

HUMAN BIOLOGY DISTINGUISHED MAJOR PROGRAM CAPSTONE SYMPOSIUM



Wednesday, May 1, 2024

Chemistry Room 306

8:30 am – 1:00 pm



Time	Speaker and Presentation Title
8:30 am	Welcome –Michael P. Timko, PhD Director, Human Biology DMP
8:40	Jordan Elisabeth O’Brien <i>Lung Cancer Tertiary Prevention: An Analysis of MHC Class II Expression in the Tumor Microenvironment</i> Advisor: Michael Brown, PhD Professor of Medicine: Nephrology, and Professor of Microbiology, Immunology, and Cancer Biology, UVA School of Medicine
8:55	Cristina Zayas Amador <i>A Qualitative Study of Puerto Rican Students’ Attitudes & Behaviors Around Mental Illness and Mental Health Services</i> Advisors: David Skubby, PhD Department of Sociology and Kathryn Quissell, PhD, MSc, MPH Department of Public Health Sciences, UVA School of Medicine
9:10	Daniel Henry Herz <i>The Relationship Between Acylated Ghrelin, Unacylated Ghrelin and Total Ghrelin on Appetite, and the Influence of Body Composition and Sex</i> Advisors: Arthur L. Weltman, PhD Professor of Kinesiology, Professor of Medicine Exercise Physiology CORE Laboratory and Kara Anderson, PhD Candidate in Exercise Physiology
9:25	Crystal Alejandra Guerrero <i>An Exploration of How Gut Microbiota Influences Early Life Neurogenesis in Drosophila melanogaster</i> Advisors: Sarah Siegrist, PhD, Associate Professor, Department of Biology, and Taylor L. Nystrom, PhD Candidate in Biology,
9:40	Helen Hien Le <i>Investigating the Role of Lactobacillus reuteri in Mice Models of Multiple Sclerosis</i> Advisor: Alban Gaultier, PhD, Associate Professor, Department of Neuroscience, University of Virginia School of Medicine and Ryan Brown, PhD Candidate in Neuroscience
9:55	QUESTION BREAK
10:05	Aida Mariam Doucoure <i>The Role of Glucose and Red Blood Cell Rejuvenation in Prolonging Single-Donor Malaria Cultivation</i> Advisors: Jennifer Güler, PhD, Associate Professor, Department of Biology and Division of Infectious Disease; and Michelle D. Warthan, MS Lab Specialist, Department of Biology
10:20	Isabel Bailey Weir <i>The Ethics of the Integration of Artificial Intelligence into the Physician-Patient Relationship, An Empirical & Theoretical Investigation,</i> Advisors: Professor Richard R Sharp, MD The Lloyd A. and Barbara A. Amundson Professor of Biomedical Ethics Honoring Paul S. Mueller, MD, Director of the Biomedical Ethics, Research Program, Mayo Clinic, Rochester, MN and Paul Scherz, PhD, Associate Professor, Department of Religious Studies, University of Virginia

- 10:35 Heeran Salah Karim**
Macrophage-Spheroid Interactions Slow Axon Degeneration in Phosphatidylserine-Dependent Manner
Advisors: Christopher Deppmann, PhD, Professor, Department of Biology and Sarah Hunter-Chang, PhD Candidate in Neuroscience
- 10:50 Olivia Lane Accad**
Implications of Nutrient Deprivation in Malarial Drug Resistance
Advisors: Jennifer Güler, PhD, Associate Professor, Department of Biology and Division of Infectious Disease; Anush Aryal, PhD Candidate, Department of Biology; Kwesi Forson, PhD Candidate, Department of Biology
- 11:05 Claire LaFleur Bierly**
An Evaluation of the Effect of Kids SIPsmartER on the Body Mass Indices of Appalachian Middle Schoolers
Advisors: Jamie Zoellner, PhD, RD, Professor, Department of Public Health Sciences, UVA School of Medicine
- 11:20 QUESTION BREAK**
- 11:30 Hannah Liliana Luviano**
Cardiomyocyte Pannexin 1 Regulates Fibrosis and Cardiac Remodeling During Advanced Isoproterenol-Induced Heart Failure
Advisor: Norbert Leitinger, PhD, Department of Pharmacology and Associate Director, Robert M. Berne Cardiovascular Research Center, University of Virginia and Caitlin Pavelec, PhD Candidate in Pharmacology
- 11:45 Hamna Shafiq**
Understanding the Mechanisms Through Which Gut Inflammation Manifests Due to Gut Microbial Dysbiosis During Undernutrition and EED
Advisor: Carrie Cowardin, PhD, Assistant Professor of Pediatrics, Division of Pediatric Gastroenterology, Hepatology, and Nutrition, Department of Microbiology, Immunology, and Cancer Biology, University of Virginia School of Medicine
- 12:00 Axel Emmanuel Luna Lopez**
Cardiovascular Initiative for Latino Community Health: Assessing the Impact of a Prevention Program on the Knowledge, Attitudes, and Practices about Cardiovascular Disease in a Faith Based Community Setting in Charlottesville, Virginia
Advisor: Max A. Luna, MD, Division of Cardiovascular Medicine, University of Virginia School of Medicine
- 12:15 Amelia Margaret Nachbar**
The Effect of Cortex Glia Dysfunction on Integrity of the Blood Brain Barrier in Drosophila melanogaster
Advisor: Jaeda Coutinho-Budd, PhD, Department of Neuroscience, UVA School of Medicine
- 12:30 QUESTION BREAK**
- 12:45 Final Comments and Adjournment - Jennifer Güler, PhD, Assistant Director Human Biology DMP**

Join Zoom Meeting:

<https://virginia.zoom.us/j/3335521208?pwd=VXAwRUJhZFVxekdCRHVDb1g2RTQxQT09&omn=97260062099>

Meeting ID: 333 552 1208 Passcode: 4999