Faculty Poster Presentations

Tuesday, April 2, 12:00 p.m.

**Arts and Literature**

**Will Fenn**  
Fine Arts  
The Hive

**Zdenko Krtic**  
Art  
Ultimate High Studio Art Project

**Design**

**Charlene LeBleu**  
Architecture, Planning, and Landscape Architecture  
Additional Authors: Joshua Vickers, M. Parker, Caralise W. Hunt, Margo Fox  
Improving Activity and Environmental Parameters in Auburn Housing Authority: Lessons Learned for Par

**Jay Mittal**  
Community Planning  
Land Conservation and Agencies involved in Alabama – Measuring Impact on Property Values

**Susan A. Youngblood**  
English  
Additional Author: Norman E. Youngblood  
Usability, Content, and Connections: How County-Level Alabama Emergency Management Agencies Communicate with their Online Public

**Education**

**Timothy D. Lewis**  
Foundations, Technology, and Secondary Education  
Additional Author: Brooke A. Burks  
“Big Brother” in the classroom: Pre-service teachers’ perceptions towards classroom surveillance cameras

**Linda Searby**  
Educational Foundations, Leadership, and Technology  
The Mentoring Mindset of New Principal Proteges

**Lindsay Tan**  
Consumer and Design Sciences  
Digital drawing and design communication

**Kimberly C. Walls**  
Curriculum and Teaching  
Additional Author: Katherine L. King  
Children’s Sight-reading Skills and Community Youth Orchestra Participation

**Food Systems**

**Tim Braden**  
Anatomy, Physiology, and Pharmacology  
Distribution and Function of Gonadotropin-releasing Hormone Receptor Type 2 in Pigs

**Tung-Shi Huang**  
Poultry Science  
Additional Authors: Ou Wang, Lin Zhang, Zhongyang Cheng, Shelly Mckee  
Using Magnetostrictive Particle Biosensor for Campylobacter Detection in Poultry Rinse Water

**Gender Issues**

**Janice Clifford**  
Sociology, Anthropology and Social Work  
Additional Authors: Madison Butler, Graduate Student  
Male Domestic Violence Offending: Uncovering the Realities

**Health Sciences and Systems**

**Sue Duran**  
Clinical Sciences  
Additional Authors: Misty Edmondson, William Ravis, Thomas Passler, Jean Lin, and Li Chen  
Pharmacokinetics of Intravenous and Oral Flunixin in Alpacas

**Chad D. Foradori**  
Anatomy, Pharmacology, and Physiology  
Additional Authors: Arthur D Zimmerman, Kathleen E. Burnis, Michael J. Weiser  
Effects of Perinatal Lead (Pb) Exposure on the Neuroendocrine Control of Reproduction

**Kimberly B. Garza**  
Pharmacy Care Systems  
The association between body weight, value of the future and dietary behaviors

---

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.
Constance Hendricks  
**Nursing**  
Additional Authors: Gregg Newschwander, Address Malada, Lindy Blanchard  
*Using Comparative Effectiveness Research Strategies in a Global Public Health Nursing Study Abroad Initiative*

Ramesh Jeganathan  
**Nutrition, Dietetics, and Hospitality Management**  
Additional Authors: Chen Zheng, Thangiah Geetha, Heidi Klues, Narendra Singh, Maria T. Diaz-Meco, Jorge Moscat  
*Amyloid β-induced neuronal death through p75 receptor is rescued by TRAF6 and p62.*

Alisha L. Jones  
**Communication and Dramatic Arts**  
*The effects of the listening and communication enhancement (LACE™) aural rehabilitation program on acceptable noise levels and perceived hearing aid satisfaction: Initial Findings*

Suresh T. Mathews  
**Nutrition, Dietetics, and Hospitality Management**  
Additional Authors: Jackie Mize, Robert Judd, Sareen Gropper, Barb Struempler, Sondra Parmer, Fred Kam, and Guang Ren  
*Saliva as a potential diagnostic medium: Identification and quantitation of fetuin-A secreted into saliva*

K. Parameshwaran  
**Pathobiology**  
Additional Authors: M.H. Irwin, Vishnu Suppiramaniam, K. Steliou and C.A. Pinkert  
*A synthetic lipoylcarnitine antioxidant reduces rotenone-induced impairment in the hippocampus*

Francine Parker  
**Nursing**  
Additional Author: Ramona Lazenby  
*Expanding Ethical Work Environments: Impact on Nurse Satisfaction*

Satyanarayana Pondugula  
**Anatomy, Physiology, and Pharmacology**  
Additional Authors: Farah Ashraf, Bruce F Smith, Mahmoud Mansour, Elaine S Coleman, Richard C Bird, Ya-Xiong Tao, Annette N Smith, Benson T Akingbemi  
*Dietary Stearidonic Acid Sensitizes Human and Canine B-Cell Lymphoma Cells to Chemotherapy Drugs*

John C. Quindry  
**Kinesiology**  
Additional Authors: Graham R. McGinnis, Matthew D. Barberio, Christopher G. Ballmann, and Bridget A. Peters  
*Exercise and heart attack protection via skeletal muscle production of interleukin-6*

Bruce F Smith  
**Pathobiology**  
Additional Authors: Ann Marie O’Neill, Jeffrey Haney, Nicole McAdams, Maninder Sandey and Payal Agarwal  
*Towards developing a PNP Activated Therapy for Canine Cancer*

Ya-Xiong Tao  
**Anatomy, Physiology, and Pharmacology**  
Additional Author: Hui Huang  
*Rescue of Intracellularly Retained Human Melanocortin-4 Receptor Mutants*

Robyn R. Wilborn  
**Clinical Sciences**  
Additional Authors: Chad Foradori, Aime Johnson  
*Kisspeptin as a marker for equine placental health (IGP-Level 1 Award, work in progress)*

Other  

Marilyn K. Rhodes  
**Nursing**  
Additional Authors: Arlene Morris, Ramona B. Lazenby  
*Caring and Competence: The Heart and the Brain of Nursing*

Science, Technology, Engineering, and Mathematics  

Nedret Billor  
**Mathematics and Statistics**  
Additional Authors: John Magnotti, Pallavi Sawant  
*Outlier Detection Methods for fMRI Data and Robust Multivariate Functional Principal Component Analysis*

Gisela Buschle-Diller  
**Polymer and Fiber Engineering**  
Additional Authors: Sarah Baldivia, Tucker McFarlane  
*Hydrogels as injectable biocompatible scaffolds for tissue repair*
Faculty Poster Presentations

Jianjun Dong
Physics
Additional Authors: R. Hansen, S. Santos, K. Patkowski, E. Thomas, Jr., P. Forrest
SPIRIT – Storing Petabytes of Information for Research into Tomorrow’s Science

N. Robert Estes II
Biology
Additional Authors: Nidhi Chigurapati, Mariam McKee, Roa Zaied
Antimicrobial Activity of Crude Leaf Extracts from Native Southeastern Shrubs: Callicarpa americana and Morella cerifera

Kathryn J. Fuller
Environmental and Forest Biology
Additional Author: Turner, J. S.
Characterizing the Fungal Symbiosis of Macrotermes Termites

Charles Gilliam
Horticulture
Additional Authors: Stephen Prior, Tom Gallagher, and S. Christopher Marble
Carbon Sequestration and Greenhouse Gas Emission Reduction in Horticulture

Leslie Goertzen
Biological Sciences
Additional Author: Curtis Hansen
Evolutionary Pattern and Process in Marshallia (Asteraceae)

Pradeep Lall
Mechanical Engineering
Additional Authors: Mahendra Harsha and Jeff Suhling
Pre-Cursors Based Prognostication of Accrued Damage and Assessment of Operational Readiness of Leadfree Electronics

Mark R. Liles
Biological Sciences and Poultry Sciences
Additional Authors: Joshua Stough, Zachary Williams, and Kenneth Macklin
Selection of Bacillus strains for Salmonella reduction within a poultry house environment

Luke Marzen
Geology and Geography
Additional Authors: Paul Holley, Art Chappelka
Development of Interdisciplinary Opportunities for Ground-Based LiDAR Applications

Russ Muntifering
Animal Sciences
Additional Authors: Leann Dillard, John Lin, Hector Calvete-Sogo, Victoria Bermejo-Bermejo
Productivity and quality of an Iberian grassland as influenced by elevated ozone and nitrogen

Ananda Nanjundaswamy
Biology
Additional Authors: Christopher Starr, Benedict Okeke
Single-step saccharification of switchgrass is more efficient than repeated saccharification in cellulosic biofuel production

Ronald Neuman
Chemical Engineering/Forestry
Additional Author: Lori G. Eckhardt
Next-Generation Volatile Compound Delivery System for Control of Insects and Insect-Borne Diseases

Brian Via
Forest Products Development Center
Additional Authors: Maria Auad, Sushil Adhikari, Yifen Wang
Development of bio-based epoxy resin systems with bio-oil: polymers and wood composite binders

John Williams
Physics and Mechanical Engineering
Additional Authors: M. J. Bozack, G. T. Flowers, P. Lall, and Erica K. Snipes
Utilizing Structure Zone Schemes to Influence the Production of Tin Whiskers

Jerrod Windham
Industrial and Graphic Design
Additional Authors: Scott Renner, Doris Hill, JoEllen Sefton
A Multi-Disciplinary Approach to Developing Assistive Technology
Social Sciences

Toni Alexander
Geology and Geography, and Human Development and Family Studies
Additional Author: Brian E. Vaughn
Evaluating Real-Time Location Based Systems (RTLS) to Understand Human Social Network Development

Duha Altindag
Economics
Additional Author: Naci Mocan
Education, Cognition, Health Knowledge, and Health Behavior

Judy Blumsack
Communication Disorders
Additional Authors: Martha W. Wilson, Sandra Clark-Lewis, Kelli M. Watts, Lindsey Soles, Cydney Ennis
RECD Norms: Finding a Universal Metric for Third-World and Developing Countries

Wi-Suk Kwon
Consumer and Design Sciences
Additional Authors: Gopikrishna Deshpande, Sang-Eun Byun, Jeffrey Katz, Sandra Forsythe, Ana Franco-Watkins, Nicholas Koulass, John F. Magnotti, Adam M. Goodman, Jae Youn Chang, and Xiao Huang
Neural Underpinnings of Scarcity Bias

James H. Long
Accounting
Additional Author: Ana Franco-Watkins
Accounting for the Costs and Benefits of Task Interruption

Jung Chul Park
Finance
Additional Author: Christos Pantzalis
Stock Repurchases and Market Reactions: Evidence from Korea

Sheri Shumacher
School of Architecture, Planning, and Landscape Architecture
Design to Improve the Social, Economic, and Cultural Conditions of Gee’s Bend, AL

Debra L. Worthington
Communication and Journalism
Additional Authors: Shaughan Keaton, Margaret Fitch-Hauser
Conversational Sensitivity and Texting Addition: Don’t Get Too Happy!

Yaogi Zhang
Forestry and Wildlife Sciences
Additional Author: Sheng Li
Vulnerabilities, Resilience, and Adaptions to Natural Disasters: Communities in Alabama and Mississippi Coastal Area

Sustainability

Kyungmi Kim
Nutrition, Dietetics, and Hospitality Management
Introduction of New Crops for Farmers and Economic Growth in the City of Valley

Daowei Zhang
Forestry and Wildlife Sciences
Additional Author: Anne Stenger
Valuing Value and Valuation of Forest Ecosystem Services

Water and the Environment

Muralikrishnan Dhanasekaran
Pharmacal Sciences
Additional Authors: Dwipayan Bhattacharya, Mengyuan Zheng, Manuj Ahuja, and T. Prabhakar Clement
Evidence of Deepwater Horizon Oil Spill Tarmats as Potent Environmental Toxicant

Dongye Zhao
Civil Engineering
Additional Authors: Xiao Zhao, Wenbo Xie
In situ immobilization of uranium in soil and groundwater using a new class of stabilized iron nanoparticles
**Engineering**

John Haser
Chemical Engineering
- Additional Authors: Robert H. Herring, Subin Hada, Mario R. Eden
  - Crystallization solvent design using 2D/3D molecular descriptors

Alexander Haywood
Chemical Engineering
- Additional Authors: Sachin Godbole, William R. Ashurst, Virginia A. Davis
  - Cellulose Nanocrystal Dispersions and Films for MEMS

Subhasis Mitra
Biosystems Engineering
- Additional Author: Puneet Srivastava
  - ENSO Induced Climate Variability Impacts on Groundwater Levels in the Lower Apalachicola-Chattahoochee-Flint River Basin

Hyejin Park
Materials Engineering
- Additional Author: Dong-Joo Kim
  - Orientation Effect of ZnO on Ethanol Gas Sensing Properties

Alexander Pfeiffenberger
Electrical Engineering
- Additional Author: Michael C. Hamilton
  - Double Helix Inspired Reworkable Microscale Electrical Interconnect Structures

Selcuk Poyraz
PFEN
- Additional Authors: Liu Zhen, Liu Yang, Zhang Xinyu
  - Carbon Nanotube Growth on Tires...Really?

Shantanu Pradhan
Chemical Engineering
- Additional Authors: Samuel Chang, Elizabeth A. Lipke
  - An Artificial Breast Cancer Tissue for Drug-testing Applications

Peter Sakalaukus
Mechanical Engineering
- Additional Authors: Pradeep Lall, Lynn Davis
  - Prognostics of Damage Accrual in SSL Luminaires and Drivers Subjected to HTSL Accelerated Aging

Achintya Sujan
Chemical Engineering
- Additional Author: Bruce J. Tatarchuk
  - Process Dynamics and Characterization of Sulfur Adsorbents via Fiber Optic UV/Vis Spectroscopy

MariAnne Sullivan
Materials Engineering
- Additional Author: Bart Prorok
  - Strengthening mechanisms of nacre in the abalone shell

Jie Zhong
Chemical Engineering
- Additional Authors: Jie Zhong, Christopher B. Roberts, W. Robert Ashurst
  - Gold Nanoparticle Films with Varying Surface Roughness Obtained by A Gas-Expanded Liquid Deposition Process

**Sciences**

Subhrajit Bhattacharya
Pharmacology
- Additional Authors: M. Buabeid, M. Ahuja, A. Alhoail, M. Dhanasekaran, K. Parameshwaran, V. Suppiramaniam
  - Prenatal nicotine exposure leads to downregulation of NMDA receptors resulting in impaired hippocampal synaptic plasticity and memory

Manal Buabeid
Neuropharmacology
- Additional Authors: Subhrajit Bhattacharya, Kodeeswaran Parameshwaran, Brett Augsburger, Manuj Ahuja, Murali Dhanasekaran, Vishnu Suppiramaniam
  - Prenatal nicotine exposure and mechanism of memory deficits in offspring

Walter Casper IV
Chemistry
- Additional Authors: Bormotova, T.A.; H. Sun, H.; Blumenthal, R.
  - Laser ablation studies of RDX sensitivity and combustion

Li Chen
Pharmaceutics
- Additional Authors: R.J. Babu, W.R. Ravis, W. Yan
  - Co-delivery of Zoledronic Acid and double-strand RNA (dsRNA) from Core-shell Nanoparticles

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.
Meng Ding
Nutrition
Additional Authors: Norbert L.W. Wilson, Kimberly B. Garza, Claire A. Zizza
Are food insecure individuals aware of their risk for diabetes?

Ford Dyke
Exercise Science
Additional Authors: Maurice Godwin, Jeremy C. Rietschel, Craig G. McDonald, and Matthew W. Miller
Validating a novel physiological metric of cognitive workload

Heather Enloe
Forestry
Additional Author: B. Graeme Lockaby
Impact of urbanization on foliar leaf litter quality

Selamawit Ghebreamlak
Biochemistry
Additional Authors: Xiao Xiao, Duin Evert, Brian Hoffman
Detection and Characterization of reaction intermediates in IspH

Hongtao Hu
Molecular Biology
Additional Authors: Narendra Singh, David Weaver, Robert Lacy
A genome-wide survey of microRNAs in two diploid cottons, Gossypium arboreum and Gossypium raimondii, through Deep Sequencing

Hui Huang
Biomedical Science
Additional Author: Ya-Xiong Tao
Rescue of intracellularly retained human melanocortin-4 receptor mutants

Mohammad Huq
Geology
Additional Authors: Ashraf Uddin, Ming-Kuo Lee, Kazi Ahmed, James Saunders
Groundwater Arsenic Distribution and Mineralogical and Geochemical Study Of Aquifer Sediments Of The Bengal Basin, Bangladesh

Ming Li
Entomology
Additional Authors: William Reid, Nannan Liu
Autosomal linkage of differential gene expression in an insecticide resistant strain of Musca domestica

Wanshu Ma
Pharmacology
Additional Authors: Yiwei Liu, Nicholas Ellison, Jianzhong Shen
Induction of CXCR7 Switches SDF-1 Signaling and Phagocytic Function in Macrophages: a Potential Role in Atherosclerosis

Tolulope Morawo
Entomology
Additional Author: Henry Fadamiro
Behavioral responses of the parasitoids, Microplitis croceipes (specialist) and Cotesia marginiventris (generalist) to host related volatile

David Morris
Biology
Phylogenomic analysis reveals an early step in the adaptation of life to oxygen

Shravanthi Mouli
Pharmacal Sciences
Additional Authors: Gayani Nanayakkara and Rajesh Amin
PPAR delta mediated cardioprotection against hypertrophy in the diabetic heart requires frataxin

Olive Njuma
Biochemistry
Additional Authors: Elizabeth N. Ndontsa, Douglas C. Goodwin
Role of peroxidatic electron donors and active site residues in the catalase activity of Catalase-Peroxidase

Mohiuddin Ovee
Biochemistry
Additional Authors: David Zoetewey, Smita Mohanty
Understanding protein-protein interaction network: a case study with Glutaminase Interacting Protein

Kasturi Pawar
Pharmacal Sciences
Additional Authors: K. R. Pawar, C. Kolli, R. J. Babu
Effect of Lipophilicity of Drugs on the Iontophoretic Delivery across Microneedle Treated Human Skin

Kushan Weerasiri
Organic Chemistry
Additional Author: Anne E. V. Gorden
2-Quinoxalinol Salen Copper (II) Complex Catalyzed Selective Oxidation of Propargylic Alcohols using tert-Butyl Hydroperoxide
Graduate Poster Presentations

Ting Yang
Entomology
  Additional Author: Nannan Liu
  Cytochrome P450s: Their Expression and Function in Insecticide Resistant Mosquitoes, Culex quinquefasciatus

Arthur Zimmerman
Biomedical Sciences
  Additional Authors: Chad D. Foradori, Desiree Wanders, Robert L. Judd
  Changes in phase I and phase II hepatic biotransformation enzyme expression and substrate availability after atrazine exposure

Social Sciences

Chris Ballmann
Exercise Physiology
  Additional Authors: Graham McGinnis, Bridget Peters, John Quindry
  Effect Of Hypoxic Recovery Post-Exercise On Blood Oxidative Stress Markers

Lauren David
Counseling Psychology PhD
  Additional Authors: Randolph Pipes, Traci Giuliano
  Gender Differences in Perceptions of Loyalty Transgressions: Who Sticks to the Code?

Matthew Davis
Psychology
  Additional Author: Ana M. Franco-Watkins
  The Impact of Adaptive Time Pressures During a Judgment Task

Marc Jackson
Cognitive and Behavioral Science
  Additional Author: Ana M. Franco-Watkins
  Self-Control for Healthy Eating Under Time Pressure

Brian Kliszczewicz
Exercise Physiology
  Additional Authors: R.Snarr, D.L. Blessing, and M.R. Esco
  Metabolic and Cardiovascular demand of a named CrossFit workout “CINDY”

Kara Palmer
Exercise Science
  Additional Authors: Matthew Miller, Leah Robinson
  Acute physical activity enhances preschoolers’ ability to sustain attention.

Ronald Snarr
Exercise Science
  Additional Authors: Emily V. Witte, Christopher T. Jenkins, Brett S. Nickerson, Michael R. Esco
  EMG activity of superficial musculature during suspension push-ups compared to traditional push-ups

Ting Wang
Educational Leadership
  Chinese School Principals’ Behavioral Intentions in Relation to Green School Practices

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.
Undergraduate Poster Presentations

Arts and Literature

Michael Krek
Communications/Theatre
Set Design The Little Foxes

Science, Technology, Engineering, and Mathematics (Chemical Engineering)

Amber Hubbard
Chemical Engineering
Additional Authors: Patricia Murdock, Virginia A. Davis
Effects of Pressure and Sonication Time on Vapor Grown Carbon Fiber (VGCF) and Multi-Walled Nanotube (MWNT) Bucky-paper

Alex Roman
Chemical Engineering
Additional Authors: Hema Ramsurn, Ram B. Gupta, Jorge Mosjidis
Extraction of Sunn Hemp-Derived Protein using Subcritical Water

Stephen Wahl
Chemical Engineering
Additional Authors: Jennifer N. Duggan, Christopher B. Roberts
Controlled Synthesis and Investigation of Platinum Nanoparticles

Health Sciences and Systems

Robert Brannan
Exercise Science
Additional Author: Ronald L. Snarr, Michael R. Esco
Electromyographic activity of middle trapezius and posterior deltoid during a suspension inverted row compared to a traditional inverted row

Amanda Martin
Biomedical Science
Additional Authors: Knoptip Thungrat, Dawn Booth
Evaluation of the sdiA Expression in Escherichia Coli on Antimicrobial Resistance

Science, Technology, Engineering, and Mathematics (Agriculture/Air Quality)

James Geraughty
Biosystems Engineering
Air quality management during natural disasters with petroleum factors

April Maxwell
Agronomy and Soils
Additional Author: Yucheng Feng
Biodegradation of Polycyclic Aromatic Hydrocarbons in Coastal Sediments

Andréj Svyantek
Agronomy and Soils
Additional Authors: Scott McElroy, Michael Flessner, Shu Chen, Jordan Toombs
Photosystem II Inhibition Herbicide Resistant Poa annua lacking known psbA Herbicide-Binding Mutations in the Photosystem II Reaction Center D1 Protein.

Science, Technology, Engineering, and Mathematics (Chemistry/Biochemistry)

Brandon Bakr
Chemistry
Additional Authors: D. G. A. Smith, K. Patkowski
Ultra-Accurate Potential Energy Surface for the He-H$_2$ Dimer

Emily Buss
Chemistry
Additional Authors: Yuancheng Li, Anne E.V. Gorden
“Green” Chemistry: Oxidation Reactions under High Pressures of Oxygen

Michael Evans
Biomedical Sciences
Additional Authors: Luisa Cruz, Leonardo De La Fuente
Site-directed mutagenesis of genes putatively involved in the response to calcium by the bacterial plant pathogen Xylella fastidiosa
B. Owen Garrett
Chemistry
Additional Authors: Yang Zhong, Peter Livant
A Bromonitro Compound Cascade Reaction Leading to a Dimeric Alkene

Anna P. Haskins
Physical Sciences
Additional Authors: Austin T. Brown, Anthony N. Frazier, Charla R. Hughes, Rachael A. Humber, Tabitha M. Michaud, Katherine E. Niell
Effect of a Punica granatum enriched diet on immunomodulation in Rhinella marina

K. Sabrina Lynn
Biochemistry
Additional Authors: Branson Maynard, Anne Gorden
Unique properties of U(VI) demonstrated in metal mediated synthesis of 2,3-diaminophenazine

Will Wanninger
Biomedical Sciences
Additional Author: Michael Squillacote
1,3,4-Thiadiazolidine-2,5-dione Base Synthesis of Oxadiazol-2-ones

Science, Technology, Engineering, and Mathematics (Materials/Mechanical Engineering)

Sarah Baldivia
Polymer/Fiber Engineer
Additional Author: Tucker McFarlane
Injectable Hydrogel Applications for Tissue Repair

Ross Bonner
Mechanical Engineering
Additional Authors: Subhrajit Bhattacharya, Vishnu Suppiramaniam
Nicotinic Receptor Integrin Linked Kinase Interplay: A Novel Mechanism for Synaptic Plasticity

Zachary Watson
Materials Engineering
Additional Author: Jeffrey Fergus
Acoustics of Materials: Flat-Top Guitars

Ryan Whitmore
Mechanical Engineering
Additional Authors: William Kirkland, Hannah Young, Ashton Richardson
Comparison of Articular Cartilage Thickness in Cadaveric Equine Limbs

Science, Technology, Engineering, and Mathematics (Microbiology/Biology/Pharmacy)

Kodye Abbott
Molecular Biology
Additional Authors: Elaine S. Coleman, Bruce F. Smith, Richard C. Bird, Annette N. Smith, Satyanarayana R. Pondugula
Gene Expression of Nuclear Receptors and Multidrug Transporters in Canine Lymphoma and Mammary Tumor Cell

Son Cheng
Microbiology
Additional Author: Peter Panizzi
S. aureus Secretome Pro-coagulant Activity Analysis and Generation of Bioluminescent S. aureus RN4220

Pamela Hart
Biology
Additional Authors: C. Keith Ray, Jonathan W. Armbruster
A look at the genetic structure of the Macrhybopsis aestivalis species complex in Alabama

Joshua Justice
Microbiology
Additional Authors: David A. Weese, Scott R. Santos
Inferring Phylogenetic Relationships utilizing Mitochondrial Genomes for a Hawaiian Cryptic Species Complex

Andrew Paulk
Biology
Additional Authors: Ananda Nanjundaswamy, Benedict Okeke
Liquid chromatography-mass spectrometry (LC-MS) profiling of oligosaccharide intermediates in lignocellulosic biomass saccharification

Erin Schmale
Microbiology
Additional Authors: Shamima Nasrin and Mark Liles
Cultivation of Novel Soil Bacteria to Identify Antimicrobial Agents

Christopher Starr
Biology
Additional Authors: Ananda Nanjundaswamy, Benedict Okeke
Enhanced feedstock saccharification by crude fungal enzyme concentrated by tangential flow filtration

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.
Grace Thaxton  
**Microbiology**  
Additional Author: Vicky van Santen  
*Comparison of Genome Sequences of ArkDPI-derived IBV Vaccine Before and After One Passage in Chickens*

Wesley Wallace  
**MCMB**  
Additional Author: Anthony Moss  
*Metabolic activity in Mnemiopsis leidyi*

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**Science, Technology, Engineering, and Mathematics (Physical Science)**

James Sartor  
**Physics**  
Additional Authors: M. Keiling, M. Fogle, A. L. Landers  
*Ion/Anion Pair Production in H₂ via Fast Electrons*

Joseph Shaw  
**Physics**  
Additional Authors: Patrick Donnan, Edward Thomas, Jr.  
*The Effects of an External Perturbation on an Existing Dusty Plasma Cloud*

---

**Social Sciences**

Katherine Brown  
**Psychology**  
Additional Authors: Andrew S. Roberts, Ana Franco-Watkins, Aimee Callender  
*Metacognition Under Pressure: Individual differences in working memory and decision making under time constraints*

Adrianna Crossing  
**Psychology**  
Additional Author: Aimee Callender  
*Validating the Think-Aloud Task as a Research Measure for Children*

Ryan Hile  
**Geography**  
Additional Author: Philip Chaney  
*Earthquake Place Vulnerability in Salt Lake County, Utah*

---

**Social Sciences/Exercise Science**

Jan-Michael Coke  
**Kinesiology**  
Additional Authors: Cory Dixon, Joe Harris, Brandon Lee  
*Differences in Physical Activity Classes Fitness Scores*

David Lee  
**Kinesiology**  
Additional Authors: Christopher Wilburn, Jonell Pedescleaux  
*Differences in the Physical Fitness of Black Male College Students*

---

**Sustainability/Biosystems/ Food Systems**

Katelyn Boston  
**Biosystems Engineering**  
*Waste Reduction Analysis and Auburn University Students’ Perception of Local Thrift Store Industry*

Woody Huguley  
**Biosystems Engineering**  
Additional Author: Tyler Phillips  
*Students’ Perceptions of Paper, Glass and Plastics Recycling as a Waste Management Strategy on the A*

Logan Kennedy  
**Biosystems Engineering**  
*Aquaponics as alleviation to threats water shortages and desertification present for food production*

---

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.
Undergraduate Poster Presentations

Chelsea Leander
Nutrition
Additional Author: Devin Yeomans
Full Purpose

Sarah Richard
Biosystems Engineering
Additional Authors: Puneet Srivastava, Subhasis Mitra
Quantifying the Effects of Climate Variability on Rainwater Harvesting

Bryan Weatherford
Biosystems Engineering
Additional Author: James Johnson
Investigations into Profitability of Byproducts of the Soybean Oil Extraction Process

Water and the Environment

Ashlee Acosta
Biosystems Engineering
Additional Author: Steven Major
The Effects of Hydraulic Fracturing Fluid on Surrounding Ecosystems in the United States

Enrique Doster
Fisheries
Additional Authors: Michael F. Chislock, John F. Roberts, Jack J. Kottwitz, and Alan E. Wilson
Recognition of an important water quality issue at zoos: Prevalence and potential threat of toxic cyanobacteria

Annie Gallagher
Biosystems Engineering
Additional Author: Jim Farmer
Analytical Study of Wastewater Treatment in Coffee Production

Abby Jones
Physical Science/Chemistry
Additional Author: Duk Kyung Kim
Measurement of peroxides ($\text{H}_2\text{O}_2$ and organic peroxides) in rainwater collected in AUM campus

Will McCartney
Biosystems Engineering
Additional Author: Ross Wall
Feasibility of Borgias Polycyclic Aromatic Hydrocarbons

Caroline Priester
Biosystems Engineering
Nonpoint Source Pollution Management for a Small Urbanized Watershed in Auburn, AL

Meredith Tidmore
Biosystems Engineering
Additional Author: Caitlin Perry
Parkerson Mill Creek Water Quality Analysis

Jacob Wadkins
Biosystems Engineering
Additional Author: Liana Wuchte
Evaluation of the Effect of Campus Construction on Surface Water in Auburn, AL

Names, Authors, Departments, and Titles of Abstracts are shown as they were submitted by the Primary Author.