

Puerto Rico Science, Technology & Research Trust



AUDIENCE INPUTS ON

BUILDING INNOVATION ECOSYSTEMS: A DISCUSSION WITH THE ISLAND'S RESEARCH COMMUNITY

PRSTRT HEADQUARTERS NOVEMBER 9TH, 2015

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Overview

The second iteration of the Meetup series took place at the Puerto Rico Science, Technology and Research Trust headquarters in San Juan, Puerto Rico, with the intention of generating alignment, as well as points of intersection, between the agendas of research, existing resources, and market opportunities; and to highlight Puerto Rico's intellectual capital in order to promote improved technology transfer, development, and commercialization of our intellectual property. This Meetup gathered audience support that filled the room to its full-capacity, thus demonstrating the interest in engaging these discussions and further the purpose of the platform strategy.

Key points regarding the Meet Ups

Foster encounters, sharing, learning, and improvement

The proposed event seeks to bring together key staff from public and private colleges and universities, private sector stakeholders, civil society organizations in charge of community economic development, business incubators, and key government players in the areas of economic development and education.

Discussion of important topics pertaining group dynamics and interests

The content agenda revolves around: Public Policy and indicators for innovation, research and development; Technology transfer for innovation; and, a new ecosystem for innovation in a variety of sectors within the Island's economy. These subject matters will be discussed in a variety of formats, from traditional presentation, workshop, and open discussion formats.

Increasing social capital by providing space and context from which to engage in crossed networking

The Meet Ups are geared at creating opportunities for participants in the fields of research, investment, traditional entrepreneurship, as well as social enterprising, in order to form bridges among groups, promote understanding through social interaction, and empower innovation.



PR RESEARCH MEET UP

DATE: Nov 9, 2015 TIME: 10:00 a.m VENUE: Puerto Rico Science, Technology, and Research Trust

– Meetup Agenda: –

10 am Welcome & Summary of 1st Meetup

10:30 am

Panel: Academic Researchers and their Experiences with the Private Sector

11:30 am

Industry/University Cooperative Research Centers (I/UCRC) Program. Speaker: Dr. Raffaella Montelli,ENG Lead Program Director, National Science Foundation

12:30 pm

Networking Lunch

1:30 pm

Industries in Puerto Rico: What do they need from the Academia?

2:30 pm

Interactive Activity: Fostering collaboration between the private industry and the academia

3:45 pm

Wrap up







Feedback on University & Private Industry Collaboration Moving from research to entrepreneurship

- Recognize cultural differences between the industry (deliverables, agile, product oriented) and the academia (slow to respond-although private universities act faster, not clear what policy is)
- Questions to build the bridge:
 - What are the needs
 - The University does not ask for needs
 - not always clear
 - there is no appropriate forum for it
 - Lack of trust.
 - Industry stands to gain
 - Donation culture
 - It is fed by the academia.
 - · Always asking for donations vs. value added proposals
 - Does the industry have a culture of seeking for help?
 - Is the academia open to work on the needs of the industry?
 - Do manufacturing facilities in PR have decision-making power?



Feedback on University & Private Industry Collaboration Moving from research to entrepreneurship

- Commitment between both parts
- Not all researchers are business people
- We don't have the mechanisms for the establishment of academic-industry relationships
- A **facilitator** to establish an effective communication between both parts. This person <u>must</u> have the transferring mentality and <u>must</u> be within the university
- Industry and academic processes are not matched, and they <u>must</u> match. The academia is too slow.
- More knowledge (from outside of Puerto Rico) on structure and processes to do this
- No previous relation with the academia
- Establish closer relationships
- New trends HUB
- Need for training HUB
- Distinguish between process issues and new product processes
- · Creation of opportunities for joint grants/projects
- · Create a pipeline of Internships and curricula
- · Interactions must be facilitated, e.g., parking
- · Foster more connections, e.g. innovation awards
- Identify long-term needs



Feedback on University & Private Industry Collaboration *Moving from research to entrepreneurship*

- · Low level of understanding regarding the working culture of the academia
 - Academia (and academics) must make their technical capacities known to the industry
 - Virtual (live) database...Insert LinkedIn
 - How does the academia manage Principal Investigators (PIs)
 - Increase networking efforts between Industry and the Academia
 - Establish mission-specific, formal mechanisms to revise institutional policies, e.g., Office or Committee
- Development of institutional policies to that end
- · Capacity building for administrators and investigators
- Collaboration
 - Centralization (platform) of a database for researchers to understand industry needs
- Collaboration mechanisms
 - PRSTRT should act as intermediary/facilitator in this process
- R&D mechanisms



- The disparities of the working cultures in the academia and the private sector were evident among the attendants, i.e., response time for decision-making, sense of urgency, agility, but also issues pertaining to risk aversion in the academia.
- There is ample recognition of the researcher community to engage the private sector. As part of that process, there is a need for researchers/academics to make their technical capacities known to the industry. The use of social media (LinkedIn) is one way to engage this.
- Inexperience on the issue of inter-institutional collaboration warrants the intervention of an intermediary that is knowledgeable of the challenges and opportunities in both sectors at the same time that they can be conversant with leaders in each of the sectors, so as to -effectively- canvas their support for change. That being said, leadership should engage the creation of formal mechanisms to explore and experiment with new collaborative practices and move towards business oriented research activity.
- A discussion around collaboration mechanisms stress the need for: process agility, should be facilitated by technology tools to allow for more efficient communication, exchange, and understanding of: industry needs, available talent, existing/applicable research, and engagement mechanisms, among other important value-adding issues.



Feedback on University & Private Industry Collaboration: *Moving from bureaucracy to entrepreneurship*

- The Trust should help address and draft clear policies, guides and templates
- Foster a research culture that prompts research prior to the generation of intellectual property
- Emphasize the importance of Intellectual Property
- Open data
- · Establish mechanisms to connect intellectual property production with industrial activity
- Discharge for the researchers (descargue)
- Creation of an independent, parallel administrative system in exclusive support of "business oriented" research activity
- Financial support for materials
- · Fostering, development, and maintenance of alliances
- Agile administrative processes
- Grant writing support
- More marketing , less protagonism.
- Eliminate individualistic mentalities ("esta es mi finquita")



Feedback on University & Private Industry Collaboration *Moving from bureaucracy to entrepreneurship*

- Intellectual property is difficult to understand and unattractive (at the UPR)
- Invite administrators (with decision making capacity) to engage capacity building
- · Work with the academic load for researchers
- Create exclusive research positions
- Outreach Office for Academia-Industry
- Templates for MoU, NDA/Confidentiality agreements, and intellectual property sharing
- Education regarding processes to engage IRB, IACUC
- Improve policies on indirect costs
- Educate university officials (administrators, deans, department heads) on entrepreneurship to reduce the existing immobility towards collaboration with private industry
- Have the private industry express itself on how can the academia be more agile
- Take the university out of the understanding/treatment/framework of it being a government agency. For example, the electoral ban is a burden to work continuity.
- Define the rules, terms & conditions, to manage policies related to intellectual property



Feedback on University & Private Industry Collaboration *Moving from bureaucracy to entrepreneurship*

- Facilitate the development of a project course in the University with funding and time for the professor
- Establish institutional policies to facilitate collaborative research agreements with the private industry
- Administrative staff at the University should have experience in research
- Processes for purchasing of materials at the UPR is inefficient. They should be facilitated by the private industry.



- There is a recognition of research activity and intellectual property development as unattractive activities and endeavors, thus the need to re-valuate and reposition these areas of work within an aspirational framework for educational organizations, both formal and informal, to adopt.
- There is a specific need for interdisciplinary preparation and experience as it research grant application and management, as administrators need to be more abreast of researcher needs (considering teaching loads versus research loads also remains as an important aspect of the teacher-researcher balance) while at the same time researchers would improve their performance with enhanced administrative skills.
- Additional capacities among University staff could improve indirect cost management of research grants. Likewise, additional capacities and skills are warranted among university officials if they are to engage in commercialization activities in support of entrepreneurship. In either case, additional support is needed to overcome present challenges.



- Creating a pipeline of internships and curricula to match private sector needs (short and long term) can enable the conditions for joint grants/projects, which then would force the modification of institutional policies to that end, as well as the proper capacity building for the effective performance of the required staff (administrators, grant managers, PI management).
- Innovation awards to recognize local talent and creativity
- The Trust should intervene and exercise leadership to draft engagement policies, guides and templates. In addition, it should act as an intermediary to facilitate a dialogue conducive to effective, collaborative work among universities, and between the universities and the private sector.
- Creation of a parallel entity that can apply and administrate research grants that are linked to technology transfer and commercialization. This entity can manage stakeholder relations, MoUs, NDAs and confidentiality agreements, as well as intellectual property sharing.



Role of the Trust

This event helped to solidify the Trust's leadership, based on consistent participant feedback, as well as stakeholder's evident trust in the PRSTRT. Thus, the claim to help promote dialogue, provide a space for encounters, and -generally- acting as a more active and functional advocate of collaboration among institutions, the private sector, and government.

Leadership for collaboration

Present research and scientific work under a new light, exhibit achievements and findings, as well as day to day work, continue to have meetings and encounters, enable the exposition of new subject matters and dialogue leading to collaboration and shared innovation among researchers and institutions.

Improved communication...available information

Regardless of whether its coming from the academia or the private industry, there is a pressing need for realtime, up-to-date, and readily available information regarding Puerto Rico's needs as it relates to researchers and their interests, institutions and their capabilities, and private industry and their problems. In all cases, it is critical for our leadership to make decisions and position our academic and research to do more.