

#### **Empower**

Leveraging satellite data and remote sensing, we empowered participants with the tools necessary to tackle their communities' most pressing climaterelated challenges.



### **Inspire change**

With the right tools and mentorship, our participants were inspired to design innovative solutions to mitigate the effects of climate change in Puerto Rico.

# MILO CLIMATE ACTION ACADEMY

The Milo Climate Action Academy is an innovative educational initiative aimed at empowering university students and recent graduates in Puerto Rico to develop creative solutions for addressing climate change. Over the course of 12 sessions, held from August 19th to December 7th, 2024, participants explored the use of satellite data to devise solutions focused on mitigating climate change impacts. This initiative, a collaboration between the Milo Space Science Institute of the Arizona State University and the Research Grants Program of the Puerto Rico Science, Technology, and Research Trust, brought together 139 participants from 53 municipalities across Puerto Rico.

PARTICIPANTS
COMPLETED THE
ACADEMY

FEPRESENTATION OF 78

OUT OF PUERTO RICAN TOWNS















# FOCUS AREAS IN PUERTO RICO



Forest Health & Restoration



Coastal Zone Management



Agricultural Sustainability

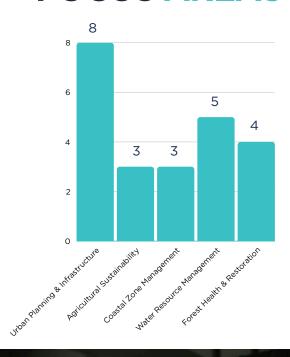


Urban Planning & Infrastructure Resilience



Water Resources Management

## **PROJECTS BY FOCUS AREAS**



# Electrical insecurity in Puerto Rico Puerto Rico faces frequent and prolonged power outages, reducing quality of life and threatening public health.

- Since the passing of various catastrophic events like hurricanes Irma, María and Fiona the electrical system has be unreliable. ensure it's services.
- · Electrical insecurity and reduced quality of life rising has influenced migration of locals leaving town cere
- · Towns in the central region of the island hold the most island's vulnerable and poor affected by longer wait times to be re energized.



# MILO CLIMATE ACTION SHOWCASE

The Milo Climate Action Showcase marked the culmination of the MILO Climate Action Academy. During the event, 102 participants presented 28 groundbreaking projects aimed at addressing climate challenges in Puerto Rico, showcasing their climate solutions to a diverse audience. It also served as a platform for the emerging climate leaders to network with academics, industry leaders, and other professionals passionate about advancing climate action and exploring how their ideas can shape Puerto Rico's future. The event concluded with the awarding of five top projects for their exceptional contributions to creating a sustainable future for Puerto Rico.

# WHAT WE ACCOMPLISHED



## **Innovation**

Teams designed and presented 28 innovative solutions to a panel of judges, with five awarded for best performance.



## **Connections**

Participants connected with peers and space and climate experts from Arizona State University, the Caribbean Center for Rising Seas, the Puerto Rico Committee of Experts on Climate Change, and the NASA Climate Resilience Program.

STUDENTS

31

EARLY-CAREER

28

SOLUTIONS

5

AWARDS







Enhancing Forest Resilience in Puerto Rico:

A Remote Sensing Approach to Invasiv

ERS PARTIES OF THE PA

TEAM 5: Forest Subteam: Invas

#### SHOWCASE WINNERS

#### 1st Place

Enhancing Forest Resilience in Puerto Rico: A Remote Sensing Approach to Invasive Species

#### 2nd Place (2 awards)

Strategies to improve the resiliency of small farmers in Puerto Rico after extreme meteorological events

Agricultural Sustainability: Soil Health Management and Monitoring in Santa Isabel

#### **3rd Place**

Examining how specific weather patterns influence bacterial growth and distribution in Puerto Rico's aquatic environments

#### 4th Place

Electrical Oasis in the central region of the Puerto Rico

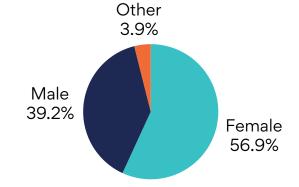
# **Building a Climate Resilient Future for Puerto Rico**

by empowering participants with the tools, knowledge, and networks needed to turn their climate solutions into reality. Through the MILO Climate Action Academy, we connected participants with experts across various fields, providing valuable insights and guidance. We also presented additional resources such as funding opportunities and entrepreneurship programs to help bring their innovative ideas to life. By supporting these emerging leaders, we are equipping them to tackle climate change, mitigate its effects, and improve the quality of life for Puerto Rican communities.

The Milo Institute welcomes individuals from all backgrounds who may or may not have experience in remote sensing and earth science. We are opening doors to students, companies, and government agencies to increase access to timely space data and innovation for as many people as possible.

David Tho

Executive Director
The Milo Space Science Institute











## **OUR COMMITMENT**

#### FEATURED IN THE WHITE HOUSE FACT SHEET



Milo Mission Academy for Climate Intelligence and Earth Science

The Milo Institute at Arizona State University and the Puerto Rico Science, Technology, & Research Trust (PRST) are establishing the Milo Mission Academy for Climate Intelligence and Earth Science. The academy will begin in fall 2024 and will equip students with expertise in remote sensing in order to create cutting-edge applications that use satellite data to address challenges on Earth. The applications will play a pivotal role in monitoring natural resources and land use within island communities to safeguard their wellbeing and sustainability. For more information, contact amaldonado@prsciencetrust.org .

#### **TESTIMONIALS**

"An exciting journey that challenges participants to involve themselves in their own future."

"It was mind opening to see the communities problems and to learn how to make a positive impact."

"My experience at the academy was extremely helpful. I was able to develop my communication and problem-solving skills while learning about climate change and remote sensing tools."

"Good source to find pathways to future professionals."

of its citizens through innovation, science, technology, and

Eng. Luz A. Crespo

Chief Executive Officer Puerto Rico Science Technology & Research Trust

"Resilience toolkit experience!"

Puerto Rico proudly leads the first MILO academy focused on climate change. At the Trust, we take on the responsibility of providing solutions and fostering a commitment to our planet, preparing the next generation of leaders who will make a difference.

Andreica Maldonado

Director, Research Grants Program
Puerto Rico Science Technology & Research Trust



research.







# NEXT

This pilot academy will not only impact our local communities but will also serve as a model for implementation in countries like Australia and Ecuador. This achievement fills us with immense pride and reaffirms our mission to create positive change on a global scale.

Andreica Maldonado



We want to give them the ability to bring resilience to the communities that they care about and empower them to identify, address, and take action to help their community become more resilient when it comes to climate change. **Sheri Klug Boonstra**