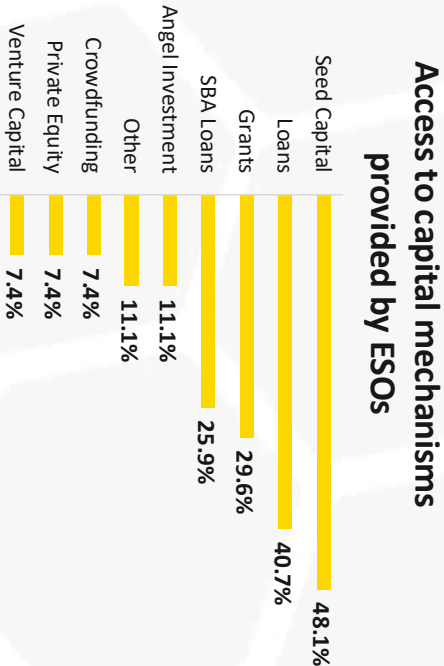
The C66 Resource Network



32% of ESOs represented in the survey provide access to capital mechanisms.

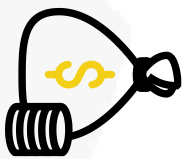
Among the reasons why entrepreneurs failed to complete the access to capital application process, ESOs highlighted:

- Lack of adequate financial projections (46.2%)
- Permitting (42.3%)
- Businesses with outdated accounting (34.6%)
- They are in very early stages (34.6%)
- Lack of Business Plan (34.6%)



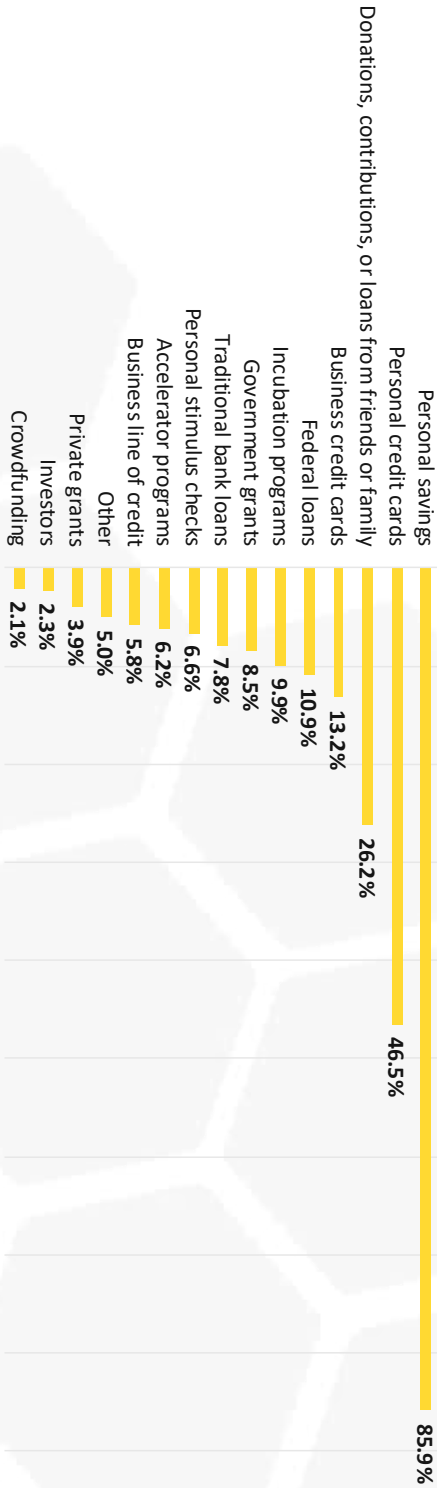
As per our survey, the capital deployed by the Resource Network in 2023 rose to \$147M, up from \$91.2M in 2022.





Financial Education and Access to Capital

Funding Sources



Entrepreneurs lack of familiarity with:

Export Incentives **66.7%**

Incentives for Creative Industries **63.8%**

Renewable Energy Incentives **62.8%**

Subsidies for Energy Trading **61.4%**

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Our Beehive's Gap Analysis

Since 2021, we have identified crucial gaps in our ecosystem, highlighted ecosystem efforts and shared recommendations continue addressing these issues.

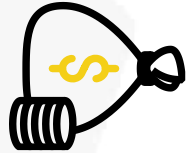
In this 2023 Status Report, we dive deeper to show entrepreneur's pains and how

To achieve significant potential for growth and development in the Puerto Rico's entrepreneurial ecosystem, in our 2023 of the Entrepreneurial Community in Puerto Rico.

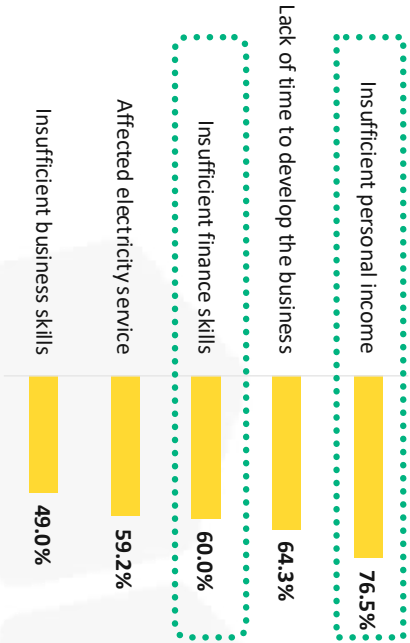


35

Financial Education and Access to Capital



Personal Factors That Have Affected Business Development

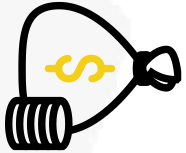


Among the main obstacles faced by entrepreneurs in the development of their businesses are:

- Availability of seed capital (64.8%)
- Current income (55.4%)
- Changes in operational costs (54.3%)
- Access to lines of credit (53.8%)
- Access to other types of private financing (52.2%)

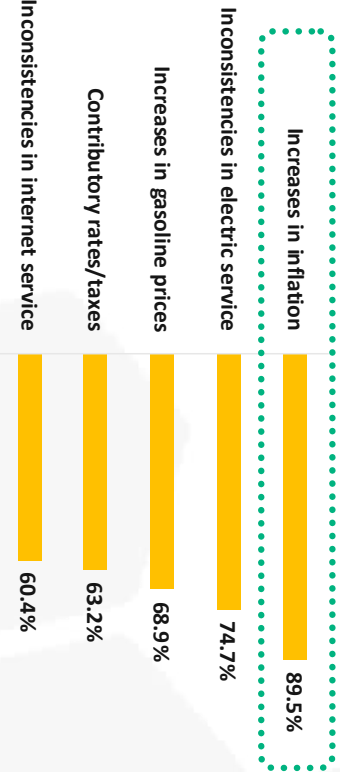


This data indicates that there is an evident need for personal finance literacy as well as access to available capital. In addition, the effect of high levels of poverty in Puerto Rico must be considered.



Financial Education and Access to Capital

External factors that have affected business development



Entrepreneurs expressed concern about the future of their businesses due to:

- Increases in inflation (78.1%)
- Changes in state tax rates (70.5%)
- Puerto Rico's public safety status (61.8%)
- State of public infrastructure in Puerto Rico (59.5%)



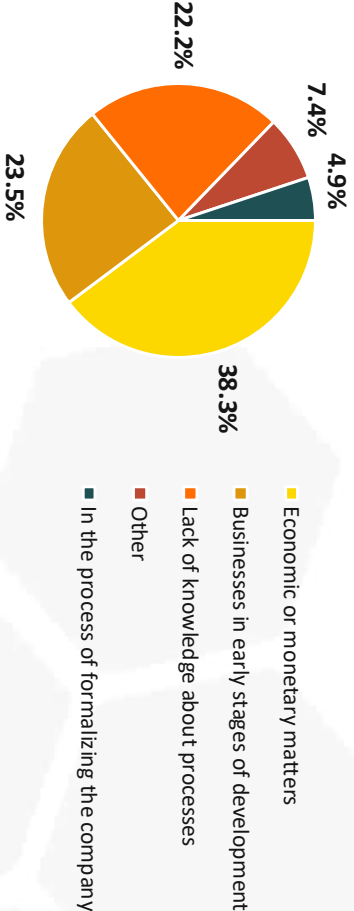
According to the Puerto Rico Planning Board's Economic Report to the Governor for 2022, the total consumers owe to lenders was \$27,958.8 million during fiscal year 2022, an increase of \$3,486.3 million, or 14.2%, relative to fiscal year 2021.

Permits and Formalization

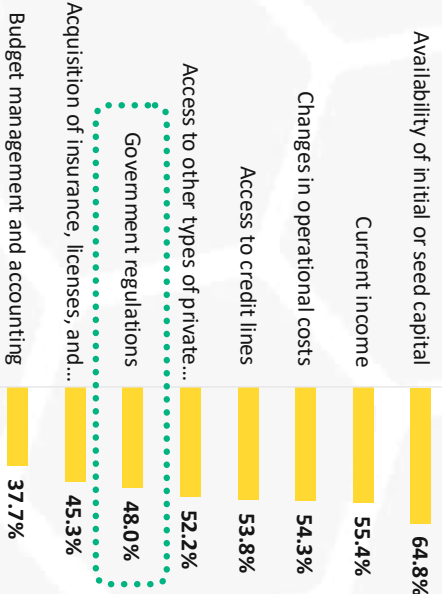


15.7% of entrepreneurs surveyed responded that their businesses are not yet formalized when asked about the legal structure of their businesses.

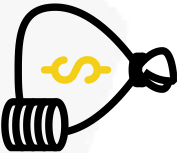
Reason why the business has not been formalized



Main obstacles in business development



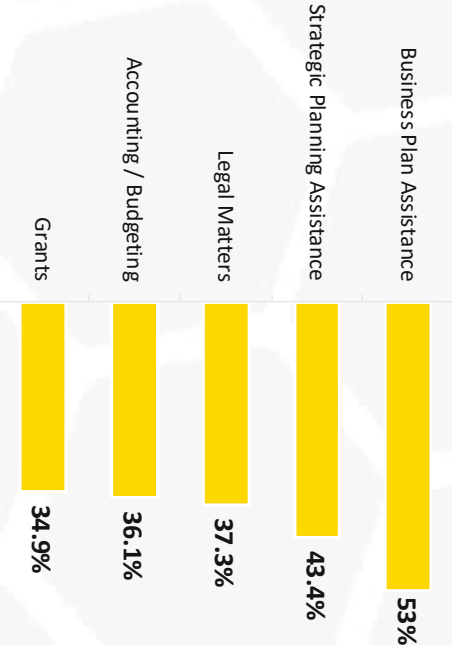
Financial Education and Access to Capital



The ESOs in the Resource Network indicated that some obstacles faced by entrepreneurs when accessing capital are:

- Lack of adequate projections (46.2%)
- Permits (42.3%)
- The business does not have its accounting up to date (34.6%)
- The business does not yet have revenue (34.6%)
- Affected Credit (23.1%)

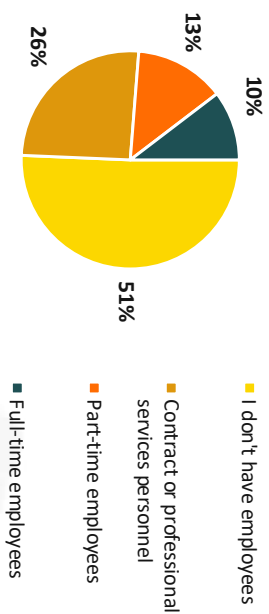
Challenges faced by entrepreneurs



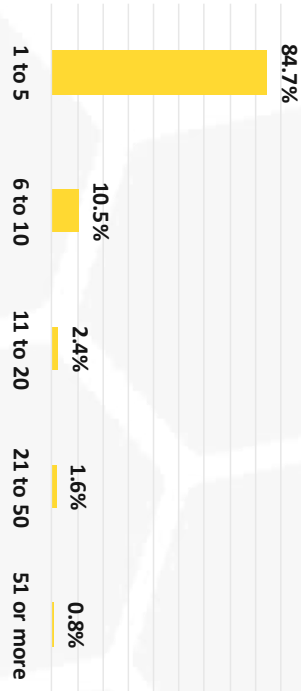


Jobs & Workforce

Type of Employees



Business Size (Number of Employees)



Approximately **68% (349)** of entrepreneurs plan to recruit staff during 2024.

Of the people who highlighted having no employees or who are the only employee and owner of their business:

28.6% are in the age range of 35-44 years

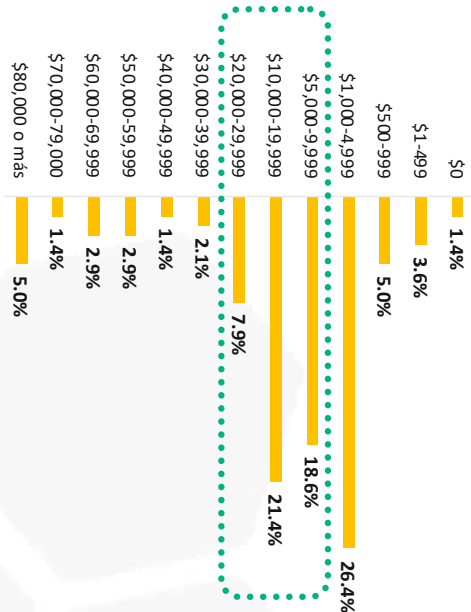
31.1% are female

22% identify as Afro-Caribbean, African American, or Black.



Permits and Formalization

Estimated loss or money not generated by the business due to the waiting time for permit approval



Comparative summary of San Juan's results in the Report: Doing Business North America 2022

"Business Formation" indicators	San Juan	Performance Highest Rank Average
Number of procedures	6	1
Time (calendar days)	6	1
Cost (as a % of income per capita)	1.29	0.11%
		0.40%

Center for the Study of Economic Liberty, Arizona State University, "Doing Business North America 2022 Report", 2023.

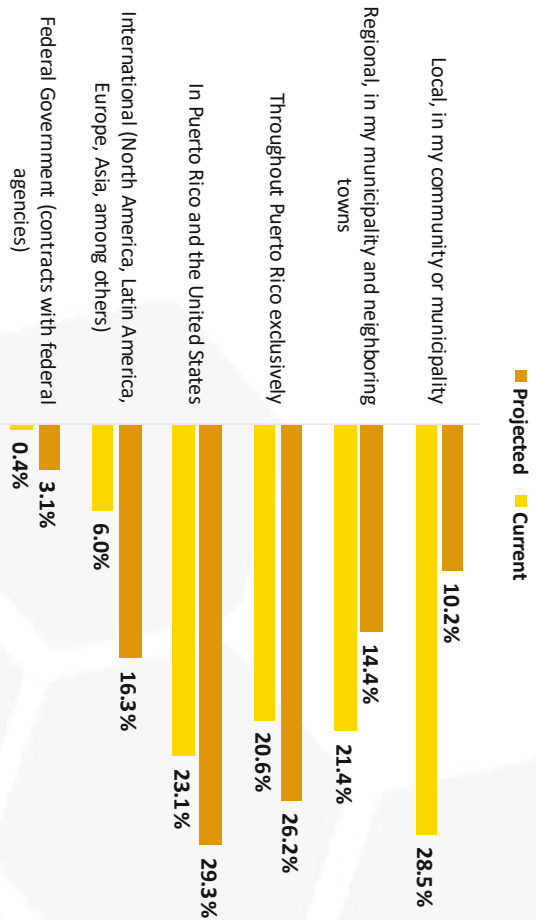


We included a question in the survey about permit approval times and found that **32.3% (140)** of respondents faced losses or opportunity costs due to permit approval delays, with about 27% reporting significant losses between \$1,000 to \$4,999."

Exporting



Current & Projected Business Reach 2023



Regarding no knowledge of export-related topics, entrepreneurs responded:

- Supply chain integration (35.5%)
- Sale and export of goods and services (30.6%)

Furthermore, in topics related to business services or resources, there is low familiarity with:

- Technology Commercialization Grants (61.4%)
- Exporting Incentives (66.7%)

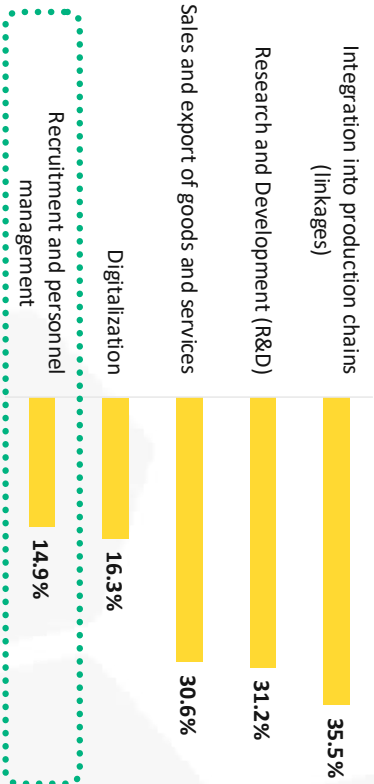
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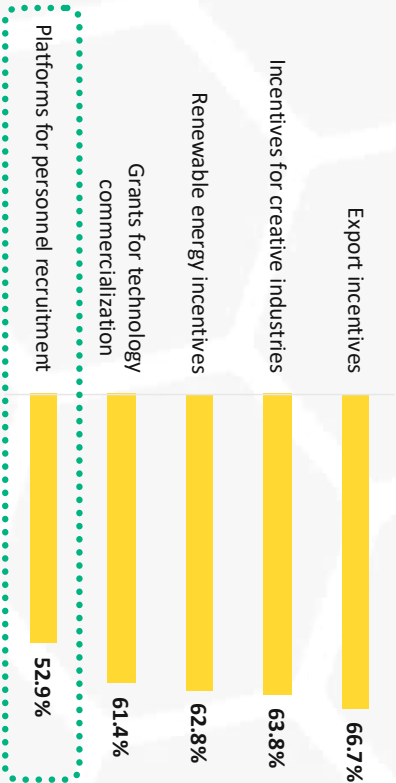
Jobs & Workforce



Business Development Areas with lowest Knowledge Levels



Business services or resources with lowest familiarity



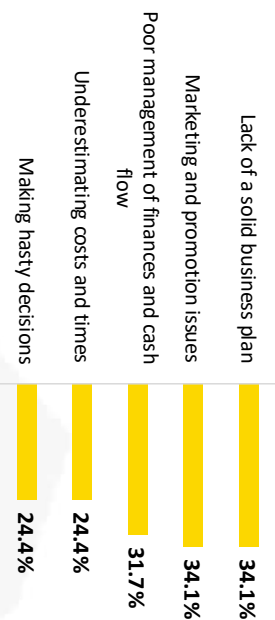
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43

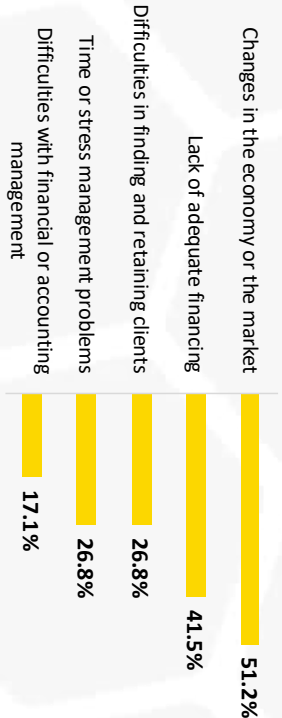
Businesses in Decline

Key Mistakes That Could Have Been Avoided



In our survey, no ESO indicated specializing in working with businesses in decline. On the other hand, when asked if they address this gap, 46.4% cannot address it, 36.9% wish to address it, and only 16.7% indicate that they are addressing this gap.

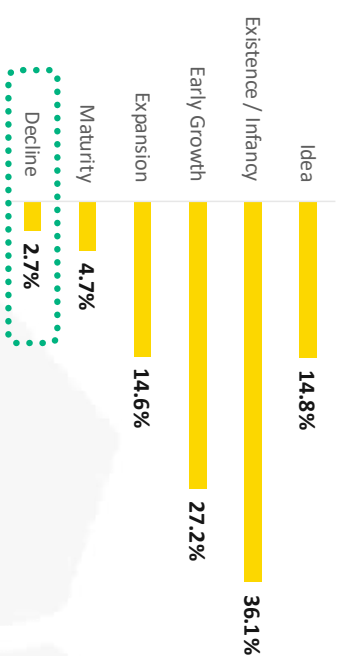
Challenges faced in developing businesses



46

Businesses in Decline

Entrepreneurs' Business Stage



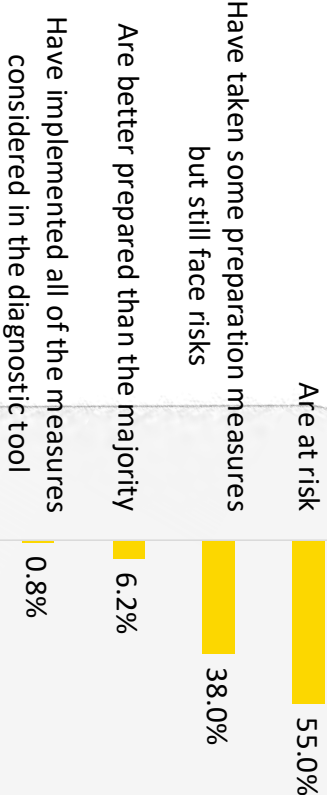
Top 5 reasons why bussiness are closing:

- Not having the necessary funds to finance the projects (29.3%)
- Not having the necessary preparation to be a successful entrepreneur (26.8%)
- Irreparable losses or damages due to a recent crisis situation (24.4%)
- Not achieving necessary sales level (17.1%)
- Entrepreneurship did not meet their expectations and they chose to stop (12.2%)

Crisis & Disaster Preparedness



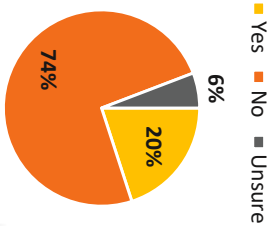
As a result of our **Crisis & Disaster Preparedness Quiz** in the Levanta tu Negocio PR platform, businesses...



N = 129

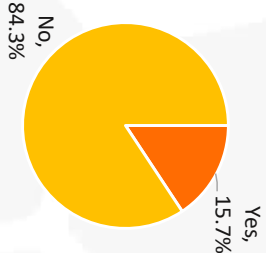
Crisis & Disaster Preparedness

Do You Have Insurance Policies?



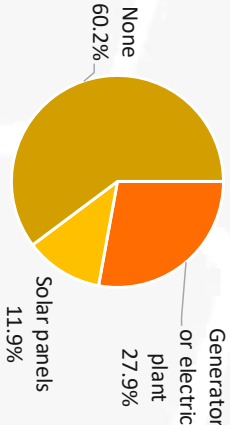
84.6% of the entrepreneurs who do not have a Contingency Fund are women, and 88.2% are Afro-Caribbean, African-American or Black.

Crisis Contingency Fund

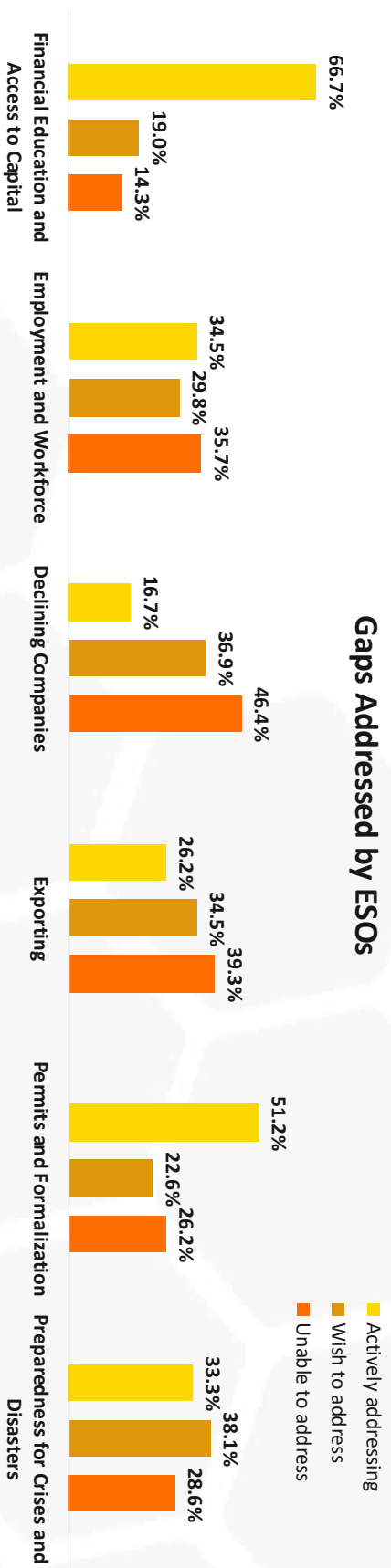


During an emergency, 25% of entrepreneurs mentioned they are able to operate for less than a month with the available resources. Other groups are able to operate for longer, 36.4% 1 to 3 months, 18.2% 3 to 6 months, and 20.4% for more than 6 months.

Electricity Generation Alternatives



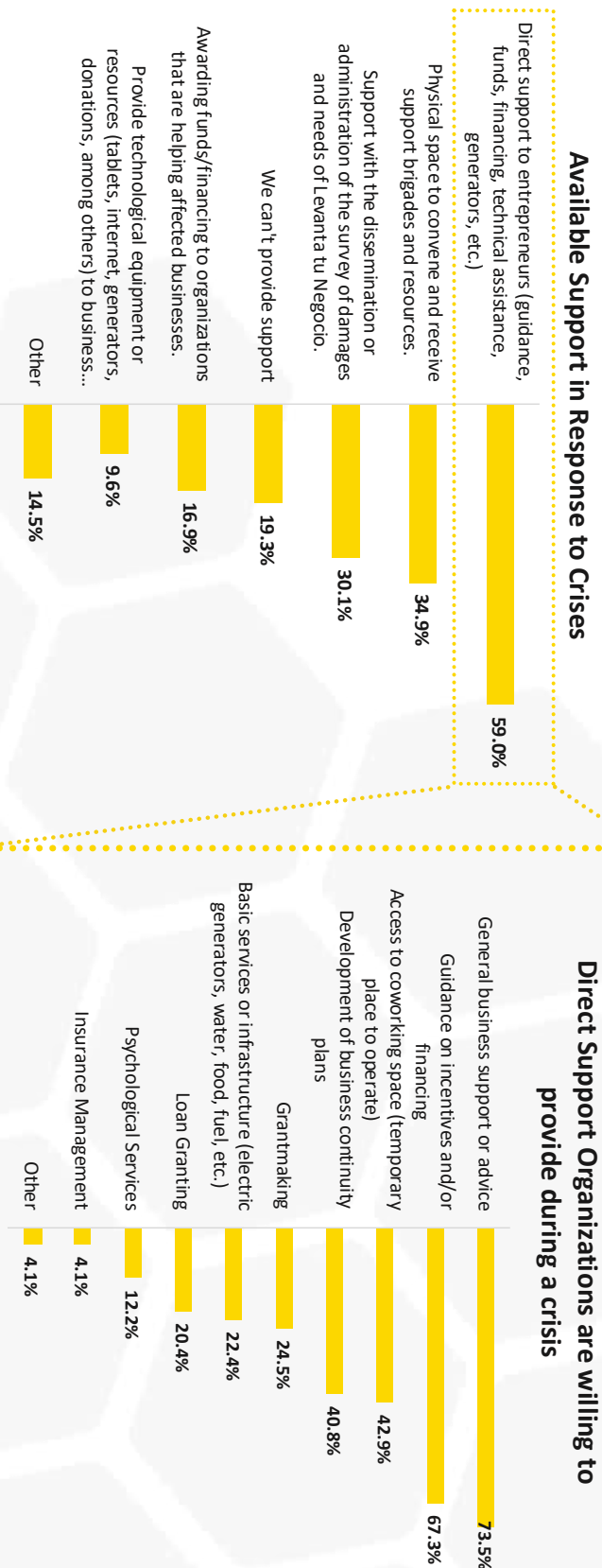
Gap Analysis of our Beehive



Challenges that entrepreneurs face, as indicated by the organizations:



Crisis & Disaster Preparedness

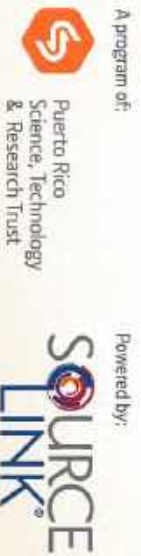




Contact Us!

✉ info@colmena66.com ☎ 787- 525-4111

🌐 colmena66.com



Bees Work Makes The Dream Work

Thanks to you, Puerto Rico can continue to position itself as a globally recognized innovation and entrepreneurship hub.

You can bee part of it too.

Become a sponsor bee to the hive!

✉ denisse@colmena66.com



Donate!





Also the PRSTRT's most recent
STRATEGIC PLAN,
applicable from 2022 through 2025
can be reviewed in these attachments

parallel¹⁸ IMPACT REPORT

2023

1

¡HOLA!

We are thrilled to announce the release of **parallel18's 2023 Impact Report**, showcasing the remarkable achievements and collective impact of both our organization and the startups we support.

Throughout the past year, parallel18 has remained committed in its mission to fostering innovation and driving positive change within the entrepreneurial ecosystem. Our Impact Report for 2023 provides a comprehensive overview of the milestones reached, initiatives launched, and transformative outcomes accomplished during this period.

Notably, this report highlights the remarkable progress of the startups that shape our ecosystem. From breakthrough innovations to significant growth milestones, each success story exemplifies the power of collaboration, resilience, and entrepreneurial spirit.

I invite you to explore this report, which serves as proof to the dedication and hard work of everyone involved in the parallel18 community. Whether you're a member of our team, a startup founder, a mentor, or a partner, your contributions have been instrumental in driving our shared mission forward.

As we reflect on the achievements of 2023, let us also look ahead with optimism and determination. Together, let us continue to leverage our collective strengths to create lasting impact and pave the way for a brighter future.

Héctor Jirau, Ph.D.
Executive Director
parallel18

2

ABOUT THIS REPORT

Eight years ago, parallel18 launched as part of a dynamic endeavor by the Puerto Rico Science, Technology, and Research Trust to invigorate the island's economic landscape by fostering a vibrant and inclusive ecosystem. Since the first generation of international startups, our interventions have left a positive mark on **452 early-stage companies**. We have provided these startups with vital support in terms of funding, mentorship, networking opportunities, resources, and avenues for investment. Our organization stands as a referrer of innovation, guiding startup alumni across the journey of development and serving as a nucleus where investors land, entrepreneurs meet, and emerging and fully developed markets link up.

This 7th Impact Report of parallel18 offers insights into the outcomes of the Gen. 11th cohort of our international acceleration curriculum, P18; the fifth generation of our local pre-acceleration program, pre18; and generations two and three of Xpand, our post-acceleration program. A total of **61 local and international startups** successfully culminated these programs during the period of January to December 2023.

This report also includes data of all startup alumni, and the initiatives and accomplishments of our subprograms.

The information contained herein was meticulously gathered through exit surveys conducted upon completion of the programs, alumni feedback spanning and additional insights meticulously curated by the dedicated team at parallel18.

parallel¹⁸

Parallel18 is an innovation hub that offers startup founders from all over the world access to high-quality business training, grants, mentorship, connections and investment opportunities to help them scale globally. The program is part of the Puerto Rico Science, Technology, and Research Trust, a private non-profit organization created with the goal of maximizing Puerto Rico's participation and creation of jobs in the global knowledge economy by promoting investment and financing of science and technology research development.

Our mission is to support your entrepreneurial journey while working to position Puerto Rico as a unique hub for innovative businesses and technology around the globe.



Puerto Rico
Science, Technology
& Research Trust



PROJECT FUNDED BY
President Joe Biden's
CHIPS and Science Act

The Puerto Rico Science, Technology and Research Trust, as described in Public Law 214-204, is a private, non-profit organization created in 2004 to foster the Island's participation and job creation in the global knowledge economy by promoting investment in and financing of science and technology research and development. It invests in, facilitates, and develops capabilities that continually advance Puerto Rico's economy and the well-being of its citizens through research and development-based enterprises, science and technology, public health, and innovation. With the vision that Rico is a globally recognized innovation hub.

The P.R. Trust for Science, Technology and Research was also designated one of 31 Tech Hubs, by President Biden's administration in 2023, to lead the PR Bio Tech Hub, with a multi-sector consortium on the Island.

parallel¹⁸

PROMOTING INNOVATION AND INCLUSIVE ENTREPRENEURSHIP

What we provide?



Supportive Ecosystem

A startup ecosystem, which has supported **400+ startups**, fosters innovation and growth by providing resources, mentorship, and networking opportunities to entrepreneurs, enabling them to thrive and succeed in their ventures.



Funding

Since 2016, we have distributed over **\$15M in grants** among our alumni and deployed **\$3.5M in capital** to startups within our investment portfolio, fueling their development and scalability.



Training & Mentorship

Our programs offer high-level mentorship tailored to the specific needs of startups, drawing from a database of **100+ mentors**, to provide invaluable guidance and expertise for their growth and success.



Investment Resources & Connections

Access to investment resources and connections with corporate partners, leveraging a network of **600+ active investors** in our database to facilitate strategic collaborations and funding opportunities, fostering their growth and market presence.

Our Programs

BioLeap

A Life Sciences innovation incubator program led by the Puerto Rico Science, Technology and Research Trust to increase economic development through innovation and entrepreneurship in the life sciences sector.



A three-month pre-acceleration program that provides grants, high-quality business training, funding, and networks to local startups to help them launch to the market. Build and run by Puerto Ricans, for Puerto Ricans.



A five-month acceleration program that provides grants, high-quality business training, funding, and networks to international startups to help them scale globally.

Pioneer and only international acceleration program in Puerto Rico.



A post-acceleration program sponsored by Banco Popular aiming to support growth-stage innovative startups from Puerto Rico that are ready to expand towards a sustainable growth and scale to new markets.

5

The Evolution

parallel¹⁸

2015

Parallel18 establishes its HQ in Santurce, Puerto Rico with the mission of accelerating local and international startups.



2016

From 9 countries, P18 accelerates 38 startups in its first cohort! With a 20-week acceleration curriculum, the selected companies connected with the island's economy while scaling into new markets.

2018



As Hurricane Maria impact the island, our pre-acceleration program is launched, celebrating its first cohort to support Puerto Rican entrepreneurs as they resiliently started to rise up after the crisis. 40 local startups successfully finished Gen. 1.

2021



As local startups transcend into a more advanced growth, Colmena66 and parallel18 joined forces to create Xpand. This program, funded by Banco Popular, seeks to support Puerto Rican companies with the necessary tools to ensure accelerated and sustainable growth towards international markets. The post-acceleration curriculum launches Gen. 1 with 16 startups.

6

MEET THE TEAM

As of March, 2024



Háctor Jirau, PhD
Executive Director
parallel18

Netasha Martínez
Program Manager
parallel18

Moncha Agüeros
Outreach Manager
parallel18

Alexandra Espinal
Business Development
Manager
parallel18

Lissa Barreras Cruz
Marketing Manager
parallel18

Sylmarie Díaz
Operations Manager
XPRAD

Bianca Conijo
Investment Manager
parallel18

Noe Crespo, PhD
Associate Director
BOLEAP



Yessica Fontánez
Startup Executive
parallel18

Doliana Colon
Startup Executive
parallel18

Gabriela Alices
Office Coordinator
parallel18

Allison Martínez
Communications
Specialist
parallel18

Augusto Suárez
Lead Designer
parallel18

Mireya Ramos
Startup Representative
XPRAD

Jaleen Álvarez
Communications
Specialist
BOLEAP

Maria del Mar López
Startup Specialist
BOLEAP

OUR MENTORS

One of the fundamental advantages of our programs lies in the extensive network of mentors we offer. With over **100 mentors** onboard, parallel18 endeavors to empower entrepreneurs by providing access to carefully selected experts who impart their wisdom through insightful sessions and personalized interactions.

During the period included in this report, our mentors were actively engaged with our community, playing a crucial role in fostering growth and collaboration.

9.5

Average rating on quality of seminars & workshops.

66

Seminars & workshops offered to P18 & pre18 alumni.

9.9

Average rating on average quality of office hours.

541

Office hours between our mentors and mentee (including alumni).

+30.4% increase in office hours offered through our programs compared with Y6 Impact Report

MEET OUR 2023 MENTORS **IN-RESIDENCE**

Valentina Jordan



Valentina Jordan is a tech and startup veteran with preparation in Business Administration and Economics and background in Sales and Product Development. Valentina was born and raised in Colombia, but spent most of her professional career working in Mexico and Brazil, focusing on strengthening the startup ecosystem in LatAm. Valentina was one of Rappi's early employees (one of Colombia's Unicorns and biggest on demand delivery platform in LatAm), playing a trivial role in Mexico's launch as well as vertical expansion. After Rappi, Valentina joined Canary, Brazilian early stage VC, as the Spanish Speaking Lead running new investments and portfolio management.

Kristin Choi

Kristin is an accomplished Operations/Business Development executive and corporate attorney with over 20 years of experience advising clients and structuring deals across industries including edtech, esports, hospitality, mobility, financial services, and REITs. As Managing Partner of DotLine, she collaborates with Venture Capital Firms and their portfolio companies to provide advisory services on go-to-market strategies and scaling, and financial planning and fundraising strategies. Kristin also runs investment syndicates to invest in startups across medtech, beauty, edtech and fintech.

Kristin holds an undergraduate degree in Political Science and Diplomacy from Yonsei University, Seoul, Korea, and a law degree from Georgetown University Law Center.



MEET OUR 2023 MENTORS **IN-RESIDENCE**

Stephanie Lee



Stephanie Lee has over 25 years of financial services experience. She currently runs her own investment and consulting firm advising venture capital firms and venture-backed companies with a focus on building and scaling high-growth tech-enabled companies. She is an advisor to the TempoCap VI Fund which includes investments in Acorns, Azimo, CurrencyCloud, Dacadoo, Everledger, and Simpleurance. She was also a strategic advisor to Rakuten Capital where she sourced deals, conducted due diligence, and was a part of the investment committee. Prior to starting her own firm, she led a buyout of Leading Quality Assurance Ltd. (LQA), the world's market leader in benchmarking analysis for the luxury hospitality industry where she took the role of CFO. Stephanie's prior experience also includes HSBC, where she was the global relationship manager for some of the bank's marquee asset manager clients such as BlackRock and PIMCO, and Neuberger Berman, where she led distribution of alternative assets to fund of funds. She holds an MBA from Harvard Business School and an AB from Harvard College.

Henry Keenan

parallel[®]
ALUMNI

After his journey in research and development for Latin America at real estate company JLL, Henry Keenan transitioned to Dubai for a consulting role before pursuing studies at UC Berkeley. Subsequently, he co-founded the Startup With Purpose Foundation, a nonprofit aimed at supporting entrepreneurs in Jordan and Kuwait. Presently, Keenan serves as the founder and CEO of RED Atlas, a technology software firm specializing in providing real estate professionals with extensive information on properties and property markets. Launched in 2021, RED Atlas leverages AI, machine learning, and user-generated data collection processes to construct its comprehensive database. Backed by \$1.35 million in funding, Keenan anticipates the company to generate \$1.2 million in revenue this year.



MEET OUR 2023 MENTORS **IN-RESIDENCE**



Xiomara Figueroa parallel¹⁸ ALUMNI

Xiomara is seasoned tech leader, and software engineer with a proven track record. She's passionate about transforming ideas into beloved, user-friendly products. As the co-founder and former CTO of BookSloth, she played an integral role in shaping the platform from its inception to becoming a acclaimed community hub for book lovers. Alongside her entrepreneurial journey, Xiomara continues to empower aspiring founders and professionals through mentorship, sharing her insights and expertise to help them navigate the challenges of the startup world.

Mario Rodríguez

Mario Rodríguez, a dedicated finance professional, holds prestigious titles including CFA and CPA. With a strong financial background, Mario has excelled in various roles within the financial services sector. As a Project Manager in Sell Side M&A at STS Capital Partners, Portfolio Manager at Atlas Asset Management, AVP Fixed Income Trader at Citigroup, and Associate Financial Consultant at Charles Schwab, Mario has showcased expertise and achievements. His track record includes securing mandates, providing stock recommendations yielding financial gains, and optimizing processes for enhanced productivity.



parallel¹⁸ 2023 **HIGHLIGHTED MENTORS**



John Branch
Go to Market Strategy



Neil Cohen
Storytelling



Alyssa Dizon
Prepare your product team to scale



Mario Medina
Investor Stewardship & Growing Operations



Devin Baptise
Unit Economics & Venture Path



Deborah Collazo
Leadership & Strategic Planning



Moises Figueroa
Intellectual Property &
The Legal Side of Branding

our 2023 PARTNERS



The Puerto Rico Science, Technology and Research Trust (PRSTRT) and parallel18, in collaboration with Banco Popular, signed an agreement to support and sponsor events aimed at connecting entrepreneurs worldwide with high-quality connections, mentoring, and networks to facilitate global scaling, enabling parallel18 to organize impactful events for entrepreneurs globally and within the local community, thereby reaffirming Banco Popular's dedication to fostering entrepreneurship for driving and sustaining the economic development of the Island.



The Puerto Rico Science, Technology and Research Trust (PRSTRT) and parallel18, in partnership with Aeronet, a leader in high-speed broadband internet in Puerto Rico, renewed their collaborative agreement to provide high-speed connectivity for all parallel18 alumni, current startups, and the parallel18 team, enabling them to operate efficiently from the organization's co-working space while reaffirming Aeronet's commitment to serving as a valuable ally for startups and the local entrepreneurial community.



The collaborative agreement between the Puerto Rico Science, Technology and Research Trust (PRSTRT), parallel18, and Mastercard, a global leader in payments and fintech, supported innovative businesses in our programs. Through this strategic partnership, our startups had access to technical support and mentorship, fostering their local and global growth within a workspace sponsored by Mastercard.



DECA Analytics, an advisory firm for strategic investment support, entered into a partnership with parallel18 by offering valuable financial support that contributes to the success of our events and provides essential resources for the growth and development of our startups. This collaboration enabled us to expand our reach, enhance the quality of our programs, and empower emerging entrepreneurs with the tools and opportunities they need to thrive in today's competitive landscape.



SUMMARY





Powered by Puerto Ricans for Puerto Ricans

Our local pre-acceleration program, **pre18**, empowers individuals to transition from their day jobs to full-time entrepreneurship by equipping them with essential resources, mentorship, and knowledge. By addressing the financial constraints and educational barriers commonly faced by local entrepreneurs, we're creating a supportive environment where innovative ideas transform into successful ventures. Our aim is to foster an ecosystem where individuals are empowered to pursue their entrepreneurial aspirations without the fear of financial instability or lack of guidance. In doing so, **we're not only boosting economic growth but also a culture of innovation and entrepreneurship within our local communities.**

Cumulative results:

Gen.1 - Gen5

1,500+

applications received

*Gen 6 application round data included in this cumulative number

161

graduated companies

\$3.4M USD

grants distributed

72%

companies still active

\$4.1M USD

cumulative revenue in Puerto Rico

Presented results are based on 30 pre18 alumni that completed the survey. Companies still active rates are estimated based on the Department of State filings and reasonable assumptions on the company's continuous operations. Active companies include those that were acquired or merged into a bigger conglomerate to avoid a left-tailed bias. Cumulative revenues may be understated as it relies on the company's form responses.

15



Gen.5

Pre18 Gen.5, consisted of 23 startups in industries such as Agrotech, Insutech, Fintech, Edtech, E-Commerce, Healthtech, Regutech, and more.

After 12-weeks, **100% of the startups had their products in the market** reporting increases in sales during their time in our program. As part of the curriculum for this cohort, the founders received over **34 mentorship sessions**, engaging in more than **39 GiveBack sessions** that impacted over **2,400 individuals**. With a total of over **219 hours of direct contact with mentors**, participants also forged **valuable business connections**, enriching their entrepreneurial journey and expanding their network within the industry.

Cohort results:

pre18 Gen. 5

\$587,500 USD

in grants distributed

\$323,988 USD

cumulative revenue in Puerto Rico during the program

\$912,000 USD

Private capital raised since inception

39

jobs created

Presented results are based on all pre18 Gen.5 alumni that completed the Impact Report survey and data captured in the exit surveys of the 23 startups of the cohort.

16



P18 SUMMARY



Pioneer and only **international** acceleration program in Puerto Rico.

By welcoming companies from across the globe, we foster a diverse ecosystem that not only supports the local business landscape but also provides invaluable opportunities for global expansion. Our dedicated team is committed to offering top-notch business education, facilitating business connections, and paving the way for investment opportunities for all our startups. Through these efforts, we strive to not only accelerate the growth of individual businesses but also positioning Puerto Rico as a hub for innovation and entrepreneurship on the world stage.

Cumulative results:

Gen.1 - Gen11

8,750+ **279** **\$624.3M** ^{USD}

applications (from Gen.1 through Gen.11)

graduated companies

cumulative valuation

\$11.7M+ ^{USD}

grants distributed

\$409.7M ^{USD}

cumulative revenue

\$320.7M ^{USD}

cumulative capital raised

75%

companies still active

883

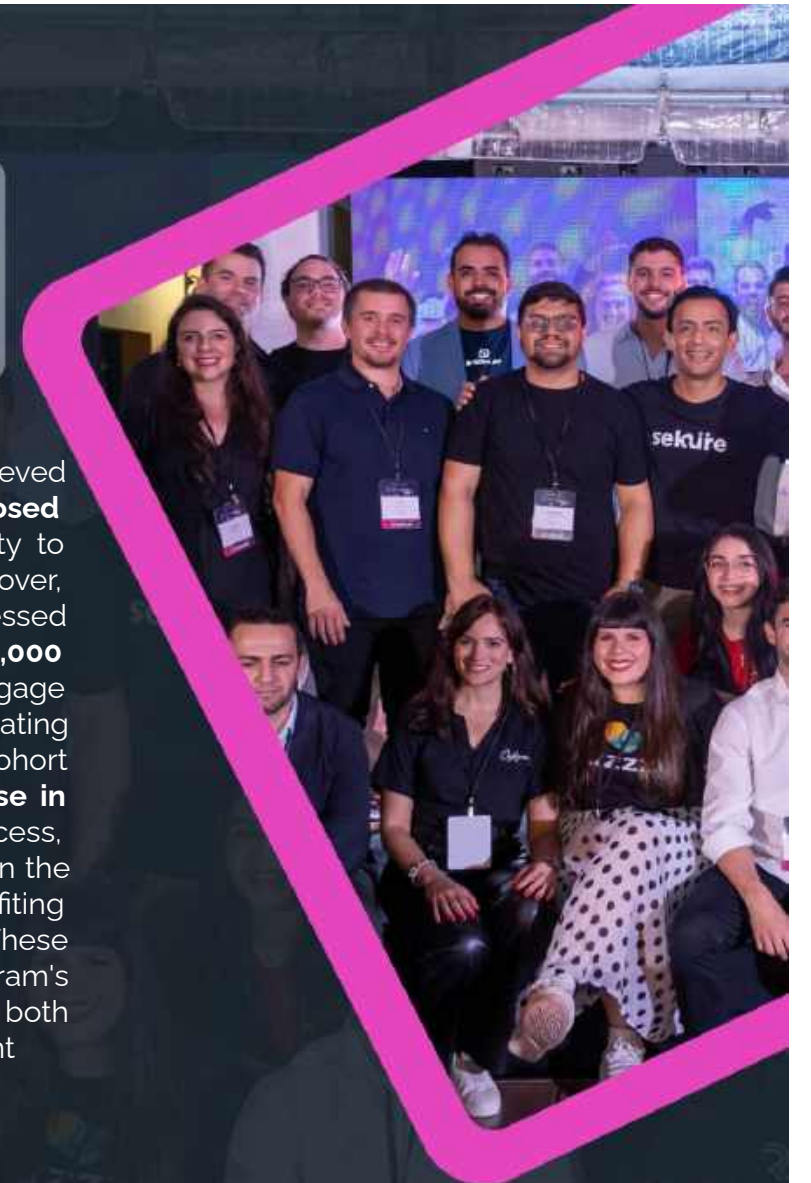
Jobs created

ⁱ Valuation results are based on 99 of P18 alumni that completed the survey and ventures quarterly updates. Reported revenue reflects data since startups inception based on information submitted on their surveys. Companies still active rates are estimated based on the Department of State filings and reasonable assumptions on the company's continuous operations, including new companies from the latest cohorts completed.

19

GEN.11

In a span of just 20 weeks, Gen. 11 achieved remarkable milestones. With **73 closed deals**, this cohort showcased its ability to effectively cater to clients' needs. Moreover, its subscriber-based ventures witnessed significant growth, welcoming over **64,000 new** subscribers who were eager to engage with their offerings. Demonstrating substantial progress, the eleventh cohort experienced a remarkable 2.6x **increase in revenue**. Beyond its commercial success, the #p18ners made a positive impact on the community, with **829 individuals** benefiting from its Giveback program. These accomplishments underscore the program's effectiveness and its commitment to both business growth and societal betterment



Cohort results:

P18 Gen.11

\$760k ^{USD}

in grants distributed among 19 startups

\$380k ^{USD}

investment deployed

\$1.3M ^{USD}

revenue generated

\$83M ^{USD}

cohort valuation

\$675k ^{USD}

capital raised during the program

ⁱ Presented results are based on the 19 P18 Gen.11 alumni that completed the Impact Report survey and data captured in the exit surveys of the cohort.

20

P 1 8

GEN.11



xpand SUMMARY





Supporting growth-stage innovative startups from Puerto Rico

Xpand is a community-driven program subsidized by Banco Popular de Puerto Rico with the purpose of supporting innovative companies in advanced growth stages in Puerto Rico, ready to expand towards sustainable growth and scale into new markets. This program provides a crucial stepping stone for companies that have already gone through acceleration phases and are now focused on further expansion.

During 2023, the members of Xpand participated of **53.5 hours of specialized mentorship**, and engaged in **29 sessions or workshops** tailored to their needs. The founders had access to a diverse pool of **27 internal and external resources/mentors**, providing comprehensive support. Through these interactions, a remarkable total of **115 connections** were established, enriching the participating companies networks and opportunities. This cohort represented seven different industries, reflecting a broad spectrum of expertise and perspectives. Additionally, their ambitions extended across five countries for export, spanning: **México, Colombia, Chile, Argentina, and the USA, with a focus on regions such as Florida and California.**

Cumulative results:

Gen.2 - Gen3

19

graduated
companies

\$52M^{USD}

cumulative
revenue

38ⁱ

jobs created

\$129M^{USD}

cumulative
valuation

100%

companies still
active

\$100K^{USD}

capital Invested in
participants

ⁱ Presented results are based on the 6 Xpand alumni that completed the Impact Report survey and data captured in the exit surveys of the cohort.

23



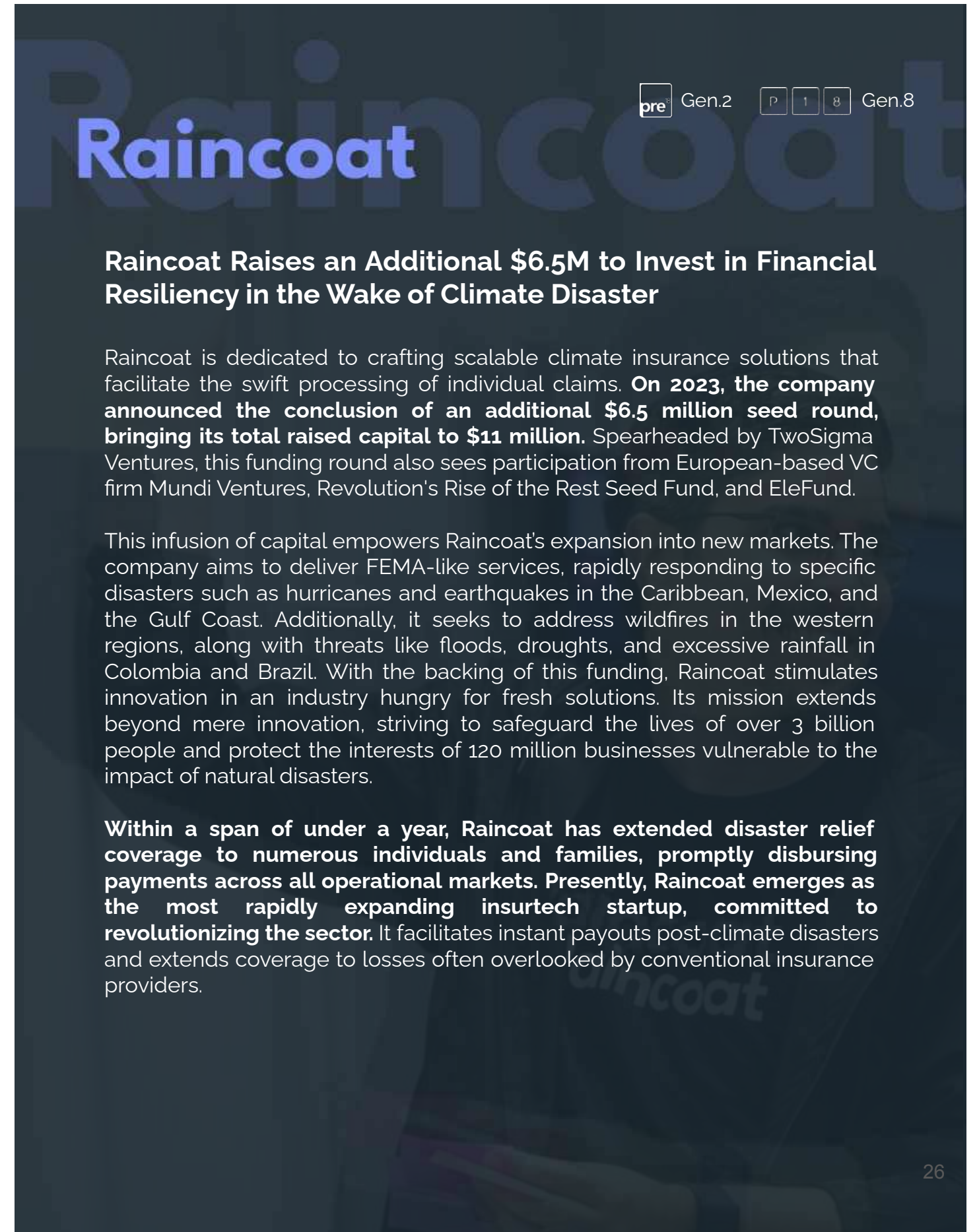
Konti, Libros787 and PRoduce join the investment portfolio of the Puerto Rico Science, Technology and Research Trust.

With the launch of Xpand Gen.3, parallel18 had the opportunity to allocate **\$100,000 in seed capital investment in up to three companies participating in this initiative through the PRSTRT**. Konti, Libros787 and PRoduce joined the investment portfolio of the Puerto Rico Science, Technology and Research Trust by receiving this funding, which not only serves as a financial boost but also signifies a validation of their potential in the eyes of industry experts. **These local companies join the 82 ventures in the Trust's investment portfolio.**

“PRoduce has always had the clear purpose of replacing imports to not only contribute to the local economy, but also generate value and social impact on our island. Xpand was not only interested in the profitability and growth of PRoduce, but through this investment recognizes the great social impact generated by our initiative. We deeply thank Xpand for believing in our vision of business success that benefits many.”

Crystal Diaz
Co-Founder
PRoduce

24



Raincoat Raises an Additional \$6.5M to Invest in Financial Resiliency in the Wake of Climate Disaster

Raincoat is dedicated to crafting scalable climate insurance solutions that facilitate the swift processing of individual claims. **On 2023, the company announced the conclusion of an additional \$6.5 million seed round, bringing its total raised capital to \$11 million.** Spearheaded by TwoSigma Ventures, this funding round also sees participation from European-based VC firm Mundi Ventures, Revolution's Rise of the Rest Seed Fund, and EleFund.

This infusion of capital empowers Raincoat's expansion into new markets. The company aims to deliver FEMA-like services, rapidly responding to specific disasters such as hurricanes and earthquakes in the Caribbean, Mexico, and the Gulf Coast. Additionally, it seeks to address wildfires in the western regions, along with threats like floods, droughts, and excessive rainfall in Colombia and Brazil. With the backing of this funding, Raincoat stimulates innovation in an industry hungry for fresh solutions. Its mission extends beyond mere innovation, striving to safeguard the lives of over 3 billion people and protect the interests of 120 million businesses vulnerable to the impact of natural disasters.

Within a span of under a year, Raincoat has extended disaster relief coverage to numerous individuals and families, promptly disbursing payments across all operational markets. Presently, Raincoat emerges as the most rapidly expanding insurtech startup, committed to revolutionizing the sector. It facilitates instant payouts post-climate disasters and extends coverage to losses often overlooked by conventional insurance providers.



P 1 8 Gen.X

Konvex Secures \$700K for PropTech

Konvex secured substantial backing in its investment round from a variety of sources. Notable supporters include accelerator programs like 500 Startups and parallel18, along with venture capital firms like Mexico's Avalancha Ventures. Furthermore, the round saw contributions from international angel investors such as Adrial Araujo (CEO of Hackmetrix), Ivan Peña (former JP Morgan executive), Fernando Cabello (CEO of Devengo.com), Ricardo Ortiz (Founder of Siigo), Luis Barrios of Arkfund and Payments Way, and Mauricio Suarez (VP Sales of Stockpress).

This funding injection comes on the heels of Konvex's impressive performance. **The startup has facilitated over 500,000 transactions in accounting reconciliations, making a significant impact on more than 80 e-commerce stores.** Notably, it has successfully reconciled over \$5 million across five countries in the region. Founder Rodríguez underscores Konvex's unwavering commitment to innovation, positioning the startup as a driving force in the open finance revolution sweeping Latin America.

With this infusion of capital, Konvex is poised to further its growth trajectory and expand its influence within the proptech sector. This strategic move positions the company for success not only within its local market but also on a global scale.

27



pre Gen.2 P 1 8 Gen.7

Amasar received the "Golden Ticket" with the opportunity to join KeHE's product portfolio, allowing them to reach over 30,000 establishments in the United States.

The Puerto Rican company Amasar, dedicated to the production of products, mainly made with breadfruit, **received the "Golden Ticket" in the alternative flour category of KeHE's "Trend Finder" initiative, one of the main national distributors of natural products in the United States.**

KeHE distributes natural, organic, specialty, and fresh products in North America. The 44 winners of the Golden Ticket will be in KeHE's product catalog and will have exposure in more than 30,000 retail stores. In addition to helping selected brands navigate the distribution industry, KeHE offers suppliers free promotional programs.

Amasar was founded in 2016 and launched its first product in 2018. Their farm operates with renewable energy, collects rainwater for irrigation, and has contour trenches to prevent soil erosion. Currently, they have four products in the local market: all-purpose flour, pancake mix, and two breakfast creams.



P 1 8 Gen.7

The Live Green Co. in their way to Clean Up Food Labels With AI-Powered Precision Fermentation

Malaysian pharmaceutical giant Duopharma Biotech Berhad (DBB) **will invest up to US\$1 million in US-based AI company, The Live Green Co (TLGC) to develop plant-powered pharmaceutical products and functional foods.** This investment builds upon the partnership established last year between the two companies, aiming to jointly create innovative products leveraging TLGC's Chakara technology platform.

Notably, this collaboration marks TLGC's inaugural venture into the pharmaceutical realm.

The Live Green Co specializes in utilizing technology for the advancement of plant-based foods categorized as "next-gen." Through its Chakara platform, it employs data science to explore plant-derived substitutes for animal-based, synthetic, and heavily processed ingredients.

28

parallel¹⁸ VENTURES



parallel¹⁸ VENTURES

Startups rely on investment to fund their operations and boost their growth. But raising money is not an easy task. Founders need a clear company strategy and amplify their options to identify the right investors. This is exactly what parallel18 Ventures does: we offer our startups advice, connections to our investor database, and support during the process of raising funds.

The parallel18 investor network is composed of hundreds of local and international members, which actively invest in startups from Latin America, the United States, and Puerto Rico.

Total Investment Raised (Gen. 1 - Gen. 11; since company's inception)



\$24,824,800 ⁱ USD

Portfolio Raised (21 current startups)



\$60,289,000 ⁱ USD

Portfolio Raised (49 current startups)

\$3.5M USD

Capital deployed (Including Business Continuity Fund)

86%

Portfolio Companies Still Active Including the Business Continuity Fund

ⁱ Presented results are based on recurrent data captured from parallel18 portfolio companies. Companies still active rates are estimated based on the Department of State filings and reasonable assumptions on the company's continuous operations.

30



Parallel18 VENTURES MATCHING FUND is a follow-up co-investment fund designed to match capital that parallel18 entrepreneurs raise from private investors to help them complete their investment rounds. The fund focuses on companies with good standing in parallel18 that continue to accelerate their growth and establish commercial and/or operational ties to Puerto Rico.

54

Investments
Deployed

\$2.46M^{USD}

Capital Deployed

94%

Companies still active

Represented Countries:



2023 Open Rounds of Investment

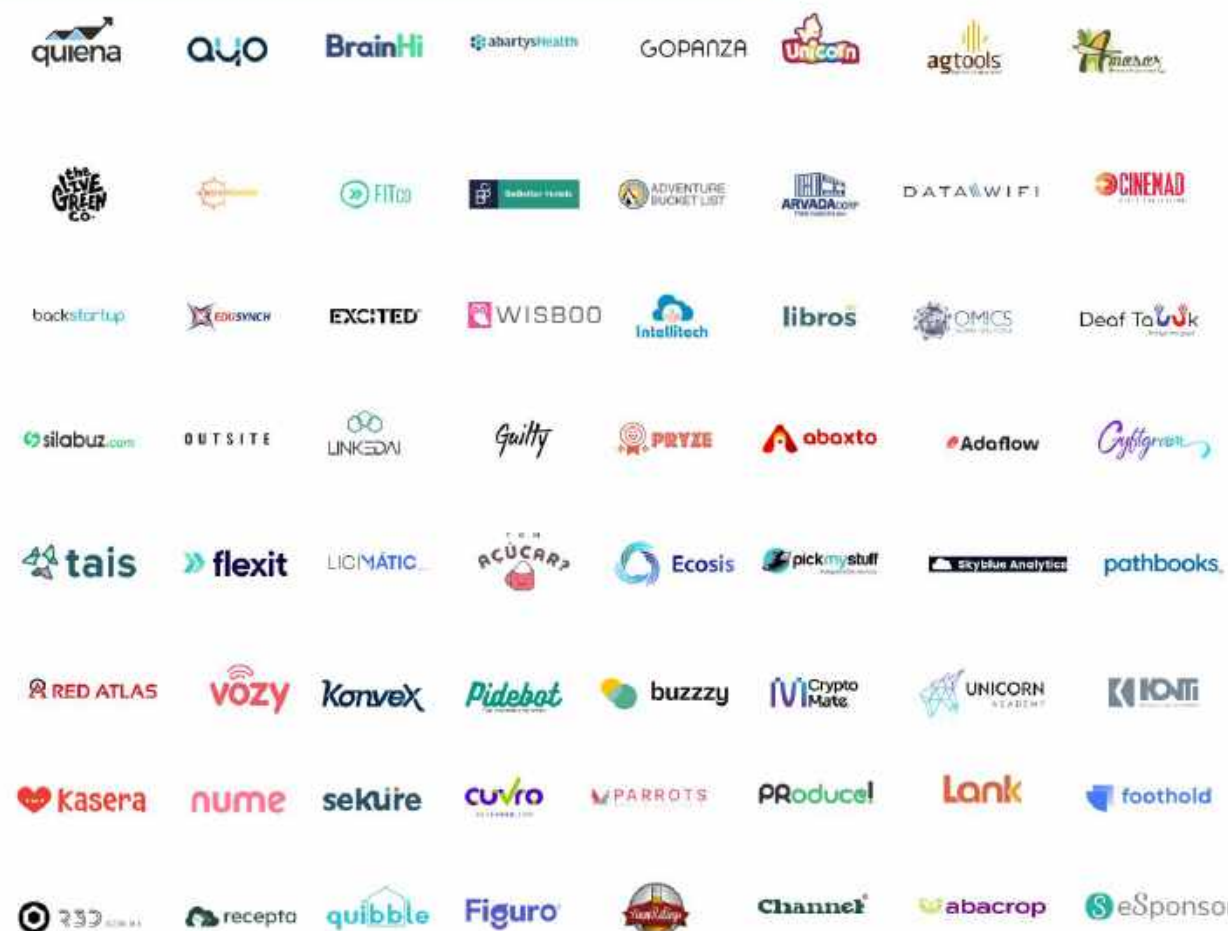


Presented results are based on recurrent data captured from parallel18 portfolio companies. Companies still active rates are estimated based on the Department of State filings and reasonable assumptions on the company's continuous operations.

31

PORTFOLIO COMPANIES

As of 2023



Acquired companies:



32

parallel¹⁸ | VENTURES SUMMIT

At the 2023 Ventures Summit Event, handpicked startups were granted a unique opportunity to not only present their fundraising pitches but also to showcase their groundbreaking products. This event gathered entrepreneurs, investors, and industry experts to converge and explore the forefront of innovation. These startups captivated potential investors with their vision, strategy, and product offerings, aiming to secure the necessary funding to push their ventures forward. It was a dynamic and inspiring occasion where innovation took center stage, driving discussions and collaborations that could potentially shape the future of various industries.



Sponsored by:



endeavor



17
Startups
Participated

45+
Investors
In-Person

30+
Investors
Remote

75+
Total
Attendees

\$27,750 USD
Total Sponsorships
and Awards

33

parallel¹⁸ CONNECT



parallel¹⁸ CONNECT

Parallel18 Connect's mission is to facilitate opportunities for startups to connect with influential business leaders in Puerto Rico, with the ultimate goal of fostering collaborations and strategic partnerships. We do this by supporting our startups in the development of a strong value proposition and business development strategy and by hosting impactful events and programming that lead to meaningful networking. Furthermore, we support our network of corporate partners by helping them drive innovation in their respective business areas.



Highlighted Deals:



ToyDoggie is a pet apparel brand designed in Puerto Rico and inspired by our tropical climate, made with the unique needs of pets in mind. They create pet accessories that are stylish, high-quality and functional. After participating in parallel18's Startup Showcase at ACDET (Asociación de Comercio al Detal) Conference 2023, **ToyDoggie connected with Pepe Ganga** and is now selling its products in two of the brands newest stores, with plans of expanding to other locations!



Gyftgram offers restaurants a contactless digital gift card platform that uses QR codes, enabling them to seamlessly sell branded and secure reloadable e-giftcards. Today, they're one of the most advanced payments platform in fraud prevention. Thanks to parallel18 Connect, **Gyftgram connected with Discover Puerto Rico**, which led to Discover Puerto Rico updating their guidelines for restaurants to be able to run promotions and use Gyftgram on the Discover Puerto Rico website.

35

CORPORATE PARTNERS

As of 2023



parallel¹⁸
CONNECT

36

GiveBack program

GiveBack

Parallel18 entrepreneurs are diverse, ranging from newcomers to the startup scene to founders on their second, third, or even fourth endeavor. Each individual brings a unique set of skills, industry insights, and professional experiences that can benefit their peers, students, and fellow entrepreneurs. Participation in parallel18 mandates active support for the local community through specified engagements. In both the pre18 and P18 programs, startups are mandated to attain at least 18 points, with giving back activities centered around technology, innovation, or entrepreneurship, aiming to foster the growth of the startup ecosystem in Puerto Rico.



48

Giveback hours

1,966

People impacted

***68% increase** compared with impact report 2022



45

Giveback hours

870

People impacted

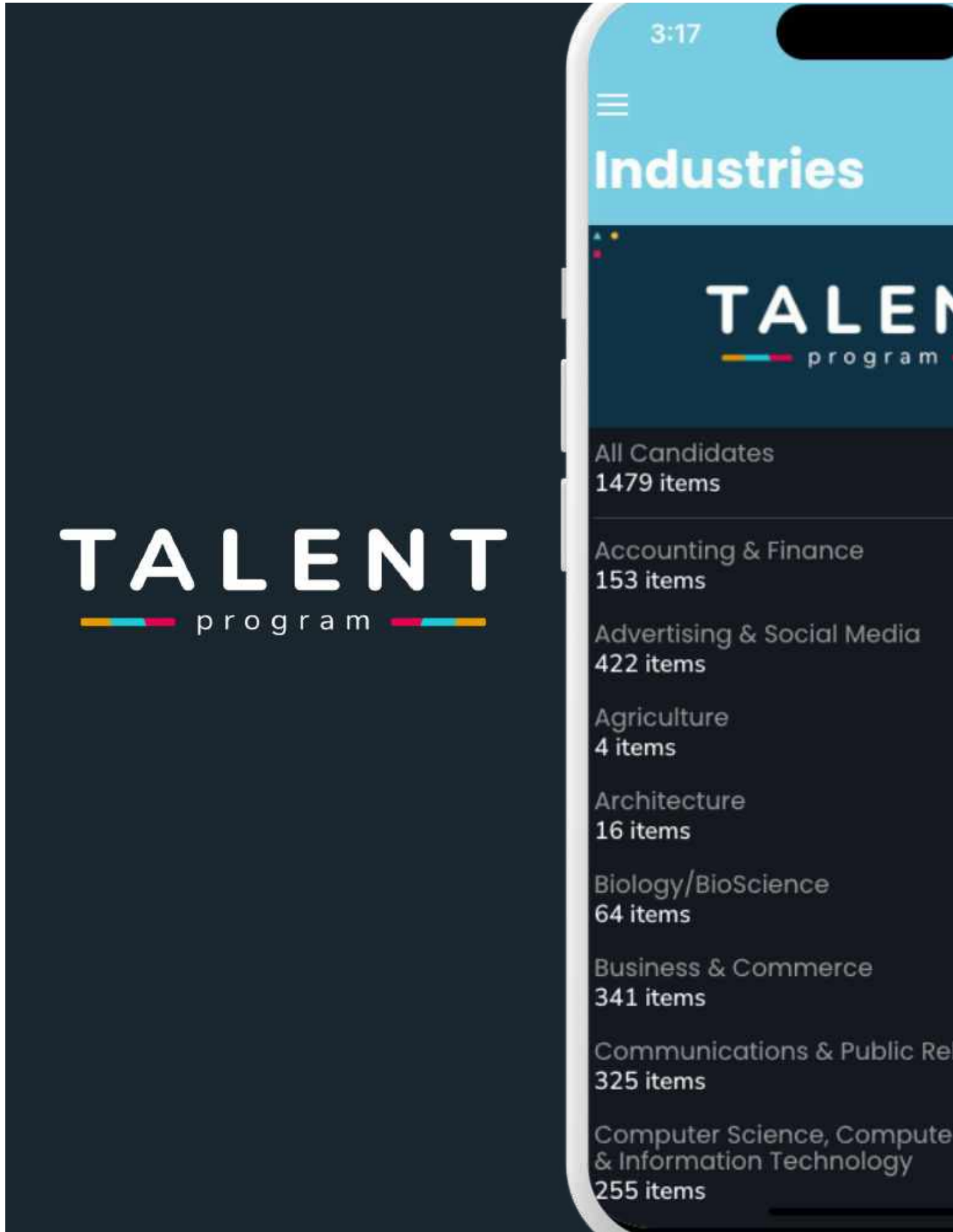
***81.2% increase** compared with impact report 2022

Cumulative Results:

P18 Gen.1 - Gen.11 / pre18 Gen.1 - Gen.5

38,651

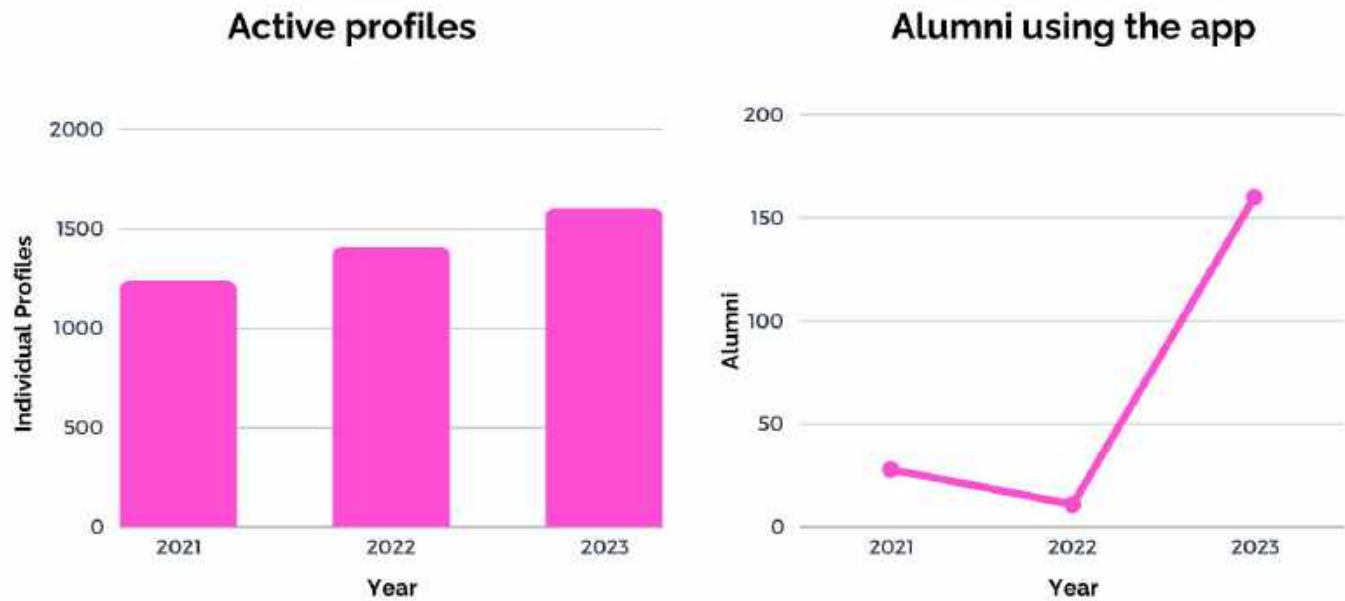
people impacted



TALENT

program

The talent app contains a repository of local talent eager to immerse themselves in the technology, innovation, and entrepreneurship sectors, seeking to acquire professional experience within our network of alumni companies. We extend our invitation to college juniors, seniors, recent graduates, postgraduate students across all fields, as well as freelancers and professionals. Their profiles and resumes are showcased to over 455 startups that have engaged with our programs. **The main goal is to provide employment opportunities to local professionals while making the recruitment process easier for startup founders.**



380

downloaded resumes

10

hiring interviews

18

people hired since revamped on 2021

2

people hired on 2023

40

POSITIONING

in the news

Parallel18 has gained recognition in numerous international media outlets, spotlighting our commitment to fostering innovative entrepreneurship in Puerto Rico. Through our relentless efforts, we have developed a portfolio of high-quality startups that exemplify excellence in their respective fields. Our work is not only focused on supporting the growth of these companies but also in promoting a thriving ecosystem to innovation and entrepreneurship.

Our dedication to boosting Puerto Rico's startup scene has scored us some major coverage from media outlets around the globe, positioning parallel18 as a real game-changer in the entrepreneurial scene.

\$866,800

2023 non-paid publicity value

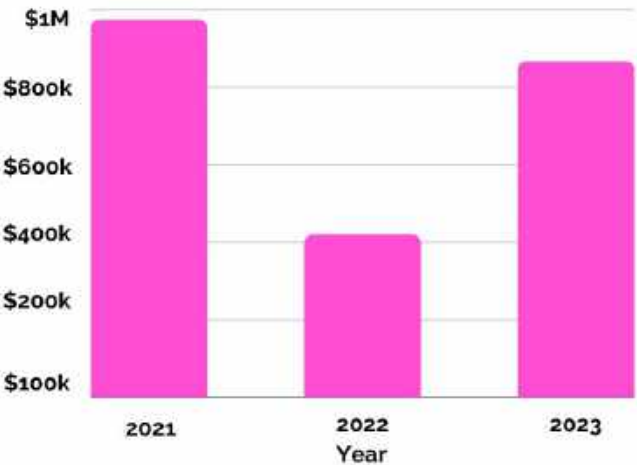
976,948

Total impressions

166

Total appearances

Cumulative non-paid publicity value



132% increase in non-paid publicity value compared with Impact Report 2022

Highlighted in:

Forbes

Entrepreneur

SOCIAL GEEK

TEKIOS

NimB

The SOCIABLE

EL NUEVO

Geektime

41

el Podcast
parallel18

At parallel18, we are dedicated to amplifying the voices of both current and aspiring entrepreneurs on our island, while also solidifying our position as a referent of entrepreneurship both locally and internationally. On **July 2023, we launched "Parallel18 el Podcast" with the mission to empower and elevate entrepreneurship within our community and beyond.** The launching of our podcast represents a natural extension of this commitment, offering a broader platform for the dissemination of knowledge and the exchange of ideas.

Cumulative Stats:

07

Episodes

3,394

Total Streams

Where are our listeners?



67%



28.4%



1.1%



0.66%

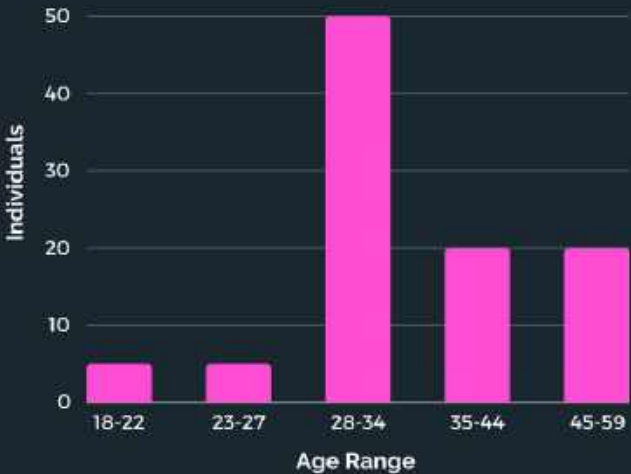
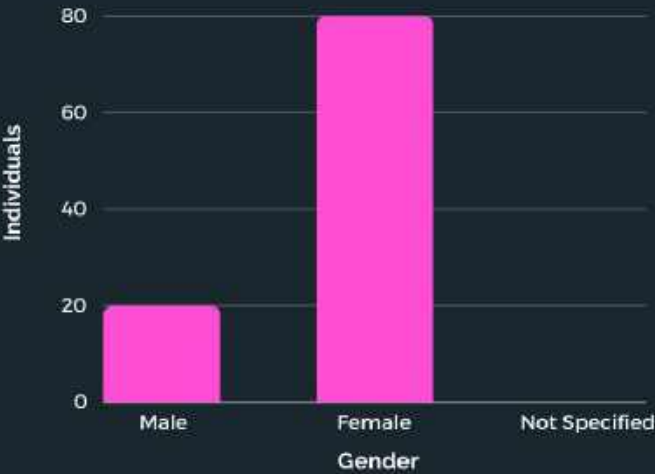


0.59%



0.56%

Demographics:



42

What's **NEXT**

BioLeap

In our continuous mission to drive innovation and to propel Puerto Rico's scientific landscape forward, we're thrilled to announce the launch of our newest incubation program, BioLeap, set to **kick off on April 1st**. BioLeap is poised to bridge the critical gap between Life Sciences research and successful commercialization. With a mission focused on accelerating translational research into tangible solutions, BioLeap aims to take visionary projects from the laboratory to the market. Through strategic mentorship, access to resources, and a collaborative network this incubation program will support aspiring entrepreneurs in the Life Sciences field.

Hello Forward Building!

Exciting times lie ahead for parallel18 as we prepare for a new chapter in our journey! After calling Santurce our home for the past six years, we're gearing up for a big move to the new **Forward Building** located at the Puerto Rico Science, Technology, and Research Trust. This transition marks a significant milestone for us, as we position ourselves at the heart of innovation. The new building promises to be a vibrant hub for both local and international startups, fostering collaboration, creativity, and ingenuity. With this relocation, parallel18 aims to amplify its impact and further solidify its role as a referent for entrepreneurial growth in Puerto Rico and the world.



The U.S Department of Energy Office of Technology Transitions has awarded parallel18 with the EPIC prize! As recipients of the prestigious third round phase 1 award, we proudly stand as one of the nation's foremost incubators dedicated to nurturing energy startups. As part of this competitive funding program, we look forward to providing mentorship, business connections and resources for energy startups and its entrepreneurs with our newest initiative: **Challenge to Innovate "Project Switch"**. This initiative is designed to drive the development of products, services, and technologies related to clean energy. With the commitment to fostering innovation in this emerging sector, Challenge to Innovate will support potential entrepreneurs in early stages, from ideation to prototyping their solution.

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THANKS!

Without the continuous support of our parent organization, **The Puerto Rico Science, Technology, and Research Trust**, none of these remarkable achievements would have been possible. We extend our most sincere gratitude for continually seeking ways to bring our visions to reality!

To our mentors: Your dedication as volunteers strengthens our program immeasurably. We appreciate your guidance, knowledge sharing, and tireless commitment to meeting the needs of our startups.

To our network of investors: We extend our sincerest thanks for placing your trust in us and providing financial backing to our startups, fostering a more inclusive ecosystem.

To our valued corporate partners: Your consistent affirmation of our organization is deeply appreciated. Thank you for not only embracing our mission but actively becoming integral parts of it.

To the extraordinary parallel18 team: Those who recently joined our family and the ones that are currently discovering other journeys, your relentless dedication and hard work throughout this year have not gone unnoticed. Here's to another year filled with growth and success!

If you're interested in joining our community as a mentor, becoming part of our corporate partner network, or seeking to diversify your investment portfolio with innovative startups, please reach out to us at info@parallel18.com. Let's continue building together!

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