

## **ORAL PRESENTATIONS - SCHEDULE**

### **SESSION 1: MOLECULAR PHYSIOLOGY AND BIOPHYSICS --- BALLROOM B**

**CHAIR: FIONA HARRISON**

**9:00 AM --- Generating a mouse model for oxidative stress**

Marquicia Pierce --- Molecular Physiology and Biophysics

**9:20 AM --- Determining the Role of the Melanocortin 3 Receptor in Reward**

Rachel Lippert --- Molecular Physiology and Biophysics

**9:40 AM --- Role of the Melanocortin-4 Receptor in Macronutrient Sensing Independent of Metabolism**

Brandon Panaro --- Molecular Physiology and Biophysics

**10:00 AM --- Effects of Low Vitamin C During Development in Gulo-/- Mice**

Elizabeth Meredith --- Molecular Physiology and Biophysics

### **SESSION 2: TRENDS AND TRADEOFFS UNDER NO CHILD LEFT BEHIND: LESSONS FROM FIVE STATES --- BALLROOM C**

**CHAIR: TOBY PARK**

**9:00 AM --- Eras of Accountability: Student Achievement in Colorado**

Maida A. Finch --- Leadership, Policy & Organizations

**9:20 AM --- Can we make our kids proficient? NCLB effects in Minnesota**

Jungmin Lee --- Leadership, Policy & Organizations

**9:40 AM --- Trends and Tradeoffs: The Effects of No Child Left Behind in Georgia**

Ryan Balch --- Leadership, Policy & Organizations

**10:00 AM --- Eras of Accountability: Student Achievement in Illinois**

Peter T. Goff --- Leadership, Policy & Organizations

**10:20 AM --- Low Stakes Subjects in West Virginia during the NCLB Years**

Amanda Ochoa --- Leadership, Policy & Organizations

**SESSION 3: CELL SIGNALING IN NORMAL AND DISEASED CONDITION ---**

**LOWER LEVEL ROOM 1**

**CHAIR: HAITING MA**

**9:00 AM --- Functional characterization of zebrafish homolog of placenta specific 8 (plac8).**

Haiting Ma --- Biological Sciences

**9:20 AM --- Pro-apoptotic Bid facilitates ATR function to replicative stress**

Yang Liu --- Cell and Developmental Biology

**9:40 AM --- The Role of Wnt Signaling in Progenitor Cells During Cardiac Homeostasis and Repair**

Bryan Fioret --- Pharmacology

**SESSION 4: METHODS FOR PROTEIN STRUCTURE DETERMINATION AND DRUG DESIGN --- LOWER LEVEL ROOM 2**

**CHAIR: STEFFEN LINDERT**

**9:00 AM --- Small molecule docking and design with flexible proteins and ligands using Rosetta software**

Gordon Lemmon --- Chemistry

**9:20 AM --- Paramagnetic restraints as novel NMR restraints for Membrane Proteins**

Julia Koehler --- Chemistry

**9:40 AM --- Quantitative Structure Activity Relationships of Allosteric Metabotropic Glutamate Receptor Modulators studied by Machine Learning Techniques**

Mariusz Butkiewicz --- Chemistry

**10:00 AM --- Prediction of carbon chemical shifts implementing machine learning techniques**

Ralf Mueller --- Chemistry

**10:20 AM --- Spin label structure and dynamics determined by Rosetta rotamer libraries**

Nathan Alexander --- Chemistry

**SESSION 5: MICROECONOMIC THEORY --- BOARD OF TRUST ROOM**

**CHAIR: GREGORY NIEMESH**

**8:45 AM --- Strategic Network Interdiction**

Sunghoon Hong --- Economics

**9:05 AM --- Relying on Experts for Decision under Uncertainty**

Alper Nakkas --- Economics

**9:25 AM --- Front of Package Information under Mandatory Disclosure**

Roger Crawford --- Economics

**SESSION 6: RELIGION, ECOLOGY AND BODIES IN AMERICAN POPULAR CULTURE --- BALLROOM B**

**CHAIR: ANDREW C. SMITH**

**10:40 AM --- No One Ever Really Leaves Here: Reassessing Joss Whedon on Desire, the Body and Subjectivity after "Dollhouse"**

Travis Ables --- Graduate Department of Religion

**11:00 AM --- Environmentalism Goes Blue**

T.L. Gray --- Graduate Department of Religion

**11:20 AM --- Incarnation as Transgression in Werner Herzog's "Grizzly Man"**

Andrew C. Smith --- Graduate Department of Religion

**11:40 AM --- Ajira Flights and Avatars: How Pop Culture is Repairing Cartesian Dualism in the Popular Imagination**

Natalie Wigg --- Graduate Department of Religion

**SESSION 7: PSYCHOLOGY AND HUMAN DEVELOPMENT --- BALLROOM C**

**CHAIR: GREGORY PARK**

**11:00 AM --- Bivariate Non-normality and the Assessment of Correlation: An Overview**

Miriam Kraatz --- Psychology and Human Development

**11:20 AM --- Content Areas Addressed During Post Deployment Health Reassessment (PDHRA) Interviews**

Corinne Lapare --- Psychology and Human Development

**11:40 AM --- Creativity and Exceptional Promise: Findings from the Study of Mathematically Precocious Youth**

Gregory Park --- Psychology and Human Development

**SESSION 8: HUMAN GENETICS --- LOWER LEVEL ROOM 1**

**CHAIR: MARYLYN RITCHIE**

- 10:20 AM --- Family-Specific Linkage Analysis of Multiple Sclerosis**  
Mary F Davis --- Center for Human Genetics Research
- 10:40 AM --- ATHENA parameter sweep: optimizing neural networks to detect gene-gene interactions**  
Emily Rose Holzinger --- Center for Human Genetics Research
- 11:00 AM --- Assessing the accuracy of reported ancestry in a biorepository linked to electronic medical records**  
Logan Dumitrescu --- Center for Human Genetics Research
- 11:20 AM --- Using a biobank linked to an electronic medical record to study genetic underpinnings of complex disease.**  
Stephen Turner --- Center for Human Genetics Research
- 11:40 AM --- Examining Host Genetics Associated with Response to Drug Treatment For HIV Infection**  
Ben Grady --- Molecular Physiology and Biophysics

**SESSION 9: MARX AND CRITICAL THEORY --- LOWER LEVEL ROOM 2**

**CHAIR: MELINDA HALL AND JESSICA POLISH**

- 11:00 AM --- Possibilities for Progress? Adorno and the Jugenstil Movement**  
Melinda C. Hall --- Philosophy
- 11:40 AM --- Getting to Know Objects through Marx, Husserl and Heidegger**  
Jessica Polish --- Philosophy
- 11:20 AM --- The Results of ‘Experimenta in Corpore Vili’: Marx's Das Kapital and Metaphors for Worker Bodies**  
Melinda C. Hall --- Philosophy

**SESSION 10: APPLIED MICROECONOMICS --- BOARD OF TRUST ROOM**

**CHAIR: P.J. GLANDON**

- 10:00 AM --- A Financial Picture of Bankruptcy Filers after they File for Bankruptcy**  
Susan Carter --- Economics
- 10:20 AM --- Information Release and Bidding Behavior: The Nevada Natural Experiment**  
Matthew Gentry --- Economics

**10:40 AM --- Yellow Magic: Quantifying the Effects of Penicillin on Population Mortality**

Gregory Niemesh --- Economics

**11:00 AM --- A Multidimensional Approach to Chronic Poverty**

Shabana Singh --- Economics

**SESSION 11: ALL WIRED UP: IN AND OUT OF SCHOOL DIGITAL LITERACY PRACTICES AMONG TODAY'S YOUTH --- BALLROOM B**

**CHAIR: EMILY BIGELOW**

**1:20 PM --- MultiREADia: Frameworks for Understanding Multimodal Texts**

Blaine Smith & Tara Alvey --- Teaching and Learning

**1:40 PM --- Social organization and participation structures of multimedia composition**

Tara Alvey --- Teaching and Learning

**2:00 PM --- Technokids: Digital Literacy Practices Among Young Children**

Emily C. Bigelow --- Teaching and Learning

**2:20 PM --- The Designs of Meaning: Analyzing the Multimodal Composition of Adolescent Bloggers**

Christian Ehret --- Teaching and Learning

**SESSION 12: APPLICATIONS OF ITEM RESPONSE THEORY (IRT) IN EDUCATION AND PSYCHOLOGY --- BALLROOM C**

**CHAIR: KARIN KATTERFELD**

**1:00 PM --- Development of a Valid Measure of Teachers' Perception of Principal Press for Instruction Using Item Response Theory**

Karin Katterfeld --- Leadership, Policy, & Organizations

**1:20 PM --- Modeling & Assessing Children's Understanding of Functional Thinking**

Katherine McEldoon --- Psychology and Human Development

**1:40 PM --- An Item Response Theory Analysis of the Symptoms and Functioning Severity Scale (SFSS) used with Clinically Referred Youth**

Michele Athay --- Psychology and Human Development

**2:00 PM --- Measuring Third Grade Students' Basic Algebraic Thinking: What Can Item Response Theory Tell Us?**

Eunsoo Cho --- Special Education

**2:20 PM --- IRT Modeling of Student Theory of Linear Measurement**

Wenyan Zhou --- Teaching and Learning

**SESSION 13: THE VANDERBILT BIBLE AND SEXUALITY SYMPOSIUM --- LOWER LEVEL ROOM 1**

**CHAIR: BRANDON SIMONSON**

**1:00 PM --- Gregory of Nyssa and Virginit**

Derek Axelson --- Divinity

**1:20 PM --- Was Sarai a naditum? Examining the Sexuality of Sarai in an Ancient Near Eastern Milieu**

Brandon Simonson --- Divinity

**1:40 PM --- From Ineligible Betrothal to Birthing Offspring as a Female Disciple: A Study of the Term "Well" in John 4:4-42**

Mary Beth McSwain --- Divinity

**2:00 PM --- Paul's "Unnatural and Deadly Passions": A Black Church Hermeneutic**

Tadhi Coulter --- Divinity

**2:20 PM --- No Longer Male and Female: Paul on Gender, Sexuality, and the Freedom of Christ**

Jacquie Hauth --- Divinity

**SESSION 14: RELIGION AND RITUAL --- LOWER LEVEL ROOM 2**

**CHAIR: CHRIS PARIS**

**1:00 PM --- Translating Shiloh: Why Ken Burns and Alex Trebek Are Wrong**

Chris Paris --- Graduate Department of Religion

**1:20 PM --- "Ladies Day in the House:" Gender and Church-State Dynamics in America**

Alyson Dickson --- Graduate Department of Religion

**1:40 PM --- Ethnoarchaeology of symbolic power: Ninam shamans and sacred spaces in Amazon**

Gerson Levi-Lazzaris --- Anthropology

**SESSION 15: ECONOMETRIC THEORY AND MACROECONOMICS --- BOARD OF TRUST ROOM**

**CHAIR: TAMARA TRAFTON**

**12:30 PM --- A Wavelet Analysis of Regression Discontinuity Design (with Yanqin Fan)**

Heng Chen --- Economics

**12:50 PM --- The Macroeconomic Importance of Sales**

P.J. Glandon --- Economics

**SESSION 16: SELECT TOPICS IN EDUCATION --- BALLROOM B**

**CHAIR: JIM SEGEDY**

**3:00 PM --- Incorporating Intelligent Learning Environments into Classrooms**

Jim Segedy --- Electrical Engineering and Computer Science

**3:20 PM --- Student retention of knowledge: SoTL methods in a lab course**

Jeremy Federman --- Hearing and Speech Sciences

**3:40 PM --- Emigration and the education/health of children in Uzbekistan**

Bakh Mirkasimov --- Economics (GPED)

**SESSION 17: CULTURAL ASPECTS OF THE TRANSATLANTIC SLAVE TRADE ---  
BALLROOM C – 3:00-4:00 PM**

**CHAIR: WILLIAM F. ROBINSON**

**The Importation Adaption, and Creolization of Slave Leisure Forms in the Americas:  
1600 to 1865**

Stephen M. Doster --- Liberal Arts and Science

**Rice Plantations in the Palmetto State: Redefining Chattel Slavery in South Carolina**

Kerek Frierson --- Liberal Arts and Science

**The Effects of “Cloth Politics” in the Trans-Atlantic Slave Trade: Cause, Cash,  
Commodity, and Comfort**

Cricket Harmer --- Liberal Arts and Science

**Going Home**

Maxine Kelly --- Liberal Arts and Science

**Singing for Strength: Enslaved Africans and Community Building in the Transatlantic  
Slave Trade**

J. Hunter Moore --- Liberal Arts and Science

**SESSION 18: MATERIALS SCIENCE --- LOWER LEVEL ROOM 1**

**CHAIR:**

**3:00 PM --- An efficient approach to characterize the mode-II fracture toughness of  
brittle and composite materials**

Arun Krishnan --- Civil and Environmental Engineering

**3:20 PM --- Ultrafast compact silicon-based ring resonator modulators using metal-  
insulator switching of vanadium dioxide**

Michael Hertkorn --- Physics and Astronomy

**3:40 PM --- Novel Lubrication Schemes for Silicon-Based Microelectromechanical Devices**

Ben Lewis --- Chemical Engineering

**SESSION 19: NARRATIVE BREAKDOWNS IN 19TH CENTURY LITERATURE --- LOWER LEVEL ROOM 2**

**CHAIR: ELIZABETH BARNETT**

**2:20 PM --- Constructing the Gothic Body in Edgar Allan Poe's American Tales**

Donika Ross --- English

**2:40 PM --- "The Last of the Ancient Race": transatlanticism and the construction of whiteness in Edgar Allan Poe's Southern Gothic**

Amanda Johnson --- English

**3:00 PM --- "The very image of them": Female Relationships and Competing Narratives in the Illustrations of Bleak House**

Heather Freeman --- English

**3:20 PM --- Fossils and Fragments: The Discontinuous Histories of Charles Darwin and Walter Pater**

Caroline Hovanec --- English

**3:40 PM --- "Putting the Sun Back in the Sky": Temporality and Translation in D'Arcy McNickle's \*Wind From an Enemy Sky\***

Christopher Pexa --- English

**SESSION 20: INTERNATIONAL TRADE --- BOARD OF TRUST ROOM**

**CHAIR: AYSE SAPCI**

**1:20 PM --- Pollution Abatement and Export Dynamics (with Joel Rodrigue)**

Omolola Soumonni --- Economics

**1:40 PM --- The Opportunity Cost of Exporting (with Joel Rodrigue)**

Youngwoo Rho --- Economics

**2:00 PM --- Information and Mergers: Theory and Evidence on the Effect of Executive Overlap on the Incidence of Mergers**

Caleb Stroup --- Economics

**2:20 PM --- Offshoring and the Skill Premium in U.S.: Evidence from Individual Workers' Data**

Tommaso Tempesti --- Economics



**POSTER PRESENTATIONS - BALLROOM A - 11:30PM - 1:20PM**

- 1 --- Evolutionary Conservation of the Human Fragile X Mental Retardation Gene Family**  
Lane Coffee --- Biological Sciences
- 2 --- Regulation of Synaptic Transmission by miR-153**  
Elizabeth Thatcher --- Biological Sciences
- 3 --- A Defect in Pain Processing (Nociception) in a Genetic Model of Fragile X Syndrome.**  
Neil Dani --- Biological Sciences
- 4 --- Validation of Diffusion Tensor MRI in the Central Nervous System using Light Microscopy**  
Ann Choe --- Biomedical Engineering
- 5 --- A "Label-Free" Method for the Determination of Polyethylene Glycol Functionalization Efficiency on Gold Monolayer Protected Clusters**  
Charleson S. Bell --- Biomedical Engineering
- 6 --- The Role of TGF- $\beta$  During in vivo Migration**  
Lauren Matisse --- Cancer Biology
- 7 --- The canonical wnt signaling pathway is activated in response to myocardial infarction: possible role in endothelial-to-mesenchymal transitions**  
Omonigho Aisagbonhi --- Cell and Developmental Biology
- 8 --- Student Attitudes Toward Science: Majors and Non-majors**  
Katherine Moynihan --- Cell and Developmental Biology
- 9 --- Lecture vs Laboratory Learning in Developmental Biology**  
Hillary Hager Carter --- Cell and Developmental Biology
- 10 --- Association of HTR3a with Autism**  
Olivia J. Veatch --- Center for Human Genetics Research
- 11 --- Genome-wide association study in the Amish indicates non-APOE genetic effects for dementia**  
Anna Cummings --- Center for Human Genetics Research
- 12 --- Lubrication strategies for Microelectromechanical Systems**  
Steven Vilt --- Chemical and Biomolecular Engineering
- 13 --- Improvement of Interfacial Compatibility in Polyurethane/Tricalcium Phosphate Composite Bone Cements Through Filler Surface Modification**  
Margarita Prieto --- Chemical and Biomolecular Engineering
- 14 --- A Computational Study of the Dynamic Formation of Au-BDT-Au Nanoelectronic Junctions**  
William French --- Chemical and Biomolecular Engineering

- 15 --- Nanofiber Composite Proton Exchange Membranes**  
Jason Ballengee --- Chemical and Biomolecular Engineering
- 16 --- Free Energy Calculation for Lennard-Jones Solid**  
Li Wan --- Chemical and Biomolecular Engineering
- 17 --- BCL::EM-Fold: Protein Folding tool for medium resolution density maps**  
Steffen Lindert --- Chemical and Physical Biology
- 18 --- Improve fold recognition by using a word-based alignment algorithm in BCL::Align**  
Sten Heinze --- Chemistry
- 19 --- BCL::Align—Sequence alignment and fold recognition with a custom scoring function online**  
Elizabeth Dong --- Chemistry
- 20 --- Novel tools for membrane protein structure determination: Application to Diacylglycerolkinase**  
Julia Koehler --- Chemistry
- 21 --- Experimental Performance of a Cheminformatics Framework in Virtual Screens for Modulators of Metabotropic Glutamate Receptors**  
Ralf Mueller --- Chemistry
- 22 --- Investigating the role of alpha-actinin in modulating CaMKII-dependent regulation of NMDA receptors**  
Nidhi Jalan-Sakrikar --- Molecular Physiology and Biophysics
- 23 --- Unisensory temporal performance is predictive of the size of the temporal window of multisensory integration**  
Leslie Kwakye --- Neuroscience
- 24 --- A Comparison of Spatial Receptive Field Architecture of Multisensory Neurons in Subcortex and Cortex**  
Juliane Krueger --- Neuroscience
- 25 --- Disrupted PKC and Amphetamine-Induced Trafficking Associated with an ADHD-Associated Dopamine Transporter Protein Variant.**  
Dhananjay Sakrikar --- Neuroscience
- 26 --- Tetracycline-regulated CRH expression in Transgenic Mice as a Model for Isolating Brain-Region Specific Function in the Stress Response.**  
Gloria Laryea --- Neuroscience
- 27 --- Loss of the  $\alpha 2\beta 1$  Integrin Decreases Squamous Cell Carcinoma Metastasis by Altering Lymphatic Vessel Morphology and Integrity**  
Thuy Tran --- Pathology

- 28 --- sFRP2 suppression of BMP and Wnt promotes mesenchymal stem cell self-renewal, ameliorating ectopic myocardial calcification**  
Maria P Alfaro --- Pathology
- 29 --- Manganese and Mutant Huntingtin Affect Striatum Medium Spiny Neuron Morphology**  
Jennifer Madison --- Pharmacology
- 30 --- Fava Beans (FB), Catecholamines, and Natriuresis**  
Tericka Smith Cesar RN, MSN, Emily Garland PhD, David Robertson MD --- School of Nursing
- 31 --- Performance of Carbon Nanofiber/Cement Composites**  
Catherine S. Gay --- Civil and Environmental Engineering
- 32 --- Control of an Internal Target Point of a Deformable Object**  
Jadav Das --- Mechanical Engineering
- 33 --- Using the EGS5 Monte Carlo code system to investigate Coherent Scatter Computed Tomography (CSCT)**  
Kenneth Lewis --- Physics / Radiology & Radiological Sciences
- 34 --- The difference between experts and novices in approaching/reading scientific journal articles and how to teach undergraduate biology majors how to approach/read a scientific journal article**  
Allison Atwood, David Vaught, and Alisha Russell --- Center for Teaching
- 35 --- Assessing Graduate Student Conceptual Understanding Using Concept Maps: The Necessity of Understanding the Assessment Tool**  
Eve Proper --- Leadership, Policy, & Organizations
- 36 --- Picture perfect: The training of visual imagery**  
Rosanne Rademaker --- Psychology
- 37 --- Visuospatial memory and Absent Reference Comprehension in 12-month-old Infants**  
Maria Osina --- Psychology and Human Development
- 38 --- Relations Between Anger Expression and Aggression Among Vietnamese Adolescents**  
Ngoc-Quynh Nguyen --- Psychology and Human Development
- 39 --- Response Properties and Environmental Features Alter the Effects of Action Observation on Action Production**  
Stephen Killingsworth --- Psychology and Human Development