

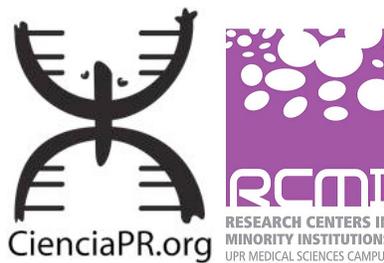
Evaluation Report

1ST CienciaPR Scientific Career Symposium:

I want to be a scientist... now what?

*September 21, 2011
University of Puerto Rico,
Medical Sciences Campus
Rio Piedras, PR*

Organized by Ciencia Puerto Rico, in collaboration with the Research Centers in Minority Institutions Program of the University of Puerto Rico, Medical Sciences Campus



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INTRODUCTION

Ciencia Puerto Rico (www.cienciapr.org) is a not-for-profit organization established in 2006 to promote science, research and scientific education in the Puerto Rican archipelago. To accomplish this mission, one of the organization's main goals is to help forge the future generations of Puerto Rican scientists. In line with this goal, on September 24th 2011, Ciencia Puerto Rico offered its first educational symposium titled: **I want to be a scientist... now what?** at the University of Puerto Rico Medical Science Campus. This event aimed to orient undergraduate and graduate students from several universities in Puerto Rico about graduate programs in the biomedical science and professional career options after completing a Ph.D. Among the symposium's objectives were to:

- Demystify scientific careers and the Ph.D. trajectory to better attract and support students interested in biomedical research to doctoral careers.
- Provide information about graduate programs in the biomedical sciences: how to apply, what is life in graduate school like, answer queries and concerns, and clarify misconceptions.
- Identify research training fellowship opportunities for graduate and undergraduate students.
- Discuss career options for biomedical scientists.
- Identify resources that may help students decide if they want to pursue a Ph.D. in biomedicine and that may help them through their early career stages.

The symposium was offered free of cost and was co-sponsored by Amgen (Puerto Rico) and the Research Centers for Minority Participation (RCMI) Program at the University of Puerto Rico Medical Sciences Campus.

EVALUATION DESIGN AND PURPOSE

Participant satisfaction with the symposium activities was evaluated through a survey handed out at the end of the day. The questionnaire included 24 questions pertaining to satisfaction with the talks and the information provided by the symposium; general demographic and academic information; interest towards careers in the biomedical sciences; and overall opinion about the symposium. The symposium had a total of 125 participants, of which 95 responded to the survey (76.0%).

FINDINGS

Participants

Participating students came from 15 college campuses across Puerto Rico, as well as one non-academic institution. The majority of the participants (75.0%) were affiliated with the University of Puerto Rico system (Figure 1) and reported life sciences as their field of study (80.0%, Figure 2). Most of the participants were undergraduate students (73.0%, Figure 3).

Figure 1: Academic Institution

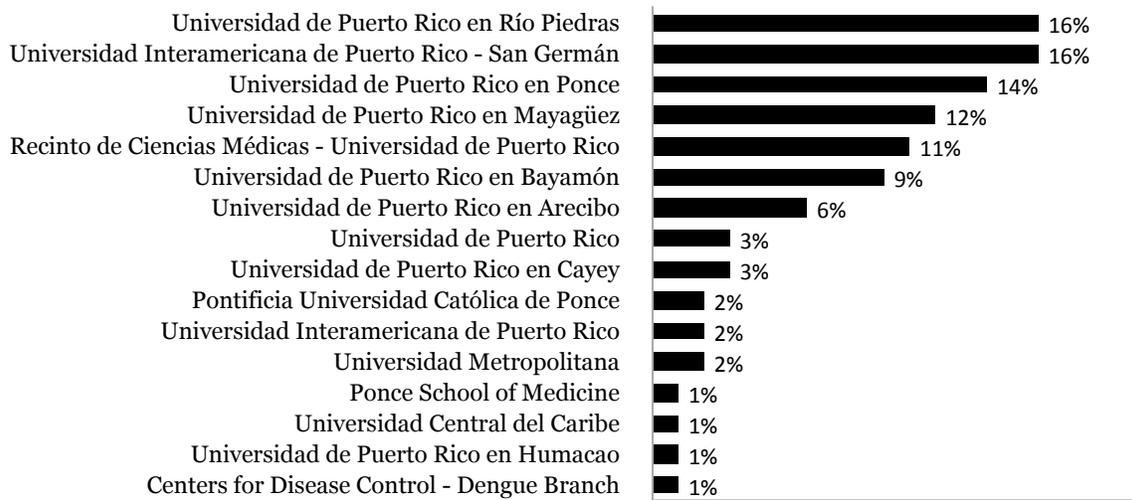


Figure 2: Field of Study

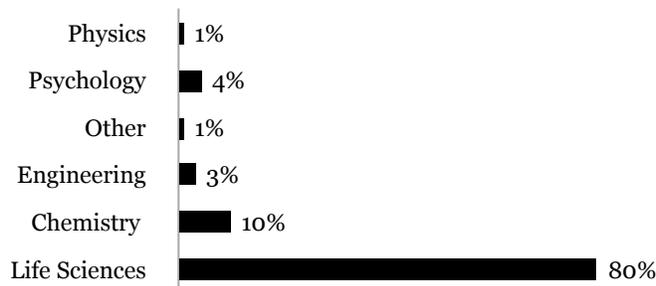
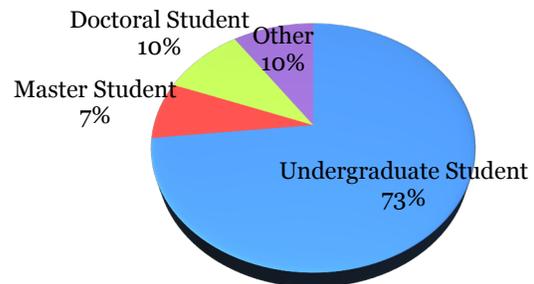


Figure 3: Academic Level

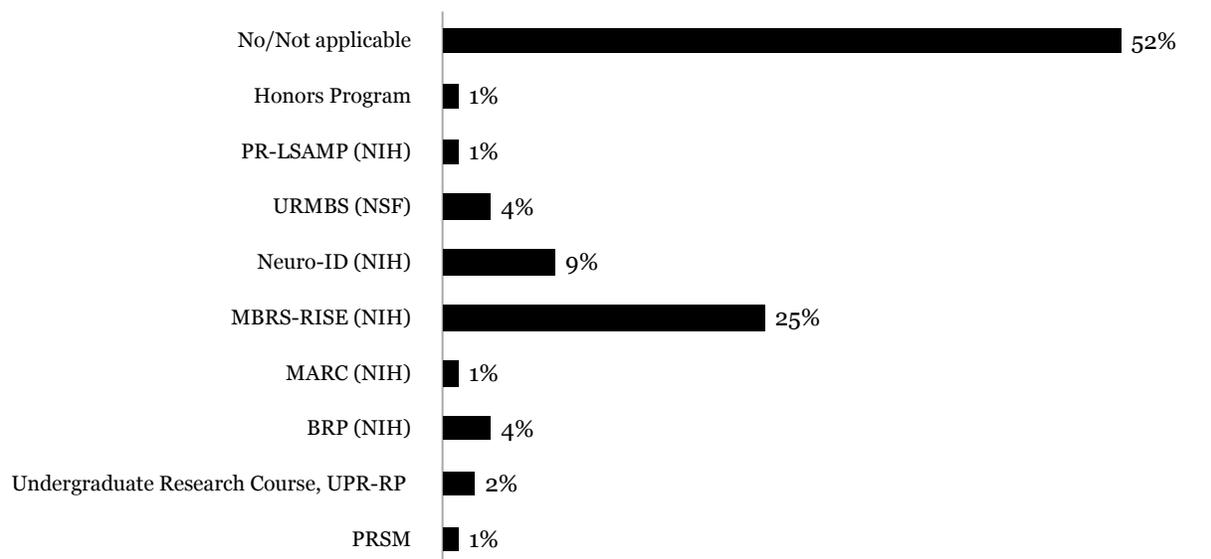


Event Dissemination

Students were invited through Ciencia Puerto Rico's mailing list, as well as through notices and invitations sent to professors and coordinators of various academic programs and departments. Invited programs included: the Puerto Rico Society of Microbiologists, the University of Puerto Rico, Rio Piedras undergraduate research program (BIOL 4990), the Biopsychosocial Research Program (BRP), the Minority Access to Research Centers (MARC) program, the Minority Biomedical Research Support-Research Initiative for Scientific Enhancement (MBRS-RISE) of the University of Puerto Rico, the Neuroscience Research Opportunity to Increase Diversity (Neuro-ID) program, the National Science Foundation-Undergraduate Research and Mentoring in the Biological Sciences (NSF-URM), the Puerto Rico Louis Stokes Alliance for Minority Participation (PR-LSAMP), and the University of Puerto Rico, Rio Piedras Honors Program.

According to the survey (Figure 4), almost half (48.0%) of the participants were part of a specific academic training program. Among these, the majority were participants of the MBRS-RISE program (21.0%).

Figure 4: Academic/Training Program



A majority of the students found out about the symposium through professors (45.0%) or a friend (22.0%, Figure 5). The majority of participating students were not originally members of Ciencia Puerto Rico (CienciaPR, Figure 6).

Figure 5: How did you find out about the symposium?

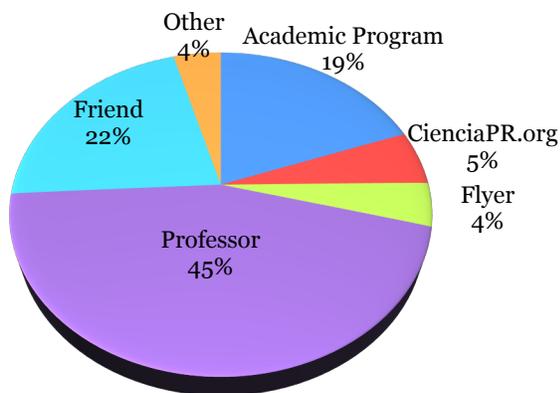
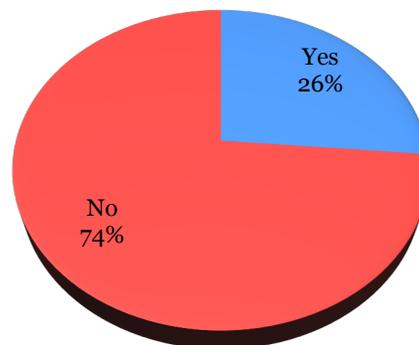


Fig 6: Are you a member of CienciaPR?



General satisfaction

In general, the participants had a very positive opinion about the symposium (85.0% rated it with a 5 or excellent; 15.0% rated it with a 4) and were very satisfied with the information provided throughout the day (85.0% rated it as excellent, Table 1).

Table 1: Satisfaction Questions

QUESTIONS	In a scale of 1 to 5:				
	Poor				Excellent
	1	2	3	4	5
General opinion about the CienciaPR Educational Symposium	0%	0%	0%	15%	85%
General quality of the talks offered	0%	0%	0%	18%	82%
The information you received during the symposium	0%	0%	2%	15%	83%
Welcome talk/Presentation about CienciaPR.org	0%	0%	3%	16%	81%
Presentation about graduate school	0%	0%	1%	20%	79%
Networking lunch	0%	3%	9%	23%	65%
Presentation about research funding opportunities	0%	0%	4%	17%	79%
Panel about careers in the biomedical sciences	0%	0%	4%	16%	80%

Logistics for the event were also rated highly, including the location of the event (Figure 7), its duration (Figure 8) and the registration system (Figure 9). Overall, ninety-nine percent (99.0%) of the participants said they would recommend the symposium to their friends or colleagues (Figure 10).

Figure 7: Was the duration of the location convenient?



Figure 8: Was the duration of the event adequate?

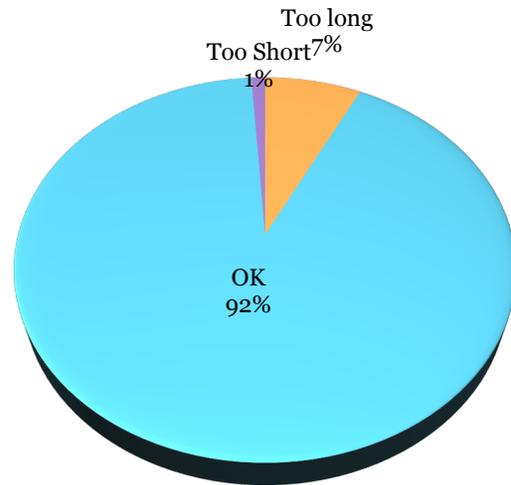
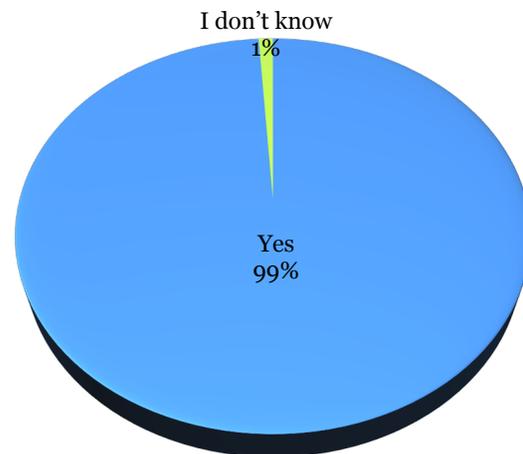


Figure 9: Where you able to register through the Internet without problems?



Figure 10: Would you recommend to event to others?



Impact

The goal of the event was to orient students about graduate biomedical training programs and career paths and to help students make better informed decisions at a crucial academic stage.

To gauge impact, we asked if the event made students become more interested in pursuing training in a biomedical PhD program and if the event had changed their impression about these programs. A majority of students (88%, Figure 11) said the information provided during the symposium had clarified their interest in a PhD training program. The event had the effect of changing the career goals for 53% of students (Figure 12).

Thus, the symposium achieved the goal of helping students make more informed decisions about their academic training paths and overall professional aspirations.

Figure 11: Did the event help clarify my interest in a PhD program?

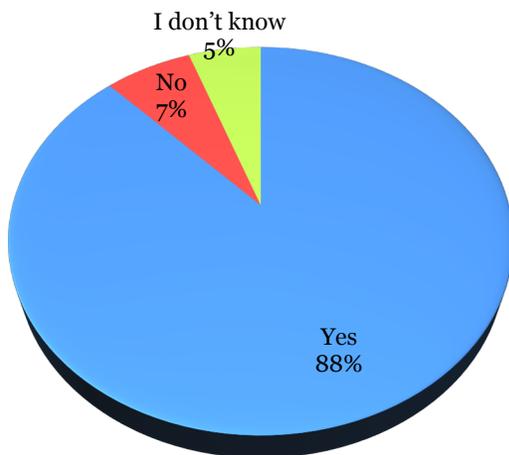


Figure 12: Did the event make you change your mind about pursuing a scientific career?



APPENDIX - QUESTIONNAIRE



Ciencia Puerto Rico

Promoviendo las ciencias y la investigación en Puerto Rico
Promoting science and research in Puerto Rico

24 de septiembre del 2011

1er Simposio Educativo CienciaPR: Quiero Ser Científico... ¿Y Ahora Qué Hago? Formulario de Evaluación

¡Gracias por asistir al Primer Simposio Educativo CienciaPR! Esperamos que haya sido una experiencia valiosa y motivacional. Nos gustaría recibir tus pensamientos y comentarios sobre el Simposio Educativo CienciaPR para mejorar eventos futuros. Por favor, contesta las siguientes preguntas. ¡No te olvides de entregar tu formulario antes de irte!

Usa la escala del 1 and 5 para evaluar:

	POBRE		EXCELENTE		
Tu opinión general sobre el Simposio Educativo CienciaPR	1	2	3	4	5
La calidad de los conferencistas en general	1	2	3	4	5
La información que recibiste durante el simposio	1	2	3	4	5
La bienvenida y charla sobre CienciaPR.org	1	2	3	4	5
La presentación sobre la escuela graduada	1	2	3	4	5
La porción de "Networking"	1	2	3	4	5
La presentación sobre oportunidades de fondos para investigación	1	2	3	4	5
El panel sobre carreras en las ciencias biomédicas	1	2	3	4	5

Contesta las siguientes preguntas. Puedes añadir comentarios adicionales al final de la evaluación:

- ¿Estás interesado en iniciar o continuar una carrera científica? Sí No No sé
- ¿Eres miembro de CienciaPR? Sí No No sé
- ¿La información que recibiste hoy te hizo cambiar de parecer sobre las carreras científicas a las que aspiras? Sí No No sé
- ¿La información que recibiste hoy te ayudó a clarificar tu interés en un programa de Ph.D. en ciencia? Sí No No sé
- ¿Le recomendarías un evento similar al Simposio Educativo CienciaPR a éste a tus amigos y/o colegas? Sí No No sé
- ¿Te pudiste registrar a través del Internet sin problemas? Sí No No sé
- ¿Crees que la duración del Simposio Educativo CienciaPR fue adecuada? Sí No No sé
- ¿Crees que la localización del Simposio Educativo CienciaPR fue conveniente? Sí No No sé

¿Cuál es tu institución académica/compañía? _____

¿Cuál es tu concentración académica actual? (e.g. pre-médica, química, etc.) _____

¿Cuál clasificación te describe mejor?

Estudiante subgraduado Estudiante de maestría Estudiante doctoral Otro: _____

¿Cómo te enteraste del Simposio Educativo CienciaPR?

Programa académico Twitter/Facebook CienciaPR.org Hoja promocional Profesor Amigo Otro: _____

¿Tienes alguna recomendación para mejorar el próximo Simposio Educativo CienciaPR? _____

¿Qué otros temas te interesaría aprender en el próximo Simposio Educativo CienciaPR? _____

¿Quieres compartir algún otro comentario sobre el Simposio Educativo CienciaPR? _____

APPENDIX - COMMENTS

Excellent symposium

It was a beautiful experience. It will help me make a decision eventually.

The symposium was excellent. Personally came at the right time where I have been thinking whether to pursue an MS or a PhD. Thank you very much, it was very successful.

Could you make it a graduate school fair next time? Would it be possible to include international institutions? Overall the activity was very well organized and was a success. Thanks for your help!

Very nice presentations, it was effective and very educational. The speakers were very dynamic, very well organized.

You should have symposia more often on various topics.

This activity should be performed annually

I am glad to know the group and be a part of it

Loved it!

Overall it was excellent! Congratulations!
Excellent initiative to bring together the Puerto Rican scientists and show how talented they are and show us the opportunities we have.

Most of the symposium was excellent

Very interesting and educational for people who want to be scientists. It clarified many doubts.

The symposium was very good and I think it was a great tool for undergraduate students. Maybe you should do the next symposium geared to graduate students.

Overall it was a very excellent symposium. You can see the commitment of the members of CienciaPR. I hope that they continue carrying out activities like this that include youth and impact middle and high school.

It was an excellent resource. I would have liked to participate in a symposium like this several years ago in order to better plan my goals.

It was spectacular. I loved it. Thanks for the opportunity.

It was an excellent conference, I recommend repeating this symposium more often it is of great benefit for students who are still wondering what to do after completing their undergraduate studies.

This activity was very important for my future.

It was rewarding experience.

Excellent work

Excellent symposium, cleared up most of my doubts and explained how to pursue a career in research

I love this initiative and hope it repeats

Its was one very intellectually enriching and clarified doubts about the difference between a career in medicine and a doctorate in research

Invite again Dr. Daniel Colón-Ramos

It was great to emphasize different careers that are available in addition to medical school

Must repeat and maybe even make it a whole weekend event with speakers, workshops and student presentations, both graduates and undergraduates

Very good initiative, pleasant and enjoyable. It promoted dialogue and respect and the views and contributions from the audience were recognized.

Excellent! This can greatly help college students in making decisions when they graduate. The networking was an excellent idea; it was a tremendous experience to share with the lecturers

In spite of being a large symposium you were able to cover many topics of interest for us college students

It was an enriching experience of knowledge

Excellent! It should be repeated and taken to all campuses

Should consider doing two sections. One for undergraduates and one for graduate students.

Excellent time management. Loved it!

Very interesting and educational

Excellent

I would love to learn more about the panelists especially to establish a mentoring relationship within this career. It takes a lot of guidance to pursue this career and it would be great to continue to share the speakers' knowledge with the students.

It was a very important event for the people of Puerto Rico and you should do more events

There were many other types of science that were not reflected

It was one of the best experiences I've had at the undergraduate level. It's definitely a good resource to clarify doubts and really define what you want to do.

The initiative is excellent. I will support the activities of CienciaPR. It motivated me in the future to work on such initiatives.

Present different careers and research opportunities

Best of the best

I enjoyed the networking. Excellent.

Excellent. Thank you!

Excellent!

Thanks to this initiative I was able see that science has always been my passion and I really want to be a scientist.

I would have liked to hear more about Dr. Daniel Colón-Ramos, his experience and research.

The symposium is good for undergraduates who do not yet have clear goals. Maybe add a part to strengthen ties between Puerto Rican scientists. Perhaps a workshop or interactive games help create this bond.

Very good, very organized. I would like that activities like this continue to be promoted to inform students.

Very good, congratulations, please repeat it and advertise it more

I liked. Very motivational. I identify with many of the stories that were shared. I love the CienciaPR initiative.

This symposium has impacted my life and I am sure that I want to be a scientist, I want to be an engineer and work with disadvantaged youth. All we want to achieve in life is possible and there are mentors, you just have to look for opportunities and make the most for my welfare and that of society to achieve a common good and happiness.

APPENDIX - SUGGESTED TOPICS FOR THE NEXT SYMPOSIUM

Agencies, programs, and companies in Puerto Rico to do research or internships (4)

Jobs

They should elaborate more on the issue of careers and what you do in each of them

Different branches and study opportunities. Grad school options.

Knowing the best universities that provide science programs

Information about professor salaries, benefits, best universities. Talk about opportunities outside of the U.S.. What about Latin America or Europe?

Opportunities for post-docs and jobs after you already are a scientist

Impact of CienciaPR in Puerto Rican society and how to contribute

Strategies on to handle English when studying abroad and how to succeed in science.

Topics related to post-docs and collaborations

I would like you to talk more more about the type of research you are doing
Managing stress in college and graduate school

Summer internships, the importance of scientific dissemination (presenting posters, etc..) Writing workshops (Personal statement), proposals (grants), interviews, etc..

More information on transfers to other institutions

I think you touched on a lot of topics important for undergraduate

MD / PhD programs

Emphasize the neurobiology topics

Roadmap for publishing an investigation (e.g. "Ethics and authorship")

More information about institutions offering PhDs

Public health and public policy

Mentorship

Careers, workload, salary

Elaborate on academic offerings at various institutions

Advances in research

It would be good to know the areas in which PhDs work, what you do and how to do

Scholarship and how to publish a paper successfully

Beyond the PhD

I would like to know about new opportunities and research and universities

Deadlines for financial aid

That speakers compare (pros, cons, differences) between a PhD, MD, MD/PhD

Opportunities for students requiring more experience to be more competitive

Statistics and employment forecasts for scientists in PR and theU.S.

The Importance of research in a medical career? Why Should MDs follow MD/PhDs?

Summer internships, research presentations, thesis process

About specific undergraduate programs in Puerto Rico

Employment opportunities with a PhD in addition to the laboratory

Integrating social sciences, opportunities in this field

More about post-bac programs

A scientists perspective, opportunities for mathematicians and physicists

Integrating social sciences and elaborating on their importance / funding

Orientation / pep-talk concerning the % of students who apply and are selected to enter graduate school. How to handle denials / rejections.

Topics on advances in Puerto Rican science

More information about different graduate schools, financial aids and careers.

More information about graduate schools besides the ones in the U.S.

Curriculum Vitae

General requirements for graduate school, strategies for the GRE