



From the Director:

Dear PI4D members,

As we approach the end of summer when faculty are busy attending conferences and meetings, I am eager to bring us back together so that we can share our collective experiences. This year we have planned the PI4D 'Snap' Talks that are meant to be short highlights of your work to bring us up to speed on the latest news coming from your lab. This will be a great opportunity to introduce your research program to all new incoming faculty to Purdue who are being invited to learn about PI4D. The event, scheduled from 2pm to 5pm on August 18th in MRGN 121, is open to all and I encourage you to tell your colleagues and friends about it so that they can come too. We will host a New Faculty Welcome Reception following the event from 5pm to 6pm that will be open to faculty only. For our graduate student community, we are planning an event on August 11th from 9am to 12pm to discuss useful strategies for fellowship applications and cover other topics related to career development. We are excited to continue building our community and to feature the great work you are doing. Remember to send us your stories of success so that we can highlight them.

I look forward to seeing you at the next PI4D event!

- Dr. Richard Kuhn
Director, PI4D

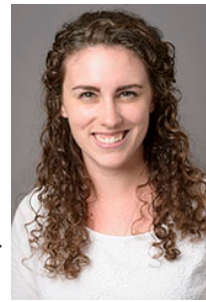
Welcome to the PI4D Ambassadors -



Diana Cortes-Selva - Diana is a Third Year PhD Candidate in the Life Science Interdisciplinary program (PULSe) working in the Department of Comparative Pathobiology. Her research focuses on the immune responses to the helminth *Schistosoma mansoni*. Originally from Nicaragua, Central America, Diana earned a M.S. from the University of Florida, Gainesville. When not working in the lab, she serves as Secretary for the PULSe GSO and grant reviewer for the PGSG Grant and Allocation Committee. In her free time she enjoys oil painting, exploring different places and foods, reading and swimming.

Elizabeth Phillips - Elizabeth is a 3rd year PhD student advised by Dr. Jacqueline Linnes in

Purdue's Weldon School of Biomedical Engineering. She wants to develop accessible healthcare technologies that can empower patients and lower the cost of healthcare. Since joining the Linnes biosensors lab she has contributed towards the point-of-care detection of neonatal sepsis, with support from the Global Engineering Program's I2D Lab Seed Grant Program, and a similar paper-based platform for low-cost HIV-testing, supported by the Bill & Melinda Gates Foundation's Grant Challenges Explorations award. Funded by the National Science Foundation Graduate Research Fellowship, Elizabeth is passionate about applying her background in chemical engineering and molecular biology to creating novel methods for detecting pathogens. Outside of the lab, she enjoys teaching local students and families about biomedical engineering as the outreach coordinator of BME's graduate student association. You can find her on Wednesdays at the West Lafayette Farmers Market, the last Thursday of the month at Science on Tap, and many other locations around the community! On the off-chance she's not in the lab, she's probably learning how to golf, walking her cat, or hiking. She's especially excited to join the PI4D Ambassador program to learn and share even more about life science research at Purdue and collaborating institutions.



Priya Prakash - I am a third-year graduate student in the Interdisciplinary Life Science (PULSe) program and work in Dr. Gaurav Chopra's research group in the Chemistry Department. My research focuses on understanding the cellular and molecular mechanisms involved in neuroinflammation. Specifically, I am investigating the role of microglial cells in mediating neuroimmune suppression in neurodegenerative disorders such as Alzheimer's disease. My work involves identifying immunomodulatory molecules in a combination therapy approach to enhance microglial phagocytosis and mediate neuroprotection to combat neuroinflammation. The long-term goal of my research is to discover and characterize immune checkpoints in the brain with potential therapeutic implications. I grew up in Bangalore, India, and pursued Biotechnology Engineering for my Bachelor's degree. In addition to science and research, I am also passionate about photography, blogging, and traveling. I am excited to be a part of the Purdue Institute of Inflammation, Immunology and Infectious Disease (PI4D) under the leadership of Dr. Richard Kuhn and Dr. Tommy Sors. Thank you for this wonderful opportunity and I look forward to contributing to our organization as a graduate student ambassador this year!

Congratulations to Dr. Mohammad Saleem for getting a [ROI REPURPOSING AURANOFIN AND](#)

2017 BioCrossroads New Venture Competition

Our New Venture Competition launched several weeks ago, and applications are due August 14th. Since Purdue always has a strong pool of applicants, I just wanted to ensure that all Foundry companies knew of the upcoming deadline.

Interested companies can find additional information and apply at the following link:

<http://www.biocrossroads.com/2017-biocrossroads-new-venture-competition/>

Please feel free to pass along my information should anyone have questions.

Chris Eckerle
BioCrossroads
(317) 238-2468

2017 Linda & Jack Gill Graduate Student Award

Application deadline is **Wednesday, August the 30th**

I would appreciate it if you could pass this e-mail along to faculty in your program who might have an eligible student (a current student predicted to finish within 12 months of nomination or a student who has defended within the last 12 months).

At this year's Gill Symposium, we will once again be presenting the "Linda and Jack Gill Graduate Student Award" to recognize an exceptional graduate student in the Life Sciences from IUB, IUPUI or Purdue. The details of the award and the nomination process are described in a letter that can be found at <http://www.indiana.edu/~gillctr/grAward.php>

Please note that for this year's event, we are not asking the awardee to present his/her thesis work at the symposium. The deadline for application submissions is Wednesday, **August the 30th**.

Thank you,

Cary Lai

A Linda and Jack Gill Scholar of Neuroscience & Professor of Psychological & Brain Sciences

Indiana University

MSBII- Room 150A

702 N. Walnut Grove Ave.

Bloomington, IN 47405

Intelligence Advanced Research Projects Activity (IARPA)

Proteos

- “The Proteos Program seeks to analyze the relationship between polymorphisms in the proteome called genetically variable peptides (GVPs) and non-synonymous single nucleotide polymorphisms (SNPs) to provide an additional forensic tool for correlating an individual with particular objects, events, and locations. DNA is the cornerstone of forensic science and is used for human identification in a variety of scenarios, e.g. criminal and missing persons investigations and the identification of human remains. Identification from biological material is dependent on the ability to characterize genetic polymorphisms in DNA. However, DNA is often recovered at very low quantities, is recovered as part of a complex mixture from several contributors, or it is degraded, all which complicate analysis and may obstruct meaningful results. Proteins are often associated with biological trace evidence such as hair and skin, and proteins are relatively more stable than DNA and can persist in the environment for longer periods of time. Protein also contains genetic variation in the form of single amino acid polymorphisms (SAPs).”
- The Proposers’ Day Conference for FELIX was on July 25. More information is available at: <https://www.iarpa.gov/index.php/165-research/current-research/cause/proposers-day/979-proteos> ; primary point of contact: Kristen Jordan, Program Manager, email: kristen.jordan@iarpa.gov ; https://www.fbo.gov/index?s=opportunity&mode=form&id=ddc2abb0b58db7f759999e32e84c9049&tab=core&_cview=0

Research Embedding Program

Request for Embedding Project Proposals

Initial Tier One Planning Projects (\$40,000 each)

Tier Two Follow-up Projects (Up to \$200,000 - \$250,000 each)

Tier one Due Dates: September 6, 2017, and Jan 10, 2018

The Walther Oncology Physical Sciences and Engineering Research Embedding Program (Walther Embedding Program), a joint program between the Indiana University Simon Cancer Center (IUSCC) and Purdue Center for Cancer Research, announces Phase 2 of the Embedding Program. The program is funded by the Walther Cancer Foundation with the goal of creating an environment where clinical perspectives drive the design of new technologies and predictive models to increase the effectiveness of cancer detection, diagnosis, and treatment. The program funds interdisciplinary, collaborative projects between Purdue University and IUSCC. Each team must include: 1) at least one Purdue faculty PI either from the physical or chemical sciences, computer science, mathematics, or engineering, 2) at least one senior clinical faculty PI from the IUSCC, 3) a Purdue postdoctoral trainee/senior graduate student, and 4) an IUSCC medical fellow/resident/junior faculty. There is an expectation that each funded trainee will spend significant time embedded in the other team members' laboratory/environment or clinic.

Successful Research Embedding Teams will be awarded funds to support the following:

1. Postdoctoral trainee/senior graduate student salary
2. Medical fellow/resident/junior faculty salary
3. Project supplies as appropriate to the project
4. Travel between institutions

The program is structured in a two-tier award system.

Tier One

Tier One projects(\$40,000/project) will support small, "embedding" pilot projects for the development of innovative ideas for the clinical translational of new technologies. Successful Tier One projects, upon completion, will have demonstrated: 1) an in-depth, impactful, and implemented embedding plan for the junior trainees (postdocs, senior graduate students, medical fellows/resident, or IUSCC junior faculty) in each research team; 2) a carefully developed research plan that demonstrates the clinical influence in the design of advanced technologies/models/tools; and 3) preliminary prototype/data/technology that demonstrates the feasibility and clinical impact of the project. The project period is five months and no-cost extensions are not allowed. There are two application deadlines for the Tier One program: September 6, 2017, and Jan 10, 2018. (Online submission will be open on August 1, and

December 1, 2017.)

Tier Two

Based on the successful implementation of the embedding plan, and scientific and technical merit, the three most successful Tier One projects will be awarded up to an additional \$200,000 - \$250,000 each during the Tier Two, or implementation phase of the project. During this phase, a continued iterative refinement will occur through scheduled progress meetings with the Walther Embedding Program leadership team. Tier Two project period is one year and six months.

All project are expected to result in a high impact on the career direction of the funded trainees, high quality publications and as appropriate, applications to federal funding agencies for fellowships or grants or advancement to commercialization of new technologies/tools.

Interested faculty in need of collaborators should contact Luanne Bermel at Purdue University (lmi@purdue.edu; 765.496.9316) or Elizabeth Parsons at the IUSCC (eparsons@iupui.edu; 317.278.0078).

Join NIAID and make a difference!

Postdoctoral Position Available

The NIAID Laboratory of Infectious Diseases is soliciting applications for a postdoc intramural research training award position in the Structural Virology Section to study how positive-sense RNA viruses enter human host cells, replicate, and evade the immune response.

Successful applicants should hold a Ph.D. and/or M.D., have less than five years of postdoctoral experience, and experience in immunology or virology. Applicants may be U.S. citizens or permanent residents; for a visiting fellowship, visa requirements apply.

Visit Office of Intramural Training and Education for more information about the position and to apply.

Visit NIAID Careers for more information about working in NIAID's dynamic atmosphere.

HHS, NIH, and NIAID are equal opportunity employers.

Funding Opportunities

Opportunity	Award Amount	Deadline

<u><i>DOD-Army USSOC Broad Agency Announcement Award</i></u>		<i>July 28, 2017</i>
<u><i>NIH Regional Consortia for High Resolution Cryoelectron Microscopy (U24)</i></u>	<i>Varies</i>	<i>August 7, 2017</i>
<u><i>NSF Joint DMS/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences (DMS/NIGMS)</i></u>	<i>Varies</i>	<i>September 1-18, 2017</i>
<u><i>NIH Cancer Research Education Grants Program to Promote Diversity - Courses for Skills Development (R25)</i></u>	<i>300,000</i>	<i>September 25, 2017</i>
<u><i>Research to Advance Vaccine Safety (RO1)</i></u>	<i>Varies</i>	<i>October 5, 2017</i>
<u><i>NIH Novel Approaches to Understanding, Preventing and Treating Lyme Disease and Tick-borne coinfections (R21)</i></u>	<i>200,000</i>	<i>October 16, 2017</i>
<u><i>NSF Ecology and Evolution of Infectious Diseases (EEID)</i></u>	<i>Varies</i>	<i>November 15, 2017</i>
<u><i>NIH Oral HIVacc: Synergistic Strategies to Systemic Vaccination (R01)</i></u>	<i>Varies</i>	<i>November 24, 2017</i>
<u><i>HHS-CDC Reducing disparities in vaccination coverage by poverty status among young children: An assessment of parental experience, barriers, and challenges with accessing quality vaccination services)</i></u>	<i>300,000</i>	<i>January 18, 2018</i>
<u><i>HHS-CDC Economic Studies of Immunization Policies and Practices</i></u>	<i>300,000</i>	<i>February 22, 2018</i>
<u><i>NIH Notice of Intent to Publish Funding Opportunity Announcements to Promote Implementation Science (R01) and Dissemination and Implementation Studies (R18)</i></u>	<i>Varies</i>	<i>Calendar Year</i>
<u><i>NIH-NIAID Omnibus Broad Agency Announcement</i></u>	<i>Varies</i>	<i>Varies</i>

****Newly added**

Additional Resources from NIH:
<https://public.csr.nih.gov/Pages/csrwebinar.aspx>

Send us your images and news stories! Images and stories can be deposited [here](#), or email us at pi4d@purdue.edu

