

ANNUAL ADMINISTRATIVE MEETING (EAC)

The PHSU NIGMS RISE program held its virtual annual advisory committee meeting on Wednesday, May 18, 2022. This meeting brought members of the internal and external advisory committees together for program updates, outcomes and planning for the new T32 grant. The EAC had a productive meeting with the Internal Advisory Committee (Drs. Caroline Appleyard, James Porter, Vanessa Rivera, Marian Sepúlveda, Idhaliz Flores, and graduate student/former RISE trainee, Roberto Morales), as well as with the current RISE trainees. We thank our EAC members, Dr. Estela Estape, Dr. Andrew Tsin and Dr. Charles Irvin, for their valuable contributions and commitment to our program, as well as the IAC, Ivelisse Rivera (RISE Lab Supervisor) and trainees for their feedback and dedication. Thank you all!



IMMUNOLOGY MEETING 2022



Congratulations to Paola Flores (1st year RISE trainee), who successfully attended her first national meeting-Immunology 2022- in Portland, Oregon, from May 6-10, 2022. Paola had the opportunity to attend lectures from some of the world's most prominent immunologists, as well as poster presentations & exhibits. This was a great opportunity for her to learn, network and have fun!

RISE changes to T32 grant mechanism: G-RISE at Ponce Health Sciences University, a new chapter!

By: Dr. Caroline Appleyard, Director

After 14 successful years the RISE graduate training program at Ponce Health Sciences University will change from an R25 to T32GM144896. The new grant "**G-RISE at Ponce Health Sciences University**" started this past May 1, 2022. This **\$3.18 million 5-year grant** aims to increase the number of Hispanic Americans doing biomedical research and encourage the growth of biomedical research in Puerto Rico.

The new grant continues to build upon the very successful training program created under the previous R25-RISE funding mechanism which had a positive impact on the training of our PhD students and on the entire PHSU community. Under the prior R25-RISE Program the PhD completion rate increased from 73% to 90%, the average time to graduation decreased from 6.24 to 5.55 years, and 64% of R25-RISE trainees continued with postdoctoral training after graduating. Of the 60 R25-RISE trainees supported 24 obtained independent fellowships, 35 already graduated with a PhD and 8 have full-time faculty positions. G-RISE will build upon those successes and adapt to several important lessons learned. It will provide the organizational structure and extensive mentoring necessary to ensure trainees have a sense of belonging and scientific identity while empowering them to prepare for and overcome obstacles in their scientific careers. The program proposes to accomplish these goals through enhancement of the academic, research, personal, and professional competence of our underrepresented minority students to better prepare them for diverse careers in the biomedical sciences. The specific measurable objectives of the PHSU G-RISE program are to provide: (1) professional, operational, and technical research skills training for PHSU G-RISE trainees; (2) communication skills training for PHSU G-RISE trainees; (3) team building/networking opportunities for PHSU G-RISE trainees; and (4) increase the PhD completion rate while reducing time-to-degree. Each of these objectives will be pursued with an experience-based balance of continuing activities that were highly effective as well as a strategic set of new training components that were developed to address the emerging needs of our trainees.

We look forward to continuing to increase the competitiveness of highly qualified underrepresented students graduating from the Biomedical Sciences PhD Program at PHSU and the number who advance to postdoctoral positions and diverse research-related careers!



(L-R) Dr. James Porter, Associate Program Director, Jean M. Schmidt, Program Coordinator, Dr. Caroline Appleyard, Program Director



17th ANNUAL PHSU-PRI SCIENTIFIC CONFERENCE

On May 7, 2022, the Ponce Research Institute hosted its 17th Annual Scientific Conference, which was held at the Hilton Ponce Golf and Casino Hotel. The main goal of this conference is to highlight ongoing research activities at Ponce Health Sciences University, and its affiliated hospitals. It also promotes network and collaborations. There were over 400 registrants, with 133 research presentations in Basic Sciences, Behavioral Sciences, Clinical Cases, Clinical Sciences, and Public Health. Presentations were evaluated by over 30 judges from affiliated and partner institutions throughout Puerto Rico. At the end of the activity, prizes were awarded to the top three presenters in each category. Winners from the biomedical sciences include sixth year RISE trainee, Lubriel Sambolin, who was awarded 2nd place in poster presentation and second year RISE trainee, Nashaly Irizarry, who was awarded 3rd place in oral presentation respectively. We congratulate them for their excellent work!

ORAL PRESENTATION

3rd place: Nashaly Irizarry (2nd year RISE trainee)

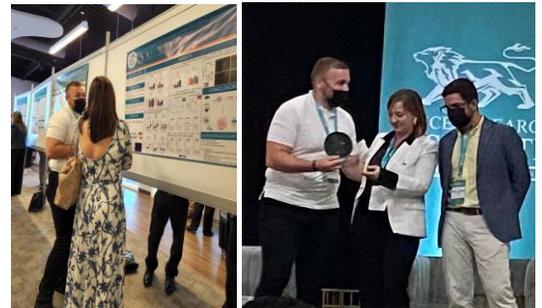
Effects of reducing FKBP5 expression in the ventral hippocampus on PTSD-related behaviors



POSTER PRESENTATION

2nd place Lubriel Sambolin (6th year RISE trainee)

Peripheral and Ventral Hippocampal Long-chain Ceramides Correlate with Depressive-like Behaviors in Rats



We also recognize the outstanding presentations of all our trainees: Jessalyn Pla (4th year), Sheila Valle (3rd year), Nelly Arroyo (3rd year), Joshua Pérez (2nd year) & Yobet Pérez (2nd year), as well as former RISE trainees, Elliott Rodríguez (4th year), Alexandra Aquino (4th year), Roberto J. Morales (5th year) and Orlando I. Torres (6th year). **Congratulations!**

RISE ALUMNI NEWS



Congratulations to former RISE trainee, Dr. Siomara Hernández, on her new position as non-clinical Study Manager at Audentes Therapeutics, effective June 13, 2022. Under the mentorship of Dr. Caroline Appleyard, she graduated on 2016 from our PhD Program, and pursued her post doc at Michigan State University. Dr. Hernández can be reached at <https://www.linkedin.com/in/siomarahr> for any advice on her field, for mentoring or networking!

All the best, Siomara!

RISE Lab Workshop: XMAP MULTIPLEX ASSAY

Friday, May 13, 2022 | 1:00 PM
Room 101 Academic Building 'D'



Pablo López Colón, B.S.
Research Technologist
Center for Research Resources
Ponce Health Sciences University

Sponsored by:
PHU Ponce Health Sciences University
PHU RISE (Grant #P20CA026683) and
RCAR Program (Grant #20M0001213)

On May 13, 2022 the RISE Lab held a workshop “XMap Multiplex Assay”, in collaboration with the Center for Research Resources. Pablo López, BS. Research Technologist from the Center for Research Resources at Ponce Health Sciences University gave a presentation on the basic terms and how to do a Multiplex Assay. Attendees had the opportunity to learn about the complete procedure ranging from the materials, kits needed and workflow. Mr. López also discussed and presented examples of troubleshooting. The workshop was broadcast via Zoom, where viewers had the opportunity to ask questions in addition to the students and audience present in the classroom.

By: Ivelisse River
RISE Lab Supervisor



SCIENZA E ARTE

On June 9, 2022, the Graduate Student Association in Biomedical Sciences (GSABS) celebrated its summit fundraising event, Scienza E Arte, which took place on the Centro Cultural Carmen Solá de Pereira in Ponce, PR. This event unites Ponce Health Sciences University (PHSU) administrators, faculty, and students in the same place combining two different aspects: science and liberal arts. "Scienza e Arte" provides the perfect environment to allow students and faculty of PHSU, as well as local artists, to expose their talents.

This year, Scienza E Arte featured a range of invited artists who represented different areas of the fine arts, raffles and silent auctions of multiple works donated by artists and artisans from around the island, where enough funds were raised for scholarships in the benefit of our dedicated students of GSABS. We thank and congratulate the GSABS Board 2021-22 for making this possible!



By: Alexandra Aquino (former RISE trainee)

PD session: Strategies for promoting your research and advocating for yourself

Our RISE Program aims to increase the competitiveness of trainees graduating from our Biomedical Sciences PhD Program by providing them with professional skills needed to succeed. Aligned with this, we invited Mrs. Cindy Makita-Dodd, Career Strategist and Coach, who gave them a workshop about Interview Preparation, on Friday, May 20, 2022. Through a very detailed presentation, she helped them improve their interview skills for future professional opportunities. Our trainees received useful tips and guidance and participated in mock interviews. It was a very interactive and pertinent session!



PD session: External Training: Updates and Feedback

As part of our RISE Program funding opportunities, our trainees can benefit from RISE support for External Training that will help them learn new techniques as well as advance in their thesis projects. On May 27, RISE trainees Jessalyn Pla (4th year), Yesenia Rivera-Escobales (3rd year), Yadiel Rivera (1st year) and Elvin Hernández (1st year) gave their peers updates and feedback from their most recent experiences attending external trainings. Jessalyn talked about Electrophysiology, Yesenia talked about Fiber Photometry, Yadiel and Elvin talked about Diet, Microbiota and Cancer Immunotherapies, as well as various educational workshops that they attended as part of the AACR 2022 Annual Meeting. Congrats everyone on your excellent presentations!



Yesenia Rivera

Elvin Hernández & Yadiel Rivera

Jessalyn Pla

#FaceOfScience campaign

Our PHSU-NIGMS RISE Program joined the Enhance Science and the NIH Diversity Program Consortium for the #FaceOfScience social media hashtag campaign on Wednesday, May 4, 2022. Its purpose was to celebrate the NIH/NIGMS Research Training Community. Our Puerto Rican inspiring young researchers who enhance science across the nation (our current PHSU-NIGMS RISE Program trainees) are pictured below!



(From L-R) Yobet Pérez (2nd year), Jonathan López (3rd year), Lubriel Sambolin (6th year), Jessalyn Pla (4th year), Joshua Pérez (2nd year), Yadiel Rivera (1st year), Yesenia Rivera (3rd year), Elvin Hernández (1st year), Sheila Valle (3rd year), Nelly Arroyo (3rd year) & Paola N. Flores (1st year)



Thesis Dissertation

Relationships between Stress, Diet, Long-chain Ceramides and Depressive-like Behaviors in Rats

Lubriel Sambolin-Escobales

PhD Candidate & RISE Program Trainee
Biomedical Sciences Program



Academic Building - Room 101
Thursday, June 9, 2022,
12:00M - 1:00PM

Join Zoom Meeting
https://psm.zoom.us/j/81005731677
psm@psm.edu (Passcode: 81005731677)
Meeting ID: 810 0057 3167
Passcode: 81005731677

Sponsored by:
PRL PhD in Biomedical Sciences,
NIH/NIH RISE (Grant #250040002020) and
RISE Program (Grant #250040002020)



Under the mentorship of Dr. James Porter, our 6th year RISE trainee, Lubriel Sambolin-Escobales, successfully defended his thesis dissertation on June 9, 2022. The title of his thesis was “Relationships between Stress, Diet, Long-chain Ceramides and Depressive-like Behaviors in Rats” where he aimed to determine the possible synergistic effect of high-fat diet in combination with short-term unpredictable stress on serum sphingolipids content and depressive symptoms. Also, to determine the effect of the direct infusion of long-chain ceramides (C20:0) into the ventral hippocampus of rats and its effects on the development of depressive-like behaviors.

Congratulations, Dr. Sambolin. All the best in your future endeavors!



10th RISE PHILOSOPHY OF SCIENCE RETREAT

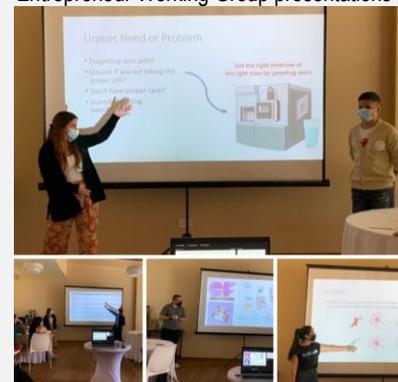
Our RISE Program held its 10th Annual Philosophy of Science Retreat on June 1-3, 2022, at Copamarina Beach Resort & Spa in Guánica, PR. We selected *Biomedical Entrepreneurship: the basics for a successful science business* as this year’s Retreat theme. Our retreat goals were to: Provide trainees with the foundational concepts of biomedical entrepreneurship; Review useful biomedical entrepreneurship skill sets to succeed; Discuss some challenges faced by business ventures in the biomedical sector (Case studies); Review the entrepreneurial mindset in problem-solving, project & budget management, and team building. The agenda included the following talks: *Biomedical Entrepreneurship: How to startup!* by Dr. Annelyn Torres; *Budget Principles for Biomedical Entrepreneurs* by Mr. Carlos Dominguez; *Case Studies* by Dr. Idhaliz Flores; *Characteristics/Skills of a Successful Biomedical Entrepreneur* by Dr. Ignacio Pino. The group also gathered for Interactive Activities and games with the aim of teambuilding. On the final day, trainees were teamed up for the Entrepreneur Working Group Presentations with the objective of presenting a biomedical product to market, considering each of the key elements of product development and describing how they would address these to develop their product. We received very good feedback as we were also able to hold our retreat in person again for the first time since 2019, due to the restrictions of covid-19.



Invited Guest Speakers



Entrepreneur Working Group presentations



Interactive Activities/Teambuilding



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