

College of Agriculture and Human Ecology

Agriculture

Undergraduate

Title: Exploring the Knowledge and Perceptions of Honey Bees within the Community

Primary author: Amber Dunnaway

Research Advisor: Dennis Duncan

Human Ecology

Undergraduate

Title: Hormones in Dairy and the Effect on Human Health

Primary author: Lina Hernandez

Research Advisor: Melinda Anderson

College of Arts and Sciences

Biology

Undergraduate

Title: Identifying patterns in the culturable skin microbiome of Appalachian salamanders

Primary author: Bailey Burns

Co-authors: John Griffith, Gabrielle Russell, Fantasia Erdman, and Megan Wharton

Research Advisor: Donald Walker

Collaborator: Aubree Hill

Graduate

Title: Computational Predictions of the Binding Sites of RAF Kinases with hRAS

Primary author: Shanrya Foster

Research Advisor: S.K. Ballal

Collaborator: Derek Cashman

Chemistry

Undergraduate

Title: Dehydrogenative Coupling of Functionalized Pyridines toward Compexants for Minor Actinide Separation

Primary author: Gabrielle Waters

Research Advisor: Jesse Carrick

Graduate

Title: Heavy Metal Remediation from Aqueous Solutions by New SIT Materials

Primary author: Emily Rush

Research Advisor: Ed Lisic

Earth Sciences

Undergraduate

Title: Grain-scale strain analysis of rock in middle Tennessee

Primary author: Kathleen Thompson

Co-author: Lori Nabors

Research Advisor: Michael Harrison

English (Papers)

Undergraduate

Title: Creation and Community in Hawthorne and Poe

Primary author: Shannon Buford

Research Advisor: Michael Burduck

Graduate

Title: Elements of the Gothic in David B.'s Epileptic

Primary author: Brandi Kriebel

Research Advisor: Anthony Baker

Mathematics

Undergraduate

Title: μ -rank of Noncommutative Quadratic Forms on Four Generators

Primary author: Jessica Prince

Research Advisor: Padmini Veerapen

Graduate

Title: Evaluating the Statistical Significance of Pedestrian Crossings on Superstreets using D-values instead of p-values

Primary author: Meghan Sigler

Research Advisor: David Smith

Physics

Undergraduate

Title: Development of New High Resolution Neutron Detector

Primary author: Leonard Mostella III

Research Advisor: Mustafa Rajabali

College of Business

Economics, Finance, and Marketing

Undergraduate

Title: The United States trade deficit with China - Solutions?

Primary author: Hannes Vhon

Research Advisor: Alma Hales

College of Education

Counseling and Psychology

Undergraduate

Title: The Importance of Cultural Values in the Stigmatization of Mental Illness

Primary author: Chassidy Overstreet

Research Advisor: Matthew Zagumny

Graduate

Title: First Experiences in Laos

Primary author: Laslie Phongsa

Research Advisor: Matthew Zagumny

Curriculum and Instruction

Graduate

Title: The Status of Tennessee Foster Parent Training and Support Including Fostering Children with Neonatal Abstinence Syndrome (NAS) and the Relationship of Foster Parents' Perceived Abilities, Motivations, and Likelihood to Continue Fostering

Primary author: Elizabeth Ramsey

Research Advisor: Jane Baker

Exercise Science, Physical Education and Wellness

Undergraduate

Title: The Difference in Step Frequency in Shod vs. Unshod Running

Primary author: Johnny Perkins

Co-author: Brianna Peach

Research Advisor: Michael Phillips

College of Engineering

Chemical Engineering

Undergraduate

Title: Use of excess energy from nuclear power generation for seawater desalination via forward osmosis

Primary author: Katlyn Schubert

Research Advisor: Laura Arias Chavez

Graduate

Title: Utilizing desalination brine for concentration of orange juice via forward osmosis

Primary author: Haley White

Co-authors: Leif Templeton and Shelby Jones

Research Advisor: Laura Arias Chavez

Civil and Environmental Engineering

Graduate

Title: Comparison of FEA and Analytical Methods for Determining Global Stability of a RAP Supported MSE Wall

Primary author: Emily Reed

Research Advisor: Daniel VanderBerge

Computer Science

Undergraduate

Title: Multi-Task Correlation-Based Feature Selection for Gene Expression Data

Primary author: Katherine Brown

Research Advisor: Doug Talbert

Graduate

Title: Safety Analysis for UAV Networks

Primary author: AHM Jakaria

Research Advisor: Mohammad Rahman

Electrical and Computer Engineering

Graduate

Title: ON SUBSYNCHRONOUS INDUCTION GENERATOR EFFECT MITIGATION IN A WIND ENERGY SYSTEM USING CURRENT SOURCE CONVERTER BASED STATCOM

Primary author: Eseme Sota

Research Advisor: Ghadir Radman

There was a TIE in the graduate division.

Graduate

Copper Substituted High Capacity and Stable P2 – Type Cathode Material Na_{0.7}Ni_{0.3}Mn_{0.59}Co_{0.1}Cu_{0.01}O₂ for Sodium Ion Battery Technology

Primary author: Bibek Tiwari

Research Advisor: Indranil Bhattacharya

Manufacturing and Engineering Technology

Undergraduate

Title: NASA Human Rover Exploration: An engineering design challenge changing the future

Primary author: Tyler Wilson

Co-authors: Macy Williams, Gordon VanHoy, Justin Finks, and Kyle Monnin

Research Advisor: Ahmed Elsayy

Mechanical Engineering

Undergraduate

Title: Parametric Testing of Surrogate Knee Replacement Bearings with Embedded Piezoelectric Transducers

Primary author: Zachariah Tiberi

Co-author: Justin Carlson

Research Advisor: Steven Anton

Graduate

Title: Thermal Management Using Diamond Nanofluid

Primary author: Farzin Mashali

Co-author: Gholamreza Mirchekari

Research Advisor: Ehsan Languri

College of Interdisciplinary Studies

Environmental Studies

Undergraduate

Title: Analysis of wastewater samples for attention deficit hyperactivity disorder (ADHD) medications by liquid chromatography-tandem mass spectrometry (LC-MS/MS)

Primary author: Waverly Parker

Research Advisor: Tammy Boles

Graduate

Title: Qualification and quantification of various opioids in urban wastewater treatment plant and river by utilization of Solid Phase Extraction (SPE) technique and LC-MS/MS

Primary author: Faranak Mahmoudi

Research Advisor: Tammy Boles

Interdisciplinary Studies

Undergraduate

Title: Stigma as a Barrier to Care in the HIV+ and Transgender Communities

Primary author: Bryson-Higgins Kelp

Research Advisor: Ashley Allison

Whitson-Hester School of Nursing

Nursing

Undergraduate

Title: An Interdisciplinary Case Study: Promoting Collaboration Between Undergraduate Nursing and Occupational Therapy Students

Primary author: Katie Howell

Co-authors: Peyton Curtis and Hailey Burke

Research Advisor: Susan Piras