

2018-2019
OCSE Graduate Student Research Grants

Agriculture

Beverly Gartland, (Dr. Jennifer Gill)
Nutritional Issues of Geriatric Horses: Ingestion Versus Digestion
AWARDED \$2,453.56

Biology

Nicholas Wheeler, (Dr. Noah Ashley)
The Effects of Alpha and Beta-Adrenergic Receptor Blockade upon Inflammatory Responses to Chronic Sleep Fragmentation
AWARDED \$3,000.00

Taylor Verrett, (Dr. Carl Dick)
Molecular Prospecting for Evidence of Cryptic Speciation in a Generalist Bat Parasite
AWARDED \$3,000.00

Aref Ranjbar, (Dr. Ajay Srivastava)
*Characterization of a Basement Membrane-Associated Protein in Endomembrane System of *Drosophila Melanogaster**
REQUESTING \$3,000.00

Sophia Corde, (Dr. Bruce Schulte)
Alleviating Human Elephant Conflict through Deterrent Fences and Environmental Monitoring in Southern Kenya
AWARDED \$3,000.00

Taylor McRoberts, (Dr. Scott Grubbs)
*The Stoneflies (*Insecta, Plecoptera*) of Mammoth Cave National Park –Assessing Patterns of Species Richness, Commonness vs. Rarity, and Affinities with Available Habitats*
AWARDED: \$895.15

Madeline Metzger (Dr. Scott Grubbs)
*The Stoneflies (*Plecoptera*) of the Black Mountains – Assessing Patterns of Diversity Hotspots, Elevation Gradients, and Potential for Regional Species Loss*
AWARDED: \$2,861.59

Lauren Kappel, (Dr. Steve Huskey)
Substrate-Borne Vibrational Communication in Veiled Chameleons During Courtship and Breeding

AWARDED: \$3,000.00

Meghan Hall,
*Seasonal Movement Patterns of Benthic Fish in Headwater Streams of a Reservoir -
Riverine Habitat Complex Upstream of the Barren River Dam*
AWARDED \$2,776.00

Wesley Payette,
*Assessment of Fitness Costs Associated with Drug-Induced Sleep Inhibition in Arctic-
Breeding Lapland Longspurs (*Calcarius Lapponicus*) Snow Buntings (*Plectrophenax
Nivalis*)*
AWARDED \$3,000.00

Kyle Whorrall, (Biology)
Documenting the Unexplored Diversity of Peruvian Spider Beetles
Requesting \$3,000.00, **AWARDED \$3,000.00**

Chemistry

Jae Ko, (Dr. Kevin Williams)
*Different Reactions of 5' -Guanosine Monophosphate and N-Acetyl-L-Methionine on a
Platinum Tri-Ammine Complex with a Seven-Membered Ring*
AWARDED: \$1,137.00

Jenna Cantway, (Dr. Les Pesterfield)
*Mechanochemistry: Solvent-Free Synthesis of Metal Coordination Compounds using Ball
Mills*
AWARDED: \$2,145.00

Ban Wang, (Dr. Yongming Deng)
*The Catalytic Methodology Development of Iron Catalysts for Carbene Transfer
Reactions*
AWARDED: \$2,991.00

Jonathan Markham, (Dr. Yongming Deng)
*Pyridine N-Oxides Assisted Activation of Alkynes by Visible Light Photo-Redox Light
Catalysis*
AWARDED: \$2,964.00

Amanda Houchens, Chemistry (Dr. Cathleen Webb)
Analysis of Mercury and Trace Metals in Bat Guano
Awarded \$2,725.00

Viral Bhavsar, (Dr. Eric Conte)
The Effects of Antibiotics on Methane Production from Anaerobic Digestion

AWARDED \$2,766.30

Geography & Geology

James Troxell, (Dr. Jason Polk)

An Adaptive Incidence Response Framework for Urban Karst Groundwater Hazards

AWARDED \$3,000.00

Matthew Cecil, (Dr. Jason Polk)

Examining Hydrogeological Dynamics of Base level and Reverse Flow of the Green River and Major Springs of Mammoth Cave, Kentucky

AWARDED \$3,000.00

Zachary Creech, (Dr. Michael May)

Lithological Character and Sequence Stratigraphy of the Ste. Genevieve Limestone in Western Kentucky

AWARDED: \$1,357.00

Jason Fox, (Dr. Leslie North)

An Index-Based Assessment of Tourism Development Impacts in Cold-Climate Coastal Landscapes

AWARDED: \$1,000.00

Adam Mattson, (Dr. Nahid Gani & Dr. Royhan Gani)

Structural Reconstruction of the Chandon, Vos, and Yellowglen Gas Discoveries in the Northern Carnarvon Basin, Australia

AWARDED: \$1,205.00

Charles O'Connell, (Dr. Chris Groves)

Developing New Tools to Study the Karst Hydrogeology of a Pristine Groundwater Flow System: Great Onyx Spring, Mammoth Cave National Park, Kentucky

Awarded \$2,965.00

Jacob Grigsby, (Dr. Nahid Gani)

Incision History of the Northwestern Ethiopian Plateau: Insights from Low-Temperature Apatite Thermochronology

AWARDED \$2,453.56

Anna Harris, Geography & Geology (Dr. Kambesis)

Quantifying the Impacts of Timber Harvest on Karst Systems in the Tongass National Forest, Alaska.

Requesting \$3,000.00 - **AWARDED \$2,453.56**

Physics & Astronomy

Bektur Adisatarov, (Dr. Ali Oguz Er)

Nanosecon Pulsed Laser Deposition of Lead Thin Film on Silicon
Requesting \$2,990.82, **AWARDED: \$ \$2,990.82**

Ernek Belekov, (Dr. Ali Oguz Er)
*Pathogenic Bacterial Deactivation in Human Blood Using Silver Nanoparticles as a
Photodynamic Therapy Agent*
AWARDED: \$2,678.00

Psychological Sciences

Katie Wheeler, (Dr. Sharon Mutter)
The Effects of Aging on Attention in Associative Learning
AWARDED \$1,221.00

Mallory Hughes, (Dr. Matthew Shake)
The Effects of Aging and Bilingualism in an Emotional Stroop Task
AWARDED: \$2,905.00

Alyssa Minton, (Dr. Andrew Mienaltowski)
Age Differences in the Impact of Gaze Direction and Context on Emotion Perception
AWARDED: \$950

Robert Twidwell, (Dr. Lance Hahn)
Perception of a Therapist Using Jargon in a Text Message-Based Session
AWARDED: \$1,440.00

Romin Geiger, (Psychological Sciences)
Preschool Self-Regulation: A Predictor of School Readiness
Requesting \$1,035.00, **AWARDED \$1,035.00**