



PATHWAY TO SCIENTISTS UNDERGRADUATE RESEARCH PROGRAM 2026 Spring Research Symposium

1:30 PM (US Eastern Time), May 5th, 2026

(Medical Sciences Building, Room B-610, 185 S Orange Ave, Newark, NJ 07103)



Opening Remarks (1:30-1:35 PM)

Group Photos (1:38 PM)

Oral Presentations:

- 1. Ariana Rashid:** Mitochondrial phenotyping of new genetically engineered mouse models (GEMMs) of prostate cancer
Alex Papachristodoulou lab, Center for Immunity & Inflammation; Center for Cell Signaling; Department of Microbiology, Biochemistry & Molecular Genetics
- 2. Ayushi Chadha:** Characterizing the Role of VEGFR3 in the 4th Pharyngeal Arch and SHF-Derived Endothelial Cells.
Sophie Astrof lab, Department of Cell Biology & Molecular Medicine

- 3. Tanisha Verma:** Use of a Mouse Model To Study Congenital Syphilis.
Nikhath Parveen lab, Department of Microbiology and Molecular Genetics
- 4. Nanakonadu Osei:** Sex-Specific Immune Responses in SHIVC/109-Infected Rhesus Macaques.
Theresa Chang lab, Microbiology, Biochemistry & Molecular Genetics, Public Health Research Institute.
- 5. Victor C. Agbara:** Pseudo Bulk Matrix/Single Cell.
Lanbo Shi lab, Public Health Research Institute, School of Pharmacy.
- 6. Rebecca George:** Brainstem projections of central amygdala oxytocin receptor neurons.
Ioana Carcea lab, Department of Pharmacology, Physiology and Neurosciences; Rutgers Addiction Research Center.
- 7. Aadit Shah:** CRISPR-Based Manipulation of Pf3D7_1117300 in Plasmodium falciparum.
Purnima Bhanot lab, Department of Microbiology, Biochemistry & Molecular Genetics.
- 8. Enrique Campos:** TELOMERASE AND MEC1 CHIMERISM, A KEY TO GENOMIC STABILITY USING SACCHAROMYCES CEREVISIAE.
Katsunori Sugimoto lab, Department of Microbiology, Biochemistry & Molecular Genetics.
- 9. Vanessa Rosales Romero:** Effects of anti-mouse PD-1 antibody injection on the mouse ovary.
So-Youn Kim Lab, Department of OBGYN & Reproductive Health.
- 10. Ziyad Hassan:** Rapamycin Effect on γ H2Ax Phosphorylation in Stimulated CD8⁺ T Cells.
Patricia Fitzgerald-Bocarsly, Department of Pathology, Immunology and Laboratory Medicine, NJMS.
- 11. Deborah Odekunle:** Effects of a Paneth Cell-Specific CCL6 Knockout on Intestinal Inflammation.
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- 12. Angel Diaz:** Characterization of Ccl6 of Intestinal Epithelial Cell Specific Ccl6 KO Mice.

Nan Gao lab, Center for Immunity and Inflammation, Department of Pharmacology,
Physiology and Neurosciences.

- 13. Serena Ilenis:** Investigation of Metabolic Adaptation in Staphylococcus aureus During
Airway Persistence.

Tania Wong lab, Center for Immunity & Inflammation; Department of Medicine.

- 14. Kendra Spencer:** Mycobacteriumsmegmatis Checkerboard andIBDM Assays.
Joel Freundlich lab, Department of Pharmacology, Physiology and Neurosciences.
Public Health Research Institute.

- 15. Adam Rowlands:** Fiberoptic Spectroscopy.
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- 16. Khushi Garg:** Exploring Cerebrovascular Reactivity in Alzheimer's Disease with
Fiberoptic Hemodynamic Spectroscopy

Hyung Ahn Lab, Brain Health Institute, Department of Pharmacology, Physiology &
Neuroscience.

- 17. Ailin Mayorga:** IL-1 Blockade in Experimental Cerebral Malaria: Effects on Immune
Activation and Tight Junction Proteins.
Robin Stephens lab, Center for Immunity and Inflammation.

- 18. Aadit Padhi:** Mechanistic target of rapamycin (MTOR) signaling pathway loss-of-
function variants in previously healthy patients with non-HIV cryptococcosis.
Jessica Hargarten lab, Department of Pathology, Center for Immunity and
Inflammation.

- 19. Chinmay Bapat:** Synthesis and Characterization of LIF Nanoparticles for the
Treatment of mTBI.

Steven Levison lab, Department of Pharmacology, Physiology & Neuroscience, Brain
Health Institute.

- 20. Justin Voelker:** Local expression of IL-21 modulates CD8+ T cell responses during
intestinal infection.

Tessa Bergsbaken lab, Center for Immunity and Inflammation, Department of
Pathology.

- 21. Sameer Mittal:** Antibiotic-Loaded Gelatin-Dopamine Hydrogel for Infected Prosthetic
Implant Salvage.
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22. Advait Gattu: Cooperative ERG–Fli1 Regulation of Lymphatic Endothelial Integrity
Alex Wong lab, Center for Immunity and Inflammation, Department of Surgery.

23. Erik Sviridov: Genome-scale metabolic reconstruction of macrophages using transcriptomic data.
Jason Yang lab, Microbiology, Biochemistry & Molecular Genetics, Center for Emerging Pathogens, Public Health Research Institute.

24. Sisir Datla: Patterns of HIV Infection in Latino Population Subgroups
Stanley Weiss lab, Department of Medicine, NJMS.

Awards given to the BEST Presentations (3:45 PM)

End of Symposium

