

**ARTS AND SCIENCES
AUTUMN SEMESTER 2018
UNDERGRADUATE RESEARCH SCHOLARSHIP COMPETITION**

RECIPIENTS OF \$10000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Anisha Babu, Neuroscience, *The Influence of Statistical Regularities on Spatial Congruency Bias*, Professor Julie Golomb

Sheen Brower, Molecular Genetics, *Building a Programmable In-Vivo Data Recorder*, Professor Helen Chamberlin

Tianli Ding, Psychology, *Behavioral changes associated with loss of NSPC derived VEGF in vivo after kainic acid*

induced excitotoxic injury, Professor Elizabeth Kirby

Kathryn Duncan, Neuroscience, *WWOX Function in DNA Repair*, Professor Jeffrey Parvin

Jeffrey Lotthammer, Biochemistry, *Investigating the Structure and Function of the Inner-Ear Hair Cell Mechanotransduction*

complex via Molecular Dynamics and Small Angle X-Ray Scattering, Professor Marcos Sotomayor

RECIPIENTS OF \$7000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Nathan Baker, Psychology, *Informal Learning in a Museum Setting: A Case Study with Language Science*, Professor Nikole Patson

Eleanor Bashian, Biochemistry, *Establishing the sensitivity of glycosylated albumin measurements in diabetic patients with chronic kidney disease*, Professor Venkat Gopalan

Hannah Nelson, English, Anthropology, *An Examination of the Post-Industrial Gothic*, Professor Jared Gardner

Jeniveve Pearson, Physics, Astronomy & Astrophysics, *How are the periods of RS CVn binary stars, such as RT And, changing over time?*, Professor Donald Terndrup

RECIPIENTS OF \$6000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Montgomery Gray, Chemistry, *Chemical Intermediates from Feedstock: Reaction Discovery and Process Optimization*, Professor T.V. (Babu) RajanBabu

Mason Harris, Earth Sciences, *An Investigation of Decreasing Porosity in the Trenton Limestone from Williams County, Ohio*, Professor Ann Cook

Adam Helton, Molecular Genetics, *Using Reporter Constructs to Determine Patterns of Expression and Subcellular Localization of the Pollen Aperture Protein DOUGHNUT in Arabidopsis thaliana*, Professor Anna Dobritsa

Colin Kurkul, Microbiology, *Identifying Food-safe Antimicrobial Compounds to Control European Foulbrood (*Melissococcus**

plutonius) in Honey Bees, Professor Reed Johnson

Elton Nguyen, Evolution & Ecology, *Development of an in vitro culture technique of *Tridacna derasa* clams*, Professor Andrea Grottoli

Lauren Peltier, Molecular Genetics

Anita Hopper, *Stress-induced tRNA intron accumulation as a potential mechanism of gene regulation*, Professor Anita Hopper

Elliot Ping, Neuroscience, *How Are Grouped Objects Represented in Visual Working Memory?*, Professor Andrew Leber

Henry Wu, Political Science, Philosophy, *Divided Courts: Judicial Behavior in Human Trafficking Cases*, Professor Lawrence Baum

RECIPIENTS OF \$5500 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Lindsey Battaglia, Psychology, Human Development & Family Science, *The Role of Resilience in Wellbeing*, Professor Jennifer Cheavens

Trent Cash, Psychology and Public Affairs, *Evaluating the Social and Emotional Well-Being of Gifted Students Receiving Different Levels of Gifted Services*, Professor Tsu-Jung Lin

RECIPIENTS OF \$5000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Jacob Brooks, Biochemistry, *Calcium Sulfate Antibiotic Loaded Beads Arrangement for Methicillin Resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa* Biofilm Eradication*, Professor Paul Stoodley

RECIPIENTS OF \$4000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Nathan Kudlapur, Biochemistry, *Characterization of Glutamyl-tRNA Synthetase Point Mutations in Human Disease*, Professor Karin Musier-Forsyth

Vasudha Raju, Psychology, Linguistics, *Differences in Lexical Perception of Word-Initial and Word-Final Geminates in Tamil*, Professor Mark Pitt

Olivia Randall, International Relations, Middle East Studies, *Reconciliation Between Women After Genocide*, Professor Hollie Nyseth Brehm

Annalee Sekulic, Anthropology, Public Policy Analysis, *Anthropogenic Flora Indicators Explain Human/Climate Interactions within Southeastern Arabia*, Professor Joy McCorriston

RECIPIENTS OF \$3000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Rachel Crites, Evolution and Ecology, *Using traditional and geometric morphometrics to study the intraspecific variation of a generalist rodent species, Praomys rostratus, in Cote d'Ivoire, Sierra Leone, and Guinea, West Africa*, Professor Ryan Norris

Elizabeth Fuller, Physics, *Magnetic Characterization of 2D Materials with Spin- Polarized Scanning Tunneling Microscopy*, Professor Jay Gupta

Elaine Loudon, Public Health, Spanish, *Perceived risk of pregnancy among adolescent women in Spanish Town, Jamaica*, Professor Maria Gallo

Abigail McGowan, International Studies, Political Science, *The Troubles: US Diplomatic Relations with the United Kingdom and the Republic of Ireland*,

1968-1986, Professor Raymond Joe Parrott

Wanting Niu, Physics, Astronomy & Astrophysics, *Developing the Simulation for Ultra Energy Neutrino Experiment*, Professor Amy Connolly

Rahi Patel, Molecular Genetics, *Cell Development and Differentiation in a Deregulated System*, Professor Wayne Miles

Abu Rogers, Biochemistry, *Characterizing the biochemical properties and post-translational modifications of Plasmodium falciparum hexokinase*, Professor Mark Drew

RECIPIENTS OF \$2500 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Brain Daniels, Chemistry

Chemistry, *o,E -Bifunctionalization of Alkyl Amines via 1,5-Hydrogen Atom Transfer*, Professor David Nagib

Lauren Garner, Psychology, *Visual influences on the perceptual organization of speech*, Professor Mark Pitt

Julian Havens, Neuroscience, *A Viral Vector Mediated Gene Editing Approach to Correction of DMD*, Professor Kevin Flanigan

Jack Kucinski, Molecular Genetics

Examining the role of histone H2A.z (HTZ-1) and its role in transcriptional repression, , Professor Helen Chamberlin

Cella Masso-Rivetti, Anthropological Sciences

Hollie Nyseth Brehm, *Confession and Forgiveness in Post -Genocide Rwanda*, Professor Hollie Nyseth Brehm

Aditya Mistry, Biochemistry, Neuroscience, *Using Crystallography to Explore Alternative Topologies in the Four-helix Bundle Protein, Rop*, Professor Thomas Magliery

Kaitlyn Toth, International Studies, Political Science, , Professor Hollie Nyseth Brehm

RECIPIENTS OF \$2000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Rachel Braun, Biochemistry, *Use of click chemistry to improve a fluorescence-based turn-on assay for RNase P. an ancient*

endoribonuclease and potential drug target, Professor Venkat Gopalan

Clara Harrod, Psychology, Criminal Justice, *Intimate Partner Violence and Nonzero-sum Beliefs*, Professor Jennifer Crocker

Hope Klingensmith, Biology, *GREB1 Activation of Akt Signaling in Cancer*, Professor Craig Burd

Alyssa McNERNEY, Psychology, *Ostracism, Optimism/Pessimism, and Risk-Taking in Social Situations*, Professor Melissa Buelow

Aretha On, Neuroscience, *Exploring the Effects of NR1P1 Expression on Proliferation, Apoptosis, and Wnt Pathway Activation in Chronic Lymphocytic Leukemia*, Professor Lynne Abruzzo

Alexandra Zborovsky, English & History, *From Tragedy to Comedy: American Jewish Comedy After the Holocaust 1950-1970*, Professor Robin Judd

RECIPIENTS OF \$1000 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Chaosong Chen, Physics, *Reducing systematic uncertainty on the top-quark cross section measurement by the ATLAS detector by improving the luminosity measurement*, Professor Harris Kagan

Jacob Ferrell, History, International Studies, *Historicizing Change in Late 20th Century Belizean Political Economy*, Professor Joel Wainwright

Maiah Fogel, Spanish

John Grinstead, *Pragmatic Reasoning and Sentence Interpretation: A Latent Variable Analysis of Inhibition*, Professor John Grinstead

Kennedy Hoying, Psychology, *Compassionate Goals and Health-Promotion Behaviors*, Professor Jennifer Crocker

Katherine Zhang, Biochemistry, Molecular Genetics, Psychology, *From Tragedy to Comedy: American Jewish Comedy After the Holocaust 1950-1970*, Professor Jian-Qiu Wu

RECIPIENTS OF \$750 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Paige Butauski, Psychology, *Thought Confidence and Relationship Quality in Romantic Conflict Interactions*, Professor Jennifer Crocker

Matthew Galla, Neuroscience, Spanish, *Phonetic Factors in Children's Quantifier Interpretation*, Professor John Grinstead

Christina Maroun, Neuroscience, Sociology, *The mental impacts of police brutality on Black women*, Professor Laura Frizzell

Carver Nabb, Psychology, *Predicting individual reading ability based on structural neural connectivity*, Professor Zeynep Saygin

Alayna Press, Environment, Economics, Development and Sustainability, *Summer 2019 Research Proposal - Perceptions of Community Capitals in Cambodia*, Professor Erin Lin

Feng Qian, Physics, Math, *Speed-up to Quantum Fourier Transform*, Professor Daniel Gauthier

RECIPIENTS OF \$250 UNDERGRADUATE RESEARCH SCHOLARSHIPS

Rezvan Baghbanian, Neuroscience, *Multiple Measures of Numerical Cognition and Quantifier Interpretation*, Professor John Grinstead

Cerys Hughes, Computer Information Sciences, Linguistics, *Use of Gazetteers in Grammar Induction*, Professor William Schuler

Quintin O'Boyle, Biochemistry, *Photodynamic Potential and Production of Apohemoglobin bound Phthalocyanines for Targeting of CD163+ Tumor Associated Macrophages in Triple-Negative Breast Cancer*, Professor Andre Palmer

Laura Patterson, Dance, *Improvisational Movement Practice as a Model for Community Work and Collaborative*, Professor Hannah Kosstrin

Michaela Schlegel, Anthropology, *Examining the Association between Heart Rate Variability and Self-Reported Substance Use*, Professor DeWayne Williams

Serina Smith, Biochemistry, Music, *Structural Stability of a Protein Fragment Essential for Hearing*, Professor Marcos Sotomayor

Selina Vickery, Neuroscience, *The Effects of Exercise on Chemotherapy-Induced Anxiety-Like Behavior*, Professor Leah Pyter

Paige Wilcox, Psychology, Criminology, *Women participation in Genocide*, Professor Hollie Nyseth Brehm