ISSUE #19

THE U-RISE POST

The Newsletter of the UPRP U-RISE Program

2024 Graduates, New U-RISE Members Page 1

Summer Internships Page 2

Scientific Dissemination Page 3

Directors Conference & Summer Internships -Information Session Page 4

Success Stories to Inspire You Page 5

#FaceOfScience Page 6

Pre-U-RISE Workshop Page 7

Honor Roll, Congratulations, and "What's next?" Page 8

Perfection is not attainable, but if we chase perfection we can catch excellence. — Vince Lombardi

CONGRATULATIONS 2024 GRADUATES!

Official U-RISE member, Jorlane de Jesús Ramírez, was accepted for her PhD at UPCM Hillman Cancer Center, and we are extremely proud of her achievements. Jorlane, started her journey at the J2 Llab as part of the Principles and Applications of Biomedical Research Tools (PABRT) program. After taking part in that program, she became a PRISE adjunct member. During this time, she fell in love with research, participated in 3 summer internships, and presented at national meetings in the US and PR; when she was sure getting a PhD was her ultimate goal, she transitioned from being an adjunct member of U-RISE to being an official member. We've been part of her long and arduous journey. She is resilient, persevering, and hardworking, and we wish her ongoing success and fulfillment in her graduate career.

Adjunct member Alondra Colón Vega was accepted for a post-bac at Washington University in St. Louis. Alondra has been in our program as an adjunct since 2022. She participated in summer internships, presented at local and national conferences, and helped other students at the J2 lab while she was here. We wish her the best in attaining her academic goals.



Dr. Ruiz, U-RISE CO-PI, and Jorlane De Jesús



Meet the New U-RISE Official Members



Alanis P. Mercado-Hernández



Alanis P. Mercado-Hernández is majoring in biology, with a concentration in biochemistry. Her goal is to further develop her technical and critical-thinking skills, collaborate with experienced researchers, and immerse herself in real-world scientific projects. Her research interests include various facets of biomedical science, and she intends to focus on understanding the molecular mechanisms underlying disease and exploring innovative solutions for diagnosis, treatment, and prevention.

Kyannet Rodríguez Cruz is pursuing a BS in the natural sciences. The idea of getting a PhD in the biomedical sciences after graduation has been on her mind since she entered college. During her freshman year, her coursework sparked her interest in such fields as biotechnology, chemistry, nephrology, and neuroscience. Then, while participating in the pre-U-RISE program during the first semester of her sophomore year, her fascination with scientific research deepened. To this day, she is still exploring and navigating the many sub-fields that biology has to offer.

Summer Internships 2024

One of the UPRP U-RISE requirements for all the official members (starting in the year of their admission into the program) is to apply for summer internships. This helps them become familiar with the long process involved in getting accepted to such an internship. The program helps them with their CVs, personal statements, and letters of recommendation. If students are not accepted on their first try, opportunities to do summer internships at Ponce Health Sciences University (PHSU)and the J2 lab are open for them. In this way, the program helps them to strengthen their CVs, increasing their odds for the following summer.

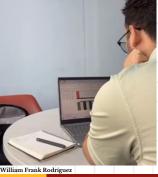
Summer internships are important for students who want to pursue a PhD in the biomedical sciences. During these internships, students acquire new scientific techniques and important lab skills and learn about experimental design and data analysis. They also participate in lab meetings, journal clubs, seminars, and workshops. But it's not all work all the time. Social activities, networking, meeting new people. and touring the host city are also part of the agenda. The greatest benefit of a summer research program is seeing firsthand how science really works, including troubleshooting, collaboration, and effective communication. Summer research internships are valuable experiences that greatly enhance each student's professional and scientific development. They also give students a competitive edge and direction for future career goals.

| Student | Summer Program | University |
|----------------------------------|--|---|
| Rodríguez Rodríguez, Patricia | Summer Research Program | Texas Tech University Health Sciences Center |
| Frank Rodríguez, William | Life Sciences Summer Undergraduate Research Programs (LSSURP) | The University of Minnesota Medical School |
| Rivera Rodríguez, Derick | 2024 GW Summer Program Advancing Research on Cancer (SPARC) | George Washington University |
| Mercado Hernández, Alanis | Summer Research | Ponce Health Sciences University |
| Rodríguez Cruz, Kyannet | Summer Research | University of Puerto Rico at Ponce |











From left to right: Kyannet Rodríguez Cruz, Alanis Mercado Hernández, William Frank Rodríguez, Patricia Rodríguez Rodríguez, Derick Rivera Rodríguez, and Jorlane de Jesús Ramírez

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Scientific Dissemination

Puerto Rico Physiological Society Annual Conference 2024

On February 23, 2024, official members Derick Rivera and William Frank presented at the Puerto Rico Physiological Society Annual Conference at the Pontifical Catholic University of Puerto Rico in Ponce. Derick presented the research he is working on with Dr. Ruiz (in collaboration with PHSU), which is titled "AMD3100 increases TNF- α in an endometriosis rat model." William presented "CRP and VEGF Effects on Endothelial Barrier Integrity: Implications for Atherosclerosis." The research on which the poster was based was conducted during his internship last summer at the University of Maryland, under the mentorship of Dr. Kimberly Stroka.



William Frank and Derick Rivera

16th Student Research and Creativity Conference

On May 10, 2024, students Patricia Rodríguez, Derick Rivera, and William Frank participated in the 16th Student Research and Creativity Conference at UPR Ponce. Patricia and William did oral presentations, while Derick presented a poster of his investigation.



Dr. Abigail Ruiz and Derick Rivera



Patricia Rodríguez and UPRP Chancellor Dr. Tessie H. Cruz

57th ACS JUNIOR TECHNICAL MEETING

On Saturday, April 20, 2024, U-RISE official members presented their research projects to peers and faculty members at the island's largest annual scientific forum, the ACS Junior Technical Meeting, at UPR-Aguadilla. This was Alanis Mercado Hernández's first time presenting as part of our program. She presented the work she was doing with Dr. Abigail Ruiz: "Effects of AMD3100 in estrous reproductive cycles and levels of cytokines in an endometriosis rat model."

Students William Frank, Jorlane de Jesús, Patricia Rodríguez, and Derick Rivera presented their research as well.



Rivera From left to right: William Frank Rodríguez, Dr. Edu Suárez, Patricia Rodríguez Rodríguez, Dr. Abigail Ruiz, Derick Rivera Rodríguez, Alanis Mercado Hernández, Kyannet Rodríguez Cruz, and Jorlane de Jesús Ramírez

ISSUE #19

Biomedical Training Program Directors Conference

U-RISE Program Directors Dr. Edu Suárez and Dr. Abigail Ruiz attended the 2024 Biomedical Training Program Directors Conference from July 8 through July 10, 2024, in North Bethesda, Maryland. This meeting is specifically designed for deans associate and program directors of programs involved NIGMS institutional in training, workforce development, and diversity. The 4 major themes of this conference were Trainee and Faculty Wellness, Excellence in Recruiting, Admissions, and Retention, Advancing Research Mentoring, and Promoting Positive Research Laboratory Culture. In addition, this was an event that promoted networking with NIGMS program officers.



Drs. Suárez and Ruiz in Maryland with colleagues.

Summer Internship Opportunities -Information Session





On January 25, 2024, Dr. Edu Suárez offered an information session in which she discussed the following:

- What a summer internship is
- What interns do and learn at summer internships
- Why summer internships are important
- Types of internships and their different advantages
- Standard requirements
- What personal statements and CVs are
- Tips for personal statements
- How the U-RISE program can help

Official members Patricia Rodríguez and Jorlane de Jesús shared their experiences doing summer internships. They motivated the other students and answered all their questions.

If you or anyone you know is interested in applying for a summer internship, don't hesitate to contact us at rise.ponce@upr.edu.

JANUARY – MAY 2024













Robert López Astacio , PhD

Roberto Morales

Yanaira Alonso Caraballo Michael Manoharan, PhD PhD

Valerie Vargas Zapata, PhD

This semester, several former PRISE members came to UPRP and offered a conference that was open to all the students of the biology department. The aim of this conference was to encourage those whose goal was—and remains—the achievement of a PhD to go for it! In these sessions, our visiting former members talked about how the PRISE program helped them achieve their goals, their journey to their degree, the tips and tricks a student should know after having been accepted into a graduate program, their experiences at their respective institutions, and much more.

Dr. Robert López has a PhD in immunology and infectious diseases, with a minor in cellular and molecular medicine, from Cornell University. He is currently working as a scientist in LCMS Biologics in the industry.

Roberto Morales is currently a PhD candidate at Ponce Health Science University.

Dr. Yanaira Alonso was a PRISE member from 2011 to 2013. She has a PhD in neuroscience from the University of Michigan. After getting her doctorate, she did a postdoctoral fellowship at Harvard Medical School/McLean Hospital; she is now a postdoctoral fellow in the Neuroscience Department at the University of Minnesota.

Dr. Michael Manoharan has a PhD in immunology from the University of California, Berkeley. He is currently working as a postdoc at the University of Minnesota, with funding from the Institutional Research and Academic Career Development Awards (IRACDA).

Dr. Valerie Vargas Zapata has a PhD in molecular and cell biology from UC Berkeley. She currently serves as the Diversity Initiatives Program Coordinator of the Wu Tsai Neurosciences Institute at Stanford.

We are incredibly proud of their academic and professional achievements. This diverse group exemplifies the many paths one can take after earning a PhD.

U-RISE congratulates and celebrates their accomplishments and wishes them all the best in this exciting phase of their careers!

Face of Science

On April 24, 2024, U-RISE official members were part of the #FaceOfScience social media campaign organized by the NIH Diversity Program Consortium. This campaign aims to engage scientist nationwide by making them share a post using the hashtag #FaceOfScience and sharing what they love most about research.

Our Instagram is rise.ponce. Follow us, if you want to be updated on everything our students are doing.

These are the things that our students love most about being a scientist:



"The thing I like most about being a scientist is that, in science, there is always space to learn something new and be innovative" -Kyannet N. Rodríguez



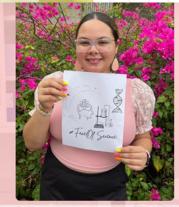
"What I love most about being a scientist is to be part of a community of human beings who like to answer questions, with direct and indirect benefits in the improvement of life quality. " -William Frank Rodríguez



"What I love most about being a scientist is the opportunity to explore the unknown and make discoveries that contribute to problem-solving and innovation in the world. I can use my curiosity as a tool for growth. Being part of a scientific community allows me to share my passion for discovery and enhances my enthusiasm for acquiring knowledge" -Patricia Rodríguez



"What I love most about being a scientist is the privilege of delving into the unknown, exploring new spaces, and answering the questions that feed my curiosity." -Derick B. Rivera



"I love that science is so broad and interdisciplinary, that no matter how little you think your contribution is, we are all working together for a greater goal: the good of humanity." -Jorlane De Jesús Ramírez

PRE-U-RISE WORKSHOPS

Design of Experiments

On February 9, 2024, official U-RISE member Jorlane de Jesús Ramírez offered a workshop on how to design This workshop aimed to provide experiments. with participants the expertise needed to systematically plan, execute, and analyze experiments, and in it, Jorlane talked about learning design experiments effectively, how to apply statistical methods, optimize processes, minimize variability, and make better decisions. The workshop's overall goal was to improve the participants' ability to design experiments that produce valuable, actionable insights and enhance research and development practices.



Electronic Professional Portfolio



On March 1, 2024, U-RISE Program Director Dr. Abigail Ruiz Rivera offered a workshop introducing the students to electronic professional portfolios. This workshop helped our students learn how to highlight their skills and achievements on an online platform to present a comprehensive collection of their work in a visually organized way. This kind of portfolio makes it possible for universities to easily ascertain a given student's capabilities and experience. Additionally, these portfolios also serve as networking tools, making it easy to share work with interested parties. Finally, they can be a valuable asset in career advancement by detailing and individual's growth and ongoing professional development, which particularly useful when that individual is seeking undergraduate opportunities such as summer internships or is being considered by a PhD graduate program.

Individual Development Plan (IDP)

On March 12, 2024, Dr. Annelyn Torres Reverón offered an individual development plan (IDP) workshop. The purpose of an IDP is to set clear objectives for the trainee's development. A written plan serves as a crucial tool that can be assessed and updated as research and training evolve. Since skill acquisition is an ongoing process that progresses in stages, the plan needs to be regularly reviewed and adjusted, in much the same way that research goals are.



2024 Honor Roll

Congratulations to all the biology students who made the 2024 HONOR ROLL, most especially those on our PRISE team!! U-RISE acknowledges their achievements; we are proud to be a part of their academic, professional, and personal development.

Official Members William Frank Rodríguez Derick Rivera Rodríguez Alanis Mercado Hernández **Kyannet Rodríguez Cruz**

Adjunct Members Diego Caquías López Yessie García Nieves Amanda Maldonado

CONGRATULATIONS

We want to congratulate our official members William Frank Rodríguez and Patricia Rodríguez Rodríguez for their excellent oral presentations at the "70ma Convención Distrital del Caribe de la Sociedad Honoraria de Biología." William Frank won 1st place with his oral presentation and Patricia Rodríguez won 3rd place for hers.

Applications Are OPEN for U-RISE! Apply now

If you've always loved the biomedical sciences but don't feel that a career in medicine, the pharmaceutical sciences, dental medicine, or veterinary medicine is the right fit, research might be the answer.

Explore our page: https://prise.uprp.edu/. See whether URISE is the right fit for you.

Requirements

Benefits

- Ba a 2nd or 3rd year Biology Lab rotations at UPR-Ponce & Department Student
 - PHSU with experienced mentors
 - Fill out an application
- Provide contact information with 2 references
- Have a 3.40 GPA or higher
- Professional development activities
- Assistance making your CV and personal statement competitive for summer research experiences

REGISTRATION & HOUSING

Shout-out to Patricia Rodríguez, whose picture was chosen for the Registration and Housing tab for the ABRCMS official page.

Join our students this year at ABRCMS, in Pittsburgh, PA, from November 13-16th, 2024.

If you were part of a summer internship and want to present your research at ABRCMS 2024, apply for a travel award here: https://www.abrcms.org/present-at-abrcms/apply-for-a-travel-award/



Apply here:

If you have any questions or need help, contact us at: rise.ponce@upr.edu

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