

Presbyterian College Summer Research Symposium

Program and Schedule

July 26, 2023

Coffee and Refreshments | 8:50 a.m. – 9:00 a.m. | Harrington-Peachtree (HP) Lobby

Introduction & Welcome | 9:00 a.m. – 9:20 a.m. | HP 214 (Amphitheater)

Welcome: Dr. Drew Brandel, '13, Director of the PC Summer Fellows Program, Assistant Professor of Psychology

Introduction: Rev. Dr. Buz Wilcoxon, '05, Acting President of Presbyterian College, Marianne & E.G. Lassiter Chaplain, and Dean of Spiritual Life

Presentations I | 9:20 a.m. – 10:20 a.m. | HP 214 (Amphitheater)

9:20-9:40 Marigordon Varner (PC Summer Fellows)

Using Acoustics to Probe the Granular Jamming Transition
Advisor: Eli T. Owens, Ph.D.

9:40-10:00 Charlotte McGuinness (SC-INBRE)

Histone Proteomic Profiling of EMT-Transformed MCF10A Breast Cells Reveal Dynamic Changes in Epigenetic Modifications
Advisor: Austin Y. Shull, Ph.D.

10:00-10:20 Patrick Buchanan (PC Summer Fellows)

Gilberto Freyre, Racial Democracy, and Contemporary Race Relations in Brazil
Advisor: Jaclyn A. Sumner, Ph.D.

Coffee Break | 10:20 a.m. - 10:40 a.m. | Harrington-Peachtree (HP) Lobby

Presentations II | 10:40 a.m. – 11:20 a.m. | HP 214 (Amphitheater)

10:40-11:00 William Leonard (PC Summer Fellows)

Optimization and Substrate Scope Analysis of Iron Porphyrin-Catalyzed Oxidation of Ketoacids to Aldehydes
Advisor: Ladie Kimberly De La Cruz, Ph.D.

11:00-11:20 Andrew Polatty (SC-INBRE)

Reactive Oxygen Species (ROS)-Triggered Carbon Monoxide (CO) Prodrugs for Targeted Delivery
Advisor: Ladie Kimberly De La Cruz, Ph.D.

Lunch | 11:30-12:30 | HP Lobby and 214 (Amphitheater)

Poster Session | 2:00 p.m. – 3:15 p.m. | Library Reading Room (Main Floor)

Carter Baytes (SC-INBRE)

Multidrug Resistance in Cancer Cells

Advisor: Amy Messersmith, Ph.D.

Clint Caldwell (SC-INBRE)

Coronal Mass Ejections and Human Physiology

Advisor: James Wanliss, Ph.D.

Jacob Clerc (SC-INBRE) and Ashton Shannon (PC Summer Fellows)

Investigating the Unjamming Transition for the Development of a Soft-Robotic Gripper

Advisor: Eli T. Owens, Ph.D.

Sam Evans (SC-INBRE)

Effects of Dietary Iron on Taxonomic Composition and Function of Zebrafish Gut Microbiome

Advisor: Stuart G. Gordon, Ph.D.

Margaret Leonard (SCICU)

The Potential Correlation Between IL32 Gene Expression and Secreted CXCL2/3 Levels in SUM159PT Breast Cancer Cells

Advisor: Austin Y. Shull, Ph.D.

Ashley Solomon (Pharmacy School)

Evaluation of Best Practice Agreement to Generate Anticoagulation Clinic Referrals

Advisor: Eileen Ward, PharmD, BCACP, CDCES, FADCES

Reagan Young (Pharmacy School)

Leveraging the Capabilities of AI Enhanced Learning Tools for Pharmacy Education: Optimizing ChatGPT to Generate Drug Knowledge Test Questions

Advisor: Dr. Serge Afeli, MSHA
