

Intersections: SOURCE Presentation Award Winners
April, 2022

Arts and Humanities

- 1st Sydney Olney. *Reborn Together on a Single Lotus Petal: Shōmyō, Shōga, and the Homoerotic Recontextualization of the Flute in Zeami's Noh Play "Atsumori"*. Faculty Mentor: Beth M. Carter, Department of Modern Languages & Literatures

Engineering

- 1st Maria Ong. *Rockwell Automation x Great Lakes Science Center: Augmented Reality Interactive Exhibit*. Faculty Mentor: Marzell Brown, Rockwell Automation.
- 2nd Tied Kehley Coleman, Paul McCabe and Neil Wang. *TLM Measurement of Solar Cells' Contact Resistivity*. Faculty Mentor: Ina Martin, Department of Materials Science and Engineering; Physics.
- 2nd Tied Christian Crawford and Benjamin MacCrimble. *Road Paint Tester*. Faculty Mentor: Wyatt Newman, Department of Electrical, Computer, and Systems Engineering.
- 2nd Tied Liam Matthews, Tatiana Pavlides, Enio Kuvliev, Ally Anderson, and Hoa Le. *Wearable Biopotential Measurement System for Epilepsy Monitoring*. Faculty Mentors: Matthew Williams, Colin Drummond, Cristian Berrara, Department of Biomedical Engineering.
- 2nd Tied Keaton Stankowski, Alia Basar, Nicholas Schoenig and Kshama Girish. *Camera Calibration System*. Faculty Mentor: Wyatt Newman, Department of Electrical Engineering and Computer Science.

Life Sciences

- 1st Tied Megan Gregory. *Too close for comfort: Role of fibronectin matrix in maintaining the space between the expanding calvaria*. Faculty Mentor: Radhika Atit, Department of Biology.
- 1st Tied Nathanael Lee. *Natural Cast of the Endocranial Cavity of an Early Miocene Sloth from Southern Chile*. Faculty Mentor: Darin Croft, Departments of Anatomy and Biology.
- 1st Tied Ishani Nautiyal. *Novel Therapeutic Strategies for Bone Marrow Failure Syndromes with Chromosome 7 Abnormalities*. Faculty Mentors: Valeria Visconte, Translational Hematology and Oncology Research, Taussig Cancer Institute, Cleveland Clinic; Drew Meyer, Department of Chemistry.
- 1st Tied Pratheek Makineni. *Single-dose radiation increases thrombin production in glioma stem cells by upregulation of the intrinsic and extrinsic coagulation cascades*. Project Mentor: Dr. Andrew E. Sloan, Department of Neurological Surgery; Faculty Mentor: David Friel, Department of Neurosciences.
- 2nd Tied Nisha Busch. *Examining the Neurodevelopmental Effects of Perinatal Cannabidiol (CBD) Exposure in Sprague-Dawley Rats*. Faculty Mentor: Timothy Flanigan, National Center for Toxicological Research Division of Neurotoxicology.

- 2nd Tied Melissa Phung. *Cell movement in the developing skull: how a disrupted Wnt signaling pathway can lead to congenital cranial disease*. Faculty Mentor: Radhika Atit, Department of Biology.
- 2nd Tied Victor Sanchez-Franco. *Altered sodium channel inactivation status in a Drosophila model of Alzheimer's disease*. Faculty Mentor: Masashi Tabuchi, Department of Neurosciences.
- 2nd Tied Shreya Satish. *Neuron activity in barrel cortex of developing mice under controlled whisker stimulation*. Faculty Mentors: Daehoon Lee, Ashley Nemes, Wen-Cheng Xiong, Department Neurosciences.
- 2nd Tied Samantha Tsang. *Generating Isogenic Lines Using Primary Microcephaly with Simplified Gyrat Pattern, Epilepsy, and Permanent Neonatal Diabetes Syndrome (MEDS) Patient-Derived iPSCs*. Faculty Mentor: Ashleigh Schaffer, Department of Genetics and Genome Sciences.

Physical Sciences

- 1st Jarrell Imamura. *Identification of Drivers of Neuroendocrine Transdifferentiation in Bladder Cancer*. Faculty Mentors: Omar Mian, PhD, Translational Hematology and Oncology, Lerner Research Institute, Cleveland Clinic; Gary Chottiner, Department of Physics.
- 2nd Zachary Ziccardi. *Characterization of the West Nile Virus 5' UTR Stem Loop A by piecewise in silico and Multidimensional NMR Modeling*. Faculty Mentor: Blanton Tolbert, Department of Chemistry.

Social Sciences

- 1st Tied C. J. Hill. *Social Impacts of Sickle Cell Disease in Children*. Faculty Mentor: Yolanda Fortenberry, Department of Biology.
- 2nd Tied Lelia Durand. *Local Governments Hinder Beijing from Achieving Climate Commitments*. Kelly McMann, Department of Political Science.
- 2nd Tied Ramona Johnson. *Geoengineering Governance and Applications for Microbial Biotechnology*. Faculty Mentor: Matthew Hodgetts, Department of Political Science.
- 2nd Tied Anna Lindrose and Anurithi Senthil. *How Did the Minimum Wage Increase in Ohio Affect High School Completion Rates?* Faculty Mentor: Jenny Hawkins, Department of Economics.