

October 7-8, 2025 / Purdue Biology 150th Anniversary Celebrating our Legacy — Shaping the Future

October 7: 150th Anniversary Karling Lecture

12:30 – 1:30pm, DLR 131 (Lunch provided at 12:00pm)

Denise Montell, Duggan Professor and Distinguished Professor, UC Santa Barbara

"Racing from border cell migration to an improved cancer immunotherapy"

October 8: 150th Anniversary Symposium and Karling Lectures PMU North and South Ballrooms

8:45 - 9:00 am

Welcome & Opening Remarks / Continental Breakfast

9:00 - 10:35 am

Session 1: From Molecular Structures to Function

Chairs: <u>John Tesmer</u>, Walther Distinguished Professor in Cancer Structural Biology, Purdue Biological Sciences

Ram Subramanian, Gerald and Edna Mann Director, Bindley Center for Bioscience, Professor of Purdue Biomedical Engineering and Biological Sciences

- <u>Janet Smith</u>, Rita Willis Professor of the Life Sciences, Martha L. Ludwig Distinguished University Professor of Biological Chemistry, University of Michigan: "Flavivirus NS1: Jack of All Trades in Viral Pathogenesis" (25 minutes)
- <u>Jack Johnson</u>, Professor Emeritus, The Scripps Research Institute: "Bacteriophage HK97: Proteolytic and Conformational Control of Virus Capsid Maturation" (25 minutes)
- <u>Nick Noinai</u>, Associate Professor, Purdue Biological Sciences: "The role of Neisserial surface machineries in hijacking host nutritional immunity" (20 minutes)
- <u>Brian Metzger</u>, Assistant Professor, Purdue Biological Sciences: "Dissecting the evolution of gene regulation using interspecies genetics" (20 minutes)
- Q&A and Discussion (5minutes)

10:35 - 10:50 am - Coffee Break and Networking

10:50 am - 12:20 pm

Session 2: From Molecules and Cells to Phenotypes and Behaviors

Chairs: <u>Claudio Aguilar</u>, Professor, Purdue Biological Sciences

Brittany Allen-Petersen, Assistant Professor, Purdue Biological Sciences

- <u>Doug Robinson</u>, Professor, Johns Hopkins University, Purdue Distinguished Science Alumnus: "Cellular Form: the Basis of Healthy Function" (25 minutes)
- <u>Jason Hanna</u>, Assistant Professor, Purdue Biological Sciences: "Insights from rare sarcomas" (20 minutes)
- <u>Matt Tegtmeyer</u>, Assistant Professor, Purdue Biological Sciences: "Population-scale functional genomics using cell villages nominates astrocyte lipid metabolism as a therapeutic target for schizophrenia" (20 minutes)
- <u>Jimmy Dooley</u>, Asst. Professor, Biological Sciences: "Sleep like a baby: How REM sleep helps the brain learn to move" (20 minutes)
- Q&A and Discussion (5 minutes)

12:20 – 1:30 pm - Lunch Break & Networking

1:30-2:30 pm

Session 3: Shaping the future of Biological Sciences.

Introduction: Stephanie Gardner, Professor, Purdue Biological Sciences

• <u>David Asai</u>, Former Senior Director for Science Education, HHMI: *The future of Science Education—Vision, Challenges, Opportunities (25 minutes)*

Panel Discussion

Moderators: Perry Paschou, Professor and Head, Purdue Biological Sciences

Stephanie Gardner, Professor, Purdue Biological Sciences

Introductory Remarks by each Panelist (20 minutes) / Moderated Discussion and Q&A (10 minutes).

- <u>Rita Colwell</u>, Distinguished University Professor, University of Maryland at College Park and Johns Hopkins, Purdue Distinguished Science Alumna
- Anne Carpenter, Senior Director of the Imaging Platform, Institute Scientist, Broad Institute, Purdue BIO 150th Anniversary Distinguished Alumna
- <u>Richard Kuhn</u>, Trent and Judith Anderson Distinguished Professor in Science, Former Department Head, Purdue Biological Sciences

 <u>David Asai</u>, Former Senior Director for Science Education, HHMI and former Department Head of Purdue Biological Sciences

2:30-2:50 pm - Coffee Break & Networking

2:50 – 4:45 pm

Session 4: From Genomes to Evolution

Chairs: Mark Christie, Professor, Purdue Biological Sciences

Stan Gelvin, Edwin Umbarger Distinguished Professor, Purdue Biological Sciences

- <u>Daniel Hartl</u>, Higgins Professor of Biology, Harvard University: "Malaria Past, Present, and Future" (25 minutes)
- Qixin He, Mary J. Elmore New Frontiers Assistant Professo, Purdue Biological Sciences: "Shared and divergent evolutionary patterns in antigens and allergens" (20 minutes)
- <u>Jeff Bennetzen</u>, Norman and Doris Giles Professor, Georgia Research Alliance Eminent Scholar, University of Georgia: "Agents of Change, Inside and Outside Plant Genomes" (25 minutes)
- <u>Sergio A. Muñoz-Gómez</u>, Assistant Professor, Purdue Biological Sciences: "Are mitochondria required for cellular complexification?" (20 minutes)
- <u>Dylan Wainwright</u>, Assistant Professor, Purdue Biological Sciences: "The slimy and snotty mucus of fishes" (20 minutes)
- Q&A and Discussion (5 minutes)

4:45-6:00 pm

Poster Session & Reception

- Student and faculty posters and student awards
- · Refreshments and networking
- Three 150th Anniversary Best Poster Awards \$1,000 each (Announced at 5:45pm)