



UNDERGRADUATE RESEARCH WEEK

APRIL 24 - 30, 2022

Welcome

2022 Undergraduate Research Week

Welcome to Undergraduate Research Week (URW) and its signature event, the 15th annual Undergraduate Research Symposium. As I write this Welcome, I am conscious of several milestones reached by the Office of Undergraduate Research: this Fall marks the tenth anniversary of our official existence – and what a decade it has been! – and this year's Symposium celebrates 15 years of showcasing student research and innovation at Illinois. We are also back in person for the Symposium for the first time since the advent of the global pandemic.

As we still face some uncertainty – the pandemic is hardly in the rearview mirror, I am grateful for the continuing support of our undergraduate researchers by our faculty, staff, students, and community partners. This year's URW and Symposium recognizes the commitment of our campus community in its efforts to design and continue research opportunities for our undergraduates in novel and thoughtful ways. The presentations found herein reflect the caliber of our students, the range and diversity of academic disciplines across our campus, and the institutional support and commitment to undergraduate research as an important component of the Illinois experience.

A special thanks is due to the incredible, hard-working Office of Undergraduate Research team, without whom the planning of such a large-scale event would be impossible: Dr. Chris Holmes, our Associate Director; Kari Darby, master's student in Library & Information Science and our Workshops Specialist; Rayven Morrow, doctoral student in Educational Policy, Organization, and Leadership; Caroline Capone, a Communications major with a concentration in Mediated Communication and Technology, and undergraduate intern for Social Media & Communications; Liv Borawski, a History major and undergraduate intern for Social Media & Communications; and Ellie Lee, our Graphic Design undergraduate intern and a Graphic Design major in the School of Art & Design.

Finally, many thanks to the Office of the Provost and our Advisory Board for their ongoing support and counsel, and to our Undergraduate Research Ambassadors who continue to make their mark in supporting both their undergraduate colleagues and OUR programming and events.

Karen Rodriguez'G, PhD

Director, Office of Undergraduate Research



The Office of Undergraduate Research



Christopher Holmes, PhD
Associate Director



Kari Darby
Workshops Specialist



Rayven Morrow
Programs Specialist



Liv Borawski
Social Media & Communications
Intern



Caroline Capone
Social Media & Communications
Intern



Ellie Lee
Graphic Design
Intern

Sign up for the Office of Undergraduate Research e-newsletter to receive occasional emails about research programs, events, and opportunities.

Sign up at:
go.illinois.edu/subscribeOUR

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Undergraduate Research Week Events

Office of Undergraduate Research Workshops - Research Week Edition

All week

The Office of Undergraduate Research (OUR) regularly hosts workshops to support students throughout their undergraduate research journeys at Illinois. In celebration of Undergraduate Research Week, OUR will be hosting sections of our Getting Started in Undergraduate Research Workshop and Research to Resume Workshops. Register and stop by to receive an OUR laptop sticker and Illinois-themed Lanyard. (Those attending the virtual workshops can pick up their items at the Symposium on April 28.)

Getting Started in Undergraduate Research Workshop

During this workshop, we will discuss the various forms of undergraduate research that take place on campus, guide students to develop a plan of action to locate research opportunities on campus and discuss ways to contact faculty research mentors.

Research to Resume Workshop

During this workshop, we will discuss strategies to successfully communicate research skills and experiences through job, graduate school, and internship application documents.

For dates and registration information, please visit:

go.illinois.edu/OURWorkshops

Department of History Research Showcase

Wednesday, April 20, 4:00 – 7:00 PM

Gregory Hall, Room 105

(Humanities Professional Resource Center)

The History Showcase will include presentations of senior theses and History Honors theses, as well as other undergraduate History research projects.

Illinois Scholars Undergraduate Research (ISUR) Program Research Expo

Thursday, April 21, 4:00 – 6:00 PM

Illini Union Rooms A, B, and C

The Grainger College of Engineering Illinois Scholars Undergraduate Research (ISUR) Program Research Expo showcases the various science and engineering projects our scholars and their mentors have been working on this year. ISUR is a two-semester, structured, mentored research experience for undergraduate students in science and engineering. Through the learning-by-apprenticeship model, students learn about the research process, develop their research and technical communication skills, and gain experience needed for graduate school acceptance or research in industry.

Under the ISUR umbrella are the following programs: Clare Boothe Luce Research Program, DaRin Butz Foundation Research Program, Semiconductor Research Corporation Undergraduate Research Program, and C3SR-Undergraduate Research in Artificial Intelligence. This year, we also have presentations from ROTC students in the Accelerated Learning and Engineering Research Training (ALERT) Program in Electronic and Cyber Security.

ISUR Scholars

Study of Liver Progenitor Cells Through Changes in Micropatterning
Ayusha Acharya (ADM Scholar), Senior, Bioengineering, ENG

Multimodal Imaging of Peripheral Arterial Disease Comorbid with Type 2 Diabetes
Yamenah Ambreen, Senior, Bioengineering, ENG

Biomaterials to Investigate Pathophysiological Mechanisms of Glioblastoma Invasion and Chemotherapeutic Resistance
Joseph Boyce, Senior, Materials Science and Engineering, ENG

Label-Free Tissue Histopathology Using Infrared Spectroscopic Imaging
Jaime Chen, Senior, Bioengineering, ENG

A 3D Tissue Engineering Model of Endometrial Vessel Networks

Noah Chiou, Junior, Bioengineering, ENG

A Model of HIV Latency in Monocytes Reveals Monocyte to Macrophage Differentiation Increases Latency Reactivation

Rob Coronado, Senior, Bioengineering, ENG

Full State Estimation of a Ballbot Using a Contactless Optical Flow Sensor

Skyler Do, Senior, Systems Engineering, ENG

Aluminum Plate-Based Tensegrity Structures

Christina Garcia, Junior, Civil and Environmental Engineering, ENG

Optimization and Evaluation of 3D Bioprinter

Lauren Krause, Junior, Bioengineering, ENG

Development of a Planar Inverted Pendulum Testbed

David Lam, Senior, Mechanical Engineering, ENG

The Virtual Reality Method on Analyzing Extinction-Based Classical Conditioning Learning

Beulah Lee, Junior, Computer Engineering, ENG

Inferring Regulatory Motifs from Fungal Genomic Sequences

Simon Liu, Junior, Computer Science, ENG

Tuning the Topology of Substrates for Coral Larval Recruitment

Eliza Lovrich, Junior, Bioengineering, ENG

Investigation of the Synthesis of YSZ Aerogels Using Crystalline Precursors

Jordan Meyer, Senior, Materials Science and Engineering, ENG

A Graphical User Interface for Rapid Prototyping of Imaging Phantoms for Nuclear Medicine Applications

Emma Morano, Sophomore, Nuclear, Plasma, and Radiological Engineering, ENG

Biomaterial-Based Tumor Models to Analyze the Role of Glioma Extracellular Matrix in Therapeutic Efficacy

Edward Neves, Senior, Chemical Engineering, LAS

Determining the Effects of Mesenchymal Stromal Cell Matrix Remodeling on Hematopoietic Stem Cell Maintenance

Alison Nunes (ADM Scholar), Senior, Materials Science and Engineering, ENG

Metabolomic and Lipidomic Analysis of Metastatic Castration Resistant Prostate Cancer Plasma

Ege Gungor Onal, Senior, Bioengineering, ENG

Understanding the Impact of Fluid Flow on Liver Sinusoidal Endothelial Cells in Conjunction with Human Stellate Cells

Danny Owen, Senior, Bioengineering, ENG

Highly Efficient High Harmonic Generation in a Hollow-Core Fiber from a Ytterbium Laser

Sahaj Patel, Junior, Physics, ENG

Investigating the Effect of Mineralized Collagen Scaffolds on the Immunomodulatory Capacity of Human Mesenchymal Stem Cells

Maxwell Polanek, Junior, Chemical Engineering, LAS

Central Illinois Intercropping: Intersection between Ancient Agriculture and Midwestern Prairie Restoration

Daniela Pope (ADM Scholar), Senior, Agricultural and Biological Engineering, ENG

Electrical Detection of Dopamine Using a Graphene-Field Effect Transistor

Malaak Saadah, Senior, Materials Science and Engineering, ENG

Design of A Textile Sensor Embedded Shirt for Posture Monitoring

Drashti Sikligar, Senior, Bioengineering, ENG

Design, Development, and Testing of a Microfluidic Phantom Setup for a Preclinical Nuclear Imaging System

Lisa Silverstein, Sophomore, Nuclear, Plasma, and Radiological Engineering, ENG

Investigation of Ionic Conductivity in Mixed Conducting Perovskite Oxide Thin Films during Crystallization

Joshua Simpson-Gomez, Senior, Materials Science and Engineering, ENG

Kinetic Modeling of CO₂ Electroreduction on Silver Nanoparticles

Sujay Someshwar, Senior, Chemical Engineering, LAS

The Surface Energy of Chemically and Physically Functionalized Graphene

Jules Suarez, Senior, Mechanical Engineering, ENG

Noisy Policies for Visual Embodied Navigation

Nikash Walia, Junior, Computer Science, ENG

Ultrasonic Measurements of Binderjet Additively Manufactured Parts

Madison Yang, Junior, Mechanical Engineering, ENG

Electrodeposition of Si Anodes for Li-ion Batteries

Muhammad Yâçin, Senior, Materials Science and Engineering, ENG

Clare Boothe Luce Research Scholars

Study of Liver Progenitor Cells Through Changes in Micropatterning

Madeline Blaauw, Senior, Bioengineering, ENG

CO₂ Electroreduction Catalyzed by Intermetallic Gold-Copper Nanoparticles

Maya Chattoraj, Senior, Chemistry, LAS

Comparative Investigation of a Continuous DC Plasma Electrode Against Boron-doped Diamond during PFAS Degradation
Jasmine Dinari, Junior, Nuclear, Plasma, and Radiological Engineering, ENG

Engineering Commensal Microbes for Optimized Therapeutic Delivery to the Gut
Shweta Khorana, Senior, Bioengineering, ENG

Interrogating the Metal/Acid Site Balance in Bifunctional Catalysts Toward Oxygenate Upgrading
Melissa Manetsch, Senior, Chemical Engineering, LAS

Dual Role of Strigolactone Signaling Partner in Inhibiting Substrate Hydrolysis
Briana Sobecks, Senior, Chemical Engineering, LAS

Hierarchical Planning with Annotated Skeleton Guidance
Ananya Yammanuru, Senior, Computer Science, ENG

Oxidation and Crystallization Behavior of Ternary Aluminum Diborides
Dana Yun, Senior, Materials Science and Engineering, ENG

DaRin Butz Foundation Research Scholars

Investigation of the Gas Phase of a Plasma-Water Interface
Elizabeth Perez, Senior, Physics, LAS

Development and Evaluation of Biopolymer Robotic Actuators for Healthcare Applications
Adia Radecka, Junior, Electrical Engineering, ENG

Development of Capacitance-Voltage Measurement Method for Non-Uniform Dopant Profiling in III-V Solar Cells
Karen Yang, Senior, Materials Science and Engineering, ENG

Semiconductor Research Corporation – Undergraduate Research Program

Optimizing Nanoparticles Using Microfluidic Instruments
Nathaniel Anderson (Siemens EDA Scholar), Junior, Materials Science and Engineering, ENG

Antimicrobial Peptides: The New Generation of Antibiotics to Create a World Free of Cancer and Bacteria
Juan David Campolargo (IBM Scholar), Sophomore, Undeclared, DGS

Evaluation of Novel Halide-Based Solid-State Electrolytes for Lithium-Ion Battery Systems
Daniel Cudzich (TI Scholar), Sophomore, Materials Science and Engineering, ENG

HOPPY: An Open-source Kit for Education with Dynamic Legged Robots
Michaela Horn (Intel Scholar), Junior, Computer Science, ENG

Using Computer Vision to Relieve the Crop Phenotyping Bottleneck
Liana Koleva (IBM Scholar), Senior, Computer Engineering, ENG

Fabrication and Testing of Metamorphic In_{0.63}Ga_{0.37}P Solar Cells
Amanda Loutris (Intel Scholar), Senior, Materials Science and Engineering, ENG

Exploration of a Stand-Alone PV System and Implementation of FarmBot
Daniel Moreno (Intel Scholar), Senior, Systems Engineering and Design, ENG

Teaching Electromagnetism through 3D VR Immersion
Savannah Pagan (TI Scholar), Sophomore, Electrical Engineering, ENG

Instability-Induced Pattern Formation for Functional Materials
Anisha Sharma (Intel Scholar), Junior, Materials Science and Engineering, ENG

Full State Estimation of a Ballbot Using a Contactless Optical Flow Sensor
Piyush Sud (Siemens EDA Scholar), Senior, Computer Engineering, ENG

Conformationally Switchable Copper Complexes
Claire Zimmerman (Siemens EDA Scholar), Senior, Chemistry, LAS

C3SR – Undergraduate Research in Artificial Intelligence

Parallelizing the Sparsification of Matrices and Hypergraphs
Manav Agrawal, Senior, Computer Engineering, ENG

Living Dictionary: Automatically Generating Wikipedia-like Content from Keywords
Nishant Balepur, Junior, Computer Science, ENG

Towards a Lab Test Results Advisor
Zach Cacini, Junior, Bioengineering, ENG

Adversarial Learning on Federated Models
Anusha Ghosh, Sophomore, Computer Science, ENG

The Information Forest: Context and Connections
Matthew Jin, Junior, Computer Engineering, ENG

Text-Based Models for Federated Learning and Adversarial Training
Suchita Joshi, Junior, Computer Science, LAS

Generating Large Synthetic and Real Graph Datasets
Arpandeep Khatua, Junior, Computer Engineering, ENG

Identifying Difficult Topics for Smart MOOCs
Akhil Kodumuri, Junior, Computer Engineering, ENG

The Information Forest: Context and Connections
Jacob Levine, Sophomore, Computer Science, ENG
Chirag Rastogi, Junior, Computer Engineering, ENG

IBM Analog AI Hardware Acceleration Kit

Joseph Rejive, Junior, Computer Engineering, ENG

Stereotype Bias Mitigation in Masked Language Models with Few-shot Learning

Emily Sallenback, Junior, Computer Science, ENG

The “Living” Encyclopedia

Sanjana Sarkar, Senior, Computer Science, ENG

Ranking Different Concepts in MOOCs

Taksh Singh, Junior, Computer Science, ENG

Interactive Aspect-Based Information Retrieval System for IT Tickets

Victor Szabo, Junior, Computer Science, ENG

Methodology for Compressing Multilingual Transformer

Heyi Tao, Senior, Computer Engineering, ENG

Federated Machine Unlearning

Rem Yang, Junior, Computer Science, ENG

IBM Analog Hardware Acceleration Kit

Bowen Xiao, Senior, Electrical Engineering, ENG

Accelerated Learning and Engineering Research Training (ALERT) in Electronic and Cyber Security

Detecting Anomalous Behaviors for Assured Command and Control

Benjamin Candee, Senior, Mathematics, LAS

Luke Lalumandier, Senior, Aerospace Engineering, ENG

Reconfigurable Antenna System to Detect and Mitigate GPS Spoofing/Jamming

Josh Carpenter, Senior, Mechanical Engineering, ENG

Adam Spitzner, Junior, Systems Engineering, ENG

Stretchable Wrinkled WSe₂ for Tunable Single Photon Emitters

Henry Feldhaus, Senior, Mechanical Engineering, ENG

Mary Pelzer, Junior, Mechanical Engineering, ENG

Trustworthy Machine Learning - Image Classification

Jisu Kim, Junior, Mechanical Engineering, ENG

Autoencoder Based IDS

Krishna Vasudev, Sophomore, Physics, LAS

Next Generation Power Electronics

Samuel Weiss, Junior, Systems Engineering, ENG

Small Array Behavior on Portable/Mobile Platforms

Patrick Yim, Senior, Mechanical Engineering, ENG

Self-Guided Tours – Innovations from the University of Illinois

April 24 – 30

Location: online and walking around campus. Access the online content at:

<https://distributedmuseum.illinois.edu/>

Illinois Distributed Museum Student Interns have been working to research different innovations and innovators from the University of Illinois. Their research resulted in self-guided tours. The Illinois Distributed Museum seeks to highlight how innovation occurs on a university campus. Users access the online content that will lead them to different locations around campus that highlight buildings, documents, and objects related to the innovations. Click on the “Tours” tab on the website to access the students’ work. There is no in-person event, so feel free to explore the tours whenever you want. The Summer 2021, Fall 2021, and Spring 2022 interns and their projects are:

Health and Wellness Tour

Claudia Krok, Senior, History Secondary Education, LAS

International Connections Tour

Render Symanski, Junior, History, LAS

John Borth, Senior, History, LAS

Early Innovations Tour

Myles Jude, Senior, History and Political Science, LAS

In the Home Tour

Gillian Lange, Senior, History, LAS

Climate Change Tour

Michael Lok, Junior, History, LAS

Marianna Tax Choldin Exhibit

Riley Mueller, Senior, History, LAS

College of Applied Health Sciences Research Showcase

Wednesday, April 27, 2:00 – 4:00 PM
George Huff Hall, 1st Floor Hallway
1206 South Fourth Street, Champaign, Illinois

Applied Health Science undergraduates will be sharing their research posters which will be presented at the Undergraduate Research Symposium in the first-floor hallway in Huff Hall. Come by to discover the exciting research our students are involved in. Feel free to ask questions of the students to learn more about their work.

College of Fine and Applied Arts - School of Art & Design BFA Exhibition

May 7 – May 15
Krannert Art Museum, 500 E. Peabody Drive,
Champaign, Illinois & Link Gallery, 408 East Peabody
Drive, Champaign, Illinois

The School of Art & Design's Undergraduate Research Week Exhibition will feature outstanding creative research by students participating in the annual Art & Design BFA (Bachelor of Fine Arts) exhibition. This celebrates the breadth of research done in Art & Design programs, encompassing the Studio Arts, Graphic Design, Industrial Design, Photography, Art History, and Art Education. Student work will also be available via an exhibition website beginning May 15. Please visit the School's website at <https://art.illinois.edu/> for more information.

College of Fine and Applied Arts - School of Architecture Project Presentations and Exhibitions

April 27 – April 29
Temple Hoyne Buell Hall
611 Loreda Taft Drive, Champaign, Illinois

The School of Architecture will be hosting its final reviews and project presentations from April 27 through 29, starting at 9:30 am. Join us for the presentations and conversations with the students about the work produced during the Spring 2022 semester. Reviews and presentations will take place in various galleries in Temple Hoyne Buell Hall. An exhibition of student work will also be on display at the West Entrance of the building, showcasing outstanding undergraduate and graduate design work. In addition, there will be models and drawings on display at the North Entrance of the building. For more information, please visit our website at arch.illinois.edu.

Department of Economics Research Symposium

Thursday, April 28, 5:00 – 7:00 PM
David Kinley Hall, Room 123
1407 West Gregory Drive, Urbana, Illinois

The Department of Economics conducts an Economics Research Symposium every spring. They are a valuable experience for Economics students who want to present research they have been working on during the academic year. Research projects are from independent studies, research courses, or any class where the student worked on a project, paper, or research. Some of the research is in the proposal form or will be ongoing, while others are completed projects.

Department of Political Science Undergraduate Honors & Awards Ceremony

Saturday, April 30, 11:00 AM – 1:30 PM
Hilton Garden Inn
1501 South Neil Street, Champaign, Illinois

The Department of Political Science's senior honors students will present their thesis work in this poster presentation session. This year's cohort consists of 23 student projects.

Rumeysa Aydogdu, Senior, Political Science, LAS
Thomas Ballard, Senior, Political Science, LAS
Jacob Berlinger, Senior, Political Science, LAS
Shivani Bhogaraju, Senior, Political Science, LAS
Tyeese Braslavsky, Senior, Political Science, LAS
Gina Fumagalli, Senior, Political Science, LAS
Jake Gulick, Senior, Political Science, LAS
Melisa Ilkhan, Senior, Political Science, LAS
Kaylynn Kattiyaman, Senior, Political Science, LAS
Ari Kelo, Senior, Political Science, LAS
Edward Kim, Senior, Political Science, LAS
Katherine King, Senior, Political Science, LAS
Jane Knight, Senior, Political Science, LAS
Zach Kowalski, Senior, Political Science, LAS
Matthew Krauter, Senior, Political Science, LAS
Isabel Launspach, Senior, Political Science, LAS
Alice Lee, Senior, Political Science, LAS
Benjamin Nathan, Senior, Political Science, LAS
Adem Osmani, Senior, Political Science, LAS
Steph Petrov, Senior, Political Science, LAS
Malia Sayad, Senior, Political Science, LAS
Alexandra Simon, Senior, Political Science, LAS
Clay Ward, Senior, Political Science, LAS

Parkland College Honors Symposium

Thursday, April 28, 11:00 AM – 2:00 PM

Parkland College, Room D244

2400 West Bradley Avenue, Champaign, Illinois

Parkland College students have participated in the Undergraduate Research Symposium at the University of Illinois at Urbana-Champaign (UIUC) since 2013 under the Ethnography of the University Initiative (EUI). This initiative, supported by the Office of Undergraduate Research at UIUC, has students use a variety of ethnographic, archival, and related methods to examine their home institutions in its broader social, political, and historical contexts within EUI affiliated courses. Starting in 2022, Parkland students doing course-embedded research will continue to benefit from this collaboration and participate in the symposium at their home institution, hosted by Parkland's Honors Program. The following student presentations from Parkland's Introduction to Cultural Anthropology course, presented at Parkland's Honors Symposium, are part of the Illinois 2022 Undergraduate Research Week.

Storytelling and its Role in Cultural Heritage

Jacob Barker, Parkland College

Asia Djafar, Parkland College

Amalie Legrande, Parkland College

Katrina Powers, Parkland College

Braden Rudicil, Parkland College

Native American Reservations: their History and Effects on Culture

Casey Conway, Parkland College

Ginger Erl-Sopper, Parkland College

Brooklyn Gonzalez, Parkland College

Bennet Hubbard, Parkland College

Alec Valentino, Parkland College

An Ethnographic Study of Generational Differences

Josiah Freedman, Parkland College

Kenny Lahners, Parkland College

Jeremiah Martens, Parkland College

YuanPei Su, Parkland College

The Contributions to Culture and Community of Various Public Spaces in Champaign-Urbana

Jacob Alfonso, Parkland College

Alana Brown, Parkland College

Zoey Dye, Parkland College

Caullin Heebner, Parkland College

Tate Herges, Parkland College

Humanities Research Institute HRI-Mellon Legal Humanities Undergraduate Research Symposium

Friday, April 29, 1:00 – 4:00 PM

Law School, Room D

504 East Pennsylvania Avenue, Champaign, Illinois

The HRI-Mellon Undergraduate Symposium features a collection of undergraduate research presentations that showcase exploration of law through applications of historical, philosophical, literary, and visual thinking. Presenters will receive feedback from faculty respondents. The event is organized by the HRI-Mellon Undergraduate Interns in Legal Humanities, who have participated in a yearlong exploration with the HRI-Mellon Legal Humanities Research Group, directed by the Mellon Faculty Fellow in Legal Humanities, Professor Colleen Murphy. Patrick Keenan, Professor of Law and Heidi Hurd Faculty Scholar, will offer the opening keynote. All are welcome to attend. This event is supported by a grant from The Mellon Foundation.

Police Use of Force: Legitimacy in the Modern Era

Thomas Ballard, Senior, Political Science and Economics, LAS

HRI-Mellon Legal Humanities Intern, 2021–22

An Objective Argument for Paternalism: Protection from Wrong Ends

Alice Lee, Senior, Political Science and Psychology, LAS

HRI-Mellon Legal Humanities Intern, 2021–22

Women Belong in the House (and the Senate): An Analysis of Gender and Legislative Effectiveness in the U.S. Senate

Steph Petrov, Senior, Political Science, LAS

Garvey and the Irish: Irish Racial Status According to Early 20th Century Pan-Africanism

Eddie Ryan, Junior, History and Economics, LAS

Corporations, Personhood, and the Right to Bend the Law

Clay Ward, Senior, Political Science and Philosophy, LAS

Regulating Social Media Algorithms: A New Path to Reducing Harm

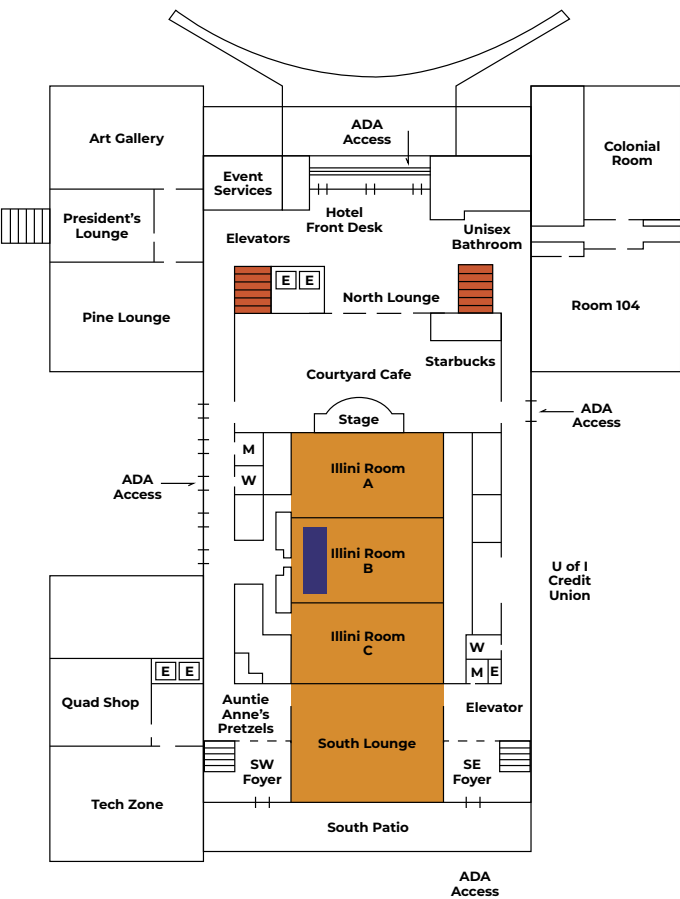
Alex Wellman, Senior, Economics and Political Science, LAS

HRI-Mellon Legal Humanities Intern, 2021–22

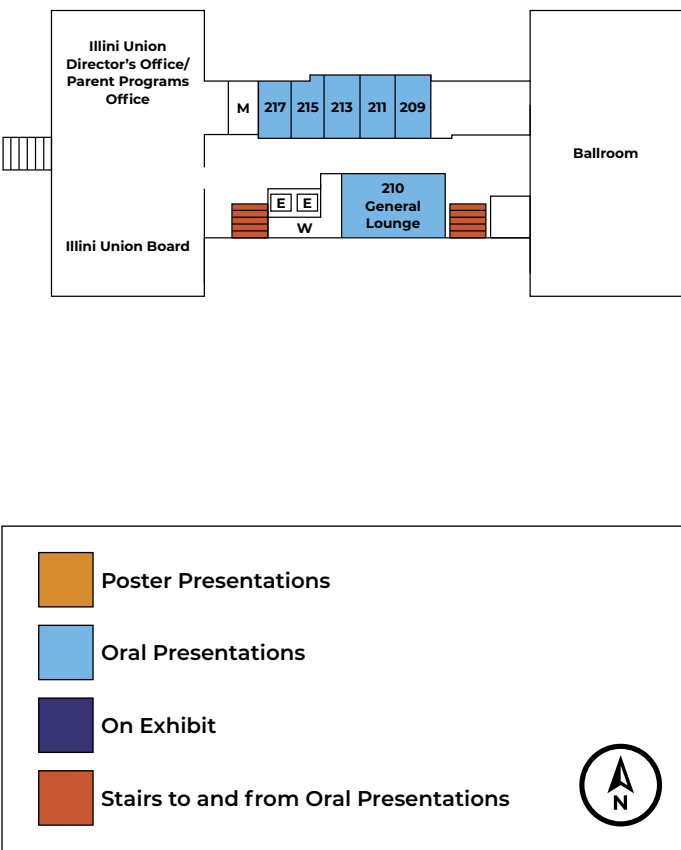
2022 Undergraduate Research Symposium

April 28, 2022
9 AM – 4:30 PM, Illini Union
Posters in Illini Rooms, A, B, C, & South Lounge
Oral Presentations on 2nd Floor

Illini Union Main Level



Illini Union Second Level



Oral/Performance Presentations

On Exhibit

Illini Room B 1:45 – 3:15 PM

Digital Dance Collages

Jason Brickman, Junior, Dance, FAA
(Research Mentor: John Toenjes, Department of Dance)

Exploring Dance, Relations, and Identity on Canvas

Ari Kelo, Senior, Theatre, FAA
(Research Mentor: Christina Rainwater, Department of Theatre)

At the Cellular Level: Symbioses, Modulations, Optimizations

9:15 – 10:15 AM, Room 217

Modulation of Host Cell Metabolism in the Presence of Helicobacter pylori Vacuolating Cytotoxin A

Sammy Alhayek, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Steven Blanke, Department of Microbiology & Ami Seeger, Department of Microbiology)

Optimizing a Cell Line Model of HIV Latency to Structurally Characterize Virological Synapse Formation and its Impact on Viral Spread

Neha Arun, Junior, Molecular and Cellular Biology, LAS
(Research Mentor: Collin Kieffer, Department of Microbiology)

The Tradeoff Between Free-living and Symbiotic Lifestyle Traits of Ensifer meliloti in Symbiosis with Medicago truncatula

Riley Popp, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Katy Heath, Department of Plant Biology & Ivan Sosa Marquez, Department of Microbiology)

Cellular Responses and Molecular Mechanisms

9:15 – 10:15 AM, Room 213

Cellular Sensing and Response to VacA-Mediated Mitochondrial Dysfunction during Helicobacter pylori Infection

Faisal Zaidi, Junior, Molecular and Cellular Biology, LAS
(Research Mentor: Ami Seeger, Department of Microbiology)

Establishing Fluorescent Indicators in Mouse Embryonic Stem Cells

Shreyaa Khanna, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Roy Dar, Department of Bioengineering)

High-throughput Analysis of Single Rat Cerebellar Neurons via Capillary Electrophoresis-Mass Spectrometry

Carolyn Oh, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Jonathan Sweedler, Department of Chemistry)

Design Thinking and Innovation

9:15 – 10:15 AM, Room 209

A New Reaction Plane Detector for the ATLAS Heavy Ion Physics Program in LHC Run 3

Farah Mohammed Rafee, Junior, Engineering Physics, ENG
(Research Mentors: Matthias Grosse Perdekamp, Department of Physics & Riccardo Longo, Department of Physics)

Contextual Innovation and Process Thinking: How a Detailed Analysis Can Lead to a Stronger Understanding of Stakeholders

Ryan Lake, Senior, Civil and Environmental Engineering, ENG
Kariem Hashem, Senior, Civil and Environmental Engineering, ENG
Arin Rzonca, Senior, Computer Science, ENG
Jessica Altenberg, Junior, Mechanical Engineering, ENG
(Research Mentor: Ann-Perry Witmer, Illinois Applied Research Institute)

Leveraging Soft Robotics for Effective Litter Collection

Omolola Okesanjo, Sophomore, Electrical Engineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)

Health and Wellness: Novel Approaches

9:15 – 10:15 AM, Room 211

COVID-19 and Adult Day Services: Perspectives of Adult Day Center Participants

Ivette Camacho, Junior, Interdisciplinary Health Sciences, AHS
(Research Mentors: Susan Aguiñaga, Department of Kinesiology and Community Health & Ana Laura Selzer Ninomiya, Department of Kinesiology and Community Health)

Diet Supplementation with Finasteride is Associated with a Reduction in Atherosclerotic Plaque Size in Mice

Grace Rygiel, Junior, Food Science and Human Nutrition, ACES
(Research Mentors: Jaume Amengual, Department of Food Science and Human Nutrition & Patrick McQueen, Department of Food Science and Human Nutrition)

Maternal Emotion Regulation and Infants' Negative Affectivity

Tingyan Liu, Senior, Psychology, LAS
(Research Mentors: Katherine Haigler, Penn State University & Karen Rudolph, Department of Psychology)

Human Behavior and Mechanisms of Change

9:15 – 10:15 AM, Room 215

Efficient Technology Use in Virtual Teams: Trust, Engagement, and Member Quality

Jack Everett, Senior, Communication, LAS
(Research Mentor: Chandler Macswain, Department of Communication)

Party Systems and Climate Change Compliance

Gina Fumagalli, Senior, Political Science, LAS
(Research Mentor: Xinyuan Dai, Department of Political Science)

Ecosystems and Environmental Change

9:15 – 10:15 AM, Room 210

Bee My Friend, Fun Guy: Exploring the Fungal Microbiomes Associated with Ground-Nesting Bees

Vi Aldunate, Senior, Integrative Biology, LAS
(Research Mentors: Anthony Yannarell, Department of Natural Resources and Environmental Science & Alexandra Harmon-Threatt, Department of Entomology)

Influence of Mammalian Herbivory and Nutrient Additions on Arabidopsis thaliana Fitness and Levels of Endopolyploidy

Matthew Stach, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Ken Paige, Department of Evolution, Ecology, and Behavior)

Partitioning Variance in Immune Phenotypes in a Zooplankton Host – Fungal Parasite System

Grace Westphal, Senior, Integrative Biology, LAS
(Research Mentors: Carla Cáceres, Department of Evolution, Ecology, and Behavior & Tara Stewart Merrill, Florida State University)

Collegiate Health and Wellness: Student Athletes; Housing Insecurity

10:45 – 11:45 AM, Room 210

Co-occurring Type 1 Diabetes and Disordered Eating Behavior in Student-Athletes: A Layered Syndemic Approach

Eva Rubin, Senior, Community Health, AHS
(Research Mentor: Caitlin Vitosky Clarke, Department of Kinesiology and Community Health)

What is Homelessness to College Students? A Literature Review Study on the Difficulties of Housing Insecure Students

Tyler Roberson, Senior, Community Health, AHS
(Research Mentors: Anthony B. Sullers Jr., Department of African American Studies & Leslie Morrow, Lesbian, Gay, Bisexual, and Transgender Resource Center)

Design Innovations

10:45 – 11:45 AM, Room 213

Creating Digital Books from Educational Videos: Addressing the Scene Detection Problem

Jiaxi Li, Senior, Computer Science, ENG
Ninghan Zhong, Senior, Computer Science, ENG
(Research Mentor: Lawrence Angrave, Department of Computer Science)

Designing A Bio-inspired Flying Fish Tail

Yuhe Cui, Senior, Mechanical Engineering, ENG
(Research Mentors: Aimy Wissa, Department of Mechanical Science and Engineering & Brooke Flammang, New Jersey Institute of Technology)

Humanities and The Arts: Creative Methods, Tools, Techniques

10:45 – 11:45 AM, Room 217

Closing the Gap Between Creative Writing and Everything Else

Shefali Mehta, Junior, English, LAS
(Research Mentor: Carolyn Wisniewski, Center for Writing Studies)

Decolonizing Research Methodologies and English as Lingua Franca

Berenice Rodriguez, Senior, English, LAS
(Research Mentor: Emma Velez, Department of Gender and Women's Studies)

Nude For Whom?: A Study of the Female Body in the Italian Renaissance, Baroque, and Neoclassical Art Periods

Erin Kravchick, Senior, Gender and Women's Studies, LAS
(Research Mentor: Emma Velez, Department of Gender and Women's Studies)

Learning and Human Development: Models, Marginalities

10:45 – 11:45 AM, Room 215

Adapted Physical Education Administration and Marginalization

Sarena Abdallah, Senior, Kinesiology, AHS
(Research Mentors: Kevin Richards, Department of Kinesiology and Community Health & Alyssa Trad, Department of Kinesiology and Community Health)

Cre8n Txt: Generativity in Textese

Matthew Angel, Senior, Linguistics, LAS
(Research Mentors: Ryan Shosted, Department of Linguistics & Aida Talic, Department of Linguistics)

The Crossroads of Disciplinary Expertise and Writing Transfer in the Writers Workshop

Alex Gallardo, Junior, Communication, LAS
(Research Mentor: Carolyn Wisniewski, Center for Writing Studies)

National 'Borders': Identity and Social Acculturation

10:45 – 11:45 AM, Room 211

"American I...?": Effects of Strength of American Identity on Civic Participation in Second-Generation Americans

Tyeese Braslavsky, Senior, Political Science, LAS
(Research Mentor: Cara Wong, Department of Political Science)

Correlating Bilingualism with Acculturation: Comparing Romanian and Latinx Populations in Chicago

Olivia Luca, Senior, Psychology, LAS

(Research Mentor: Salvatore Callesano, Department of Spanish and Portuguese)

Democracy and Migration

Rumeysa Aydogdu, Senior, Political Science, LAS

(Research Mentor: Cara Wong, Department of Political Science)

Nature, Life, and the Environment: Pathogens and Predations

10:45 – 11:45 AM, Room 209

The Great Exodus: Deadly Intracellular Bacillus anthracis Pathogen Fleeing From the Executing Host Immune Cells

Yiting Song, Senior, Food Science and Human Nutrition, ACES

(Research Mentors: Tamilselvam Batcha, Department of Microbiology & Steven Blanke, Department of Microbiology)

The Impacts of Fungicide and Predator Stressors on Daphnia pulicaria

Hayden Goldspink, Senior, Integrative Biology, LAS

(Research Mentors: Jeannette Cullum, Program in Ecology, Evolution and Conservation Biology & Luke Hearon, Department of Entomology)

The Trifecta of Pathogenesis

Ria Ravi, Senior, Molecular and Cellular Biology, LAS

(Research Mentors: Steven Blanke, Department of Microbiology & Henry Chen, Department of Microbiology)

Health and Wellness: Program Designs for Effective Engagement

1:45 – 2:45 PM, Room 213

Development and Iteration of Medication Adherence: Applications for Older Adults

Carson Smith, Senior, Interdisciplinary Health Sciences, AHS

(Research Mentors: Renato Azevedo, Department of Kinesiology and Community Health & Timothy Hale, Department of Kinesiology and Community Health)

Effectiveness of a Youth Summer Physical Activity Program for Children from Low-Income Households in Champaign County

Mariam Ouzidane, Junior, Integrative Biology, LAS

Kenley Grimmer, Junior, Kinesiology, AHS

(Research Mentors: Naiman Khan, Department of Kinesiology and Community Health & James Dalling, Department of Plant Biology)

Improving Fitness Inclusivity Among Disabled Populations

Joshua Salamea, Senior, Kinesiology, AHS

(Research Mentor: Brynn Adamson, Department of Kinesiology and Community Health)

Managing Environmental Degradations: Carbon Emissions; Soil Bacteria; Fungal Parasites

1:45 – 2:45 PM, Room 210

Evaluation on the Treatment Effect of Low-Carbon City Pilot (LCCP) Policy in China

Chenghao Jiang, Junior, Economics, LAS

(Research Mentor: Eun Yi Chung, Department of Economics)

Novel Soil Bacteria that Reduce the Benefits of Legume-Rhizobium Symbiosis

James Kosmopoulos, Senior, Integrative Biology, LAS

(Research Mentors: Katy Heath, Department of Plant Biology & Rebecca Batstone, Carl R. Woese Institute for Genomic Biology)

The Impact of Fungicide, Microcystis and Metschnikowia bicuspidata on Daphnia

Rhea Bhaumik, Senior, Integrative Biology, LAS

(Research Mentor: Carla Cáceres, Department of Evolution, Ecology, and Behavior)

Nuanced Approaches, Novel Methods in Understanding Marginalized Communities

1:45 – 2:45 PM, Room 209

Sexual Assault on College Campuses: The Need for An Intersectional Approach in Prevention

Mackenzie Drummond, Senior, Gender and Women's Studies, LAS

(Research Mentor: Emma Velez, Department of Gender and Women's Studies)

Social Production of an Internal Colony: Urban Space in Black Chicago, 1945-1970

Connor Barnes, Junior, History, LAS

(Research Mentors: Mark Steinberg, Department of History & Stefan Djordjevic, Department of History)

Socially "Distant": Social Integration of Foreign Migrant Laborers in South Korean Society

Kolten Conklen, Senior, Global Studies, LAS

(Research Mentors: Dan Shao, Department of East Asian Languages and Cultures & Myoung-sun Song, Department of East Asian Languages and Cultures)

Trauma and Human Behaviors: Contributing Factors, Implications

1:45 – 2:45 PM, Room 211

Factors Contributing to State and Trait Anger in Incarcerated Women

Christine Kwon, Sophomore, Social Work, SSW

(Research Mentors: Rachel Garthe, School of Social Work & Mariah Maldonado, School of Social Work)

Parents' Mental Health Struggles in Relation to the Mental Health of Their Children During the COVID-19 Pandemic: The Role of Emotion Responsive Parenting

Maya Novick, Freshman, Social Work, SSW

Abby Gillogly, Junior, Social Work, SSW

Grace Dietrich, Senior, Social Work, SSW

Matthew Saxsma, Senior, Psychology, LAS

(Research Mentors: Rachel Garthe, School of Social Work & Shongha Kim, School of Social Work)

The Impact of an Adolescent Dating Violence Prevention Program on Dating Violence Norms: A Comparison of In-Person vs. Online Program Delivery

Sarah Aronson, Senior, Social Work, SSW

Alexis Krones, Senior, Social Work, SSW

(Research Mentors: Rachel Garthe, School of Social Work & Amanda Yeazel, School of Social Work)

Science and Technology I

1:45 – 2:45 PM, Room 215

Characterization of Electronic Properties of Graphene Nanoribbons using Scanning Tunneling Microscopy

Xianzhi Wei, Junior, Materials Science and Engineering, ENG

(Research Mentor: Joseph Lyding, Department of Electrical and Computer Engineering)

Electrochemically-Mediated Enantioselective Separation using Redox Polymer

Sung Ju Chae, Senior, Chemical Engineering, LAS

(Research Mentor: Jemin Jeon, Department of Chemical and Biomolecular Engineering)

Global Stability of the Non-Relativistic Israel-Stewart Equations

Ariel Lerman, Junior, Mathematics, LAS

(Research Mentor: Jorge Noronha, Department of Physics)

Science and Technology II

1:45 – 2:45 PM, Room 217

News Flash: Atmospheric Variations Possibly Impact Starlink Satellites

Mayura Kulkarni, Sophomore, Electrical Engineering, ENG

(Research Mentors: Raluca Ilie, Department of Electrical and Computer Engineering & Mei-Yun Lin, Department of Electrical and Computer Engineering)

Skillful Prediction of UK Seasonal Energy Consumption Based on Surface Climate Information

Samuel Li, Junior, Mathematics and Computer Science, LAS

(Research Mentor: Ryan Sriver, Department of Atmospheric Sciences)

Wide-field Magnetic Imaging Using Laser-Excited Nitrogen-Vacancy Centers in Diamond

Jack Li, Senior, Engineering Physics, ENG

(Research Mentors: Virginia Lorenz, Department of Physics & David Cahill, Department of Materials Science and Engineering)

Computations

3:15 – 4:15 PM, Room 210

Application of an Agent-based Model Simulation Platform to Evaluate COVID19 Control Measures in Northern Illinois Counties

Angelo Santos, Junior, Computer Engineering, ENG

(Research Mentor: Weihao Ge, National Center for Supercomputing Applications)

Convergence of Artificial Intelligence and High Performance Computing for Scientific Problems

Nikil Ravi, Junior, Mathematics and Computer Science, LAS

(Research Mentor: Eliu Huerta, Department of Physics)

COVID-19 and The State: Exposing Inequalities, Fracturing Borders

3:15 – 4:15 PM, Room 217

Examining the Impact of COVID-19 on Cuban Food Security

Andrew White, Senior, Global Studies, LAS

(Research Mentor: Timothy Wedig, LAS Global Studies)

The Modern Day Panopticon: Weaponization of Moroccan Borders

Alyssa Prisby, Sophomore, Sociology, LAS

(Research Mentor: David Schrag, Global Studies)

The Openness of Autonomous Civil Society Organizations in Authoritarian Regimes During Crises: A Case Study of China

Chiyong Kim, Senior, Political Science, LAS

(Research Mentor: Yujeong Yang, Department of Political Science)

Nature, Life, and Environmental Change: Novel Solutions to 21st Century Challenges

3:15 – 4:15 PM, Room 211

Individual Swine Identification through Image Processing

Noel Dunning, Freshman, Computer Science and Animal Sciences, ACES

(Research Mentor: Isabella Condotta, Department of Animal Sciences)

*Rescuing the Mutants: Integrating Sugar Transporters into *Ostreococcus tauri**

Shikha Adhikari, Sophomore, Bioengineering, ENG

(Research Mentors: Steven Burgess, Department of Plant Biology & Anbarasu Karthikaichamy, Department of Plant Biology)

Maize Volatile Emissions under Interacting Flooding and Herbivory

Erinn Dady, Senior, Earth, Society, and Environmental Sustainability, LAS

(Research Mentor: Esther Ngumbi, Department of Entomology)

Science and Technology: Novel Paradigms

3:15 – 4:15 PM, Room 213

Behavior Analysis of Ataxin-2 Knockdown in an ALS Mouse Model

Hayden Moore, Junior, Bioengineering, ENG
(Research Mentors: Thomas Gaj, Department of Bioengineering & Alejandra Zeballos, Department of Bioengineering)

Computational Simulation of mm Ultrasonically-Powered Neural Stimulators

Prithvi Nathan, Sophomore, Electrical Engineering, ENG
(Research Mentor: Aapo Nummenmaa, Massachusetts General Hospital)

Forecasting-Biased Adaptive Informative Sampling of Aquatic Ecosystems via a Novel Autonomous Surface Vessel

Ethaniel Moore, Junior, Mechanical Engineering, ENG
(Research Mentors: Joao Almeida de Souza Ramos, Department of Mechanical Science and Engineering & Girish Chowdhary, Department of Agricultural and Biological Engineering)

Innovations in Science & Technology: Necroptotic and Phagolysosomal Pathways; Metabolic Labelling

3:15 – 4:15 PM, Room 215

Developing a Light-Inducible Necroptotic System to Dissect the Necrosome's Role in Cytokine Induction

Jeong Won Han, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Teak Jung Oh, Department of Biochemistry)

Effect of Metabolic Labeling on Dendritic Cell Cytokine Uptake for Cancer-Targeted Therapy

Emily Chen, Concurrent Enrollment Student
(Research Mentors: Joonsu Han, Department of Materials Science and Engineering & Hua Wang, Department of Materials Science and Engineering)

Importance of Phagolysosomal Trafficking for the Escape of B. anthracis from Infected Host Alveolar Macrophages

Shreya Rao, Junior, Molecular and Cellular Biology, LAS
(Research Mentors: Steven Blanke, Department of Microbiology & Tamilselvam Batcha, Department of Microbiology)



Posters

PA Session - Science and Technology

9 – 10:15 AM, Illini Room A

1. Analyses of Filamentary Structures in the 30 Doradus Star-Forming Region

Eli Sofovich, Senior, Astronomy, LAS
(Research Mentor: Tony Wong, Department of Astronomy)

2. Analysis of Breakage Data from Stone Mastic Asphalt Utilizing the Bailey Method

Braden Moore, Sophomore, Chemical Engineering, LAS
(Research Mentor: Javier J. Garcia Mainieri, Department of Civil and Environmental Engineering)

3. Building an NLP-Powered Repository and Search Tool for Cyber Risk Literature

David An, Freshman, Mathematics, LAS
(Research Mentors: Frank Quan, Department of Mathematics & Linfeng Zhang, Department of Mathematics)

4. CO₂ Electroreduction Catalyzed by Intermetallic Gold-Copper Nanoparticles

Maya Chatteraj, Senior, Chemistry, LAS
(Research Mentors: Prashant Jain, Department of Chemistry & Francis Alcorn, Department of Chemistry)

5. Cooking with Science: Pancake Volcanism on Venus

Dominik Rzeszutek, Sophomore, Geology, LAS
(Research Mentors: Trish Gregg, Department of Geology)

6. Detecting Binary Supermassive Black Holes by Measuring Changes in Apparent Brightness

Arya Desai, Sophomore, Astronomy, LAS
(Research Mentors: Tony Chen, Department of Astronomy)

7. Discrimination of Mixed and Ice Phase Clouds using WSR-88D Radars

Jash Parekh, Freshman, Computer Science, ENG
(Research Mentor: Troy Zaremba, Department of Atmospheric Sciences)

8. Examining Exploding Transients in Spiral Arms

Holly Wingren, Junior, Astronomy, LAS
(Research Mentors: Alex Gagliano, Department of Astronomy & Gautham Narayan, Department of Astronomy)

9. Fabrication Pressure Dependence of Superconducting Granular Aluminum Films

Tathagata Banerjee, Junior, Engineering Physics, ENG
(Research Mentors: Alexey Bezryadin, Department of Physics & Eugene Colla, Department of Physics)

10. High-Efficiency High Harmonic Generation in a Hollow Core Fiber with a Ytterbium Laser

Sahaj Patel, Junior, Engineering Physics, ENG
(Research Mentors: Fahad Mahmood, Department of Physics & Nina Bielinski, Department of Physics)

11. Impact of Near-Earth Supernovae on Oort Cloud Objects

Leeanne Smith, Sophomore, Physics, LAS
(Research Mentor: Jesse Miller, Department of Astronomy)

12. Investigating the Role of the Choroid Plexus in Immune Cell Trafficking in MS

Maryam Shaaban, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Andrew Steelman, Department of Animal Sciences)

13. Plant Inspired Soft Active Solids: The Effect of Microstructural Changes on Time-dependent Movement

Lorenzo Magnaye, Senior, Materials Science and Engineering, ENG
John Chen, Junior, Materials Science and Engineering, ENG
Julia Lies, Junior, Materials Science and Engineering, ENG
(Research Mentor: Shelby Hutchens, Department of Mechanical Science and Engineering)

14. Single Nuclei Sequencing of the Preoptic Area in *Amphiprion ocellaris* as a Model for Understanding Feminization of the Brain

Abigail Histed, Senior, Psychology, LAS
(Research Mentor: Justin Rhodes, Department of Psychology)

15. Soft Prosthetic Hand

Charmaine Nieves, Junior, Mechanical Engineering, ENG
Jorge Jimenez, Sophomore, Mechanical Engineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)

16. Variability of AGN Light Curves from the South Pole Telescope: Is There a Correlation between Variability and Flux, Luminosity, or Redshift?

Maya Vira, Junior, Astronomy, LAS
(Research Mentor: Joaquin Vieira, Department of Astronomy)

17. Usadel Equation Modeling to Predict Excitation Energy With a Known Phase Gradient

Alexander Romanov, Junior, Engineering Physics, ENG
(Research Mentors: Alexey Bezryadin, Department of Physics & Michael Pak, Air Force Institute of Technology)

18. X-rays from Supernova Explosions: Threats to Earth-like Biospheres

Ian Brunton, Senior, Astronomy, LAS
Connor O'Mahoney, Senior, Astronomy, LAS
(Research Mentor: Brian Fields, Department of Astronomy)

19. Virtual Reality and its Immersive Capabilities: Can It Stimulate Pro-Environmental Behavior

Justin Sun, Senior, Advertising, COM
Minghao Sun, Junior, Advertising, COM
Henry Rose, Senior, Advertising, COM
(Research Mentors: Chen (Crystal) Chen, Department of Advertising & Ewa Maslowska, Department of Advertising)

PB Session - Health and Wellness

9 – 10:15 AM, Illini Room A

25. The Effects of Dietary Sialyllactose on Volatile Fatty Acid Concentration in Four-Week-Old and Eight-Week-Old Pigs

Emma Prybylski, Sophomore, Animal Sciences, ACES
(Research Mentors: Ryan Dilger, Department of Animal Science & Rebecca Golden, Department of Animal Science)

26. An Analysis of the Inequality of Adverse Childhood Experiences Facing African Americans in Illinois and the Impact of State Economic Policy

Chance Flemming, Junior, Social Work, SSW
Michelle Morrison, Junior, Social Work, SSW
(Research Mentor: Rachel Garthe, School of Social Work)

27. An Investigation of Brain Activation and Affect During Acute Exercise

Erin Markowitz, Junior, Molecular and Cellular Biology, LAS
Jackie Buczkowski, Senior, Kinesiology, AHS
(Research Mentors: Steven Petruzzello, Department of Kinesiology and Community Health & Allyson Box, Department of Kinesiology and Community Health)

28. Assessing Attitudes, Behaviors, and Barriers Related to Yoga Practice During COVID-19: A Global Yoga Survey

Jett Ramir, Senior, Integrative Biology, LAS
(Research Mentors: Neha P. Gothe, Department of Kinesiology and Community Health & Jonathan Cerna, Neuroscience Program)

29. Contribution of Extended High Frequencies to Speech-in-Noise Perception and Cognition

Chloe Maghinang, Junior, Speech and Hearing Science, AHS
Melinda Jara, Freshman, Speech and Hearing Science, AHS
(Research Mentor: Raksha Mudar, Department of Speech and Hearing Science)

30. Development of eText Platform for Sustainable Weight Loss through Dietary and Lifestyle Changes

Abigail Fuller, Senior, Food Science and Human Nutrition, ACES
Bryn Grossman, Senior, Food Science and Human Nutrition, ACES
Muskaan Sawhney, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Manabu Nakamura, Department of Food Science and Human Nutrition & Nouf Alfouzan, Department of Food Science and Human Nutrition)

31. Effect of Tai Chi and Aging on Resting State Theta Power in Older Women

Jennifer Zhao, Sophomore, Interdisciplinary Health Sciences, AHS
(Research Mentor: Manuel Hernandez, Department of Kinesiology and Community Health)

32. Evaluating How Chronic Stress Can Diminish Immunotherapy Efforts in Osteosarcoma Patients

Srivaishnavi Popuri, Senior, Global Studies, LAS
(Research Mentors: Valeria Bonatti, LAS Global Studies & Caitlin Clarke, Department of Kinesiology and Community Health)

33. Evolutionarily Conserved Acrosomal Protein SP-10 is Dispensable for Male Mouse Fertility

Ann Steephen, Junior, Biochemistry, LAS

(Research Mentor: Prabhakara Reddi, Department of Comparative Biosciences)

34. Fall prevention Social Features from Dyadic Relationships

Otniel Fernandez, Sophomore, Community Health, AHS

(Research Mentors: Shannon Mejia, Department of Kinesiology and Community Health & Tai-Tsue, Department of Kinesiology and Community Health)

35. Impact of Daily Guides on MEDSReM App Usage

Hannah Serio, Junior, Molecular and Cellular Biology, LAS

(Research Mentors: Renato Ferreira Leitão Azevedo, Human Factors and Aging Laboratory & Mimi Trinh, Human Factors and Aging Laboratory)

36. Implementation of a Human Reasoning Recorder for Images

Delu Zhao, Freshman, Computer Science and Economics, LAS

(Research Mentor: Adithya Murali, Department of Computer Science)

37. Instructional Support for Wearable Health Trackers: Understanding Older Adults' Opinions and Preferences

Shaunik Kapoor, Senior, Kinesiology, AHS

(Research Mentor: Maurita Harris, Department of Kinesiology and Community Health)

38. Exercise-Sensitive Microbial Xenometabolites Regulate Monocyte Responses to an In Vitro Immune Challenge

Josh Schauer, Junior, Molecular and Cellular Biology, LAS

(Research Mentors: Chia-Hao Lin, Department of Kinesiology and Community Health & Jacob Allen, Department of Kinesiology and Community Health)

39. Qualitative Data Analysis: Coding Development for Deaf Participant Transcripts

Faith Burnham, Junior, Food Science and Human Nutrition, ACES

(Research Mentors: Megan Bayles, Department of Kinesiology and Community Health & Wendy Rogers, Department of Kinesiology and Community Health)

40. Role of Muscle-released Exosomes in Exercise-Induced Adult Hippocampal Neurogenesis

Prithika Ravi, Freshman, Molecular and Cellular Biology, LAS

Leah Malan, Junior, Psychology, LAS

(Research Mentor: Justin Rhodes, Department of Psychology)

41. Self-report of Cognitive Complaints in Healthy Aging and Mild Cognitive Impairment

Natalia Rzepa, Sophomore, Speech and Hearing Science, AHS

Nithya Anand, Sophomore, Psychology, LAS

(Research Mentor: Raksha Mudar, Department of Speech and Hearing Science)

42. Sound Rage: A Review of the Implications of Misophonia for College Age Students

Emilie Schramer, Junior, Speech and Hearing Science, AHS

Alicia Pensamiento, Senior, Speech and Hearing Science, AHS

(Research Mentor: Callie Brennan, Beckman Institute)

43. The Importance of Client-centered Wheeled Device Fittings

Gracie Savino, Junior, Kinesiology, AHS

(Research Mentors: Mikaela Frechette, Department of Kinesiology and Community Health & Laura Rice, Department of Kinesiology and Community Health)

44. The Mediating Effects of Perceived Control on the Association between Meaning in Life and Stress

Di Yao, Sophomore, Psychology, LAS

(Research Mentor: Sarah Ward, Business Administration)

PC Session - Social Science and Behavior

9 - 10:15 AM, Illini Room C

50. Corporations, Personhood, and the Right to Bend the Law

Clay Ward, Senior, Political Science, LAS

(Research Mentor: Samantha Frost, Department of Political Science)

51. A Look Into the Influence of Political Sadness on Behavior

Abby Greetis, Sophomore, English, LAS

(Research Mentor: James Steur, Department of Political Science)

52. An Examination of the Effects of Brown vs Board of Education on Latinx Students

Camila Renteria, Freshman, Elementary Education, EDU

(Research Mentor: José Del Real Viramontes, Department of Education Policy, Organization & Leadership)

53. An Investigation of Overdisciplined Black Teenage Girls in Champaign

Adriana Fernandez, Freshman, Early Childhood Education, EDU

(Research Mentor: Stephanie Smith, Department of Curriculum and Instruction)

54. An Investigation of Social Emotional Learning

Madison Bean, Sophomore, Elementary Education, EDU

(Research Mentor: Alisha Lewis, College of Education)

55. Combating Systemic Racism in Access to Parks and Recreation Resources

Fredy Quevedo, Jr., Senior, Recreation, Sport and Tourism, AHS

Kristel Ong, Freshman, Community Health, AHS

(Research Mentors: Monika Stodolska, Department of Recreation, Sport and Tourism & Kim Shinew, Department of Recreation, Sport and Tourism)

56. Conflict Monitoring in Persons with Mild Cognitive Impairment

Holly Panfil, Sophomore, Speech and Hearing Science, AHS

Sharbel Yako, Junior, Molecular and Cellular Biology, LAS

(Research Mentor: Raksha Mudar, Department of Speech and Hearing Science)

57. Feedback on Early Intervention Programs

Jordan Naffziger, Freshman, Early Childhood Education, EDU
(Research Mentor: Mia Chudzik, Department of Special Education)

58. Foucault, Power, and Public Health Disparities

Shivani Bhogaraju, Senior, Political Science, LAS
(Research Mentor: Samantha Frost, Department of Political Science)

60. Influence of Relationship Quality within Caregiving Dyads on Participation in and Valuation of Physical Activity as a Fall Prevention Method

Frances Balto, Sophomore, Kinesiology, AHS
(Research Mentors: Tai-Te Su, Department of Kinesiology and Community Health & Shannon Mejia, Department of Kinesiology and Community Health)

61. Intimate Partner Violence: The Role of Adverse Childhood Experiences and Attachment

Matthew Saxsma, Senior, Psychology, LAS
(Research Mentor: Rachel Garthe, School of Social Work)

62. Looking Inwards: The Role of Bias Awareness and Colorblind Racial Attitudes in Shaping Activism Orientation

Eleanor Humphreys, Senior, Psychology, LAS
(Research Mentors: Emily Blevins, Department of Psychology & Nathan Todd, Department of Psychology)

63. Manufactured Ignorance: Lysenko and the Denial of Genetics

Quinn Sears Smith, Junior, History, LAS
(Research Mentors: Roderick Wilson, Department of History)

64. Phone Screening for Cognitive Impairment in Older Adults

Kelly Trevillian, Senior, Speech and Hearing Science, AHS
Alexandra Trekas, Junior, Speech and Hearing Science, AHS
(Research Mentor: Raksha Mudar, Department of Speech and Hearing Science)

65. Relations between Organizational Capacity and External Environments in Sport for Development Organizations

Shaurya Gupta, Freshman, Economics, LAS
Jeongwoo Choi, Junior, Statistics, LAS
(Research Mentor: Wonju Lee, Department of Recreation, Sport and Tourism)

66. Retweet, Like, Reshare: Online Activism & Long Term Offline Activism

Jasmine Ng, Junior, Political Science, LAS
(Research Mentor: Avital Livny, Department of Political Science)

67. Risk Factors During Infancy and Child BMI at 3 Years: The Role of Maternal Socioeconomic Characteristics and Mode of Infant Feeding

Muskaan Sawhney, Senior, Molecular and Cellular Biology, LAS
Alyssa Kalejs, Senior, Psychology, LAS
(Research Mentors: Jennifer Barton, Family Resiliency Center & Brenda Koester, Family Resiliency Center)

68. Analyzing the Relationship between Fear and Election Violence

Billy Wojcicki, Senior, Advertising, COM
(Research Mentor: Tolgahan Dilgin, Department of Political Science)

69. Cross Linguistic Influence on Spanish-Speaking Immigrants

Joselyn Vazquez, Freshman, Psychology, LAS
(Research Mentor: Irati Hurtado Ruiz, Department of Spanish and Portuguese)

70. Political Influences on Perception of Meme Humor: A Pilot Study

Maher Adoni, Freshman, Molecular and Cellular Biology, LAS
(Research Mentor: Jack Dempsey, Department of Educational Psychology)

71. Student Characteristics Related to Classroom Belonging in Online Settings

Aparajita Vemuri, Sophomore, Psychology, LAS
(Research Mentor: Amos Jeng, Department of Educational Psychology)

72. Disparity in Administrative Court Decisions: Evidence from Tax and Immigration Courts

Alexandra Gergova, Sophomore, English, LAS
Matthew Ratajczyk, Junior, Political Science, LAS
(Research Mentor: Luzmarina Garcia, Department of Political Science)

73. When Fact-Checks Fail: Instilling Social Responsibility on Social Media

Alexandra Simon, Senior, Political Science, LAS
(Research Mentors: Thomas Rudolph, Department of Political Science & James Steur, Department of Political Science)

74. Women Belong in the House (and the Senate): An Analysis of Gender and Legislative Effectiveness in the U.S. Senate

Stephanie Petrov, Senior, Political Science, LAS
(Research Mentor: Gisela Sin, Department of Political Science)

75. Collaborative Research Spaces: Organizing Work in a Decolonial Trajectory

Laura Garcia, Junior, Anthropology, LAS
(Research Mentor: Lila Ann Dodge, Department of Anthropology)

PD Session - Data and Information

9 – 10:15 AM, Illini Room South Lounge

85. A Digital Book Based Pedagogy to Improve Course Content Accessibility for Students with and without Disabilities

Sujit Varadhan, Junior, Computer Science, ENG
(Research Mentors: Hongye Liu, Department of Computer Science & Lawrence Angrave, Department of Computer Science)

86. A Look into Using eDNA in Relation to Salamanders

Manasa Donepudi, Freshman, Integrative Biology, LAS
(Research Mentor: Amanda Curtis, Program in Ecology, Evolution, and Conservation Biology)

87. An Algorithm to Measure Skin Tones with Applications to Bias in the Film Industry

Aydan Pirani, Freshman, Computer Science, ENG
Ritvik Banakar, Freshman, Computer Science and Philosophy, LAS
Aniket Gargya, Freshman, Computer Science, ENG
(Research Mentors: Lawrence Angrave, Department of Computer Science & Rini Bhattacharya Mehta, Department of Religion)

88. An Exploratory Analysis for Identifying Metabolomic Biomarkers Corresponding to Different Food Interventions
Gaurav Mantri, Sophomore, Computer Science, ENG
Vineet Chinthakindi, Sophomore, Computer Science, ENG
Dev Patel, Freshman, Computer Science and Statistics, LAS
 (Research Mentors: Alexis Baldeon, Division of Nutritional Sciences & Mara Perez Tamayo, Division of Nutritional Sciences)

89. Analyzing Citations to one Fraudulent Clinical Trial
Ariella Grossberg, Junior, Econometrics and Quantitative Economics, LAS
 (Research Mentor: Jodi Schneider, School of Information Sciences)

90. Applications of Computer Learning in Stem Cell Transplants
Katherine Bieber, Sophomore, Molecular and Cellular Biology Honors, LAS
 (Research Mentor: Jonah Moss, Rush University Medicine)

91. Are the Digits of π Random? A Statistical Analysis and Visualization of the Random Character of π Based on its Continued Fraction Expansion
Zhuo Zhang, Freshman, Mathematics, LAS
Arpandeep Khatua, Junior, Computer Engineering, ENG
Xiaotong Li, Junior, Mathematics, LAS
Alex Jin, Freshman, Mathematics and Computer Science, LAS
Shreyas Singh, University High School
 (Research Mentors: AJ Hildebrand, Department of Mathematics & Efstathios Konstantinos Chrontsios Garitsis, Department of Mathematics)

92. Designing an Interface for Building Puzzles to Test a Framework to Recognize Objects and their Relationships in Visual Discrimination Puzzles
Shreya Vinjamuri, Freshman, Computer Science, ENG
 (Research Mentor: Adithya Murali, Department of Computer Science)

93. Developing Software Infrastructure Supporting Large Scale Daily Weather Analysis
Angie Cheng, Senior, Computer Science and Math, LAS
 (Research Mentors: Wade Fagen-Ulmschneider, Department of Computer Science & Karle Flanagan, Department of Statistics)

94. Do Voting Paradoxes Occur in the Real World? The Case of AP College Football Polls
Vivek Thatte, Sophomore, Computer Science, ENG
 (Research Mentor: AJ Hildebrand, Department of Mathematics)

95. Living Dictionary: Automatically Generating Wikipedia-like Content from Keywords
Nishant Balepur, Junior, Computer Science, ENG
 (Research Mentor: Kevin Chang, Department of Computer Science)

96. Machine Learning Guided Directed Halogenase Evolution
Juliana Gurevich, Freshman, Chemical Engineering, LAS
Ansh Sharma, Freshman, Computer Science, ENG
 (Research Mentor: Haiyang (Ocean) Cui, Carl R. Woese Institute for Genomic Biology)

97. Observing the Data Visualization Tools of Science Mapping
Divya Jain, Freshman, Information Sciences, SIS
 (Research Mentor: Jodi Schneider, School of Information Sciences)

98. Resolving Racial Health Disparities by Using Advanced Statistics and Machine Learning on Complex Multidimensional Datasets
Haihley Connors, Junior, Interdisciplinary Health Sciences, AHS
 (Research Mentors: Zeynep Madak-Erdogan, Department of Food Science and Human Nutrition & Ashlie Santaliz Casiano, Division of Nutritional Sciences)

99. The Effects of Feeding Non-toxigenic Clostridia and Bacillus on Body Condition Score and Ketosis in Holstein Cows During the Transition Period
Katelyn Smoot, Senior, Animal Sciences, ACES
 (Research Mentors: Lizet Garcia, Department of Animal Sciences & Phil Cardoso, Department of Animal Sciences)

100. Vermillion County Animal Shelter Rates Throughout the COVID-19 Pandemic
Ruth Lemna, Senior, Animal Sciences, ACES
 (Research Mentor: Amy Fischer, Department of Animal Sciences)

101. Visualizing Temperature Data on Local to National Scales
Katherine Miles, Senior, Statistics, LAS
 (Research Mentors: Wade Fagen-Ulmschneider, Department of Computer Science & Karle Flanagan, Department of Statistics)

102. Realistic Video Simulation for Testing Real Time Self-Driving Systems
Bhargav Chandaka, Junior, Mathematics and Computer Science, LAS
Niviru Wijayarathne, Senior, Mechanical Engineering, ENG
 (Research Mentor: Shenlong Wang, Department of Computer Science)

103. Documenting Bilingual Speech in the Midwest Through Corpus Linguistics
Jared Canty, Senior, Information Sciences, SIS
 (Research Mentor: Irati Hurtado, Department of Linguistics)

PE Session - Science and Technology

10:45 AM- 12:00 PM, Illini Room A

1. Soft Actuator Meshes
Hima Pamu, Senior, Mechanical Engineering, ENG
 (Research Mentor: Girish Krishnan, Industrial Science and Engineering)

2. Challenges in Characterizing Iridoid Oxidase from *Camptotheca acuminata* and *Catharanthus roseus*
Alfredo Martinez-Ruiz, Senior, Molecular and Cellular Biology, LAS
 (Research Mentors: Mary Schuler, Department of Cell and Developmental Biology & Justin Miller, Department of Cell and Developmental Biology)

3. Chemoinformatics-Driven Ligand Optimization for Aziridine Desymmetrization by Grignard Reagents
Andrew Feng, Senior, Chemistry, LAS
 (Research Mentors: Scott Denmark, Department of Chemistry & Alexander Shved, Department of Chemistry)

4. CRISPR-SKIP Double Exon Skipping
Gianna Elias, Junior, Bioengineering, ENG
 (Research Mentors: Angelo Miskalis, Department of Bioengineering & Shraddha Shirguppe, Department of Bioengineering)

5. Developing Networks of Mechanical Oscillators with Synthetic Interactions
Jiarui Yu, Junior, Engineering Physics, ENG
(Research Mentor: Bryce Gadway, Department of Physics)

6. Effect of Polyelectrolyte on Nanoparticle Chemotaxis
Nicole Southey, Sophomore, Bioengineering, ENG
(Research Mentors: Max Tetrick, Department of Chemistry & Catherine Murphy, Department of Chemistry)

7. Gaseous Halos of Simulated Milky Way-like Galaxies
Bhavya Pardasani, Junior, Astronomy, LAS
(Research Mentors: Andrew Wetzel, University of California-Davis & Jenna Samuel, University of Texas-Austin)

8. Glycosaminoglycan Content in Mineralized Collagen Scaffolds Influence Macrophage Polarization
Melisande Wong Yan Ling, Junior, Chemical Engineering, LAS
(Research Mentors: Vasiliki Kolliopoulos, Department of Chemical and Biomolecular Engineering & Brendan Harley, Department of Chemical and Biomolecular Engineering)

9. Predicting Parameters for Morphology Reconstructions of Cells from SIMS Images
Christian Sarol, Junior, Bioengineering, ENG
(Research Mentor: Brittney Gorman, Department of Chemical and Biomolecular Engineering)

10. RNF126 Mediated Ubiquitination of Pre-RC Components
Darya Asoudegi, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Supriya Prasanth, Department of Cell and Developmental Biology & Neha Chetlangia, Department of Cell and Developmental Biology)

11. Fabrication of TiO₂ Nanotubes on FTO Glass for Photovoltaic Applications
Ryan He, University Laboratory High School
(Research Mentor: Melinda Tidrick, University Laboratory High School)

12. Subclassifying Thunderstorm Wind Types to Assess Engineering Importance in Iowa
David Roegner, Senior, Atmospheric Sciences, LAS
(Research Mentors: Franklin Lombardo, Department of Civil and Environmental Engineering & Jessica Choate, Department of Atmospheric Sciences)

13. The Association Between Depressive Symptoms and Negative Affect Through the Exploration of an Individual Face Threshold
Julia Gainski, Senior, Integrative Biology, LAS
(Research Mentors: Sepideh Sadaghiani, Department of Psychology & Chris Perriello, Department of Psychology)

14. The Evaluation of Novel Halide-Based Solid-State Electrolytes for All-Solid State Lithium-Ion Battery Systems
Daniel Cudzich, Sophomore, Materials Science and Engineering, ENG
(Research Mentors: Paul Braun, Department of Materials Science and Engineering & Carlos Juarez-Yescas, Department of Chemistry)

15. The Impact of Ice Caps on the Stability of Magma Systems
Lilian Lucas, Junior, Geology, LAS
(Research Mentors: Patricia Gregg, Department of Geology & John Albright, Department of Geology)

16. Peak Shaving and Valley Filling of Grid Load in Residences using V2G Electric Vehicles
Chen Si, Sophomore, Computer Science, ENG
(Research Mentor: Shanshan (Shirley) Liu, Department of Civil and Environmental Engineering)

17. Wire Instance Perception from RGBD Imagery with Mask R-CNN
Jingyi Xiang, Sophomore, Electrical Engineering, ENG
(Research Mentor: Holly Dinkel, Department of Aerospace Engineering)

PF Session - Health and Wellness

10:45 AM– 12:00 PM, Illini Room A

25. Adherence to Daily Self-Weighing Can Improve Weight Loss Progress in EMPOWER Weight Management Program
Kathleen Kleinert, Senior, Food Science and Human Nutrition, ACES
Tommy Pasternak, Senior, Food Science and Human Nutrition, ACES
Jennifer Pochly, Senior, Food Science and Human Nutrition, ACES
(Research Mentor: Jin Yu, Department of Food Science and Human Nutrition)

26. Are Sleep Patterns and Routines During Infancy Associated with Child BMI at 3 Years?
Amani Khatib, Senior, Community Health, AHS
Helen Fan, Junior, Chemistry, LAS
Vedant Choudhary, Sophomore, Integrative Biology, LAS
(Research Mentors: Jennifer Barton, Family Resiliency Center & Brenda Koester, Family Resiliency Center)

27. Changes in Gene Expression in Response to NAMPT Inhibitor and Fulvestrant Combination Compared to Fulvestrant Treatment
Maddie Szkwarek, Sophomore, Bioengineering, ENG
(Research Mentors: Ayca Nazil Mogol, Department of Food Science and Human Nutrition & Zeynep Madak-Erdogan, Department of Food Science and Human Nutrition)

28. DNA-Damaging Toxin Disrupts Intestinal Epithelial Barrier Function to Facilitate Bacterial Invasion
Michael Adisumarta, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Steven Blanke, Department of Microbiology & Molly Crowder, Department of Microbiology)

29. Effect of Stress on the Expression of Genes in the Hippocampus
Gloria Sunderland, Junior, Psychology, LAS
(Research Mentor: Sandra Rodriguez Zas, Department of Animal Sciences)

30. Effects of Immune Activation on Maternal Spleen Weight and Gene Expression
Sora Ogawa, Junior, Animal Sciences, ACES
(Research Mentors: Adrienne Antonson, Department of Animal Sciences & Meghan Grace Connolly, Department of Animal Sciences)

31. How Racial and Individual Differences Impact Prospective Exercise Behavior
Abigail Keck, Junior, Kinesiology, AHS
Tashara Davis, Junior, Kinesiology, AHS
 (Research Mentors: Jonathan North, Department of Kinesiology and Community Health & Allyson Box, Department of Kinesiology and Community Health)

32. Inflammatory Response Gene, Interleukin-6 (Il6), Induced by Lipopolysaccharide (LPS) was Further Up-Regulated in the Heart of Alpha-Tocopherol Transfer Protein-Null Mice
Emily Collins, Senior, Food Science and Human Nutrition, ACES
 (Research Mentors: John Erdman, Department of Food Science and Human Nutrition & Megumi Hashida, Division of Nutritional Sciences)

33. Investigating the Connections Between IBD and Neurological Diseases through PTBP1
Emily Tung, Sophomore, Molecular and Cellular Biology, LAS
 (Research Mentor: Wenyan Mei, Department of Comparative Biosciences)

34. Meditation and Mindfulness Matters: A Global Survey Assessing Barriers and Behaviors Related to Mindfulness Practice
Courtney Himley, Senior, Kinesiology, AHS
 (Research Mentor: Neha Gothe, Department of Kinesiology and Community Health)

35. Preliminary Analysis of Lower Resting Heart Rate on Cognitive Function as Measured through the Erikson Flanker Task After an Acute Bout of Exercise
Naman Thakkar, Senior, Kinesiology, AHS
Emma Lamblin, Senior, Molecular and Cellular Biology, LAS
 (Research Mentors: Jeongwoon Kim, Department of Kinesiology and Community Health & Naiman Khan, Department of Kinesiology and Community Health)

36. Role of CCR5 Receptor on CD4+ T cells in Brain Neuronal Damage and Lung Dysfunction Under the Cryptococcus Infection
Andrea Dayal, Junior, Biochemistry, LAS
 (Research Mentor: Makoto Inoue, Department of Comparative Biosciences)

37. Sexual Assault Recovery among Sexual and Gender Minority University Students: The Role of Microaggressions
Maksymilian Piasecki, Senior, Psychology, LAS
 (Research Mentors: Allyson Blackburn, Department of Psychology & Nicole Allen, Department of Psychology)

38. Studying the Molecular Mechanisms and Behavior in Four Copy Gldc Mice as it Relates to Schizophrenia Pathophysiology
Matthew Tomlinson, Senior, Molecular and Cellular Biology, LAS
 (Research Mentor: Maltesh Kambali, Department of Comparative Biosciences)

39. The Effect of Maternal Immune Activation on Placental Integrity
Emma Donnini, University High School
 (Research Mentor: Adrienne Antonsen, Department of Animal Sciences)

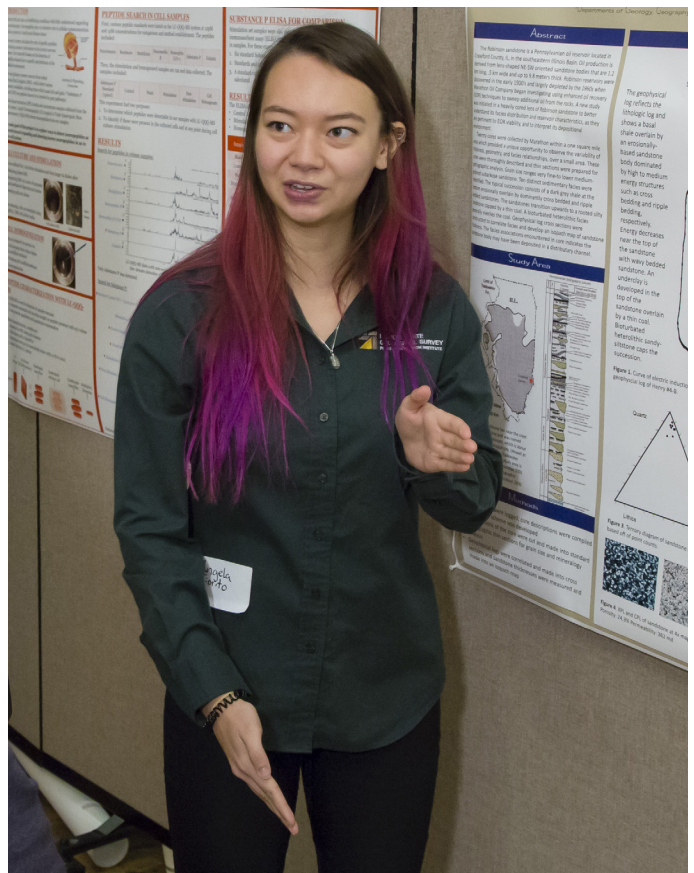
40. The Effects of Intestinal FFAR2 Knockout on Gut Inflammation
Brittany Anglin, Senior, Animal Sciences, ACES
 (Research Mentors: Laurie Rund, Department of Animal Sciences & Maria Elisa Caetano Silva Abreu, Department of Animal Sciences)

41. The Neurodegenerative Brain: Examining Links between Biological Markers and Psychological Functioning
Zoe Tsokolas, Junior, Psychology, LAS
 (Research Mentors: Florin Dolcos, Department of Psychology & Haley West, Department of Psychology)

42. Validation of the Fall Concerns Scale for Wheelchair and Scooter Users
Emily Kim, Junior, Kinesiology, AHS
 (Research Mentor: Laura Rice, Department of Kinesiology and Community Health)

43. Yoga, Meditation, and Depression Among Latina Youth: Perspectives of Catholic Priests
Brenda Bravo, Senior, Kinesiology, AHS
 (Research Mentor: Susan Aguinaga, Department of Kinesiology and Community Health)

44. Identifying Lactic Acid Bacteria in Fermented Food Samples Capable of Aromatic Amino Acid Metabolism
Alex Ladan, Senior, Kinesiology, AHS
 (Research Mentors: Mikaela Webb, Division of Nutritional Sciences & Jacob Allen, Department of Kinesiology and Community Health)



PG Session - Learning and Human Development

10:45 AM- 12:00 PM, Illini Room C

50. *A French 9/11? Contemporary French Literature in the Wake of Terrorism*

Sarah Holland, Sophomore, Global Studies, LAS
(Research Mentor: Nicolas Portugal, Department of French & Italian)

51. *ASL Aspire: An Online Educational Tool for STEM vocabulary*

Mona Jawad, Junior, Bioengineering, ENG
Ethan Gaughan, Junior, Bioengineering, ENG
Sri Medisetti, Junior, Bioengineering, ENG
Amy Lee, Junior, Bioengineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)

52. *Assisting with the Development of a Framework to Guide Personalized Support for Older Adults Learning Novel Technologies*

Emma Lachs, Senior, Community Health, AHS
(Research Mentor: Kenneth Blocker, Department of Educational Psychology)

53. *Assisting with the Iterative Development of Instructional Support for Older Adults Learning the Amazon Echo*

Kyreon Williams, Senior, Interdisciplinary Health Sciences, AHS
(Research Mentors: Kenneth Blocker, Department of Educational Psychology & Wendy Rogers, Department of Kinesiology and Community Health)

54. *Collecting Open Access Resources for Archival Science Courses*

Zimo Qu, Freshman, Astronomy, LAS
(Research Mentor: Jamie Coen, School of Information Sciences)

55. *Comparing Expressive Language Use in Typically Developing Children and Children with Down Syndrome using Narrative Storytelling*

Sarah Pechtl, Junior, Speech and Hearing Science, AHS
Raquelle Riffle, Junior, Speech and Hearing Science, AHS
(Research Mentors: Marie Channell, Department of Speech and Hearing Science & Alex Barkhimer, Department of Speech and Hearing Science)

57. *Examining Disability Awareness and Inclusion Practices in Mainstream Educational Settings*

Kelsey Libert, Senior, Speech and Hearing Science, AHS
Madison Barrera, Junior, Speech and Hearing Science, AHS
(Research Mentor: Marie Moore Channell, Department of Speech and Hearing Science)

58. *Examining the Relationships Between Socio-Emotional Skills and Academic Outcomes in College Sample*

Jiepeng Yuan, Senior, Psychology, LAS
(Research Mentors: Brent Roberts, Department of Psychology & Hee Jun Yoon, Department of Psychology)

59. *Exploring Gender Differences in Foreign Language Anxiety Across Virtual and In-Person Environments*

Savannah Sander, Senior, Psychology, LAS
(Research Mentor: Tricia Thrasher, Department of French and Italian)

60. *Goals, Goal Conflict, and Well-Being in Emerging Adulthood*

Meghna Paul, Senior, Psychology, LAS
(Research Mentors: Erin Buddesheim, Counseling Psychology & Chris Napolitano, Department of Educational Psychology)

61. *How to Manage Small Group Work to Improve Student Outcomes and Promote Social Justice*

Esther Xu, Sophomore, Middle Grades Education, EDU
(Research Mentor: Christina Krist, Department of Curriculum and Instruction)

62. *Impact of Negative Internal State on Missing Possessions: A Literature Review*

Yoobeen Choi, Junior, Psychology, LAS
Haeri Choi, Senior, Psychology, LAS
(Research Mentors: Hee Jun Yoon, Department of Psychology & Zachary Shipstead, Department of Psychology)

63. *Language Generated During Picture Book Reading in Two Naturalistic Settings: Familiar Vs. Unfamiliar Picture Books*

Ted Jung, Senior, Psychology, LAS
(Research Mentors: Jessica Montag, Department of Psychology & Anastasia Stoops, Department of Psychology)

64. *Linguistic Discrimination and Latinx Parenting*

Milton Guendica Jr, Senior, Spanish, LAS
(Research Mentor: Salvatore Callesano, Department of Spanish and Portuguese)

65. *Mental State Language Use in Narrative Storytelling Across the Preschool Years*

Melissa Bruce, Senior, Speech and Hearing Science, AHS
(Research Mentor: Marie Channell, Department of Speech and Hearing Science)

66. *Next Generation Science Standards in What-if Hypothetical Implementations in Minecraft (WHIMC)*

Liliya Weerts, Sophomore, Early Childhood Education, EDU
Alyssa Anastasi, Freshman, Elementary Education, EDU
(Research Mentor: H. Chad Lane, Department of Educational Psychology)

67. *Parent/Caregiver Perceptions of Student's Mental and Behavioral Health and the Impact on School Involvement During the Pandemic*

Alexis Krones, Senior, Social Work, SSW
Sarah Aronson, Senior, Social Work, SSW
Madisyn Welsh, Senior, Social Work, SSW
(Research Mentors: Rachel Garthe, School of Social Work & Shongha Kim, School of Social Work)

68. *Parent-Child Relationship Quality and Empathy Development in Early Adolescence*

Nimisha Goenka, Senior, Psychology, LAS
(Research Mentor: Nancy McElwain, Department of Human Development and Family Studies)

69. *Perceptions of the Teacher Shortage*

Sarah Juskiewicz, Sophomore, Middle Grades Education, EDU
(Research Mentor: Nancy Latham, Department of Curriculum and Instruction)

70. Personal and Professional Development Among College Student Volunteers in a Sport-For-Development Program**Lexi Anaya**, Freshman, Kinesiology, AHS**Angela Ni**, Freshman, Interdisciplinary Health Sciences, AHS
(Research Mentors: Jon Welty Peachey, Department of Recreation, Sport, and Tourism & Kevin Richards, Department of Kinesiology and Community Health)**71. ScribeAR, an Automated Live-captioning Augmented Reality System****Abhiram Tamvada**, Freshman, Computer Science and Economics, LAS**Joanna Huang**, Sophomore, Computer Science, ENG**Harsh Deep**, Senior, Statistics and Computer Science, LAS
(Research Mentors: Lawrence Angrave, Computer Science & Colin Luaidi, Department of Physics)**72. Student Perceptions of Real-World Mathematics Applications****Kaylah Washington**, Freshman, Middle Grades Education, EDU

(Research Mentor: Adam Poetzel, Curriculum & Instruction)

73. Sustainable Play: Environmental Education and Technology For Children In Uruguay**Danielle Chao**, Freshman, Earth, Society and Environmental Sustainability, LAS

(Research Mentor: Kutasha Bryan-Silva, Curriculum and Instruction)

74. Teacher Unions: History and Next Steps**Anna Wheeler**, Freshman, Elementary Education, EDU

(Research Mentor: Jon Hale, Curriculum & Instruction)

75. The Benefits and Challenges of Pre-Service Teacher Education in the Digital Age: A Case Study of IGlobal project**Cara Merkle**, Sophomore, Middle Grades Education, EDU**Ashley Xu**, Sophomore, Elementary Education, EDU

(Research Mentors: Aigul Rakisheva, Department of Education Policy, Organization and Leadership & Allison Witt, Department of Education Policy, Organization and Leadership)

76. The Effectiveness of Virtual Education Experience for Preservice Teachers Participating in the IGlobal Project**Paige Sawatzky**, Freshman, Elementary Education, EDU

(Research Mentors: Aigul Rakisheva, Department of Education Policy, Organization and Leadership & Allison Witt, Department of Education Policy, Organization and Leadership)

77. The Influence of Book Reading on Question Production in Toddlers and Caregivers**Katarzyna Klimek**, Senior, Psychology, LAS

(Research Mentors: Jessica Montag, Department of Psychology & Anastasia Stoops, Department of Psychology)

78. The Role Agricultural Education Recruitment Events Have in Recruiting Illinois Agricultural Educators**Alexandra Johannes**, Junior, Agricultural Leadership, Education, and Communications, ACES

(Research Mentor: Amy Leman, Agricultural Leadership, Education, and Communications)

79. Understanding the Impacts of Soft Robotics Curriculum on Students' Engineering Identity**Elizabeth McNeela**, Junior, Bioengineering, ENG**Thomas Tran**, Junior, Bioengineering, ENG

(Research Mentor: Holly Golecki, Department of Bioengineering)

PH Session - Nature, Life, and Environmental Change**10:45 AM- 12:00 PM, Illini Room South Lounge****85. "Barcode-Matching" of the Euchromatin Regions Along Homologous Chromosomes Facilitates DNA-Break-Repair-Independent Homologous Pairing****Royal Shrestha**, Junior, Molecular and Cellular Biology, LAS

(Research Mentors: Huan Yu Qiao, Comparative Biosciences & Yiheng Peng, Comparative Biosciences)

86. Characterizing Microphysical Processes Within Midwest and Northeast U.S. Wintertime Extratropical Cyclones Using Quasi-Vertical Profiles: Results from IMPACTS**Gavin DeBrun**, Junior, Engineering Physics, ENG

(Research Mentor: Troy Zaremba, Department of Atmospheric Sciences)

87. DNA Zip Codes and the 3D Genome Organization in the Nucleus**Mary Ehmann**, Junior, Chemical Engineering, LAS

(Research Mentors: Huimin Zhao, Chemical and Biomolecular Engineering & Meng Zhang, Chemical and Biomolecular Engineering)

88. Do Monogamous Poison Frogs Prefer the Calls of Their Mates Over Those of Strangers?**Molly Podraza**, Junior, Animal Sciences, ACES

(Research Mentors: Jen Moss, Department of Evolution, Ecology, and Behavior & Eva Fischer, Department of Evolution, Ecology, and Behavior)

89. Effects of Neonicotinoids and Fungicides on Painted Lady Butterflies**Kristine Schoenecker**, Junior, Natural Resources and Environmental Sciences, ACES

(Research Mentors: Alexandra Harmon-Threatt, Department of Entomology & Anthony Yannarell, Department of Natural Resources and Environmental Sciences)

90. Engineering the First Transgenic Anemonefish *Amphiprion Ocellaris* for Studying Socially Influenced Sex Change**Emma Ibanez**, Junior, Molecular and Cellular Biology, LAS

(Research Mentor: Justin Rhodes, Department of Psychology)

91. Genome Mining Guided Discovery of Novel Bioactive Natural Products**Yimeng Zhao**, Senior, Molecular and Cellular Biology, LAS

(Research Mentor: Huimin Zhao, Chemical and Biomolecular Engineering)

92. Interacting Effects of Pesticides and Pollen Nutritional Quality on Honey Bee Hypopharyngeal Gland Size**Madeleine Shapiro**, Senior, Integrative Biology, LAS

(Research Mentors: Ashely St. Clair, Department of Entomology & Adam Dolezal, Department of Entomology)

93. Prion Protein (PRNP) Gene's Relation between Maternal and Fetal White-tailed Deer (WTD)

YiYing Tung, Senior, Natural Resources and Environmental Sciences, ACES

(Research Mentors: Nohra Mateus-Pinilla, Prairie Research Institute & Jan Novakofski, Department of Animal Sciences)

94. Purification and Quantification of Recombinant CNF-like Protein Toxins from *E. coli*

James Lopez, Senior, Molecular and Cellular Biology, LAS

(Research Mentors: Brenda Wilson, Department of Microbiology & Mengfei Ho, Department of Microbiology)

95. Reaction-Based Carbon Sequestration Through Fluid Circulation in Ocean Basalts

Chloe Marks, Junior, Geology, LAS

(Research Mentor: Craig Lundstrom, Department of Geology)

96. Body Shape Evolution and Morphological Variation in North American Minnows

Emma Grassi, Junior, Interdisciplinary Health Sciences, AHS

(Research Mentor: Milton Tan, Illinois Natural History Survey)

97. Social and Ecological Drivers of Behaviors that Prevent Aquatic Invasive Species Transport

Alison Siever, Junior, Natural Resources and Environmental Sciences, ACES

(Research Mentors: Carena van Riper, Department of Natural Resources & Environmental Sciences & Elizabeth Golebie, Department of Natural Resources & Environmental Sciences)

98. Testing microRNA Mediation of Queen Mandibular Pheromone Effects on Lipid Levels in the Western Honey Bee, *Apis mellifera*

Laura Kilikevicius, Senior, Molecular and Cellular Biology, LAS

(Research Mentors: Sarai Stuart, Program in Ecology, Evolution, and Conservation Biology & Gene Robinson, Department of Entomology)

99. The Effects of Flooding on the Growth and Performance of the Fall Armyworm, *Spodoptera frugiperda*

Mackenzie Larsen, Senior, Integrative Biology, LAS

Raelin Mamaril, Senior, Integrative Biology, LAS
(Research Mentor: Esther Ngumbi, Department of Entomology)

100. The Role of Interactor Proteins in Mimicking the Effects of Serendipity- α Knockdown in *Drosophila melanogaster*

Leeza Turchin, Junior, Integrative Biology, LAS

Matthew Kim, Junior, Molecular and Cellular Biology, LAS
(Research Mentor: Natalie Biel, Department of Developmental Biology)

101. Mesocarnivore Detections in Relation to Spatial, Temporal, and Fish Variation Along Riparian Corridors

Lauren Brunk, Junior, Natural Resources and Environmental Sciences, ACES

(Research Mentor: Jinelle Sperry, Department of Natural Resources and Environmental Sciences)

102. "Turbulence Training": the Effects of Repeated Exposure to Turbulent Flow on the Swimming Performance of Hatchery-Reared Rainbow Trout

Hannah Grace Marti, Freshman, Earth, Society and Environmental Sustainability, LAS

(Research Mentor: Katherine Straley, Program in Ecology, Evolution, and Conservation Biology)

103. Analysis of Soil Microbiome over Past 100 Years and the Effects of Modern Agriculture

Samantha Contreras, Senior, Molecular and Cellular Biology, LAS

Disha Parikh, Sophomore, Bioengineering, ENG
(Research Mentor: Alonso Favela, Department of Natural Resources & Environmental Sciences)

104. Susceptibility of Pumpkin and Squash Plants to Bacterial Spot and Bacterial Wilt Diseases

Mirai Inaoka, Junior, Crop Sciences, ACES

(Research Mentor: Sarah Hind, Department of Crop Sciences)

105. Uncovering Host-Pathogen Interactions that reveal Genetic Variability and Evolutionary History

Riya Patel, Freshman, Molecular and Cellular Biology, LAS

(Research Mentor: Valeria Trivellone, Prairie Research Institute)

PI Session - Science and Technology

1:30 – 2:45 PM, Illini Room A

1. A Cost-Efficient, Multi-Ink Pneumatic Based Bioprinter

Nathan Chung, Junior, Bioengineering, ENG

(Research Mentors: Pei-Hsuan Hsieh, Department of Bioengineering & Yamuna Phal, Department of Electrical and Computer Engineering)

2. Biomaterial-Based Tumor Models to Analyze the Role of Glioma Extracellular Matrix in Therapeutic Efficacy

Edward Neves, Senior, Chemical Engineering, LAS

(Research Mentor: Sara Pedron Haba, Department of Chemical and Biomolecular Engineering)

3. Characterization of Novel Phages Infecting *Staphylococcus* and *Streptococcus* Species

Tom Akin-Olabiyi, Junior, Molecular and Cellular Biology, LAS

(Research Mentor: Asma Hatoum-Aslan, Department of Microbiology)

4. Development and Analysis of Machine Learning For Heavy-Ion Reaction Plane Measurement in the LHC

Aryan Vaidya, Sophomore, Physics, LAS

(Research Mentors: Matthias Grosse Perdekamp, Department of Physics & Riccardo Longo, Department of Physics)

5. Effects of Spatter and Gas Flow in Additive Manufacturing Processes

Kevin Danner, Junior, Civil and Environmental Engineering, ENG

(Research Mentors: Jinhui Yan, Department of Civil and Environmental Engineering & Qiming Zhu, Department of Civil and Environmental Engineering)

6. Genome-Targeting Pathogen Promotes Loss of Intestinal Barrier Function Through DNA Damage Response

Olivia Rodriguez, Junior, Biochemistry, LAS
(Research Mentors: Molly Crowder, Department of Microbiology & Steven Blanke, Department of Microbiology)

7. High-Precision Compliant Mechanism for Scanning Electrochemical Microscopy

Nikita Lukhanin, Junior, Mechanical Engineering, ENG
(Research Mentors: Charles Schroeder, Department of Chemical and Biomolecular Engineering & Joaquín Rodríguez-López, Department of Chemistry)

8. Investigating BLM Helicase Functions in Meiosis by Using a BLM Inhibitor (ML216)

Erica Joo, Junior, Molecular and Cellular Biology, LAS
(Research Mentor: Joe (Huanyu) Qiao, Comparative Biosciences)

9. Looking for Dopamine: in vivo Method of Neurotransmitter Detection Using Modified Carbon-Fiber Microelectrodes

Roy Zhou, Sophomore, Bioengineering, ENG
(Research Mentor: Mei Shen, Department of Chemistry)

10. Modulation of Structural Parameters of Mineralized Collagen Scaffolds in Order to Drive Macrophage Polarization Towards an M2 Phenotype

Jared Buabeng, Sophomore, Chemical Engineering, LAS
(Research Mentor: Aliko Kolliopoulos, Department of Chemical and Biomolecular Engineering)

11. Optimization of Total Peptide Assays for Analysis of Small Sample

Aniket Joglekar, Freshman, Molecular and Cellular Biology, LAS
(Research Mentors: Elena Romanova, Department of Chemistry & Jonathan Sweedler, Department of Chemistry)

12. Programmable and Automated Shape Controlled Synthesis of Bottlebrush Polymers

David Yang, Senior, Chemical Engineering, LAS
(Research Mentors: Damien Guironnet, Department of Chemical and Biomolecular Engineering & Yash Kamble, Department of Chemical and Biomolecular Engineering)

13. Switching Frontal Polymerization Methods: FROMP and FRaP

Parmeet Kaur, Sophomore, Chemistry, LAS
(Research Mentor: Jacob Lessard, Department of Chemistry)

14. Synthesis of Regioregular Poly(allenamer)s via Ring-Opening Allene Metathesis Polymerization of Substituted Cyclic Allenes

Megan Murphy, Junior, Chemistry, LAS
(Research Mentors: William Neary, Department of Chemistry & Jeffrey Moore, Department of Chemistry)

15. The Effects of Di(2-Ethylhexyl) Phthalate (DEHP) Exposure on the Uterus of Mice With Endometriosis

Sandra Stasiak, Senior, Biochemistry, LAS
(Research Mentor: Romana Nowak, Department of Animal Sciences)

16. The Effects of Maternal IL-17A Levels on Offspring Cortical Development in a Germ-Free Mice Model

Neil Doherty, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Adrienne Antonson, Department of Animal Sciences & Selena Wang, Department of Animal Sciences)

17. Vector Borne Pathogen and Phytoplasma Transmission

Patrick Mojsa, Freshman, Undeclared, DGS
(Research Mentor: Valeria Trivellone, Prairie Research Institute)

18. Postoperative Cognitive Dysfunction in Aged Mice: Creating a Model Brain

Santino Martinez, Sophomore, Undeclared, DGS
(Research Mentor: Rajasekar Nagarajan, Comparative Biosciences)

19. Comparing Formally Verified Primality Tests in the Digital Age of Mathematics

Sean Golinski, Senior, Physics, LAS
(Research Mentor: Bolton Bailey, Department of Computer Science)

PJ Session - Health and Wellness

1:30 – 2:45 PM, Illini Room A

25. Analyzing Life Experiences Through Oral History Methods

Vivian La, Sophomore, Journalism, COM
(Research Mentor: Sana Saboowala, Program in Ecology, Evolution, & Conservation Biology)

26. Analyzing Substance Use Amongst Black/African American Youth in Illinois

Aalishba Ahmad, Senior, Community Health, AHS
(Research Mentor: Crystal Reinhart, School of Social Work)

27. Assessing the Potential of Voice-Activated Digital Home Assistants for Older Adults with Mobility Disability

Husna Hussaini, Sophomore, Sociology, LAS
(Research Mentor: Kenneth Blocker, Department of Educational Psychology)

28. Associations between Maternal Questions During Shared Storybook Reading and Child Expressive Language in School-Age Children with Down Syndrome

Nadia Hernandez, Senior, Speech and Hearing Science, AHS
(Research Mentors: Marie Moore Channell, Department of Speech & Hearing Science & Rebekah Bosley, Department of Speech & Hearing Science)

29. Brain-Lung Network Disconnection in Cryptococcus-associated Immune Reconstitution Inflammatory Syndrome

Yuzuki Ishikawa, Junior, Keio University
(Research Mentor: Makoto Inoue, Department of Comparative Biosciences)

30. Changes in Gene Expression of ER+ Breast Cancer Tumors in Response to Palbociclib and NAMPT Inhibitor Combination Therapy
Maya Miriyala, Sophomore, Bioengineering, ENG
(Research Mentors: Zeynep Madak-Erdogan, Department of Food Science and Human Nutrition & Ayca Nazil Mogol, Department of Food Science and Human Nutrition)

31. Dietary Sodium-Restriction and Renal Meals for Hemodialysis (DISARM-HD) Study
Micheala Leahy, Junior, Molecular and Cellular Biology, LAS
(Research Mentors: Kenneth Wilund, Department of Kinesiology and Community Health & Shu Kwan, Division of Nutritional Sciences)

32. Do Diet, Physical Activity, and Aerobic Fitness Relate to Academic Performance in Preschool-Aged Children?
Diana Morales, Senior, Speech and Hearing Science, AHS
Sarah Kravitz, Senior, Human Development and Family Studies, ACES
(Research Mentor: Shelby Key, Department of Kinesiology and Community Health & Arden McMath, Division of Nutritional Sciences)

33. Estrogen Receptor Beta 1: a Potential Therapeutic Target for Triple Negative Breast Cancers
Alexander Wang, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Benita Katzenellenbogen, Department of Molecular and Integrative Physiology)

34. Lombard Effect and Speech Intelligibility by Frequency
Corrie Penrod, Freshman, Speech and Hearing Science, AHS
Anna Latham, Freshman, Interdisciplinary Health Sciences, AHS
(Research Mentors: Pasquale Bottalico, Department of Speech and Hearing Science & Silvia Murgia, Department of Speech and Hearing Science)

35. Metabolomic Analysis of NAMPT Inhibitor Combined with Fulvestrant Therapy in Estrogen Receptor Positive Breast Cancer
Alanna Kaminsky, Junior, Food Science and Human Nutrition, ACES
(Research Mentors: Zeynep Madak-Erdogan, Department of Food Science and Human Nutrition & Ayca Nazli Mogol, Division of Nutritional Science)

36. Optimizing Video-technology for Social Engagement in Care Partners of Persons with Dementia
Sarah Jones, Senior, Speech and Hearing Science, AHS
(Research Mentors: Raksha Mudar, Department of Speech and Hearing Science & George Mois, Department of Kinesiology and Community Health)

37. Postnatal Maternal Anxiety and Depression as Joint Predictors of Mothers' Responsiveness to Infant Distress in the Home Environment
Olivia Clausius, Senior, Human Development and Family Studies, ACES
Emma Jacobs, Senior, Human Development and Family Studies, ACES
(Research Mentor: Nancy McElwain, Department of Human Development and Family Studies)

38. Quantifying Physiopathological Changes in Mouse Models Due to Multiple Sclerosis and Concomitant Flu Insults
Yasmine Khan, Freshman, Bioengineering, ENG
Ziyin Wang, Freshman, Bioengineering, ENG
(Research Mentor: Jorge Maldonado DeJesus, Neuroscience Program)

39. The Cholesterol Metabolite, 27-Hydroxycholesterol, Promotes M2-like Macrophage Phenotype and Differentially Regulates Liver-X Receptor in Myeloid Cells
Srishti Tiwari, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Erik Nelson, Department of Molecular and Integrative Physiology)

40. The Effect of Vertical Transmission of Maternal Influenza A Vaccination Status on Neonatal Brain Development in Swine
Ana Tziortzis, Senior, Animal Sciences, ACES
(Research Mentors: Adrienne Antonson, Department of Animal Sciences & Meghan Connolly, Neuroscience Program)

41. The Impact of Subchronic Exposure to Iodoacetic Acid on the Colon of Adult Female Mice
Justin Chiu, Sophomore, Animal Sciences, ACES
(Research Mentor: Jodi Flaws, Department of Comparative Biosciences)

42. Using Adaptive Filters and Combining Different Sound Sources to Make Hearing in Different Circumstances a More 'Real' Experience
Mankeerat Sidhu, Freshman, Computer Engineering, ENG
(Research Mentor: Ryan M. Corey, Department of Electrical and Computer Engineering)

43. Diet Choices & Sweet Taste Perception Among Habitual and Non-Habitual Consumers of Low-Calorie Sweeteners
Ayah Albareedi, Senior, Political Science, LAS
(Research Mentors: Clara Salame, Department of Food Science and Human Nutrition & Yanina Pepino, Department of Food Science and Human Nutrition)

44. An Analysis of Estimated Energy Expenditure Through Physical Activity in Hemodialysis Patients
Ritika Patel, Junior, Psychology, LAS
(Research Mentors: Kenneth Wilund, Department of Kinesiology and Community Health & Alexis King, Department of Kinesiology and Community Health)

PK Session - Social Science and Behavior

1:30 – 2:45 PM, Illini Room C

51. An Investigation into the Connections Between Sadness and Trust in Political Entities
Larry Peng, Sophomore, Computer Science and Economics, LAS
(Research Mentor: James Steur, Department of Political Science)

52. An Investigation of Music-Elicited Chills and Their Acoustic Elicitors in Vocal Music
Richard He, Senior, Music, FAA
(Research Mentor: Pasquale Bottalico, Department of Speech and Hearing Science)

53. An Objective Argument for Paternalism: Protection from Wrong Ends
Alice Lee, Senior, Political Science, LAS
(Research Mentor: Benjamin Miller, Department of Political Science)

54. Attachment and the Timing of Trauma

Moriah Zumdahl, Senior, Psychology, LAS
(Research Mentor: R. Chris Fraley, Department of Psychology)

55. Deplatforming the Alt-Right: a Study of Hate Speech and Twitter Bans

Malia Sayad, Senior, Political Science, LAS
(Research Mentor: Nicholas Grossman, Department of Political Science)

56. Disparities by Gender in Self and Peer Review Scores

Melissa Chen, Senior, Computer Science, ENG
(Research Mentor: Brian Bailey, Department of Computer Science & Wendy Shi, Department of Computer Science)

57. Does Political Ideology Relate to Evaluations of Jury Decision-Making?

Kaitlin Ratcliff, Senior, Psychology, LAS
(Research Mentors: Chadly Stern, Department of Psychology & Julia Spielmann, Department of Psychology)

58. How Does Background Noise Affect Speakers' Ability to Use Voice Therapy Techniques

MariaElena Kouriabalis, Senior, Speech and Hearing Science, AHS
Natalie Hart, Junior, Speech and Hearing Science, AHS
(Research Mentor: Keiko Ishikawa, Department of Speech and Hearing Science)

59. Impact of Immigration and Trauma on the Expression of Schizotypy in First- and Second-Generation Immigrants

Daniella Di Stefano, Senior, Psychology, LAS
(Research Mentors: Thomas Kwapi, Department of Psychology & Mahogany Monette, Department of Psychology)

60. Impacts of Resources on the Outcomes of Research

Natalie Hanlon, Senior, Communication, LAS
(Research Mentor: Luisa Ruge-Jones, Department of Communication)

61. Influence of Bilingual Extracurricular Mentorship in STEM

Paola Beltran Gutierrez, Junior, Agricultural Leadership, Education, and Communications, ACES
(Research Mentor: Amy Leman, Department of Human Development & Family Studies)

62. Interactive Effects of Parental Responses to Youth Positive Affect and Youth Depressive Symptoms on Adolescent Subjective Positive Affect in Daily Life

Larysa Brandys, Senior, Psychology, LAS
(Research Mentors: Benjamin Hankin, Department of Psychology & Julianne Griffith, Department of Psychology)

63. Interactive Effects of Parent-Child Conflict and Youth Social Anxiety Symptoms in Predicting Youth Real-Life Coping

Caley Lane, Senior, Psychology, LAS
(Research Mentors: Benjamin Hankin, Department of Psychology & Julianne Griffith, Department of Psychology)

64. Investigating the Influence of Parenting Styles on Children's Online Language Intensity in the Context of Celebrity Worship: Emotion Regulation as a Mediator

Sherry Zhang, Senior, Media and Cinema Studies, COM
(Research Mentor: Chen Chen, Department of Advertising)

65. Patterns of Influence: How Governments Utilize Minority Targeting Propaganda Campaigns

Benjamin Nathan, Senior, Political Science, LAS
(Research Mentor: Alyssa Prorok, Department of Political Science)

66. Potential Methods to Identify Politicization in Coverage of the Opioid Crisis

Jefferson Mathews, Junior, Statistics, LAS
(Research Mentor: Jodi Schneider, School of Information Sciences)

67. Sitting Pretty: a Tactical Urbanist's Exploration of Public Seating Attraction

Alastair Merrett, Senior, Sustainable Design, FAA
(Research Mentor: Eric Benson, School of Art & Design)

68. Title IX Privacy and Transparency

Shriya Srikanth, Sophomore, Information Sciences, SIS
(Research Mentor: Madelyn Sanfilippo, School of Information Sciences)

69. Personality Politics: a Global Evaluation of Personality Traits and Political Ideology

Nate Szczerba, Junior, Political Science, LAS
(Research Mentor: Sanghoon Kim-Leffingwell, Department of Political Science)

70. Affective Polarization in Media: How Political Commentary Shows Describe the Other Side

Matthew Lehmann, Freshman, Political Science, LAS
Maheen Sadrudin, Sophomore, Psychology, LAS
(Research Mentor: Isaiah Raynal, Department of Political Science)

71. Zero Tolerance Policies and the School-to-Prison Pipeline: the Important Role of School-Family Collaborations in Decreasing Juvenile Delinquency

Madisyn Welsh, Senior, Social Work, SSW
(Research Mentors: Rachel Garthe, School of Social Work & Shongha Kim, School of Social Work)

72. Know Thy Enemy: Exploring How Governing Parties Choose Where to Commit Pre-Election Violence

Brendon Carter, Sophomore, Agricultural and Consumer Economics, ACES
(Research Mentor: Tolgahan Dilgin, Department of Political Science)

73. An Analysis of the Design and Implementation of Educational Programs at the Anderson Art Museum

Yuna Choi, Freshman, Early Childhood Education, EDU
(Research Mentors: Stephanie Smith, Curriculum & Instruction & Sylvia Yang, Curriculum & Instruction)

PL Session - Nature Life and Environmental Change

1:30 – 2:45 PM, Illini Room South Lounge

85. *3 (Bird) Strikes and You're Out: Quantifying Bird Mortality due to Window Strikes at UIUC*

Julia Knauz, Junior, Natural Resources and Environmental Sciences, ACES

Colin Dobson, Junior, Natural Resources and Environmental Sciences, ACES

Julia Bondi, Freshman, Integrative Biology, LAS

David Edlund, Senior, Natural Resources and Environmental Sciences, ACES

Isabelle Jaquet, Senior, Natural Resources and Environmental Sciences, ACES

(Research Mentor: T.J. Benson, Department of Natural Resources and Environmental Sciences)

86. *A DNA Sequencing Strategy for Studying Novelty-seeking Behavior in White-tailed Deer (*Odocoileus virginianus*)*

Rachel Lupas, Senior, Molecular and Cellular Biology, LAS

(Research Mentors: Nohra Mateus-Pinilla, Prairie Research Institute & Jan Novakofski, Department of Animal Sciences)

87. *A New Reared Species of *Larissimus Nixon* (Hymenoptera: Braconidae), from the Yanayacu Biological Station, Ecuador*

Pomona Carrington-Hoekstra, Sophomore, Integrative Biology, LAS
(Research Mentor: James Whitfield, Department of Entomology)

88. *An Analysis of Sustainability in the Agritourism Context*

Tyler Swanson, Junior, Agricultural and Consumer Economics, ACES

(Research Mentors: Bryan Endres, Department of Agricultural & Consumer Economics & Renata Endres, Department of Recreation, Sport, and Tourism)

89. *An Investigation of Birth Size and Survival in *Daphnia dentifera**

Joshua Fisher, Senior, Integrative Biology, LAS

(Research Mentors: Patrick Wilson, Department of Evolution, Ecology, and Behavior & Carla Cáceres, Department of Evolution, Ecology, and Behavior)

90. *Stream, Soil, and Survival - An Investigation on Dissolved Oxygen in Aquatic Systems*

Eisha Peyyeti, Freshman, Computer Science, ENG

(Research Mentor: Chieh-Ying (Cindy) Chen, Department of Civil and Environmental Engineering)

92. *Comparisons Between Litter Size and Fetal Development for Chronic Wasting Disease in White-Tailed Deer*

Melanie Bergman, Senior, Animal Sciences, ACES

(Research Mentors: Nohra Mateus-Pinilla, Prairie Research Institute & Jan Novakofski, Department of Animal Sciences)

93. *Defining the Role of Acetylation in the Regulation of the Bacterial Cell Cycle*

Katarina Vrtikapa, Sophomore, Molecular and Cellular Biology, LAS

(Research Mentor: Paola Mera, Department of Molecular and Cellular Biology)

94. *Genetic Marker Assessment for Diversity in Illinois Feral Hemp*

Vanessa Soliz, Senior, Crop Sciences, ACES

(Research Mentor: Chance Riggins, Department of Crop Sciences)

95. *Investigating and Improving CRISPR-Cas9 in Heterochromatin of Mammalian Cells*

Andrew Zhang, Junior, Molecular and Cellular Biology, LAS

(Research Mentors: Huimin Zhao, Department of Chemical and Biomolecular Engineering & Che Yang, Department of Biochemistry)

96. *Investigating UIUC Undergraduate Students' Knowledge of and Responses to Severe Weather Events*

Rebekka Delaney, Senior, Atmospheric Sciences, LAS

(Research Mentors: Alicia Klees, Department of Atmospheric Sciences & Deanna Hence, Department of Atmospheric Sciences)

97. *Phenotypic Plasticity in Response to Conspecific Cues in Poison Frog Tadpoles*

Halle-Mari Santiago, Freshman, Chemistry, LAS

(Research Mentors: Lisa Surber, Department of Evolution, Ecology, and Behavior & Eva Fischer, Department of Evolution, Ecology, and Behavior)

98. *Posttranslational Modification of *Orc6* and its Activity in the Cell Cycle*

David Chen, Junior, Molecular and Cellular Biology, LAS

(Research Mentors: Supriya Prasanth, Cell and Developmental Biology & Fredy Kurniawan, Department of Cell and Developmental Biology)

99. *Relationship Between Nitrogen/CO₂ Availability and Photosynthesis on *Medicago Sativa**

Ronnica Szeto, Sophomore, Chemical Engineering, LAS

(Research Mentor: Matthew Brooks, Department of Plant Biology)

100. *Seasonal Dynamics of *Daphnia* in Freshwater Lakes*

Gabriel Kosmacher, Junior, Mathematics and Computer Science, LAS

Dillon Max, Junior, Mathematics, LAS

(Research Mentor: Zoi Rapti, Department of Mathematics)

101. *Semantic Memory*

Elizabeth Barajas, Junior, Molecular and Cellular Biology, LAS

(Research Mentor: Andrew Flores, Department of Psychology)

102. *Shadow of the Prion Protein in Chronic Wasting Disease Wild White-tailed Deer (*Odocoileus virginianus*)*

Nora Ryan, Junior, Animal Sciences, ACES

(Research Mentors: Nohra Mateus-Pinilla, Prairie Research Institute & Jan Novakofski, Department of Animal Sciences)

103. *Signatures of Molecular Evolution in the Temperate Icefish, *Champsocephalus esox**

Eliana Eng, Freshman, Integrative Biology, LAS

(Research Mentor: Julian Catchen, Department of Evolution, Ecology, and Behavior)

104. *Tissue and Microsatellite Markers Selection to Study Relatedness in Illinois White-tailed Deer*

Myra Esmail, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Nohra Mateus-Pinilla, Prairie Research Institute & Jan Novakofski, Department of Animal Sciences)

105. *Understanding Human-Bird Interactions in Champaign-Urbana*
Jessica Vestal, Sophomore, Natural Resources and Environmental Sciences, ACES

(Research Mentors: Carena van Riper, Department of Natural Resources & Environmental Sciences & Devin Goodson, Department of Natural Resources & Environmental Sciences)

106. *Using Machine Learning to Determine Changes in Green Algae Abundance in the Northern Great Plains Throughout the Holocene*

Kate O'Brien, Junior, Geology, LAS
(Research Mentor: Jessica Conroy, Department of Geology)

107. *Using Metabarcoding to Analyze Plant-Insect Interactions on Fort Hood, Texas*

Jacob Dalen, Senior, Animal Sciences, ACES
(Research Mentors: Jinelle Sperry, Department of Natural Resources and Environmental Sciences & Aron Katz, Department of Natural Resources and Environmental Sciences)

PM Session - Food Systems

3:15 – 4:30 PM, Illini Room A

1. *An Analysis of Physical Activity Levels with Hemodialysis Patients Before & After a Physical Program*

Shavan Patel, Junior, Astronomy, LAS
(Research Mentors: Kenneth Wilund, Department of Kinesiology and Community Health & Alexis King, Department of Kinesiology and Community Health)

2. *Central Illinois Intercropping*

Daniela Pope, Senior, Agricultural and Biological Engineering, ENG
(Research Mentor: Rabin Bhattarai, Department of Agricultural and Biological Engineering)

3. *Investigation of Using a 254 nm UV Lamp Against E. Coli K12 and L. Innocua*

Jonathan Poole, Senior, Food Science and Human Nutrition, ACES
(Research Mentors: Zhenhui Jin, Department of Food Science and Human Nutrition & Yi-Cheng Wang, Department of Food Science and Human Nutrition)

4. *Downregulation of Glossy15 Alters the Harvest Index in Sorghum*

Jiaying Cen, Senior, Plant Biotechnology, ACES
(Research Mentor: Stephen Moose, Department of Crop Sciences)

5. *Effects of Feeding Yellow Mealworm- and Buffalo Mealworm- Based Diets on the Body Weight, Body Composition, and Blood Metabolites of Diet-Induced Obesity Mice*

Lauren Di Stefano, Junior, Animal Sciences, ACES
(Research Mentors: Kelly Swanson, Department of Animal Sciences & Yifei Kang, Department of Animal Sciences)

6. *Effects of the Presence of Water in Feed on Temperature Stability*

Kylee Alexander, Senior, Animal Sciences, ACES
(Research Mentor: Phil Cardoso, Department of Animal Sciences)

7. *Estimated Household Food Waste Amounts and Psychosocial Drivers of Food Waste Mitigation Efforts Among Self-Identifying Conservers*

Gwendoline Balto, Senior, Food Science and Human Nutrition, ACES
(Research Mentor: Melissa Prescott, Department of Food Science & Human Nutrition)

9. *The Effect of Food and Non-Food Matrices on Antimicrobial Efficacy*

Mike O'Connell, Senior, Food Science and Human Nutrition, ACES
(Research Mentor: Cristina Resendiz-Moctezuma, Department of Food Science & Human Nutrition)

10. *The Impact of Light Conditions and Vernalization on the Growth of Winter Wheat*

Sasha Zvenigorodsky, Junior, Crop Sciences, ACES
(Research Mentor: Jessica Rutkoski, Department of Crop Sciences)

11. *The Impact of Seaweed Extract Addition on Nitrous Oxide Emissions*

Nicole Lim, Junior, Natural Resources and Environmental Sciences, ACES
(Research Mentor: Isaac Klimasmith, Department of Natural Resources and Environmental Sciences)

12. *Tissue Specific Aggressiveness of Fusarium graminearum in Wheat and Maize*

Harrison Hall, Junior, Crop Sciences, ACES
(Research Mentor: Santiago Mideros-Mora, Department of Crop Sciences)

13. *Vulnerability of Food, Water, and Energy Resources for Sustainable Development: Stressors and Responses*

Rosemary Mascarenhas, Sophomore, Agricultural and Biological Engineering, ACES
Diego Rodriguez, Senior, Engineering Technology and Management for Agricultural Systems, ACES
(Research Mentors: Luis Rodriguez, Department of Agricultural and Biological Engineering & Michael Stablein, Department of Agricultural and Biological Engineering)

14. *Will Our Pumpkins Be Squashed?: Comparing X. cucurbitae Disease Characteristics Across Midwest Isolates*

Kayla Vittore, Senior, Crop Sciences, ACES
(Research Mentor: Sarah Hind, Department of Crop Sciences)

15. *Image-Based Feed Monitoring in Dairy Cattle*

Zoey Witruk, Sophomore, Animal Sciences, ACES
(Research Mentors: Isabella Condotta, Department of Animal Sciences & Phil Cardoso, Department of Animal Sciences)

PN Session - Health and Wellness

3:15 – 4:30 PM, Illini Room A

25. A Narrative Review of Pollutants and Regulations in Family-Based Childcare Settings

Brianna Sirdich, Sophomore, Interdisciplinary Health Sciences, AHS
Vinh Vo, Junior, Interdisciplinary Health Sciences, AHS
(Research Mentors: Rifat Binte Alam, Department of Kinesiology and Community Health & Laura Marcela Quintero, Department of Kinesiology and Community Health)

26. An Investigation into the Relationships Between Hydration Status and Working Memory

Mariah Barnett, Senior, Molecular and Cellular Biology, LAS
Kaitlyn Andrey, Graduated December 2021, Molecular and Cellular Biology, LAS
(Research Mentors: Nathaniel Willis, Division of Nutritional Sciences & Shivani Sethi, Department of Kinesiology and Community Health)

27. Drawing Under the Influence: Alcohol-Induced Impairment in Hand-Eye Coordination in Women After Bariatric Surgery

Roberto Macher, Freshman, Food Science and Human Nutrition, ACES
(Research Mentor: Marta Yanina Pepino de Gruev, Department of Food Science and Human Nutrition)

28. Evaluating Phenotypic Responses of THP-1 Macrophages as a Function of Their Genome and Secretome

Megan Shamsi, Junior, Chemical Engineering, LAS
(Research Mentor: Vasiliki Kolliopoulos, Department of Chemical and Biomolecular Engineering)

29. Finish Your Plate: The Role of Vegetable Availability and Parental Feeding Practices on Picky Eating

Naomi Popoolapade, Junior, Molecular and Cellular Biology, LAS
Summer Jett, Junior, Community Health, AHS
(Research Mentors: Brenda Koester, Family Resiliency Center & Jennifer Barton, Family Resiliency Center)

30. Barriers in Daily Living Activities for Deaf Older Adults: Analysis of ACCESS Study

Maya Dye, Sophomore, Speech and Hearing Science, AHS
(Research Mentors: Megan Bayles, Department of Kinesiology and Community Health & Wendy Rogers, Department of Kinesiology and Community Health)

31. Imaging of the Endocytic/Lysosomal Pathway of Internalized QD-Labeled EGF in RAB-Transfected HeLa cells Through Fluorescence Microscopy

Sonja Gurbani, Junior, Bioengineering, ENG
(Research Mentors: Andrew Smith, Department of Bioengineering & Opeyemi Arogundade, Department of Bioengineering)

32. Impact on Anxiety-Like Behavior in Adult Female and Male Mice from Prenatal Exposure to Environmentally Relevant Phthalate Mixtures

John Salazar, Senior, Molecular and Cellular Biology, LAS
Camryn Dusold, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Megan Mahoney, Department of Comparative Biosciences & Stephanie Soriano, Department of Comparative Biosciences)

33. Investigating the Regulatory Mechanism of the Small RNA OxyS on the Expression of Cyclopropane Fatty Acid Synthase (cfa) in Escherichia coli
Bishal Baskota, Sophomore, Integrative Biology, LAS
(Research Mentor: Kristen Farley, Department of Microbiology)

34. The Effect of Intimate Partner Violence on Physical Health Among Separating Mothers

Hannah Chen, Junior, Human Development and Family Studies, ACES
Madelyn Bird, Junior, Human Development and Family Studies, ACES
(Research Mentors: Tani Akinbode, Department of Human Development and Family Studies & So Young Park, Department of Human Development and Family Studies)

35. The Effects of a Novel Emotion-Regulation Training Program on Cognitive Control and Resilience

Yagna Reddy, Junior, Psychology, LAS
(Research Mentors: Florin Dolcos, Department of Psychology & Kelly Hohl, Department of Psychology)

36. The Effects of an Individualized Physical Activity Program in Hemodialysis Patients

Beatrice Benavent, Sophomore, Kinesiology, AHS
Sophia Melton, Senior, Molecular and Cellular Biology, LAS
(Research Mentors: Alexis King, Department of Kinesiology and Community Health & Ken Wilund, Department of Kinesiology and Community Health)

37. The Effects of Cholesterol on Diving Mammal Lung Surfactant Models

Simon Grimm, Junior, Materials Science and Engineering, ENG
(Research Mentors: Cecilia Leal, Department of Materials Science and Engineering & Marilyn Porras-Gomez, Department of Materials Science and Engineering)

38. The Effects of Fiber Intake and Exercise on the Gut Microbiome and Human Health

Bea Alicante, Senior, Food Science and Human Nutrition, ACES
(Research Mentor: Riley Hughes, Department of Food Science & Human Nutrition)

39. The Importance of Manuals in Supporting Technology Use in Older Adults

Eldrick Surheyao, Sophomore, Interdisciplinary Health Sciences, AHS
(Research Mentors: Wendy Rogers, Kinesiology and Community Health & Renato Azevedo, Kinesiology and Community Health)

40. The Mediterranean and Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) Diets: Associations with Cognition and Psychological Distress Among Latinos

Diana Morales, Senior, Speech and Hearing Science, AHS
(Research Mentor: Susan Aguiñaga, Department of Kinesiology and Community Health)

41. The Modulation of Actin Dynamics and Assembly by CD2-Associated Protein

Rithva Ramesh, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: William M. Brieher, Department of Cell and Developmental Biology)

42. To Establish an In-Vitro Contraceptive and Anti-cancer Drug Screening System by Synchronizing Spermatogenesis and BrdU Incorporation
Zhengde Liu, Junior, Molecular and Cellular Biology, LAS
 (Research Mentors: Huanyu Qiao, Department of Comparative Biosciences & Jianan Feng, Department of Comparative Biosciences)

43. Phenotyping General Health and Sensorimotor Abilities in Mice with Maternal and Paternal Heterozygous Null Alleles of Noncanonically Imprinted Dopa Decarboxylase Gene
Moudar Dweydari, Sophomore, Kinesiology, AHS
 (Research Mentors: Paul Bonthuis, Department of Comparative Biosciences & Erin O'Leary, Department of Comparative Biosciences)

44. Investigating the Effect of Mineralized Collagen Scaffolds on the Immunomodulatory Capacity of Human Mesenchymal Stem Cells
Maxwell Polanek, Junior, Chemical Engineering, LAS
 (Research Mentor: Aliko Kolliopoulos, Department of Chemical and Biomolecular Engineering)

45. Effect of Prenatal Maternal Stress on Mindful Parenting
Emma Donnini, University High School
 (Research Mentors: Katherine Haigler, Department of Psychology & Heidemarie Laurent, Department of Psychology)



PO Session - Social Science and Behavior

3:15 – 4:30 PM, Illini Room C

50. A Modified Integrative Literature Review on the Barriers to Mammography Screening in Black Women Living in Rural Areas
Jenny Yang, Senior, Nursing, NUR
 (Research Mentor: Teresa Krassa, Department of Biobehavioral Nursing Science)

51. A Social Cocktail: Friends, Alcohol, and Drinking Problems
Rashmi Ghonasgi, Senior, Psychology, LAS
 (Research Mentor: Catherine Fairbairn, Department of Psychology)

52. Advantages & Disadvantages of Working from Home for Hispanic & Whites During the COVID-19 Pandemic
Laura Perez, Junior, Community Health, AHS
Susie Lopez, Senior, Human Development and Family Studies, ACES
 (Research Mentors: Karen Kramer, Department of Human Development and Family Studies & Hayoung Choi, Department of Human Development and Family Studies)

53. Devaluation of Androgyny in Artificial Intelligence
Taniya Boone, Freshman, Undeclared, DGS
 (Research Mentor: Julia Spielmann, Department of Psychology)

54. An Investigation on the Influence of Age and Race on the Relationship Between SEB Skills and Activism
Indya Grant, Senior, Human Development and Family Studies, ACES
 (Research Mentor: Madison Sewell, Department of Educational Psychology)

55. Association Between Family Stress and Depressive Symptoms: The Role of Emotional Clarity
Cheyenne Petersen, Senior, Psychology, LAS
 (Research Mentors: Karen Rudolph, Department of Psychology & Haley Skymba, Department of Psychology)

56. Behavior Management Training for Teachers in the Induction Phase
Aleksandra Guzy, Senior, Community Health, AHS
Talitha Akoto, Freshman, Community Health, AHS
 (Research Mentor: Stacy McGuire, Department of Special Education)

57. Black Mothers Matter
Alina Yamin, Junior, Gender and Women's Studies, LAS
 (Research Mentor: Emma Velez, Department of Gender and Women's Studies)

58. Collaboration: a Common Goal of BCBAs and OTs to Support Children with Special Needs
Brynn Leiter, Senior, Human Development and Family Studies, ACES
 (Research Mentor: Cheryl Light Shriner, Department of Special Education)

59. Examining the Effectiveness Related to Knowledge, Advocacy, and Empowerment of the ASISTIR program for Latinx Parents of Youth With ASD

Emily Leon, Sophomore, Speech and Hearing Science, AHS
(Research Mentor: Janeth Aleman-Tovar, Department of Special Education)

60. How Context Influences Language Learning

Andrew McCarthy, Senior, Psychology, LAS
(Research Mentor: Andrew Flores, Department of Psychology)

61. Identifying Topics in COVID-19 News Articles

Neha Mathew, Junior, Computer Science and Linguistics, LAS
(Research Mentor: Jodi Schneider, School of Information Sciences)

62. Men in Early Childhood Care and Education. Should We Be Concerned?

Alia Alicea, Senior, Human Development and Family Studies, ACES
(Research Mentor: Brent McBride, Department of Human Development & Family Studies)

63. Parent Advice-Seeking and Coping Strategies: Implications for Youth Mental Health During COVID-19

Jacqueline Quintana, Senior, Human Development and Family Studies, ACES
Saira Gonzalez, Senior, Human Development and Family Studies, ACES
(Research Mentors: Kelly M. Tu, Department of Human Development and Family Studies, Xiaomei Li, Department of Human Development and Family Studies & Gyuri Kim, Department of Human Development and Family Studies)

64. Need Satisfaction and Emotions

Shuo Yan, Senior, Psychology, LAS
(Research Mentor: Howard Berenbaum, Department of Psychology)

65. Self-Control Makes the Man, but What Makes Self-Control: Inaction in a COVID-19 World

Melody Leung, Senior, Psychology, LAS
(Research Mentors: Wenhao Dai, Department of Psychology & Dolores Albarracin, Department of Psychology)

66. Short- and Long-Term Voice Familiarization Improves Children's Speech-in-Noise Recognition

Isabella Lau, Freshman, Speech and Hearing Science, AHS
Zainab Yusuff-Akinbo, Junior, Speech and Hearing Science, AHS
Amber Dorn, Junior, Speech and Hearing Science, AHS
(Research Mentor: Mary Flaherty, Department of Speech and Hearing Science)

67. The Influence of Relatedness on Relative Clause Production

Tingyan Liu, Senior, Psychology, LAS
(Research Mentors: Jacqueline Erens, Department of Psychology & Jessica Montag, Department of Psychology)

68. The Role of Text Exposure on Language Comprehension

Alyssa Choi, Senior, Psychology, LAS
(Research Mentors: Anastasia Stoops, Department of Psychology & Jessica Montag, Department of Psychology)

69. Theories of the Criminal Legal System

Alina Loewenstein, Freshman, Psychology, LAS
Yitong Wang, Junior, Psychology, LAS
(Research Mentor: Allison A. Carrington, School of Social Work)

70. Transparency in Product Design: from Design Intention to Consumer Satisfaction

Vidhi Sikaria, Sophomore, Industrial Design, FAA
(Research Mentor: Susmita Das, Institute of Communications Research)

71. Indigenous Alcohols vs. Colonial Interests: the Role of Recogimientos de mujeres in Protecting Spanish Dominance in Late Colonial Mexico

Sid Bhushan, Freshman, Computer Science and Linguistics, LAS
(Research Mentor: Megan Gargiulo, Department of Spanish and Portuguese)

72. Examining Linear Separability Effect in Color Space

Yinuo Peng, Senior, Psychology, LAS
(Research Mentors: Simona Buetti, Department of Psychology & Zoe (Jing) Xu, Department of Psychology)

73. A Proposed Study on Professor Work Satisfaction

Yureni Roman, Freshman, Psychology, LAS
(Research Mentor: Taiyler Rayford, Department of Educational Psychology)

PP Session - Numbers, Data, and Computation

3:15 – 4:30 PM, Illini Room South Lounge

85. A New Paradigm for Silicic Magma Chamber Storage Using Ti-In-Quartz Thermometry

Valerie Smykalov, Junior, Geology, LAS
(Research Mentor: Kalini Bruckel, Department of Geology)

86. A Simple Embedded Subgrid Model for Black Hole Accretion Disks

Ferzem Khan, Senior, Astronomy & Physics, LAS
(Research Mentor: Paul Ricker, Department of Astronomy)

87. An Investigation of Wind Tunnel and the Efficiency of the Propeller

Yu Li, Sophomore, Computer Engineering, ENG
Patrick Cunningham, Freshman, Computer Science, ENG
(Research Mentor: Yogi Patel, Department of Aerospace Engineering)

88. Analysis of Study Using MyVoice to Collect Data on Youth Caregiving Experiences and Perspectives

Eve Rubovits, Sophomore, Community Health, AHS
Anna Vanisko, Freshman, Interdisciplinary Health Sciences, AHS
Anjali Yedavalli, Freshman, Biology, LAS
(Research Mentor: Minakshi Raj, Department of Kinesiology and Community Health)

89. Applications of Radial Basis Function Interpolation for the Analysis of Polar Region Atmospheric Ion Density
Alexander Shaffer, Freshman, Engineering Physics, ENG
 (Research Mentors: Raluca Ilie, Department of Electrical and Computer Engineering & Mei-Yun Lin, Department of Electrical and Computer Engineering)

90. Using Machine Learning to Compute Fluid Dynamics Simulations
Artem Khodachuk, Sophomore, Electrical Engineering, ENG
Aakash Shah, Freshman, Aerospace Engineering, ENG
 (Research Mentor: Shantanu Shahane, Department of Mechanical Science and Engineering)

91. Distinguishing LP and HP Supercells and Their Environments
Grayson Nelson, Senior, Atmospheric Sciences, LAS
 (Research Mentor: Jeff Frame, Department of Atmospheric Sciences)

92. Dual Role of Strigolactone Receptor Signaling Partner in Inhibiting Substrate Hydrolysis
Briana Sobecks, Senior, Chemical Engineering, LAS
 (Research Mentors: Diwakar Shukla, Department of Chemical and Biomolecular Engineering & Jiming Chen, Department of Chemical and Biomolecular Engineering)

93. Hierarchical Planning with Annotated Skeleton Guidance
Ananya Yammanuru, Senior, Computer Science, ENG
 (Research Mentors: Diane Uwacu, Department of Computer Science & Nancy Amato, Department of Computer Science)

94. Improving Kinetic Impact Based Asteroid Deflection
Artem Mustaev, Junior, Aerospace Engineering, ENG
 (Research Mentors: Siegfried Eggel, Aerospace Engineering & Rahil Makadia, Department of Aerospace Engineering)

95. Investigating the Effects of MEG3 on Tame and Aggressive Behavior in Red Foxes (*Vulpes vulpes*)
Abigail Rich, Junior, Integrative Biology, LAS
 (Research Mentors: Anna Kukekova, Department of Animal Sciences & Jennifer Johnson, Department of Animal Sciences)

96. Network Analysis for Collaborations in Computer Science
Boda Song, Junior, Computer Science and Statistics, LAS
 (Research Mentor: Ibtilah Ferwana, Department of Computer Science)

97. Optimization of Catalyst Synthesis for Efficient Metal Precursor Utilization
Melissa Manetsch, Senior, Chemical Engineering, LAS
 (Research Mentors: David Flaherty, Department of Chemical and Biomolecular Engineering & Claudia Berdugo-Díaz, Department of Chemical and Biomolecular Engineering)

98. Scattering Black Hole Experiments
Healey Kogan, Sophomore, Engineering Physics, ENG
 (Research Mentor: Helvi Witek, Department of Physics)

99. The Mechanisms of Misinformation: Clustering Diffusion Networks of Low Credibility Sources by Topology
Ethan Grinberg, Sophomore, Computer Science and Advertising, COM
 (Research Mentor: Jacob Fisher, Department of Advertising)

100. Wing Design: Optimal Topology of a Spar Under Aerodynamic Loads
Nick O'Brien, Sophomore, Aerospace Engineering, ENG
 (Research Mentor: Jimmy He, Department of Mechanical Science & Engineering)

101. Predicting the Behavior of a Bubble in Ultrasound Waves
Rachel Hays, Senior, Aerospace Engineering, ENG
 (Research Mentor: Pratik Das, Aerospace Engineering)

102. Royal Colorings of Trees
Sudhit Rao, Freshman, Mathematics, LAS
 (Research Mentor: Mina Nahvi, Department of Mathematics)

103. There's (Almost) Free Lunch: NumPy on CUDA Graphs
Mit Kotak, Junior, Engineering Physics, ENG
 (Research Mentors: Kaushik Kulkarni, Department of Computer Science & Andreas Kloeckner, Department of Computer Science)

104. Who Are We Helping?
Mutmaina Adebayo, Freshman, Computer Science and Philosophy, LAS
 (Research Mentors: Camille Cob, Computer Science & Raima Mathew, Department of Computer Science)

105. Bioinformatic Discovery of Haplotypes in Genomic Regions Differentiating Populations of Red Foxes (*Vulpes vulpes*)
Anastasiya Sushkova, Junior, Biochemistry, LAS
 (Research Mentor: Anna Kukekova, Department of Animal Sciences)

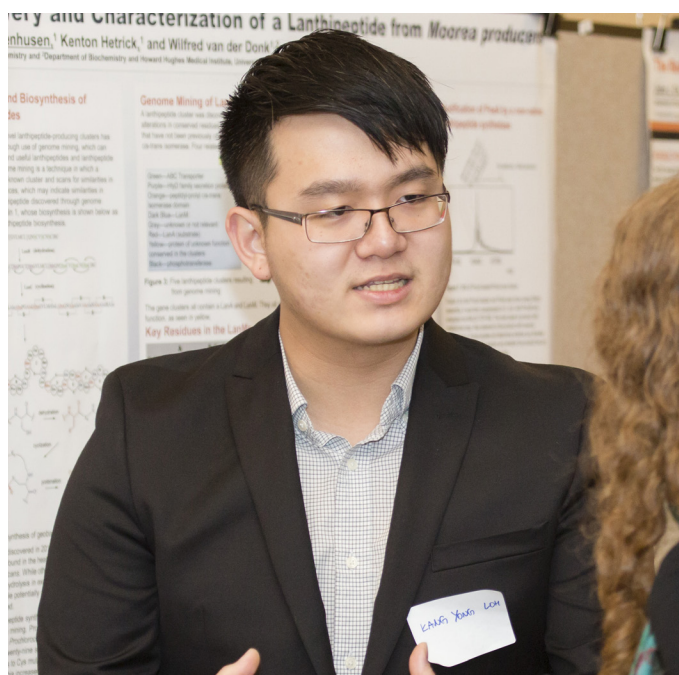


Image of Research Competition

The Image of Research is a multidisciplinary competition celebrating the diversity and breadth of undergraduate student research at the University of Illinois at Urbana-Champaign. All undergraduate students were invited to submit entries consisting of an image and brief text that articulates how the image relates to the research. The Image of Research at Illinois was inspired by the Image of Research competition at the University of Illinois at Chicago.

The 2022 competitions are supported by a gift to the Scholarly Commons from Mrs. Mardell J. O'Brien.

2022 Competition Judges

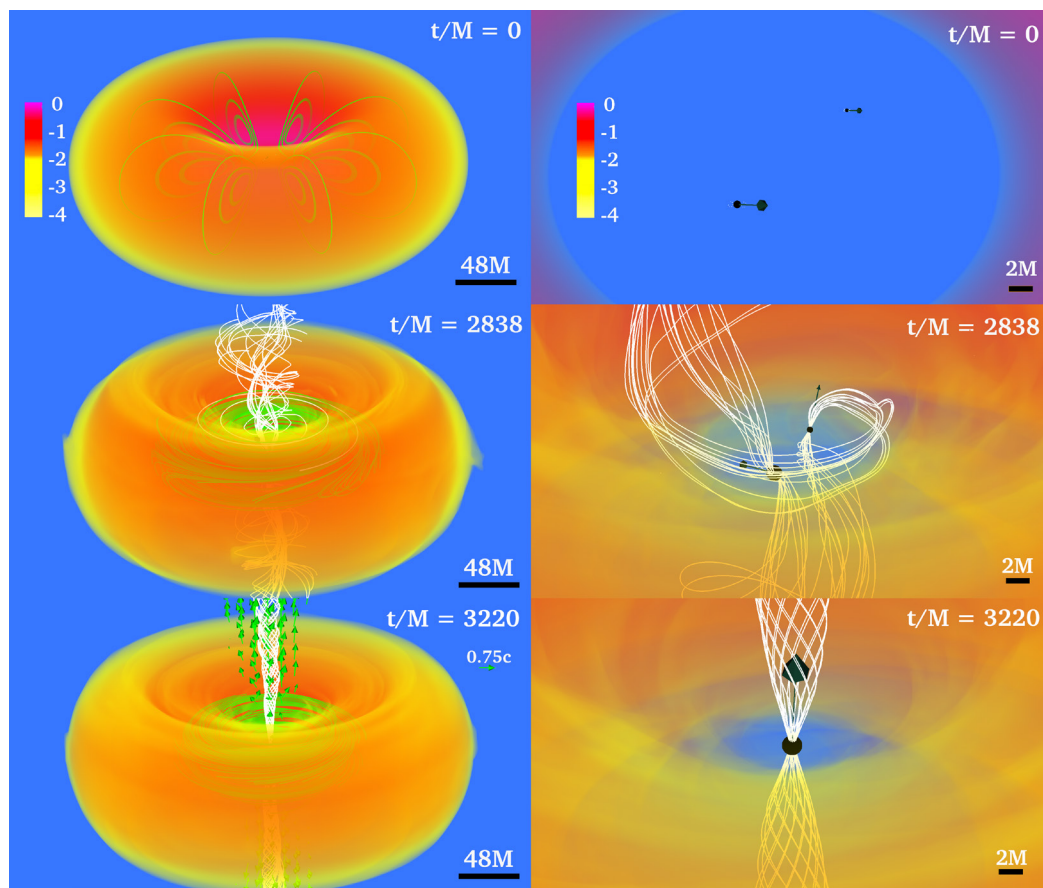
- **Sanga Sung** (Government Information Librarian)
- **Janis Shearer** (Public Services & Engagement Librarian)
- **Eric Kurt** (Media Commons Coordinator)
- **Merinda Hensley** (Digital Scholarship Liaison and Instruction Librarian)
- **Natasha Mamaril** (Associate Director for Undergraduate Research, Grainger College of Engineering)

Each image you see in this section has an accompanying narrative.
You can read the narratives that go along with each submission at:
<https://publish.illinois.edu/imageofresearch/2022-undergraduate-entries/>

1st
PLACE

3D Visualization of Binary Black Hole Merger

Mit Kotak, Junior, Engineering
Physics, ENG

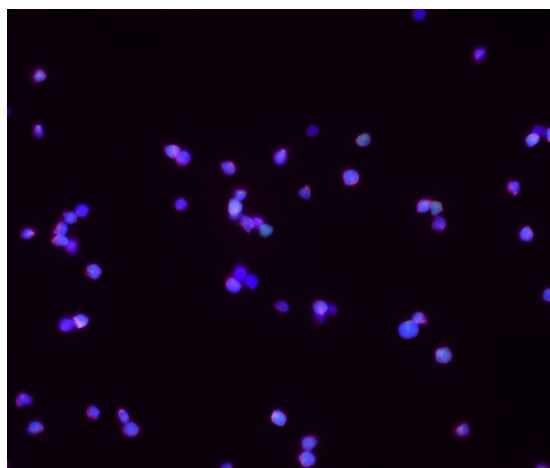


To view past entries, please visit:

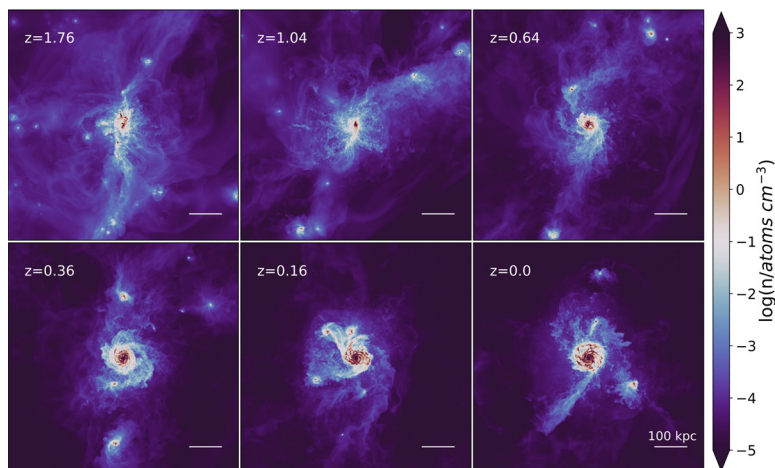
<https://publish.illinois.edu/imageofresearch/undergraduate-image-of-research/undergraduate-past-competitions/>



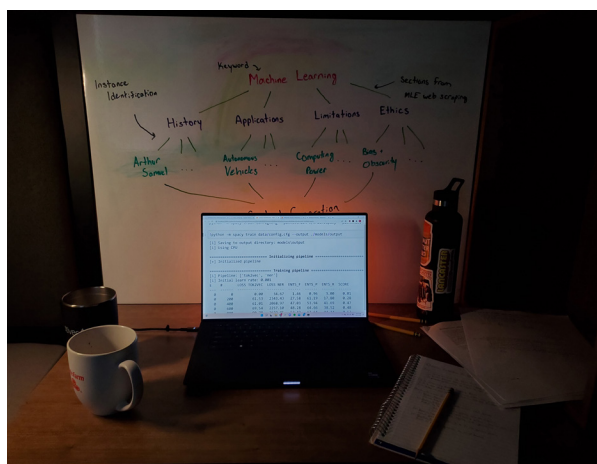
2nd PLACE **Too Cool to Cry**
Jaylon Muchison, Sophomore, Acting, FAA



honorable MENTION **Pink, Green, and the Cure to HIV**
Neha Arun, Junior, Molecular and Cellular Biology, LAS

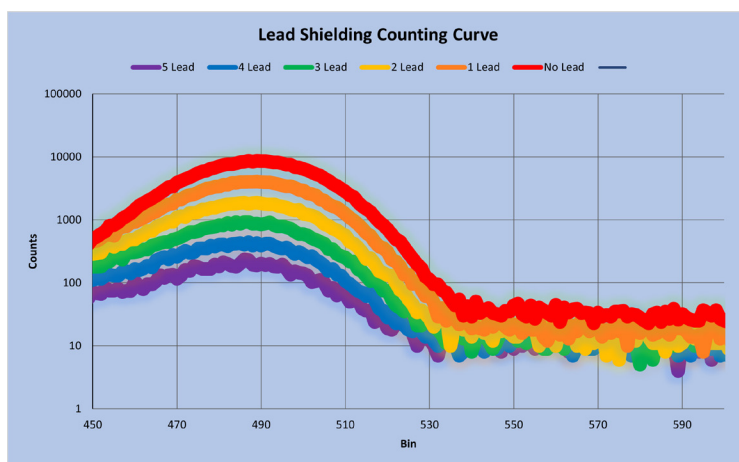


honorable MENTION **Evolution of a Milky Way-like Galaxy and its Satellite Galaxies**
Bhavya Pardasani, Junior, Astronomy, LAS



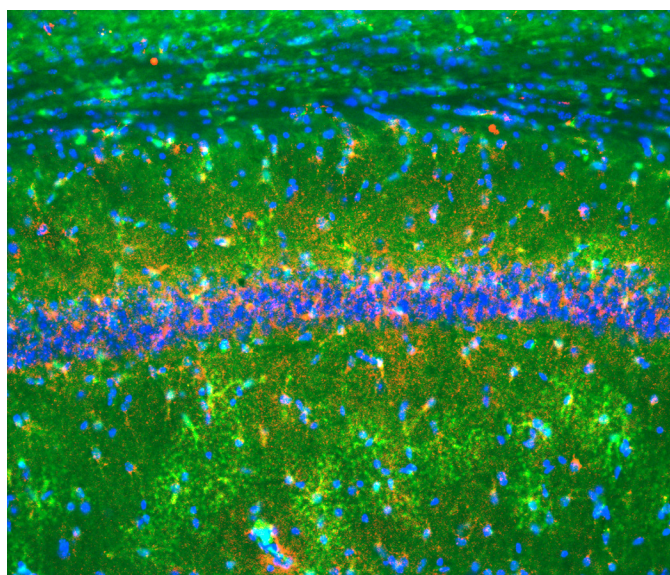
Late Nights

Nishant Balepur, Junior, Computer Science, ENG

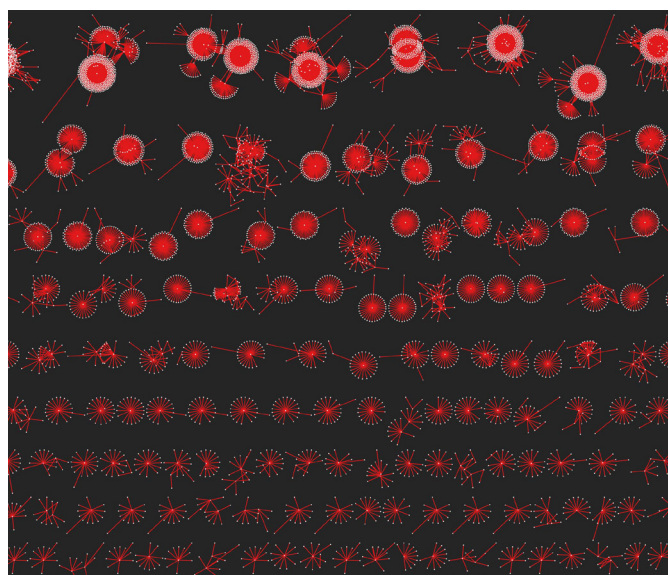


Radiation Rainbow

Matthew Koska, Junior, Nuclear, Plasma & Radiological Engineering, ENG

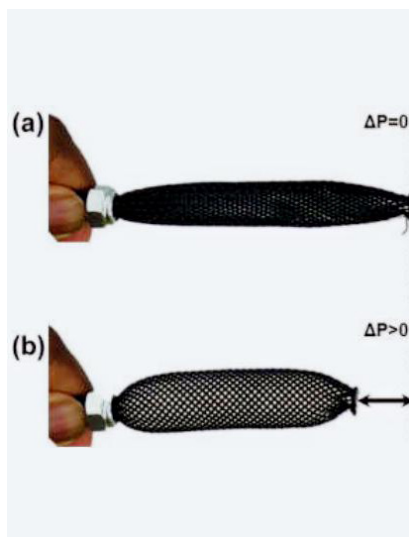


Confocal Imaging of GLDC Protein Localization in a Schizophrenia Mouse Model
Jenna Horner, Senior, Molecular and Cellular Biology, LAS



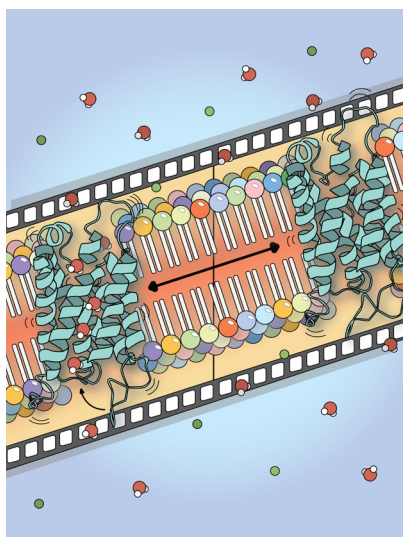
The Shape of Misinformation

Ethan Grinberg, Sophomore, Computer Science and Advertising, COM



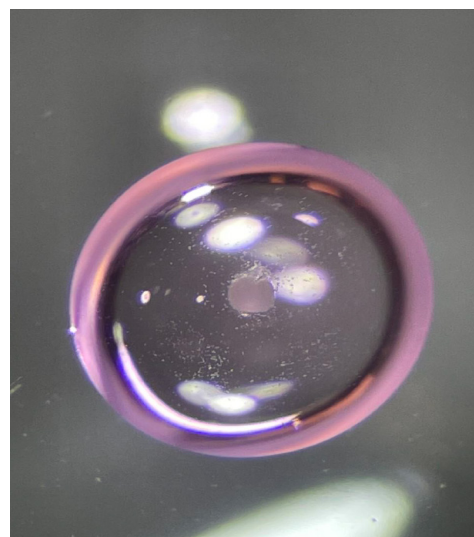
McKibbens Actuator Relaxed and Pressurized

Omolola Okesanjo, Sophomore, Electrical Engineering, ENG



Molecular Movies Reveal Cellular Gatekeeping of Water Transport Influenced by Plasma Membrane Complexity

Anh Nguyen, Senior, Chemical and Biomolecular Engineering, LAS

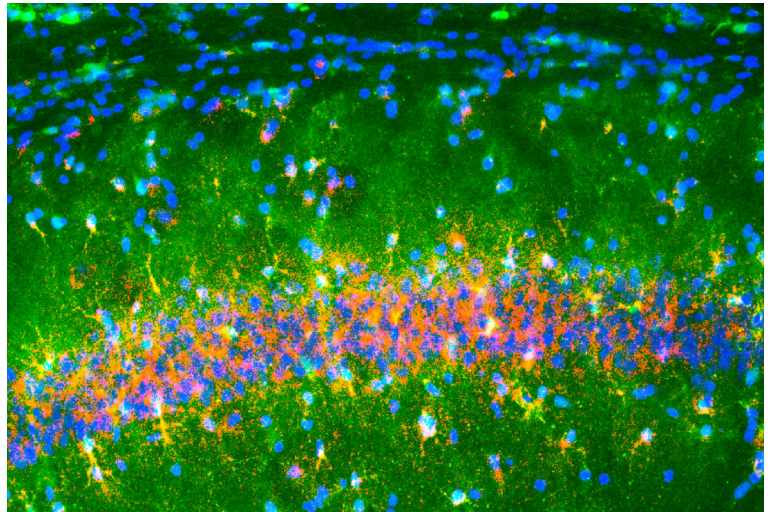


Neonatal Mouse Ovary Culture Incorporated in Cisplatin Treatment Using the Hanging Drop Method

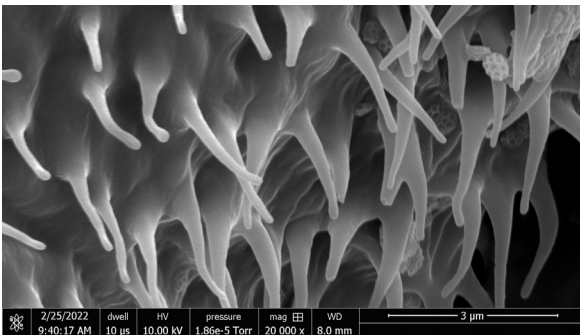
Erica Joo, Junior, Molecular and Cellular Biology, LAS



Critical Periods of Neurogenesis During Male to Female Sex Change in Clownfish
Sarah Craig, Senior, Psychology, LAS



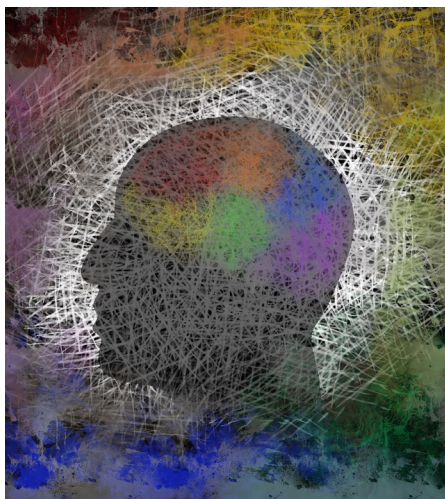
Immunofluorescence of Mouse Hippocampus- Memory and Schizophrenia
Jacob Reyes, Senior, Molecular and Cellular Biology, LAS



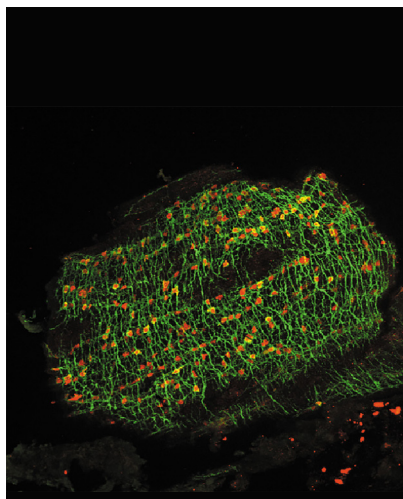
Interactions between Brochosomes and Wing Topography in Macrostelus quadrilineatus
Shreyas Rajagopalan, Junior, Integrative Biology, LAS



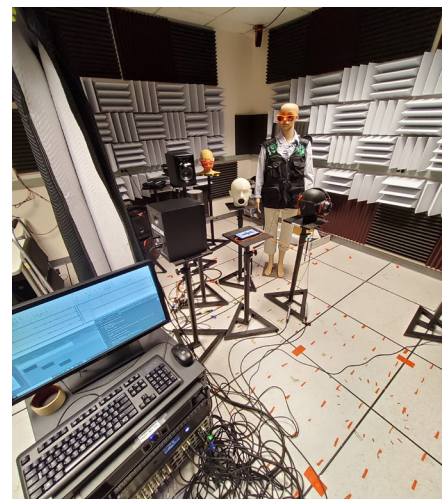
The Steward
Daniela Pope, Senior, Agricultural and Biological Engineering, ACES



Negative Internal State in the Midst of Chaos
Yoobeen Choi, Junior, Psychology, LAS



Luminescence in the Black Ocean of Brain-Gut Axis Connection
Emily Tung, Sophomore, Molecular and Cellular Biology, LAS



A Novel Approach to Make Listening a More, "Real" Experience Through Audio Signal Processing and Low-Level App Development
Mankeerat Sidhu, Freshman, Electrical and Computer Engineering, ENG

Celebrating Our Student Scholars

The Office of Undergraduate Research (OUR) is committed to supporting Illinois undergraduates in all aspects of their research endeavors. Through Conference Travel Grants and Research Support Grants, OUR offers financial support to fund students' research and creative activities across all disciplines on campus. For more information on these grants and how they may support you during your research journey, please contact OUR.

Research Support Grant (RSG)

The Research Support Grant (RSG) provides students from all disciplines with the funds necessary to conduct research or creative projects during the academic year both on and off campus (including summer terms). Awards will be up to \$2,000 and are meant to cover research travel costs, living expenses incurred during academic breaks, and materials or other ancillary costs.

For more information, please visit:

http://go.illinois.edu/OUR_RSG

FALL 2021 WINNERS:



Volatile Organic Compound Emissions in Tomato: Influence of Plant Variety and Herbivory

Erinn Dady, Senior, Earth, Society and Environmental Sustainability, LAS
(Research Mentor: Esther Ngumbi, Department of Entomology)



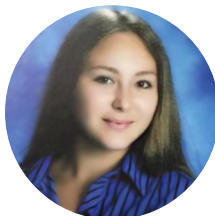
Targeted Detection of Allergen Foods in Quinoa Flour Using VNIR Hyperspectral Imaging and Machine Learning

Qianyi Wu, Junior, Department of Agriculture and Biological Engineering & Chemistry, ENG
(Research Mentor: Mohammed Kamruzzaman, Department of Agriculture and Biological Engineering)



NLRC4 Inflammasome Transcriptional Regulation by IRF8 and Brd4 via Binding to an NLRC4 Intronic Region

Maureen McCoy, Senior, Biochemistry, LAS
(Research Mentor: Lin-Feng Chen, School of Molecular and Cellular Biology)



Correlating Acculturation with Bilingualism in Spanish and Romanian Speaking Communities

Olivia Luca, Senior, Psychology & Spanish, LAS
(Research Mentor: Salvatore Callesano, Department of Spanish and Portuguese)



The Mediating Effects of Perceived Control on the Association between Meaning in Life and Stress

Di Yao, Sophomore, Music & Psychology, FAA/LAS
(Research Mentor: Sarah Ward, Department of Business Administration)



Fusion of Vertical Water Quality Profiling with Bathymetric Mapping via a Utilitarian Autonomous Surface Vehicle

Ethan Moore, Junior, Mechanical Science and Engineering, ENG
(Research Mentor: Joao Almeida de Souza Ramos, Department of Mechanical Science and Engineering)



Collapsible Phase Transforming Origami Structures Actuated by Nylon Artificial Muscles
Anan Ghrayeb, Senior, Mechanical Engineering, ENG
 (Research Mentor: Sameh Tawfik, Department of Mechanical Science and Engineering)



Advantages and Disadvantages of Controller-free Gesture-based Interactions for Mobile Augmented Reality
Jaewook Lee, Senior, Computer Science, ENG
 (Research Mentor: Alex Kirlik, Department of Computer Science)



Fabrication and Testing of Metamorphic InGaP Solar Cells
Amanda Loutris, Senior, Materials Science and Engineering, ENG
 (Research Mentor: Minjoo Lawrence Lee, Department of Electrical and Computer Engineering)

Conference Travel Grant (CTG)

The Conference Travel Grant (CTG) provides undergraduate students with awards of up to \$350 to subsidize costs associated with presenting their research posters, papers, or creative works at in-person and virtual professional conferences. This year, we proudly supported 27 students in presentations of their scholarly and creative endeavors at a wide range of in-person and virtual conferences.

For more information, please visit:

http://go.illinois.edu/OUR_CTG

FALL 2021 WINNERS:



Designing 3D Printed Micro-Actuators for Functionalized Fiber Optics
Alyssa Bradshaw, Senior, Electrical Engineering, ENG
 (Research Mentor: Holly Golecki, Department of Bioengineering)



Improving Interactivity in the Virtual Environment - A Soft-Robotic Hand Utilizing Computer Vision and Pneumatics
Phil Liang, Junior, Bioengineering, ENG
 (Research Mentor: Holly Golecki, Department of Bioengineering)



Biomimetic SERS Nanoparticles with Enhanced Dispersibility, Signal Brightness & Ligand Targeting
Jamie Jones, Senior, Bioengineering, ENG
 (Research Mentor: Indrajit Srivastava, Department of Bioengineering)



Climate Change and Women's Security in Mozambique
Sophie Luijten, Senior, Global Studies & Spanish, LAS
 (Research Mentor: Çağlayan Baser, Department of Social Sciences, New York University)



Disruption of MUC5B α Expression Leads to Chaotic Mucus Flow
Amy Lee, Junior, Bioengineering, ENG
 (Research Mentor: Steven Rowe, Departments of Medicine, Pediatrics, Cell Developmental & Integrative Physiology at The University of Alabama at Birmingham)



Comparison of Emergency Department Utilization & Throughput Between Male and Female Patients: A Retrospective Cohort Investigation
Ege Onal, Senior, Bioengineering, ENG
 (Research Mentor: Venkatesh R. Bellamkonda, Department of Emergency Medicine)

FALL 2021 WINNERS:(CONTINUED)



Designing 3D Printed Micro-Actuators for Functionalized Fiber Optics
Adia Radecka, Senior, Electrical Engineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)



Improving Interactivity During COVID19: A Soft-Robotic Hand Utilizing Computer Vision and Pneumatics
Thomas Tran, Junior, Bioengineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)



How Political Ideology Relates to Perceptions of Jury Decision-Making
Kaitlin Ratcliff, Senior, Psychology, LAS
(Research Mentors: Chadly Stern & Julia Spielmann, Department of Psychology)



Integrative Genomic Characterization of Therapeutic Targets for Pancreatic Cancer
Patrick Yu, Sophomore, Computer Science, ENG
(Research Mentor: Jimmy Guo, Harvard Medical School)



Oil column Pinch-off Controls the Oil Fraction of the Oil-coated Bubble
Amrit Singh, Senior, Mechanical Engineering, ENG
(Research Mentor: Jie Feng, Department of Mechanical Science and Engineering)

SPRING 2022 WINNERS:



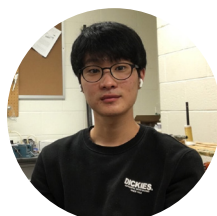
Parallel Minimum Spanning Forest Computation using Sparse Matrix Kernels
Tim Baer, Senior, Mathematics & Computer Science, LAS
(Research Mentor: Edgar Solomonik, Department of Computer Science)



SHOP: Deep Learning for near Real-Time Detection of Small Handheld Objects
Sylvia E., Sophomore, Philosophy, LAS
(Research Mentor: Ujjal Kumar Bhowmik, Department of Electrical and Computer Engineering)



SHOP: A Deep Learning-based Pipeline for near Real-Time Detection of Small Handheld Objects
Jeffrey Chang, Sophomore, Electrical Engineering, ENG
(Research Mentor: Ujjal Kumar Bhowmik, Department of Electrical & Computer Engineering)



Science AI dente: Elastocapillarity and Swelling of Cooked Pasta
Jonghyun Hwang, Senior, Mechanical Engineering, ENG
(Research Mentor: Sameh Tawfik, Mechanical Science and Engineering)



Maize Volatile Emissions Under Interacting Flooding and Herbivory
Erinn Dady, Senior, Earth, Society and Environmental Sustainability, LAS
(Research Mentor: Esther Ngumbi, Department of Entomology)



*The Tradeoff Between Free-living and Symbiotic Lifestyle Traits of *Ensifer meliloti* in Symbiosis with *Medicago truncatula**
Riley Popp, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Katy Heath, Department of Plant Biology)

SPRING 2022 WINNERS:(CONTINUED)



Scattering Black Hole Experiments
Healey Kogan, Sophomore, Engineering Physics, ENG
(Research Mentor: Helvi Witek, Department of Physics)



The Life of the Native People of Indonesia's Largest Treasure Island
Stuart Seputro, Junior, Plant Biotechnology & Actuarial Science, ACES/LAS
(Research Mentor: Marianne Jones, Department of Linguistics)



Novel Soil Bacteria that Reduce the Benefits of Legume-Rhizobium Symbiosis
James Kosmopoulos, Senior, Integrative Biology Honors, LAS
(Research Mentor: Katy Heath, Department of Plant Biology)



Online Social Support and Adolescent Well-being: A Systematic Review
Jaime Shields, Junior, Psychology, LAS
(Research Mentor: Chris Napolitano, Department of Educational Psychology)



The Effects of Flooding on the Growth and Performance of the Fall Armyworm, Spodoptera frugiperda
Raelin Mamaril, Senior, Integrative Biology, LAS
(Research Mentor: Esther Ngumbi, Department of Entomology)



Social and Ecological Drivers of Behaviors that Prevent Aquatic Invasive Species Transport
Alison Siever, Junior, Natural Resources and Environmental Sciences, ACES
(Research Mentor: Carena van Riper, Department of Natural Resources and Environmental Sciences)



Metabolic characterization of breast cancer cells and extracellular vesicles using fluorescence lifetime imaging microscopy
Elisabeth Martin, Senior, Bioengineering and Spanish, ENG/LAS
(Research Mentor: Stephen Boppart, Department of Electrical & Computer Engineering)



Design of a Textile Embedded Sensor Shirt for Posture Monitoring
Drashti Sikligar, Senior, Bioengineering, ENG
(Research Mentor: Holly Golecki, Department of Bioengineering)



VANET Authentication Protocol Secure against Relay Attacks; UAV-VANET Authentication for Real-Time Highway Surveillance; How Effective are Identification Technologies in Autonomous Driving Vehicles?
Otto Piramuthu, Senior, Computer Science, ENG
(Research Mentor: Matthew Caesar, Department of Computer Science)



Development and Analysis of Machine Learning For Heavy-Ion Reaction Plane Measurement in the LHC
Aryan Vaidya, Sophomore, Physics, LAS
(Research Mentor: Matthias Grosse Perdekamp, Department of Physics)



Let's meet in vTimeXR! Using Virtual Reality to Take Foreign Language Speaking Practice Beyond the Classroom
Savannah Sander, Senior, Psychology, LAS
(Research Mentor: Tricia Thrasher, Department of French and Italian)



The Mediating Effects of Perceived Control on the Association Between Meaning in Life and Stress
Di Yao, Sophomore, Psychology & Music, LAS/FAA
(Research Mentor: Sarah Ward, Department of Business Administration)

Undergraduate Research Apprenticeship 2022 Cohort

The Undergraduate Research Apprenticeship Program (URAP@UI) offers undergraduate students with little or no research experience the opportunity to assist advanced graduate students with their research projects. Through a one-on-one research experience with their graduate student mentor and participation in GC295-Introduction to Research, undergraduate students have the opportunity to learn what it means to do research, create knowledge, and produce scholarship.

This year, we received a record number of applications with close to 500 applicants competing for 62 available spots in the program. Below we showcase and celebrate the undergraduate scholars as well as their graduate student mentors and thank them for an outstanding semester.

More information about URAP can be found at:

<https://undergradresearch.illinois.edu/programs/urap.html>

Maher Adoni, Freshman, Molecular and Cellular Biology, LAS
(Research Mentor: Jack Dempsey, Department of Educational Psychology)

Talitha Akoto, Freshman, Community Health, AHS
(Research Mentor: Stacy N. McGuire, Department of Special Education)

Bea Alicante, Senior, Food Science and Human Nutrition, ACES
(Research Mentor: Riley Hughes, Department of Food Science and Human Nutrition)

Bishal Baskota, Sophomore, Integrative Biology, LAS
(Research Mentor: Kristen Farley, Department of Microbiology)

Sid Bhushan, Freshman, Computer Science and Linguistics, LAS
(Research Mentor: Megan Gargiulo, Department of Spanish and Portuguese)

Taniya Boone, Freshman, Undeclared, DGS
(Research Mentor: Julia Spielmann, Department of Psychology)

Jared Canty, Senior, Information Sciences, SIS
(Research Mentor: Irati Hurtado, Department of Linguistics)

Brendon Carter, Sophomore, Agricultural and Consumer Economics, ACES
(Research Mentor: Tolgahan Dilgin, Department of Political Science)

Danielle Chao, Freshman, Earth, Society and Environmental Sustainability, LAS
(Research Mentor: Kutasha Bryan-Silva, Department of Curriculum and Instruction)

Samantha Contreras, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Alonso Favela, Department of Natural Resources and Environmental Sciences)

Patrick Cunningham, Freshman, Computer Science, ENG
(Research Mentor: Yogi Patel, Department of Aerospace Engineering)

Gavin DeBrun, Junior, Engineering Physics, ENG
(Research Mentor: Troy Zaremba, Department of Atmospheric Sciences)

Arya Desai, Sophomore, Astronomy, LAS
(Research Mentor: Tony Chen, Department of Astronomy)

Manasa Donepudi, Freshman, Integrative Biology, LAS
(Research Mentor: Amanda Curtis, Program in Ecology, Evolution, and Conservation Biology)

Laura Garcia, Junior, Anthropology, LAS
(Research Mentor: Lila Ann Dodge, Department of Anthropology)

Alexandra Gergova, Sophomore, English, LAS
(Research Mentor: Luzmarina Garcia, Department of Political Science)

Sean Golinski, Senior, Physics, LAS
(Research Mentor: Bolton Bailey, Department of Computer Science)

Abby Greetis, Sophomore, English, LAS
(Research Mentor: James Steur, Department of Political Science)

Shaurya Gupta, Freshman, Economics, LAS
(Research Mentor: Wonju Lee, Department of Recreation, Sport, and Tourism)

Juliana Gurevich, Freshman, Chemical Engineering, LAS
(Research Mentor: Haiyang (Ocean) Cui, Carl R. Woese Institute for Genomic Biology)

Aleksandra Guzy, Senior, Community Health, AHS
(Research Mentor: Stacy McGuire, Department of Special Education)

Rachel Hays, Senior, Aerospace Engineering, ENG
(Research Mentor: Pratik Das, Department of Aerospace Engineering)

Sarah Holland, Sophomore, Global Studies, LAS
(Research Mentor: Nicolas Portugal, Department of French and Italian)

Artem Khodachuk, Sophomore, Electrical Engineering, ENG
(Research Mentor: Shantanu Shahane, Mechanical Science and Engineering)

Vivian La, Sophomore, Journalism, COM
(Research Mentor: Sana Saboowala, Program in Ecology, Evolution, and Conservation Biology)

Matthew Lehmann, Freshman, Political Science, LAS
(Research Mentor: Isaiah Raynal, Department of Political Science)

Emily Leon, Sophomore, Speech and Hearing Science, AHS
(Research Mentor: Janeth Aleman-Tovar, Department of Special Education)

Yu Li, Sophomore, Computer Engineering, ENG
(Research Mentor: Yogi Patel, Department of Aerospace Engineering)

Nicole Lim, Junior, Natural Resources and Environmental Sciences, ACES
(Research Mentor: Isaac Klimasmith, Department of Natural Resources and Environmental Sciences)

Alina Loewenstein, Freshman, Psychology, LAS
(Research Mentor: Allison Carrington, School of Social Work)

Hannah Grace Marti, Freshman, Earth, Society and Environmental Sustainability, LAS
(Research Mentor: Katherine Strailey, Program in Ecology, Evolution, and Conservation Biology)

Santino Martinez, Sophomore, Undeclared, DGS
(Research Mentor: Rajasekar Nagarajan, Department of Comparative Biosciences)

Patrick Mojsa, Freshman, Undeclared, DGS
(Research Mentor: Valeria Trivellone, Prairie Research Institute)

Braden Moore, Sophomore, Chemical Engineering, LAS
(Research Mentor: Javier J. García Mainieri, Department of Civil and Environmental Engineering)

Nick O'Brien, Sophomore, Aerospace Engineering, ENG
(Research Mentor: Jimmy He, Department of Mechanical Science & Engineering)

Jash Parekh, Freshman, Computer Science, ENG
(Research Mentor: Troy Zaremba, Department of Atmospheric Sciences)

Disha Parikh, Sophomore, Bioengineering, ENG
(Research Mentor: Alonso Favela, Department of Natural Resources and Environmental Sciences)

Larry Peng, Sophomore, Computer Science and Economics, LAS
(Research Mentor: James Steur, Department of Political Science)

Eisha Peyyetti, Freshman, Computer Science, ENG
(Research Mentor: Chieh-Ying (Cindy) Chen, Department of Civil and Environmental Engineering)

Zimo Qu, Freshman, Astronomy, LAS
(Research Mentor: Jamie Coen, School of Information Sciences)

Sudhit Rao, Freshman, Mathematics, LAS
(Research Mentor: Mina Nahvi, Department of Mathematics)

Matthew Ratajczyk, Junior, Political Science, LAS
(Research Mentor: Luzmarina Garcia, Department of Political Science)

Yureni Roman, Freshman, Psychology, LAS
(Research Mentor: Taiylor Rayford, Department of Educational Psychology)

Maheen Sadrudin, Sophomore, Psychology, LAS
(Research Mentor: Isaiah Raynal, Department of Political Science)

Aakash Shah, Freshman, Aerospace Engineering, ENG
(Research Mentor: Shantanu Shahane, Department of Mechanical Science and Engineering)

Ansh Sharma, Freshman, Computer Science, ENG
(Research Mentor: Haiyang (Ocean) Cui, Carl R. Woese Institute for Genomic Biology)

Chen Si, Sophomore, Computer Science, ENG
(Research Mentor: Shanshan (Shirley) Liu, Department of Civil and Environmental Engineering)

Vidhi Sikaria, Sophomore, Industrial Design, FAA
(Research Mentor: Susmita Das, Institute of Communications Research)

Leeanne Smith, Sophomore, Physics, LAS
(Research Mentor: Jesse Miller, Department of Astronomy)

Boda Song, Junior, Computer Science and Statistics, LAS
(Research Mentor: Ibtiha Ferwana, Department of Computer Science)

Nate Szczerba, Junior, Political Science, LAS
(Research Mentor: Sanghoon Kim-Leffingwell, Department of Political Science)

Maddie Szkwarek, Sophomore, Bioengineering, ENG
(Research Mentors: Ayca Nazil Mogol, Department of Food Science and Human Nutrition & Zeynep Madak-Erdogan, Department of Food Science and Human Nutrition)

Matthew Tomlinson, Senior, Molecular and Cellular Biology, LAS
(Research Mentor: Maltesh Kambali, Department of Comparative Biosciences)

Joselyn Vazquez, Freshman, Psychology, LAS
(Research Mentor: Irati Hurtado Ruiz, Department of Spanish and Portuguese)

Aparajita Vemuri, Sophomore, Psychology, LAS
(Research Mentor: Amos Jeng, Department of Educational Psychology)

Shreya Vinjamuri, Freshman, Computer Science, ENG
(Research Mentor: Adithya Murali, Department of Computer Science)

Yitong Wang, Junior, Psychology, LAS
(Research Mentor: Allison Carrington, School of Social Work)

Holly Wingren, Junior, Astronomy, LAS
(Research Mentors: Alex Gagliano, Department of Astronomy & Gautham Narayan, Department of Astronomy)

Billy Wojcicki, Senior, Advertising, COM
(Research Mentor: Tolgahan Dilgin, Department of Political Science)

Jingyi Xiang, Sophomore, Electrical Engineering, ENG
(Research Mentor: Holly Dinkel, Department of Aerospace Engineering)

Delu Zhao, Freshman, Computer Science and Economics, LAS
(Research Mentor: Adithya Murali, Department of Computer Science)

Celebrating Our Research Mentors

Good mentoring requires substantial support, time, and commitment. This year we invited the undergraduate presenters on our program to speak about their experiences with their research mentors. The following represents but a small showing of the overwhelming response we received, and we would like to further recognize and offer thanks to all those who mentor undergraduate researchers at Illinois.

“Thank you Dr. Sweedler for your support and guidance throughout these past four years in your group! You’ve helped me grow as both a researcher and an individual, and I will carry your advice with me during my career.”

- Carolyn Oh

(Senior, Molecular and Cellular Biology, LAS)

Research Mentor:

Jonathan Sweedler, Department of Chemistry

“Professor Wong, thank you for encouraging me to think deeper and to question the world around me. Thank you for being so patient with me in this process and for supporting me every step of the way, both academically and otherwise!”

- Tyese Braslavsky

(Senior, Political Science, LAS)

Research Mentor:

Cara Wong, Department of Political Science



“Dr. Garthe, you have provided so many with invaluable support both inside and outside the classroom. Your dedication to our lab and to social science research as a whole is truly inspiring. Thank you for your mentorship!”

- Alexis Krones

(Senior, Social Work, SSW)

Research Mentor:

Rachel Garthe, School of Social Work

“ Thank you to Drs. Hind, Rai, and Malvino for being excellent role models of women in science, as well as genuinely kind and supportive people. Thank you for being a positive part of my and other students’ academic journey. ”

- Kayla Vittore
(Senior, Crop Sciences, ACES)

Research Mentors:
Sarah Hind, Rikky Rai, and
Maria Malvino, Department of Crop Sciences

“ Thank you so much, Dr. Whitfield! You’ve been an incredibly kind and patient mentor, and I’ve learned a lot about insect systematics throughout this project. ”

- Pomona Carrington Hoekstra
(Sophomore, Integrative Biology, LAS)

Research Mentor:
James Whitfield, Integrative Biology

“ Dear Julianne, I am incredibly thankful to have had the opportunity to work with you. Thank you so much for all of the support and valuable feedback you have given me over the years. Not only have you helped me become a stronger researcher, but you have also helped me to become more confident in myself. My thesis project and time as a research assistant has been such a fulfilling experience, and it would not have been the same without your impact. ”

- Caley Lane
(Senior, Psychology, LAS)

Research Mentor:
Julianne Griffith, Department of Psychology

“ Thank you, Tolgahan, for inspiring me with the thrill of discovering something new in our research. We tried many things along the way that did not work, but that made the learning experience so much better. ”

- Brendon Carter
(Sophomore, Agricultural and Consumer Economics, ACES)

Research Mentor:
Tolgahan Dilgin, Department of Political Science

“ Dr. Golecki, thank you so much for all your support and guidance throughout this semester. We greatly appreciate your insight, responsiveness, and commitment. You’ve made the research process both educational and enjoyable, and we are excited to continue working with you! #womeninstem #plusthomas ”

- Elizabeth McNeela (Junior, Bioengineering, ENG)
& Thomas Tran (Junior, Bioengineering, ENG)

Research Mentor:
Holly Golecki, Department of Bioengineering

“ Thank you Dr. Sperry for your guidance in translating my passion into an exciting research project and for giving me endless opportunities to study wildlife in the field and lab setting. Your mentorship has permanently strengthened my love for research and passion for studying wildlife! ”

- Lauren Brunk
(Junior, Natural Resources and Environmental Sciences, ACES)

Research Mentor:
Jinelle Sperry, Department of Natural Resources and
Environmental Sciences

“Dr. Witt and Aigul, thank you for all of your support! We are so glad to be involved in IGlobal and are grateful for the opportunities it has provided us. We also appreciate your help and guidance, especially in regards to our project.”

- **Cara Merkle**
(Sophomore, Middle Grades Education, EDU)
- **Ashley Xu**
(Sophomore, Elementary Education, EDU)

Research Mentors:
Allison Witt and Aigul Rakisheva, College of Education



“Thank you, Maurita! You have been an amazing and supportive research supervisor from the very beginning. You have taught me many skills that I will continue to use in my academic career. I appreciate you being so supportive not only in the research process, but in life as well!”

- **Shaunik Kapoor**
(Senior, Kinesiology, AHS)

Research Mentor:
Maurita Harris, Applied Health Sciences

“Dr. Callesano, thank you for supporting my academic ambitions. Your mentorship has made me a better writer, researcher, and person. I am excited to continue developing our project!”

- **Milton Guendica**
(Senior, Spanish, LAS)

Research Mentor:
Salvatore Callesano, Department of Spanish & Portuguese

“Thank you, Professor Angrave, for your dedication in promoting accessible technology for students both within UIUC and across the nation. Your drive in ClassTranscribe and ScribeAR has inspired me in my research and your continual support, patience, and passion to help students grow has given me greater confidence.”

- **Joanna Huang**
(Sophomore, Computer Science, ENG)

Research Mentor:
Lawrence Angrave, Department of Computer Science

“Lila, words cannot express how thankful I am to have you as my mentor! I am eternally grateful for your knowledge and insight throughout the research process. Your encouragement and wisdom will have an impact beyond my undergraduate career.”

- **Laura Garcia**
(Junior, Anthropology, LAS)

Research Mentor:
Lila Ann Dodge, Department of Anthropology

Promoting Other Offices

The Office of Undergraduate Research is proud to collaborate with many offices that promote and support undergraduate research and scholarship at Illinois.

National and International Scholarships

Every year, University of Illinois students successfully compete for prestigious national and international scholarships, supported and guided by the National and International Scholarships (NIS) Program. NIS aims to help high-achieving Illinois undergraduates and alumni prepare for these scholarships through valuable advising and feedback for applicants. Students should consider applying for one or more awards if they are dedicated to a mission or vocation, whether it is research, policy, or service-based! If you are interested in pursuing such awards, NIS can help you unlock your potential and become a stronger candidate. Interested students—from freshmen to recent alumni—are encouraged to visit NIS to discuss these opportunities.

The Office of Undergraduate Research applauds the work by NIS and proudly congratulates the following winners of these nationally and internationally competitive awards.

Website:

<https://topscholars.illinois.edu/>

Email:

topscholars@illinois.edu

Physical Location:

National & International Scholarships Program
University of Illinois at Urbana-Champaign
807 South Wright Street, 5th Floor
MC-317
Champaign, IL 61820

The Goldwater Scholarship

Are you a STEM researcher? The Barry M. Goldwater Scholarship recognizes students who demonstrate a strong commitment to a research career in math, science, or engineering. Successful applicants display intellectual curiosity and possess potential for significant future contributions in their chosen field. The scholarship is for juniors or exceptional sophomores who are current U.S. citizens, U.S. nationals, or resident aliens. In addition to receiving one- or two-year \$7,500 awards, Goldwater recipients also become part of a cohort of scholars. Applicants should be committed to pursuing a Ph.D. in the research fields of mathematics, sciences, or engineering.

Deadline: The campus deadline is November 28, 2022. For more information and support with applying, please contact NIS.

RECENT WINNERS:



Emmarie Alexander



Marta Cortinovis



Evan Dray



Ari Lerman

The Fulbright Scholarship

Are you looking for an exciting way to spend a year abroad after you graduate? The Fulbright U.S. Student Program awards approximately 2,200 full scholarships annually for U.S. citizens to pursue an academic year experience in over 140 countries worldwide. Juniors, seniors, and alumni may apply to pursue a research project or a graduate degree program abroad. In addition, applications may be submitted to spend one year as an English Teaching Assistant (ETA) in any of almost 80 countries. The University of Illinois perennially is recognized by The Chronicle of Higher Education as a Top Producing Institution of Fulbright student awards.

Deadline: The campus deadline is August 29, 2022. For more information and support with applying, please contact NIS.

RECENT WINNERS:



Richard Chao



Michelle Dinh



Jade Roberts

Schwarzman Scholars

Are you aspiring to be a global leader in your field? Schwarzman Scholars is a program for the next generation of young leaders, anchored in a fully funded, 11-month master's degree in Global Affairs at Beijing's Tsinghua University. The experience encompasses amazing opportunities in and outside the classroom, including extensive leadership training, a network of senior mentors, internships, career development, and travel seminars around China. Schwarzman Scholars prepares young leaders for a world where China plays a vital role. Scholars learn from world-class faculty and guest speakers about the emergence of China as an economic and political force through a rigorous and dynamic core curriculum. Students and alumni of any citizenship are eligible.

Deadline: The campus deadline is August 25, 2022. (May 20, 2022, for students holding passports from China, Hong Kong, Taiwan, or Macao). For more information and support with applying, please contact NIS.

RECENT WINNERS:



Boming Yang

Beinecke Scholarship

Are you a humanities or social sciences student interested in graduate school? The Beinecke Scholarship offers U.S. citizen juniors \$4000 immediately prior to entering graduate school and an additional \$30,000 while attending graduate school. The Beinecke is interested in students who demonstrate superior standards of intellectual ability, scholastic achievement, and personal promise. Preference is given to candidates for whom the award would increase the likelihood that they would be able to attend graduate school. Most recipients are students hoping to attain a PhD.

Deadline: The campus deadline is January 17, 2023. For more information and support with applying, please contact NIS.

RECENT WINNERS:



Kolten Conklen

Knight-Hennessy Scholarship

Are you committed to advancing your education for the good of others? The Knight-Hennessy scholarship offers 2 to 5 years of funding towards a graduate degree from Stanford University. Aside from graduate school funding, the scholarship offers recipients leadership training, mentorship, and cohort-based experiential learning. Knight-Hennessy is interested in supporting the next generation of global leaders who possess strong academic skills in addition to qualities of leadership and generosity. Seniors and alumni within six years of graduating from college are eligible to apply.

Deadline: The campus deadline is September 12, 2022. For more information and support with applying, please contact NIS.

RECENT WINNERS:



Sriyankari Chitti



Writers Workshop

A research university is a writing university. The Writers Workshop provides support for all writers in the campus community—undergraduate and graduate students, post-doctorates, faculty, and staff—via writing consultations, writing groups and retreats, and webinars and presentations. By doing so, the Writers Workshop advances the mission of the University to create an inclusive learning environment that fosters students' abilities to achieve their academic, professional, and personal goals.

The Writers Workshop supports all forms of academic and professional writing, at any stage of the writing process. We provide feedback on essays, research papers, personal statements, cover letters, theses and dissertations, manuscripts for publication, presentations, digital compositions, and anything between and beyond.

Find more information at:

<https://writersworkshop.illinois.edu/>

University Library

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Kogan, Healey - Poster Session PP - Numbers, Data, and Computation; Celebrating Our Student Scholars
Koleva, Liana - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo
Koska, Matthew - Image of Research
Kosmacher, Gabriel - Poster Session PL - Nature Life and Environmental Change
Kosmopoulos, James - Oral Panel 1:45 - Managing Environmental Degradations: Carbon Emissions, Soil Bacteria, Fungal Parasites, Room 210; Celebrating Our Student Scholars
Kotak, Mit - Poster Session PP - Numbers, Data, and Computation; Image of Research
Kouriabalis, MariaElena - Poster Session PK - Social Science and Behavior

Kowalski, Zach - Department of Political Science Undergraduate Honors & Awards Ceremony
Krause, Lauren - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo
Krauter, Matthew - Department of Political Science Undergraduate Honors & Awards Ceremony
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Kravitz, Sarah - Poster Session PJ - Health and Wellness
Krok, Claudia - Self-Guided Tours – Innovations from the University of Illinois
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Kulkarni, Mayura - Oral Panel 1:45 - Science and Technology II, Room 217
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La, Vivian - Poster Session PJ - Health and Wellness
Lachs, Emma - Poster Session PG - Learning and Human Development
Ladan, Alex - Poster Session PF - Health and Wellness
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Lake, Ryan - Oral Panel 9:15 - Design Thinking and Innovation, Room 209
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Lane, Caley - Poster Session PK - Social Science and Behavior
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Latham, Anna - Poster Session PJ - Health and Wellness
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Launspach, Isabel - Department of Political Science Undergraduate Honors & Awards Ceremony
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Lee, Alice - Department of Political Science Undergraduate Honors & Awards Ceremony; Humanities Research Institute HRI-Mellon Legal Humanities Undergraduate Research Symposium; Poster Session PK - Social Science and Behavior
Lee, Amy - Poster Session PG - Learning and Human Development; Celebrating Our Student Scholars
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Lehmann, Matthew - Poster Session PK - Social Science and Behavior
Leiter, Brynn - Poster Session PO - Social Science and Behavior
Lemna, Ruth - Poster Session PD - Data and Information
Leon, Emily - Poster Session PO - Social Science and Behavior
Lerman, Ariel - Oral Panel 1:45 - Science and Technology I, Room 215
Leung, Melody - Poster Session PO - Social Science and Behavior
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Li, Jack - Oral Panel 1:45 - Science and Technology II, Room 217
Li, Jiaxi - Oral Panel 10:45 - Design Innovations, Room 213
Li, Samuel - Oral Panel 1:45 - Science and Technology II, Room 217
Li, Xiaotong - Poster Session PD - Data and Information
Li, Yu - Poster Session PP - Numbers, Data, and Computation
Liang, Phil - Celebrating Our Student Scholars
Libert, Kelsey - Poster Session PG - Learning and Human Development
Lies, Julia - Poster Session PA - Science and Technology
Lim, Nicole - Poster Session PM - Food Systems
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Liu, Tingyan - Oral Panel 9:15 - Health and Wellness: Novel Approaches, Room 211; Poster Session PO - Social Science and Behavior
Liu, Zhengde - Poster Session PN - Health and Wellness
Loewenstein, Alina - Poster Session PO - Social Science and Behavior
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Lopez, Susie - Poster Session PO - Social Science and Behavior
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Lupas, Rachel - Poster Session PL - Nature Life and Environmental Change
Macher, Roberto - Poster Session PN - Health and Wellness
Maghinang, Chloe - Poster Session PB - Health and Wellness
Magnaye, Lorenzo - Poster Session PA - Science and Technology
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Mamaril, Raelin - Poster Session PH - Nature Life and Environmental Change; Celebrating Our Student Scholars
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Marks, Chloe - Poster Session PH - Nature Life and Environmental Change
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Marti, Hannah Grace - Poster Session PH - Nature Life and Environmental Change
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Martinez-Ruiz, Alfredo - Poster Session PE - Science and Technology
Mascarenhas, Rosemary - Poster Session PM - Food Systems
Mathew, Neha - Poster Session PO - Social Science and Behavior
Mathews, Jefferson - Poster Session PK - Social Science and Behavior
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Medisetti, Sri - Poster Session PG - Learning and Human Development
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Merkle, Cara - Poster Session PG - Learning and Human Development
Merrett, Alastair - Poster Session PK - Social Science and Behavior
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Miles, Katherine - Poster Session PD - Data and Information
Miriyala, Maya - Poster Session PJ - Health and Wellness
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Mojza, Patrick - Poster Session PI - Science and Technology
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Moore, Hayden - Oral Panel 3:15 - Science and Technology: Novel Paradigms, Room 213
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OBrien, Nick - Poster Session PP - Numbers, Data, and Computation
O'Connell, Mike - Poster Session PM - Food Systems
Ogawa, Sora - Poster Session PF - Health and Wellness
Oh, Carolyn - Oral Panel 9:15 - Cellular Responses and Molecular Mechanisms, Room 213
Okesanjo, Omolola - Oral Panel 9:15 - Design Thinking and Innovation, Room 209; Image of Research
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Onal, Ege Gungor - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo; Celebrating Our Student Scholars
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Penrod, Corrie - Poster Session PJ - Health and Wellness
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Piasecki, Maksymilian - Poster Session PF - Health and Wellness
Piramuthu, Otto - Celebrating Our Student Scholars
Pirani, Aydan - Poster Session PD - Data and Information
Pochyly, Jennifer - Poster Session PF - Health and Wellness
Podraza, Molly - Poster Session PH - Nature Life and Environmental Change
Polanek, Maxwell - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo; Poster Session PN - Health and Wellness
Poole, Jonathan - Poster Session PM - Food Systems
Pope, Daniela - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo; Poster Session PM - Food Systems; Image of Research
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Romanov, Alexander - Poster Session PA - Science and Technology
Rose, Henry - Poster Session PA - Science and Technology

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Ryan, Nora - Poster Session PL - Nature Life and Environmental Change
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Rzeszutek, Dominik - Poster Session PA - Science and Technology
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Salazar, John - Poster Session PN - Health and Wellness
Sallenback, Emily - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo
Sander, Savannah - Poster Session PG - Learning and Human Development; Celebrating Our Student Scholars
Santiago, Halle-Mari - Poster Session PL - Nature Life and Environmental Change
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Sarol, Christian - Poster Session PE - Science and Technology
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Schoenecker, Kristine - Poster Session PH - Nature Life and Environmental Change
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Si, Chen - Poster Session PE - Science and Technology
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Simpson-Gomez, Joshua - Illinois Scholars Undergraduate Research (ISUR) Program Research Expo
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Szkwarek, Maddie - Poster Session PF - Health and Wellness
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Valentino, Alec - Parkland College Honors Symposium
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Zhang, Zhuo - Poster Session PD - Data and Information
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Zhao, Jennifer - Poster Session PB - Health and Wellness
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Zvenigorodsky, Sasha - Poster Session PM - Food Systems

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