



HUSKEY
7 GRADUATE
2017 RESEARCH
2 EXHIBITION



TUESDAY
MARCH 21
Newcomb Hall
1-5PM

SCHEDULE OF EVENTS

Judge & Presenter Check-In

12:00-1:00

Keynote Address, Dr. Milton Adams

1:00-1:30, *South Meeting Room*

Oral Presentations

1:30-3:40

- ◆ Natural Sciences, *Kaleidoscope Room*
- ◆ Social Sciences, *Gallery Room*
- ◆ Arts & Humanities, *Board Room 376*

Poster Presentations & Reception

3:30-4:30, *Newcomb Hall Ballroom*

Awards Ceremony

4:30 - 5:00, *Newcomb Hall Ballroom*

NATURAL SCIENCES

Oral Presentations

- 1:30 Jessica Taggart, *Psychology*
The Real Thing: Preschoolers Prefer True Activities to Pretend Ones
- 1:45 Ying Wang, *Chemistry*
The Therapeutic Potential of Adenosine in Stroke Treatment
- 2:00 Edward Moan, *Physics*
Classical Physics Redux: Using ultracold atoms to measure the rotation of the Earth
- 2:15 Alexandra Newman, *BIMS*
Capping the Problem: Stabilizing atherosclerotic plaques to prevent fatal cardiac events
- 2:30 *Break*
- 2:40 Ioana Marin, *BIMS*
Don't Stress Your Microbiome! - How Intestinal Bacteria Affect Mental Health
- 2:55 Anna Way, *Biology*
To Survive or To Reproduce- that is the question: Molecular deconstruction of the energy trade-off between soma and germline in *C. elegans*
- 3:10 Ana Estrada, *Biomedical Engineering*
Computational Prediction of Heart Growth from Injury and Therapy
- 3:25 Rajveer Nehra, *Physics*
Shining Light on a Quantum Computer

SOCIAL SCIENCES

Oral Presentations

- 1:30 Elissa Zeno, *Sociology*
Reproductive Futures in Action: Reconciling the Divergent Timelines of Career, Motherhood, and Reproduction
- 1:45 Robert Kubinec, *Foreign Affairs*
When Elites Fail to Undermine Democracy: Tunisia's Regime Transition in Comparative Perspective
- 2:00 Courtney Rogers, *Public Health*
Co-design for change: Developing an Health application with youth to address health disparities in Appalachia
- 2:15 Dannah Dennis, *Anthropology*
On the Road to Nowhere: Stalled Politics and Urban Infrastructure in Kathmandu
- 2:30 *Break*
- 2:40 Sasheenie Moodley, *Public Health*
Pilot Testing a Virtual Peer Support Network to Lower HIV Prevalence among Men at Risk for HIV in Botshabelo, South Africa
- 2:55 Yaping Wang, *Foreign Affairs*
The Dog That Barks: State-led Publicity Campaigns on Territorial Disputes
- 3:10 Zhe Zhu, *Economics*
Income Inequality and Manufacturing Employment: International Evidence and Lessons for US
- 3:25 Brandon Ng, *Psychology*
Stuck in My Ways or Capable of Change? Lay Personality Beliefs Moderate the Pain of Social Exclusion

ARTS & HUMANITIES

Oral Presentations

- 1:30 Elizabeth Austin, *Slavic Languages*
Building Northern Siberia: the Causes and Effects of the Soviet GULAG System
- 1:45 Brian Neumann, *History*
The Nullification Revival: Christianity and Political Crisis in Upcountry South Carolina
- 2:00 Alicia Caticha, *Praxis Fellowship Program*
Dash-American: Keeping Up with the Media Ecologies of the Kardashians
- 2:15 Ross Mittiga, *Government*
What's the Problem with Geo-Engineering?
- 2:30 *Break*
- 2:40 Maxwell Tfirm, *Music*
Computers Learn Sound: Creating Timbre Through Neural Networks
- 2:55 Indu Ohri, *English*
"He was Fighting the Child and Killing It": Traumatized Bodies, Youthful Victims, and Ghostly Revengers
- 3:10 William Boyce, *Religion Studies*
Beyond Statistics: Sexual Minorities and Religious Expression

POSTER SESSION

Maria Ali, *Biology*

Netrin-1 Influences Oligodendrocyte Progenitor Cell Spacing

Olga Askinazi, *Biology*

Lamellipodia in the test tube: Dynamin2 and cortactin organize actin networks in vitro

Shawna Benjamin, *BIMS*

Deconstructing the network of stress responses promoting cellular and organismal homeostasis in *C. elegans*

Rachana Bhawe, *Biology*

Maintaining polymorphisms in the wild - Can two lizards be the same even if they look different?

Vanessa Bijak, *Chemistry*

Differential binding affinities of Synaptotagmin-1A with Munc18 using CW-EPR in the presence and absence of SNAP25

Margot Bjoring, *Psychology*

How do birds perceive song: Different neurons process sound differently

Audrey Brown, *Biology*

Operation Ghostbusters: A Path to Better Methods for Understanding Antimalarial Resistance

Rui Cao, *Biomedical Engineering*

Photoacoustic Microscopy of Cerebral Hemodynamic and Metabolic Responses to Anesthetics

Mihee Chung, *Nursing*

The Impact of Stigma Among caregivers of people with dementia: An Integrative Review of Literatures

Sarah Coe-Odess, *Psychology*

Epigenetic effects of social support in adolescence predict early adult psychosocial wellbeing

POSTER SESSION

Brynn Cook, *Environment Sciences*

Pollination in the Anthropocene : the model pollinator *Manduca Sexta* (*M. sexta*) can learn to follow polluted floral plumes

Steven Dakermanji, *Chemistry*

Enantioenrichment of a Molybdenum Dearomatization Agent using Chiral Ligands

Caitlin Dreisbach, *Nursing*

Intimate partner violence and gestational weight gain in a population-based sample of perinatal women

Marissa Drell, *Psychology*

Compulsory Equality: Children Think Resources Must Be Divided Equally

Sierra Eisen, *Psychology*

Heroes, Villains, and Everything in Between: Children's Assessment of Morally Ambiguous Characters

Nick Embrey, *Economics*

Skill loss and search assistance in general equilibrium

Amy Ferguson, *Environment Sciences*

Making the case for nature-based solutions to coastal erosion in Virginia's coastal bays

Lucy Guarnera, *Psychology*

When women conceive in rape: Legal attitudes and judgments among a jury-eligible sample

Qizhang Jia, *Chemistry*

Atomistic simulations of dopamine on carbon microelectrode surfaces

Jessica Kansky, *Psychology*

The Link Between Adolescent Autonomy in Romantic Relationships and Adult Romantic Qualities

POSTER SESSION

Wenfán Ke, *Biology*

Creating the first single-cell resolution whole-organism atlas of metabolic gene expression by Fluorescent In Situ RNA Sequencing (FISSEQ) in *C. elegans*

Caroline Kelsey, *Psychology*

Early reputation management: Three-year-old children are more generous following priming with eyes

Alex Kreutzberger, *BIMS*

Reconstitution of Calcium Mediated Exocytosis of Secretory Vesicles

Sherry Liu, *Nursing*

Literature Review of Interventions for Children Exposed to Violence

Erin Maresh, *Psychology*

The hidden costs of social-evaluative threat on working memory

Jessica Mazen, *Psychology*

Other risk factors affect the relationship between parental monitoring and marijuana use among American Indian adolescents

Jennifer McDaniels, *Biology*

The Generation of Extra-chromosomal DNA Amplicons in Antimalarial Resistant *Plasmodium falciparum*

Thushani Nilaweera, *Chemistry*

Determining the role of conserved ion pairs between the barrel and hatch domain of BtuB

Sarah Nyenhuis, *Chemistry*

Membrane bridging by Synaptotagmin-1: the potential importance of cholesterol in a previously charge dominated regime

Shaina Rowell, *Psychology*

Positivity bias in memory for good and bad deeds

Tyler Santander, *Psychology*

The entropic brain: Towards a unifying endophenotype between genes and behavior

POSTER SESSION

Chuck Schmidt, *Molecular Physiology and Biological Physics*

Structure and function of the BCoR-AF9 complex and its implications in MLL-AF9 leukemias

Nichole Schwartz, *Chemistry*

Selective Photolytic Functionalization of Light Alkanes Using Iodine Oxide and Chloride Salts

Becky Stanhope, *BIMS*

Chlamydia trachomatis IncV is a tether protein at membrane contact sites between the endoplasmic reticulum and the bacteria-containing compartment

Jacqueline Stevens, *BIMS*

Inflammation during female gonorrheal infection

Michael Swanberg, *Nursing*

A Canary in the Coal Mine: Exploring African-American women's lived experience of childbirth.

Alexandra Werntz, *Psychology*

Am I anxious?: Implicit and explicit self-concepts of anxiety predict symptom acknowledgement

Audrey Wittrup, *Psychology*

The Prevalence and Effects of Favorite Teachers

Meltem Yucel, *Psychology*

Tattling as cooperation: Young children tattle to enforce moral norms

Angela Zeigler, *Biomedical Engineering*

Making a Tough Decision: How do cells respond to complex signals?

Hui Zhao, *Nursing*

"Sphere of Influence": American Missionary Nurses in China, 1870s-1930s

Yunlu Zhu, *Biology*

Neural Crest Cells: Death Eaters in the Developing Nervous System

Paul Zivick, *Astronomy*

Exploring the Milky Way Dark Halo