# Table of Contents

## Foreword

**Articles**

- Conconscious and Unconscious Semantic Activation in Episodic Memory Retrieval, Luke Churchill
- Strong Coupling of a Spin Ensemble in Ruby Crystal to a Three-Dimensional Copper Cavity, Michael Seitanakis
- Sonometry for Osteoporosis: Assessing the Impact of Phase Sensitive and Phase Insensitive Detection, Ryan W. Wahidi

## Summaries of Student Work

- Kidney Outcomes in the Very Low Birth Weight Population, Prachi Aggarwal
- Exploring the Role of FGF20 in the Gustatory System of Mice, Sakirat O. Akadri
- Fabrication of an Electronic Immersive Coater for Layer-by-Layer Assembly of 3D Printing Nanocomposites, Hari Anandarajah
- Forelimb Strength Meter — A Device to Measure Individual Forelimb Strength in Rats, Peter C. Andres
- Doping Bil.; A Computational Study of Electronic Properties, Yvette Anguiano
- When the Purging Process Goes Wrong: Investigating the Weed-Out Paradigm in Twenty-First Century Higher Education, Chase Antonacci
- The Effects of Germline Sequestration on Multicellularity, Odion Asikhia
- Cerebrospinal Fluid Parameters Alone Do Not Inform Infection Management in Posthemorrhagic Hydrocephalus, Brandon Baksh
- Studying Implicit Social Exclusion Using Pupillometric Analysis, Jared Balbona
- Toll-Like Receptor 4 Is Critical in the Development of Resection-Associated Steatosis, James Bao
- Exposure to Bacteria and Bacteria Carriage in the Social Amoeba, Anthony Bartley
- A Micro and Macro Analysis of Israel’s Organ Donation System, Ronny Bass, Grace Dearing, Sara Miller, and Nathan Ross
- The in vitro Biosynthesis of Obafiuorin β-lactone Analogs for Use in a Biological System, Catherine Beamish
- Trehalose as a mTOR Independent Inducer of Autophagy in a Mouse Model of Tuberous Sclerosis Complex, Brennan Beeler
- Development of an Algorithm to Calculate Torsional Angles of Polypeptide Structures, Krish Tejas Bharat
- The Role of Notch Signaling on Heart Rate and Atrial Conduction Velocity, Somya Bhatnagar
- Doppler Shift Human Detection Using a Microphone Array, Michael J. Billington
Mapping Prejudice: A Perceptual Dialectology Approach to Evaluating Language Attitudes towards South-Perceived Speech in the United States, Marie Bissell

Mu Opioid Receptor Desensitization in Inflammatory Pain, Matthew Bredder

Higher Income Predicts Poorer Long-Term Health Outcomes in China, Ethan Brodeur, Ben Rosenkranz, and Haoshu Xu

Catalytic Hydrogenolysis of Aryl Ether Substrates, Alex Brown

Identifying Protective Genes Against Cognitive Sequelae Following West Nile Mediated Encephalitis, Jasmine Brown

The University Features Gothic Collegiate Architecture and a Glass Ceiling: Gender Inequality, Numbers Game Logic, and Top-to-Bottom Moral Licensing in American Academia, Alisa Caccamo

Ocean’s Deadliest: Who Is Morally Responsible for Microfiber Pollution?, Luka Cai Minglu

Driving Gene Expression in the Heterochromatic Environment of the Fourth Chromosome of D. melanogaster, Jacob Cantrell

Reconciliation of Protein Coding Genes on the Drosophila elegans Muller F and D Elements, Jacob Cantrell, Emily Chi, Guanlan Dong, Ben French, and Monica Perumattam

Co-application of the Steroid Alfaxalon Enhances the GABAergic Effects of Propofol and Diazepam, Lily Cao

Using Cave Bacteria to Inhibit Pseudogymnoascus destructans, the White Nose Pathogen, Austin Chan

Experimental Verification of Bulk Metallic Glass Prediction from Machine Learning, Ryan Chang

Phenomenal Accent Patterns: A Computational Approach to Exploring the Application of Theoretical Frameworks from Music Theory to Linguistics, Alicia L. Chatten

A Role for Antennal Lobe Baseline Activity in Odor-Related Predictive Coding, Alex B. Chen

Matrix Completion: Climate Field Reconstruction Using Tree Rings, Timothy Chen

A Man’s Game: Analysis of the Gender Divide in Chess, Sarah Chiang

Synthesis of Bifunctional Molecules and their Aβ-Binding Ability, Justin Chu

Optical Methods to Quantify Oxygen Tension in Microfluidic Devices, Yunli Emily Chu

Characterization of Four Novel Nonsense Mediated Decay Homologs in Tetrahymena thermophila, Joyce Chung, Jason Kunisaki, Kelsey Pitts, and Joshua Sands

Characterization of Structural and Mechanical Properties of iPSC-derived Cardiomyocytes for Future Application to Familial Cardiomyopathies, Paige Cloonan

Automatic Sleep Stage Classification Using a Neural Network Algorithm, Zoe Cohen

Pollinator Visitation and Plant Diversity in Tallgrass Prairie Communities, Cara Cook

Correlates of Suicidal Ideation in Preschool-Onset Major Depressive Disorder, Sarah Curci

Inferring Natural Symbiotic Relationships Using Experimental Evolution, Ashley D’Costa

Parkinson’s Disease Fibrils: Analyzing Aggregation Growth Properties in a Cell System, Maria I. Dabrowski

Role of Snail1 in Breast Cancer Progression and Metastasis, Caroline Davitt

Identifying Novel Therapeutic Targets in Myeloproliferative Neoplasms, Elisa De Togni

A Novel Actinomycete Integration Plasmid Derived from WUSTL Soil-Isolated Phage, Ashby deButts

A Report on Motorcycle Taxi Policy Changes and Associated Effectiveness of Lay First Responder Training Programs in Uganda, Peter G. Delaney

Enlightened Dissent: A Treatment of Eighteenth-Century Baptists and Moravians, Taylor F. DiRoberto

Pathology of Right Ventricular Failure Following LVAD Implantation, Sarah Dyott
The Costs of Altruism in the Social Amoeba

Dictyostelium discoideum, Clarissa Dzikunu

Trace Metal Fate during Reaction of
Manganese Oxide Minerals with Small
Organic Acids under Aerobic Conditions,
Claire Elias

Trumpeting American Exceptionalism:
The Implications and Consequences of
the 2015 Revision to the AP U.S. History
Exam, Sophie Elliott

Self vs. Informant Reports on the Specific
Levels of Functioning Scale Relationships
to Depression and Cognition in
Schizophrenia, Julia Ermel

Effects of Grammatical Gender on
Developing Lexical Representations
in a Second Language,
Rebecca Feltman-Frank

India’s Influence on Soviet Culture,
Ashley Ferguson

X-Ray Flux/Spectral Variability of the
Gravitationally Lensed Blazar PKS 1830-211,
Christian Fogerty

Complicating ‘Revitalization’:
Understanding How Urban LGBT
Communities Impact Metropolitan
Neighborhoods, Reuben Forman

Investigating the Mechanism of Microtubule
Plus-End Tracking by the Arabidopsis
Spiral1 Protein, Layla Foroughi

The Effects of Psychopathic Personality
Factors and Gender on Substance Use,
Depression, and Anxiety, Lauren Fournier

Investigating the Role of γ3, an Auxiliary
Subunit of the BK Channel, in Myometria
Smooth Muscle Cells, Will Freeman

Comparative Annotations of Transcription
Start Sites and Identification of Conserved
Motifs on the Drosophila F Element,
Ben French

Effects of S1P Mutation on ER Stress and
Cholesterol Synthesis Markers in Human
Epithelial Cells, Connie Gan

Characterization of Biotinylated Molecules
in Triple-Transgenic Alzheimer’s Mouse
Model, Evan Garden

Noble Gas Mass Spectrometry,
Nathan Gartlan

Can Cognitive and Negative Symptom
Severity in Schizophrenia Predict Reward
Learning Ability?, Maria Gehred

MLL3-Mediated Changes in Chromatin
Structure during Hematopoiesis,
Natalie Gehred

Examining the Role of Asparagine 564 in
E. coli MetH by Site-Directed Mutagenesis,
Alyse Gellis and Charlotte Young

Genetic Interaction between gpr125 and
knypek in Convergence and Extension
Movements, Songyuan Geng

Effects of Talker Intelligibility and Noise
on Judgments of Accentedness,
Sarah Gittleman

Intracellular Localization of
Staphylococcus aureus in Osteoclasts,
Emily Goering

Design and Activation of Frequency
Tunable 200GHz Gyrotron, Natalie Golota

Exercise, Social Support, and Structure:
Involvement in Sports and Non-Sport
Activities and Depression, Anxiety, and
Intelligence in Children, Lisa Gorham

Robotic Arm Pile Sorting, Jonathan Gross

Topological Transitions in a
Superconducting Qubit, Arman Guerra

The Potential Role of ER-Associated
Degradation Protein DERL3 in Multiple
Myeloma, Harshath Gupta

Third Party Punishment Preferences
Toward White and Black Perpetrators:
A Comparison in US Dollars,
Gabriel Habtemariam

Best Practices in Peer Learning Sessions:
Sessions Advice from Peer Leaders,
Claudia A. Hendrick

Human Definitive Hematopoietic
Specification from Pluripotent Stem Cells
Is Regulated by Mesodermal Expression
of CDX4, Jolie T.K. Ho

Induction of IDH2 R140Q Mutation in
Stem Cells with Doxycycline Increases
Rate of Cell Death, Reuben Aaron Hogan

Assessing Astrocyte Neuropathology in
Chronic Traumatic Encephalopathy,
Eric Hsu
Activation of Dendritic Cell Subsets Following alum- or MPL-adjuvanted Vaccination, Kelly Hu

A for Average? Going Down the Rabbit Hole of Grade Inflation, Margaret Hua

The Social Status of Islam in Xi’an, Jordan Hughes

Conductive Composite Filaments for 3D Printing, Erica Hwang

Exploring Continuity between Schizoid PD and Autism Spectrum Disorders, Pearl Igwe

Analyzing the Effects of PLD3 on APP Processing, Chimezie Ileje

MicroRNA-142 Is Critical for Peripheral NK Cell Homeostasis and Function, Aaron Ireland

Medical Technology in a Developing Developed World, Mexico City 2016, Isabel Izek

Hypoxic Environments Regulate CXCR4 Expression and Drive Collective Cell Migration, Rachel Jacobsohn

Using Bacterial Nanocellulose as a Plasmonic Biosensor, Liz L. Jahng

Towards Discovering Inhibitors of cyt c Biosynthesis in Systems I, II, and III, Shannon J. Jiang

Studying Competition in the Vegetative State: Using Dictyostelium discoideum Sex Locus as a Stable Marker, Daniela Anabel Jimenez

Rational Radicals: Japanese Foreign Policy in the Twenty-First Century, Syrus Jin

Genes Associated with Subjective Well-Being in a Recent GWAS Are Associated with Decreased Depressive Symptoms: Possible Biological Mechanisms, Mackenzie Jones

The Effect of Negative Allosteric Modifiers on mGluR5 Activity, Sartajdeep Kahlon

Exploring the Role of DCAF1 in HIV Replication: A 2-hybrid Screen in Yeast, Anish Kanesa-thasan

The Mechanisms by Which Smaller Images Provide Beneficial Effects in Category Learning, Madison Kasoff

Functional Role of Nonstructural Proteins in Respiratory Syncytial Virus Mediated Host Immune Evasion, Samir S. Kaveeshwar

Application of the Dispersive Optical Model to $^{208}$Pb, Michael Keim

Circadian Expression in Human Tracheal Epithelial Cell, Meaghan Kenfield

Ultrastructural Analysis of the Drosophila Larval CNS in Wild-Type and AdamTS-A Loss of Function and Over-Expression Mutants, Prajwal Keranahalli

Synthesis of Near-Infrared Emitting Quantum Dots for Deep Tissue Imaging, Daniel Khan

Purification Chip for Radiolabeling Antibodies, Minki Kim

Transient and Single-Particle Sensing of Gold Nanorods for Applications in Biomolecular Sensing, Eshan King

Biodiversity-Ecosystem Function Relationships Are Mediated by the Environment and Functional Trait Assembly, Ashley Knudson

Does Tau Pathology in the Sublaterodorsal Region Affect Sleep Patterns in Mice?, Vishal Krishnan

ROCK Inhibitors Prevent DLK Activation in a Regenerative Context, Trevor J. Krolak

Impact of Belowground Arthropods and Fungi on Germination Rates and Seedling Survival of Exotic and Native Plant Species in Missouri, Molly Kuhs

A Deep Network for Predicting the Epoxidation of Drug-Like Molecules Generalizes to an External Test Set, Ayush Kumar

Identifying and Characterizing the Mutational Landscape of Noncirrhotic Hepatocellular Carcinoma, Jason Kunisaki

Lead Iodide Crystal Synthesis for Single Crystal Conversion Studies to Lead Perovskites, Craig Laing
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIK3C2G in Multiform Glioblastoma, <em>Patrick Nils Lasowski</em></td>
<td>156</td>
</tr>
<tr>
<td>Geographic Analysis of Weak Educational Institutions and Their</td>
<td>157</td>
</tr>
<tr>
<td>Associated Ecological Risk in Missouri, <em>Chase Latour</em></td>
<td></td>
</tr>
<tr>
<td>The Role of STAT3 in Alzheimer's Disease Associated Amyloid Beta</td>
<td>158</td>
</tr>
<tr>
<td>Damages, <em>Molly Lawrence</em></td>
<td></td>
</tr>
<tr>
<td>The Effect of Negative Affect on Anxiety Trajectories, <em>Clara Lee</em></td>
<td>159</td>
</tr>
<tr>
<td>CFD Performance of Turbulence Models for Flow from Supersonic</td>
<td>160</td>
</tr>
<tr>
<td>Nozzle Exhausts, <em>Han Ju Lee</em></td>
<td></td>
</tr>
<tr>
<td>Calculating the Physical Properties of Black Holes, <em>Heather Lee</em></td>
<td>161</td>
</tr>
<tr>
<td>Designing Ultrasensitive Responses in Cellular Systems by Introducing</td>
<td>162</td>
</tr>
<tr>
<td>Cooperativity into Artificial Riboswitches, <em>Matthew Leong</em></td>
<td></td>
</tr>
<tr>
<td>Identification of Genes Essential for Orsay Virus Infection in *C.</td>
<td>163</td>
</tr>
<tr>
<td>elegans*, <em>Christian Leung</em></td>
<td></td>
</tr>
<tr>
<td>Experiencing Lupus: An Illness Narrative, <em>Jerik Leung</em></td>
<td>164</td>
</tr>
<tr>
<td>Molecular Mechanisms of pH Modulation of Cardiac Sodium Channels</td>
<td>165</td>
</tr>
<tr>
<td>(Na1.5), <em>Bicong Li</em></td>
<td></td>
</tr>
<tr>
<td>What Types of Flashcards Improve Science Test Performance?, *Chelsea</td>
<td>166</td>
</tr>
<tr>
<td>Lin*</td>
<td></td>
</tr>
<tr>
<td>Effect of Circadian Rhythmicity on Sensory Reception in Weakly Electric Fish, <em>Anan Lu</em></td>
<td>167</td>
</tr>
<tr>
<td>Searching for Extended Halos around TeV Blazars with Fermi LAT, <em>Bohan Lu</em></td>
<td>168</td>
</tr>
<tr>
<td>Investigating the Role of actr10 in Schwann Cells of the Peripheral Nervous System, <em>Melissa Lu</em></td>
<td>169</td>
</tr>
<tr>
<td>Rodent Herpesvirus Texas (RHVT) Encodes a High Affinity Chemokine Decoy Receptor, <em>Yun Hsuan Lu</em></td>
<td>170</td>
</tr>
<tr>
<td>Cognitive Effects of Hiding Emotion in a Social Situation, <em>Sean Lydon</em></td>
<td>171</td>
</tr>
<tr>
<td>Theory of Mind Priming Pilot: Rating the Ambiguity of Revised Line of Sight Probe Task Stimuli, <em>Julia Mandel</em></td>
<td>173</td>
</tr>
<tr>
<td>Coding Political Preferences for Commissioners of the European</td>
<td>174</td>
</tr>
<tr>
<td>Commission, <em>Bradley Mankoff</em></td>
<td></td>
</tr>
<tr>
<td>Longitudinal Study of Saginus weddelli and Saginus imperator in</td>
<td>175</td>
</tr>
<tr>
<td>Southeastern Perú, <em>Annie Marggraff</em></td>
<td></td>
</tr>
<tr>
<td>Transposon Mutagenesis: The Key to Discovering the Genetic Factors</td>
<td>176</td>
</tr>
<tr>
<td>Behind the Dictyostelium discoideum and Burkholderia Symbiosis, <em>Rory Mather</em></td>
<td>177</td>
</tr>
<tr>
<td>Expanding Our Understanding of Photoautotrophic Iron Oxidation on Earth, <em>Beau McCinley</em></td>
<td>178</td>
</tr>
<tr>
<td>Fast K-mer Counting Using the Bi-Directional Burrows-Wheeler</td>
<td>179</td>
</tr>
<tr>
<td>Transform, <em>Rishil Mehta</em></td>
<td></td>
</tr>
<tr>
<td>The Jackson Site Is Back! LiDAR-Based Mound Construction and Viewshed Analysis of the Coles Creek Era Poverty Point Landscape, <em>Joy Mersmann</em></td>
<td>180</td>
</tr>
<tr>
<td>Machine Learning Psychometric Function Testing, <em>Nikki Metzger</em></td>
<td></td>
</tr>
<tr>
<td>Survival of the Fittest: Comparing Synthetic and Clinical Variants of</td>
<td>181</td>
</tr>
<tr>
<td>TEM Beta-lactamase, <em>Katelyn Miyasaki</em></td>
<td></td>
</tr>
<tr>
<td>Analyzing Molecular Pathways between Maternal Obesity and Risk of</td>
<td>182</td>
</tr>
<tr>
<td>Endometrial Cancer in F1 Mice Generations, <em>Zeel N. Modi</em></td>
<td></td>
</tr>
<tr>
<td>Designing β-lactamase Inhibitors to Restore the Efficacy of Existing Antibiotics, <em>Katelyn Moeder</em></td>
<td>183</td>
</tr>
<tr>
<td>Isolating Different Pools of Tau in the Brain, <em>Paul Moiseyev</em></td>
<td>184</td>
</tr>
<tr>
<td>Brain Structure in Children and Young Adults with Phenylketonuria,</td>
<td>185</td>
</tr>
<tr>
<td><em>Devante Morgan</em></td>
<td></td>
</tr>
<tr>
<td>Synthesis of the N4 Tetradentate Ligand, <em>Emily Morgan</em></td>
<td>186</td>
</tr>
<tr>
<td>Assessing Differences in Boldness, an Evolutionarily Important</td>
<td>187</td>
</tr>
<tr>
<td>Personality Trait, among Rural and Urban Box Turtles, <em>Madeleine Mullen</em></td>
<td></td>
</tr>
</tbody>
</table>
Circadian Regulation of Microglial Function Alzheimer’s Disease, Collin Joseph Nadarajah

Studying the Synthesis of Cuprous Oxide Nanocrystals, Andrew Novick

Synaptic Dependent Amyloid-β Generation in vivo in Alzheimer’s Disease Mouse Model, Derrick Ogola

Defining Neuronal Subtype Specification in Reprogrammed Striatal Neurons, Hannah Olsen

A New Route to the Synthesis of a Triplet Silylene, Dawa Michael O’Sullivan

Technology for Drug Development to Eradicate HIV/AIDS, Rahul Oza

Pediatric Applications and Usefulness of 3D Printed Prosthetic Arms, Ilan Patle and Mark Sullivan

Genetic Variation Linked to Neuroticism Is Associated with Amygdala Function, William W. Pan


Identities at Stake: How Empathetic Virtual Reality Reshapes Personal Identity, Jin Seok Park

Cyclophilin A Mediates Blood-Brain Leakage and Edema after Subarachnoid Hemorrhage, Devin Patel

Emotion Regulation Goals and Strategy Use in Romantic Relationships, Taylor Pitcher

A Possible Role for the microRNA-276 Gene Duplication in Specifying Sex-Related Neuronal Functions, Nathan Pomper

Do Endotoxins Directly Injure Red Blood Cells?, Jaya Prakash

Local Adaptation and the Role of Carried Symbionts to Thermal Stress in a Social Amoeba Dictyostelium discoideum, Xinye Qian

Biosynthesis of Bi-functional Products from the FASII System, Jimmy Qiao

MIR142 Loss-of-Function Mutations Promote Leukemogenesis via Derepression of ASH1L Resulting in Increased HOX Gene Expression, Rahul Ramaswamy

Development of Igor Pro Based Data Analysis Programs for Use in the Study of Atmospheric Chemistry, Charles Rapp

Effects of Effort on Neurocognitive Performance of HIV+ Individuals, Gina Rhee

Effects of Salinity, pH, and Scale Inhibitor on the Wettability and Stability of Biotite, Gabriella Rieke

Significance of the Feminization of Eating Disorders, Rachel Rothman

Influence of Dictyostelium discoideum upon Species Diversity within Pseudomonas fluorescens, Erica Ryu

Investigating the Impact of Auxin on Pseudomonas Metabolism, Saryu Sanghani

Cross-Cultural Happiness, Audrey Schield

Role for Ventral Nucleus Accumbens Dynorphinergic Neurons in Reward, Gavin Schmitz

Cardiac Macrophage Composition Determines Dilated Cardiomyopathy Patient Outcomes, Caralin Schneider

Reaction Mechanisms of Planar Disilenes, Alex Seim

The Impact of E-cigarette Use in Inflammatory Bowel Disease, Jasmine Serpen

A Genetic Study of Heterochromatin Formation Mediated by a Triplet Repeat in Drosophila melanogaster, Sukruth Shashikumar

Exploring Space Weathering Effects on Asteroid Regolith Breccia, David Shaw

The Association between Baseline Pupil Size and Cognitive Function, Jeffrey Shi

Rewarding Effects of Opioidergic Projections from the Ventral Pallidum to Substantia Nigra, Yu Jin Shin

Vocal Communication to Facilitate Dispersal in Saguinus imperator and Saguinus weddelli, Alessandra A. Silva

Shooting for Answers: Bullying, Masculinity, and School Massacres, Bonnie Simonoff
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted Gene Deletion using Intrinsic Deletion Machinery in Tetrahymena thermophila, Urvi Sinha</td>
<td>222</td>
</tr>
<tr>
<td>p62 Deficiency Leads to the Disruption of Mitochondrial Function in Macrophages, Eric Song</td>
<td>223</td>
</tr>
<tr>
<td>Total Synthesis of a Library of Unnatural Derivatives of Lingzhiol, Emma Streff</td>
<td>224</td>
</tr>
<tr>
<td>Personality and Biomarkers for Predicting Brain Volumes in Older Adults, Maya Strod</td>
<td>225</td>
</tr>
<tr>
<td>Establishing the FGFR1 Downstream Signaling Pathways Responsible for Regulating the Differentiation of Cochlear Hair Cells, Yutao Su</td>
<td>226</td>
</tr>
<tr>
<td>Exploring Experimental Parameters for the Realization of a One-Photon and One-Qubit Heat Engine, Caroline Sullivan</td>
<td>227</td>
</tr>
<tr>
<td>Genetic Mapping of Midbrain Pain Circuitry, Saranya Sundaram</td>
<td>228</td>
</tr>
<tr>
<td>Graphene Oxide Nanomaterials for Active Biosensing, Corban Swain</td>
<td>229</td>
</tr>
<tr>
<td>The Role of Lipin 1 in Cardiac Metabolism and Function, Alison Swearingen</td>
<td>230</td>
</tr>
<tr>
<td>Host-Parasite Interactions: Effects of Larval Habitat on Ascogregarina barretti infection in Aedes triseriatus, Brenden Sweetman</td>
<td>231</td>
</tr>
<tr>
<td>The Effect of Framing on Mind-Wandering in Young and Late Adulthood, Benjamin Talisman</td>
<td>232</td>
</tr>
<tr>
<td>LTL1 Protein Regulates DNA Rearrangement Boundaries in Tetrahymena thermophila, Marta Taye</td>
<td>233</td>
</tr>
<tr>
<td>The Genetic Basis of Alzheimer’s Disease: Phenotype-Genotype Relationship in Autosomal-Dominant Alzheimer’s Disease, Carmen Toomer</td>
<td>234</td>
</tr>
<tr>
<td>The Effects of Arterial Tortuosity on Aneurysm Progression, Lien Tran</td>
<td>235</td>
</tr>
<tr>
<td>Carriage of Symbiotic Burkholderia spp. Changes the Number of Innate Immune Cells in Social Amoebae, Stacey Ulhm</td>
<td>236</td>
</tr>
<tr>
<td>Conduct Disorder Genomewide Association Study and Extension to Affective Brain Function, Namrata Vakkalagadda</td>
<td>237</td>
</tr>
<tr>
<td>Physiognomy Predicts Local Tick Abundance in Ozark Forests, Thomas Van Horn</td>
<td>238</td>
</tr>
<tr>
<td>Decision Making and Psychotic-Like Experiences, Gina Vellequette</td>
<td>239</td>
</tr>
<tr>
<td>Building Non-Monogamies: Race, Quare Sexual Politics, and the (Im)possibilities of Non-monogamy, Jordan Victorian</td>
<td>240</td>
</tr>
<tr>
<td>Epimorphin Regulates the Mouse Intestinal Stem Cell Niche via the Stromal Microenvironment, Courtney Vishy</td>
<td>241</td>
</tr>
<tr>
<td>Classification of Hippocampal Interneuron Types Using Optical Clearing and Immunostaining, Elena Waidmann</td>
<td>242</td>
</tr>
<tr>
<td>A Grassroots Revolution? Imagining Change in St. Louis Food Landscapes, Joselyn Walsh</td>
<td>243</td>
</tr>
<tr>
<td>The Next Generation of Wireless Cyber-Physical Simulator, Xinghan Wang and Kevin Xu</td>
<td>244</td>
</tr>
<tr>
<td>Adding Insecurity to Injury: Risk Factors for Disordered Eating among Competitive Runners, Sophie M. Waterson</td>
<td>245</td>
</tr>
<tr>
<td>Pathological Biomarkers and Cognitive Change in Parkinson Disease, Alexandra J. Weigand</td>
<td>246</td>
</tr>
<tr>
<td>Lighter Than a Feather: MEMS Scale with Attogram Sensitivity, Zack Weinstein</td>
<td>247</td>
</tr>
<tr>
<td>Photoluminescence of CdTe Quantum Wires, Sarah Wilson</td>
<td>248</td>
</tr>
<tr>
<td>Mechanical Testing of Mice Achilles Tendons, Alexander Wirtz</td>
<td>249</td>
</tr>
<tr>
<td>Transparent Conducting Sulfides, Sondra Wouch</td>
<td>250</td>
</tr>
<tr>
<td>Annotation of Contig19 in Drosophila eugracilis, Hang Xue</td>
<td>251</td>
</tr>
<tr>
<td>Synthesis of Bismuth Vanadate Nanocrystals for Methane Oxidation, Alicia Yang</td>
<td>252</td>
</tr>
<tr>
<td>Investigating the Relationship between Cell Size and Biosynthetic Capacity in Bacillus subtilis, Zhizhou (Jason) Yang</td>
<td>253</td>
</tr>
<tr>
<td>지문 (jë•móø̊n): Exploring Equality in South Korea, Caroline Yoo</td>
<td>254</td>
</tr>
<tr>
<td>Category Learning with Actual Samples and Its Effect on Memory Performanc, Jae Un Yoo</td>
<td>255</td>
</tr>
<tr>
<td>The Molecular Mechanisms of Sensory Synapse Formation, Judy Yoo</td>
<td>256</td>
</tr>
</tbody>
</table>
Geometric Algorithms for Identifying Protein Structures, Dan Zeng

Empresas Legales? Argentine Recovered Restaurants and the 2011 Bankruptcy Law, Ben Zeno

Biochemical Characterization of AldA, a Novel Enzyme in Pseudomonas syringae Indole-3-acetic Scid Biosynthesis, Kaleena X. Zhang


Annotation of the Genomic Landscape on Contig29 of the D. eugracilis Dot Chromosome, Kristina Zudock

UNDERGRADUATE RESEARCH PEER REVIEW BOARD