Published on *Ciencia Puerto Rico* (https://www.cienciapr.org)

Young scientists implement science outreach projects, create resources for educators and students [1]

Submitted by Mónica Ivelisse Feliú-Mójer [2] on 20 July 2017 - 9:31pm


[2]

Dra. Leslie Díaz and Raura Doreste, 2016 Yale Ciencia Academy fellows, during their outreach activity.

As part of the Yale Ciencia Academy for Career Development [3], the 2016 class of fellows [4] led and implemented a series of science outreach projects to put into practice the communication, teaching and leadership skills they learned during their year in the program. Through these projects, these young scientists also had the opportunity to broaden their impact on society and their communities. The Yale Ciencia fellows organized or participated in conferences, panels, talks and workshops; conducted science demonstrations at schools and fairs for the general public; participated of TV interviews and public events; carried out awareness campaigns; wrote articles and blogs; and created resources for K-12 education. Through the projects carried out, the fellows impacted more than 5,400 people. We congratulate these young scientific leaders for their effort and excellent work!

Below we share some of the resources created by the 2016 Yale Ciencia fellows. We invite you to use these resources and share them with your students, colleagues and networks.

Resources for K-12 education

Creating a home garden [5] (in Spanish): Omar Vélez López [6], and Adlín Rodríguez Muñoz [7], doctoral students in microbiology and physiology, respectively, at the Medical Sciences Campus of the University of Puerto Rico, offer tips for establishing a home garden. Their advice is useful for establishing a garden not only in your home but also in your school or community. These young scientists also share a guide for teachers (in Spanish) to establish an urban agriculture club or project.

- Video (in Spanish): https://youtu.be/aK-YTAY4fJA [8]
- Teacher guide (in Spanish): https://goo.gl/CvTGKw [9]

Teacher's guide [10] and presentation [11] about the cardiovascular system: Ana Vaquer Alicea [12], PhD student in physiology at the Medical Sciences Campus of the University of Puerto Rico created this teacher's guide [10], accompanied by a presentation [11], to teach about the cardiovascular system (both in Spanish). The guide includes lectures, activities and discussion questions and is aligned with curriculum standards.

- Presentation (in Spanish): https://goo.gl/JxHSUT [11]
- Teacher Guide (in Spanish): https://goo.gl/hcVpn1 [10]

Brain Anatomy Lesson [13]: Rosa Martínez García [14], a doctoral student in neuroscience at Brown University, created this lesson to teach students about the anatomy of the brain and the differences between the brains of different organisms using simple and easy-to-find materials.

- Lesson and guide for teachers: https://goo.gl/pBygAV [13]

General Public

Personalized medicine and its ethical implications [15] (in Spanish): Gabriel Gracia Maldonado [16], PhD student in pathobiology and molecular medicine at the University of Cincinnati, highlights advances in the field of genetics, how they contribute to personalized medicine and its ethical implications.

Agricultural Genetics [17]: Héctor Díaz Zavala [18], a doctoral student at the Ponce Research Institute, summarizes the role that genetics has played in agriculture throughout the history of mankind and how it is an important tool today for Puerto Rico's food sovereignty.

Nervous System and Athletes [19]: Ivelisse Cruz Torres [20], PhD student in pharmacology at the University of Colorado, Denver, uses the example of a taekwondo athlete to illustrate how the nervous system controls our movements and motor responses.

Experiments in our daily lives [21] (in Spanish): Kelvin Quiñones Laracuente [22], a doctoral student in neuroscience at the Medical Sciences Campus of the University of Puerto Rico, wrote

and produced this podcast about the scientific process or method and how we can apply it in our daily lives.

Meet the Molecular Sciences Research Center [23] **(in Spanish)**: Melissa Ortiz Rosario [24], doctoral student in biochemistry at the Medical Sciences Campus of the University of Puerto Rico talks about the Molecular Sciences Research Center (CICiM, in Spanish) and how it fosters the commercialization of research knowledge in Puerto Rico.

Digital Collections of Plants [25]: Kristian Saied Santiago [26], a doctoral student in genetics at the Albert Einstein College of Medicine, writes about the extensive collection of plants from Puerto Rico and the Caribbean that exists in the New York Botanical Garden, its history and utility not only for the scientific community, but for the general public.

Resources for Undergraduate and Graduate Students

Questions to prepare for a job interview [27] **(in Spanish)**: Aslín Rodríguez Nassif [28], doctoral student in chemistry at the University of Puerto Rico Mayagüez, shares this list of questions to prepare for a job interview, which she compiled as part of a workshop she offered at her institution.

Tips for writing a personal essay: During a workshop organized by Dr. Carlos De León Rodríguez [29] and Susana Rodríguez Santiago [30], a recent graduate in microbiology and immunology and doctoral student in cell biology (respectively) at the Albert Einstein College of Medicine, and Juan Concepción Cardona, a doctoral student in psychology at the Pontifical Catholic University of Puerto Rico, shared tips about graduate school and how to write a personal essay. During her talk [31] (in Spanish), Susana discussed the experience of being a graduate student and how students interested in following that path can prepare. Dr. Mónica Feliú-Mójer [32], coordinator of the Yale Ciencia Academy participated as a guest in the workshop and shared strategies on how to write a good personal essay [33] (in Spanish).

- Presentation about graduate school (in Spanish): https://goo.gl/GWiXaP [31]
- Personal essay presentation (in Spanish): https://goo.gl/ABpx6s [33]

Tags:

- yale ciencia academy [34]
- educator resources [35]

Links

[1] https://www.cienciapr.org/en/blogs/yale-ciencia-academy/young-scientists-implement-science-outreach-projects-create-resources [2] https://www.cienciapr.org/en/user/moefeliu [3] http://www.cienciapr.org/yca [4] https://www.cienciapr.org/en/yale-ciencia-academy/meet-yca-2016-fellows [5] https://www.cienciapr.org/es/blogs/members/agricultura-urbana-consejos-para-atajar-la-crisis-alimentaria-y-desarrollar-su-huerto [6] https://www.cienciapr.org/en/user/omar-velez-lopez [7] https://www.cienciapr.org/en/user/adlinrodz [8] https://youtu.be/aK-YTAY4fJA [9] https://goo.gl/CvTGKw [10] https://goo.gl/hcVpn1 [11] https://goo.gl/JxHSUT [12] https://www.cienciapr.org/es/user/anavaqueralicea [13] https://goo.gl/pBygAV [14] https://www.cienciapr.org/es/user/rimartinezgarcia [15] https://www.cienciapr.org/es/blogs/members/el-futuro-de-la-medicina-personalizada-y-sus-implicaciones-eticas [16] https://www.cienciapr.org/es/user/gabo044 [17] https://www.cienciapr.org/en/blogs/members/agricultural-genetics-science-tool-explore-puerto-ricos-new-age-agriculture [18] https://www.cienciapr.org/es/user/hdiaz [19] https://www.cienciapr.org/en/blogs/members/role-nervous-system-taekwondo-athlete [20] https://www.cienciapr.org/es/user/ivicruz [21] https://www.cienciapr.org/es/podcasts/radiocapsulas-cienciapr/experimentos-nuestros-asistentes-personales [22] https://www.cienciapr.org/es/user/kequila [23] https://www.cienciapr.org/es/blogs/members/el-cicim-un-espacio-colaborativo-de-investigacion-cientifica-de-primera-que-fomenta-la [24] https://www.cienciapr.org/es/user/melissa-ortiz-rosario [25] https://www.cienciapr.org/en/blogs/members/collection-digitization-caribbean-plant-specimens-0 [26] https://www.cienciapr.org/es/user/kristian313 [27] https://www.cienciapr.org/sites/cienciapr.org/files/preguntas_sugeridas_para_prepararse_para_una_entrevista_de_traba [28] https://www.cienciapr.org/es/user/aslin-rodriguez [29] https://www.cienciapr.org/es/user/carlosmdeleon [30] https://www.cienciapr.org/es/user/srodsan [31] https://goo.gl/GWiXaP [32] https://www.cienciapr.org/es/user/moefeliu [33] https://goo.gl/ABpx6s [34] https://www.cienciapr.org/en/tags/yale-ciencia-academy [35] https://www.cienciapr.org/en/tags/educator-resources