University at Buffalo
College of Arts and Sciences

Undergraduate Research Showcase 2026
Program Guide

Welcome by Dean Jeff Grabill, SU210, 1 p.m. – 1:10 p.m.

Lightning Talks I (SU210, 1:10 p.m. – 1:40 p.m.)

Student (major)	Project Title	Mentor	Dept
Carsyn Bonesteel (Biological Sciences)	The evolutionary and functional impact of the human-specific acyl-CoA thioesterase (ACOT1) gene duplication	Omer Gokcumen	Biological Sciences
Liana Sicroff (Biological Sciences)	Is phosphorylation of the deacetylase Hst1 impacting virulence in Candida glabrata?	Laura Rusche	Biological Sciences
Rani Patel (Mathematics, Physics)	Synchronization in networks of networks with applications to epilepsy	Sarah F. Muldoon	AI and Society
Anna Zheng (Neuroscience)	Linking AI-Enhanced LDCT and AI-Based Environmental Modeling to Address Lung Cancer Disparities in China	Colleen Culleton	Spanish
Kendric Warrick (Music, Theatre and Dance)	Live Performance in Musical Theater is More Than Just Entertainment	Tamika Hanley	Music

Lightning Talks II (SU210, 4 p.m. – 4:40 p.m.)

Student (major)	Project Title	Mentor	Dept
Ori Edgar (Philosophy and Jewish Thought)	A Conceptual History of Idolatry	Sergey Dolgopolski	Jewish Thought
Owen Penhollow (Economics; Philosophy, Political Science and Economics)	Manufacturing Identity: A Model of Emergent Segregation with Social Learning and Complex Identity	Ryan Muldoon	Philosophy
Jonathan Stasi-Welsh (Medicinal Chemistry)	Development of a multidimensional 19F-NMR database in methanol and water for the identification of emerging organofluorinated contaminants in the environment	Alexander Hoepker	RENEW Institute
Gavin Glaser (Biological Sciences)	Childhood Abuse and Health in Midlife: What Role Do Adult Offspring and Romantic Partners Play	Ashley Barr	Sociology and Criminology
Katie Kremer (Psychology and Music)	Joint Impact of Executive Function and Emotion Regulation on Aggression Subtypes in Early Childhood	Jamie Ostrov	Psychology
Samantha Treadway (Psychology)	Measuring anxiety-like behaviors in rats using machine learning-based phenotyping	Paul J Meyer	Psychology

University at Buffalo
College of Arts and Sciences

Poster Session I (SU215, 1:45 p.m. – 2:45 p.m.)

Pos. #	Student (major)	Project Title	Mentor	Dept
1	Hal Svetanics (Biological Sciences)	Macroinvertebrate Responses to Insecticides in Intermittent Stream Ecosystems	Corey Krabbenhoft	Biological Sciences
2	Siobhan Lanich (Biological Sciences)	Placement of the freshwater mussel Lampsilis siliquoidea (family Unionidae) in an Urban Stream for reduction of Escherichia coli	Corey Krabbenhoft	Biological Sciences
3	Dee Dolce (Biological Sciences)	Impact of Inclusive and Human-Centered Learning Materials in an Undergraduate Genetics Classroom	Robin Costello	Biological Sciences
4	Keith Hunt (Biological Sciences)	Non-inherited variations and FAD in a Sri Lankan population	Shermali Gunawardena	Biological Sciences
5	Justin Crandall (Biological Sciences)	Oxygen Enhanced Growth in Soil and Hydroponic Grown Lettuce	Heather Williams	Biological Sciences
6	Lily Plympton and Samuel Mejorado (Biological Sciences)	Analysis of Rubisco Assembly and Cell-Specific Expression in Leaves of Transgenic Nicotiana tabacum	James Berry	Biological Sciences
7	Edward Botchway (Biological Sciences)	Inhaled Isopropyl Alcohol for the Treatment of Nausea/vomiting in a Pediatric Emergency Department.	Haiping Qiao & Susana Ruano	UBMD Emergency Medicine
8	Michelle Shaposhnik and Kristina Lee (Biological Sciences)	Hydrogel delivery system for 1,4-dihydrophenonthrolin-4-one- 3-carboxylic acid (1,4-DPCA) in Osteoblastic and Fibroblastic Cells	Rosemary Dziak	Oral Biology (School of Dental Medicine)
9	Devan Renjen (Accounting, Biological Sciences)	Alginate Enhanced Nanocalcium Scaffolds for Bone Regeneration	Rosemary Dziak	Oral Biology (School of Dental Medicine)
10	Angelo Bargnesi (Biological Sciences)	Donor-Derived Cell-Free DNA in a Kidney Transplant Recipient with Recurrent Rejection and Graft Failure: A Pediatric Case	Xiaoyan Wu	UBMD Pediatrics
11	Kevin Brydalski (Biological Sciences)	Distinct oral microbial states in APECED associate with inflammation and mucosal immune dysfunction.	Patricia Diaz	Oral Biology (School of Dental Medicine)
12	Arianna Elefante (Biomedical Sciences)	Tumor Tactics: Deciphering the IL-1α and PD-L1 Connection.	nan	Roswell Park
13	Mahmud Amin (Biological Sciences)	Epigenetics and Photobiomodulation Synergistically Regulate Odontoblast Mitochondrial Dynamics	Praveen Arany	Oral Biology (School of Dental Medicine)

14	Xander Seguin (Chemistry)	Occurrence, Removal, and Screening-Level Ecological Risk of Antidepressants in Municipal Wastewater Treatment Plants	Diana S. Aga	Chemistry
15	Ignat Fomin and Charlie Oke (Biomedical Sciences)	Rational Design of Terfenadine Derivatives Targeting Oncogenic TFE3 Fusions in Translocation Renal Cell Carcinoma	David Heppner	Chemistry
16	Zachary Jock (Applied Mathematics)	Multi-Channel Auditory Cortical Responses to Spatialized Speech	Mishaela DiNino	Communicative Disorders and Sciences
17	Angel Wang (Psychology)	Auditory System Function and Self-reported Listening Ability in Individuals with Anxiety Disorders	Mishaela DiNino	Communicative Disorders and Sciences
18	Kendra Richardson (Speech and Hearing Science)	Filled Pausing in Parkinson's Disease	Jessica Huber	Communicative Disorders and Sciences
19	Kris Ogilvie (Biological Sciences)	Method Development for Root Exudate Collection in Drought Conditions	Richard Marinos	Earth Sciences
20	Samantha Striemer (Chemistry and Geological Sciences)	Do lake-effect precipitation events have unique isotope signatures?	Elizabeth Thomas	Earth Sciences
21	Jared Rowland (Physics)	Polyphosphate as a Prebiotic Scaffold: Ion-Dependent Condensate Phase Behavior and Macromolecular Assembly	Priya Banerjee	Physics
22	Rebecca Korsh (Physics)	Reprograming the disordered prion-like domain of FUS protein to regulate its pathological aggregation	Priya Banerjee	Physics
23	Ivan Mui (Psychology)	How can organizations support gender minority employees? A qualitative examination	Kimberly Chaney,	Psychology
24	Kelsey Solomon (Psychology)	Gender Minority's Perspectives of a Transgender-Inclusive Poster in Organizational Settings	Kimberly Chaney,	Psychology
25	Micah Sinclair (Psychology)	Assessing the Validity of Two Video-Based Scenarios for Bystander Research	Kathleen Parks	Psychology
26	Ryan Lane and Caden Giardino (Psychology, Psychology)	Does tempo provide sufficient evidence to elicit a transition from song to speech in perception and production?	Peter Pfordresher	Psychology
27	Julia Shavuo (Psychology)	Mobilizing School Community Partnerships to Promote Mental Health among Elementary Students in Buffalo	Nathaniel Woodard and Jacoby Loury	School of Public Health and Health Professions
28	Marissa Taylor (Political Science and Communication)	Cognitive and Communicative Dynamics Between Correctional Officers and Incarcerated Individuals: A Field Study on Institutional Interaction in New York State Correctional Facilities	Zach Carr	Communication
29	Bennett Schaefer (Economics)	Industry Resilience after the 2008 Financial Crisis	Joanne McLaughlin	Economics

30	Faheem Khawar (Economics, Mathematics, and Statistics)	Utility Shocks and Asset Valuation: Evidence from a Synthetic Economy	Justin Downs	Economics
31	Janeeta Ashimi (Economics)	Medicaid Expansion and Insurance Coverage for Young Single Mothers	Joanne McLaughlin	Economics
32	Nicole Gerdes (Environmental Science)	Screening Cu(I)-based Electrochemical Carbon Capture Sorbents for Stability	Jonathan Boualavong	Civil, Structural, and Environmental Engineering (School of Engineering ad Applies Sciences)
33	Dylan Kleehammer (Philosophy, Economics)	Segregation, Complex Identity, and Social Learning	Ryan Muldoon	Philosophy
34	Na'Dia Carter (Political Science)	Local Democracy in Action ~ Buffalo City Charter	Micaela Lipman	Philosophy
35	Sophia Furlong (Political Science and Law)	The Role of Gender in Judicial Decision-Making in New York State Family Law	Abigail Matthews	Political Science
36	Tahanie Ahmed (Political Science)	The Presence of U.S Military in the Middle East and North Africa Region in Relation to a Decreased Frequency of Coups	Carla Martinez Machain	Political Science
37	Elizabeth O'Boyle (Sociology)	The Effects of Adult Offspring Emotional Distress on Maternal Health in Midlife: Bringing the Social Foreground into Focus	Kristen Lee	Sociology and Criminology
38	Arivana Russell (Psychology)	Attitudes toward Sexually Diverse Partnerships: Evidence from an Experimental Study	Kristen Lee	Sociology and Criminology
39	Kasity Peffer (Criminology and Legal Studies)	Thinking Inside the Box	Veronica Horowitz	Sociology and Criminology
40	Max Chernetsky (History)	A Continent Aflame: British and French Foreign Policy during the American and Mexican Civil Wars	Sarah Handley-Cousins	History
41	Liam Riter (History and Geography)	The Spread of Séance: How and Why the Story of the Fox Sisters Spread	Claire Schen	History
42	Jake Wojtowicz (History, Education)	The 80's political consequences of LA Punk v.s. The LAPD	David Herzberg	History
43	Natalie Bucki (Media Study)	The Present	Sama Waham	Media Study
44	Zuzu Guilfoyle (Media Study)	Exploring the Works of Margaret Dolinsky and the CAVE Network	Dave Pape	Media Study
45	Danielle Walker (Music Theatre)	2026 Senior Showcase- Working as a Line Producer and Assistant Director	James Beaudry	Theatre and Dance
46	Faith Marsala (Theatre Design/Tech)	Urinetown Costume Design	Max Levitt	Theatre and Dance

47	Selena Pereyra (Dance and Psychology)	Campus to Community (C2C): Moving Beyond the Stage	Jeanne Fornarola	Theatre and Dance

Poster Session II (SU215, 3:00 pm – 4:00 pm)

Pos. #	Student (major)	Project Title	Mentor	Dept
2	Jocey Celeste (Biological Sciences)	Does the deletion of casein kinase alpha subunits affect expression of Hst1-repressed virulence genes in the pathogenic yeast Candida glabrata?	Laura Rusche	Biological Sciences
3	Lauren Benson (Biomedical Sciences, Psychology)	Regulation of riboflavin production in the filamentous fungi Ashbya gossypii via Sum1/Sir2 complex	Laura Rusche	Biological Sciences
4	Dennis Kogos (Biomedical Sciences)	Structural Deficits of the forebrain in old mice with Foxg1 G161Gfs mutation	Jae Lee	Biological Sciences
5	Pedro Silva (Biomedical Sciences)	Influence of Detergent Type and Concentration on Bleaching Phenotype Caused by Virus-Induced Gene Silencing in Digitalis lanata.	Zhen Q. Wang	Biological Sciences
6	Aidan Sumrall (Biological Sciences)	Evaluation of AI assistance in Ecological Literature Reviews	Corey Krabbenhoft	Biological Sciences
7	Alissa Bowers (Neuroscience)	Traits of native fish species and susceptibility to competition with an invader	Corey Krabbenhoft	Biological Sciences
8	Christopher Page (Biological Sciences, Linguistics)	Structural Genomic Evolution across Lamiales Inferred from Novel Lamioid Mint Genomes	Charlotte Lindqvist	Biological Sciences
9	Gabriela Caceres (Biological Sciences)	Differences in Patient Satisfaction in School-Based Health Centers by Spanish versus English Language Preference and Hispanic Ethnicity	Lucy Holmes	UBMD Pediatrics
10	Noam Ernan and Isabella Huerta-Andrade (Biological Sciences)	Plant and fungal cell-wall-degrading oral bacteria	Ashu Sharma	Oral Biology (School of Dental Medicine)
11	Joseph Clark (Chemistry)	Using vibrational spectroscopy to probe the interaction of glyphosate at goethite surfaces	Luis Velarde	Chemistry
12	Luca Pasceri (Chemistry)	Synthesis of a Manganese (III) N-Oxide Coordination Complex	David Lacy	Chemistry
13	Matthew Machelor (Chemistry)	Microwave-enhanced Trypsin Digestion for Bottom-Up Proteomics Mapping	Troy Wood	Chemistry

14	Grace Markey (Speech and Hearing Sciences)	Effects of SpeechVive and Expiratory Muscle Strength Training (EMST) on Speech in Individuals with Parkinson's Disease	Jessica Huber	Communicative Disorders and Sciences
15	Julia DiPasquale and Claire Northman (Speech and Hearing Sciences)	Aging Effects on Listening Effort with Cochlear Implant Simulation Practice	Kristina Milvae	Communicative Disorders and Sciences
16	Alexandra Avellaneda (Earth Sciences)	Finding Crevasses on the Greenland Ice Sheet	Kristin Poinar	Earth Sciences
17	Harrison Van Lone (Earth Sciences)	Modeling Stream Temperature in Response to Climate and Hydrologic Change in Mountain West River Basins	Yifan Cheng	Earth Sciences
18	Grace Maxson (Earth Sciences)	Assessing Late-Glacial Varve Presence and Environmental Controls in Western New York Lake Sediments	Jason Briner	Earth Sciences
19	Andrew Cuzzacrea (Earth Sciences)	Holocene hydrological and ecological changes in Bonnie Lake, Southeast Greenland	Sudip Acharya	Earth Sciences
20	Amrita Ganapathy (Mathematics)	Modulation Equations for Multi-Component Nonlinear Wave Equations and Applications	Gino Biondini	Mathematics
21	Caden Holland (Mathematics)	Cubulation of groups	Johanna Mangahas-Kutluhan	Mathematics
22	Rachel Hayek (Physics)	Structural Characterization of Safranin-O Binding to Chicken Egg White Lysozyme for Future Anisotropic Terahertz Spectroscopy Studies	Andrea Markelz	Physics
23	Shafqat Mahmud (Physics)	Thermorheology Illuminates the Energetic Basis of Viscoelastic Networks in Biomolecular Condensates	Priya Banerjee	Physics
24	Brando Diaz (Psychology)	The Masculine Identity: Competitiveness as the Barrier to Male Empathy	Michael J. Poulin	Psychology
25	Grace LeVea (Psychology)	From Auditory Stress to Behavioral Decline: Noise, Social Context, and Enrichment in an Alzheimer's Mouse Model	Micheal Dent	Psychology
26	Caiden Class (Anthropology, Biotechnology)	Morphological Limb Variation Within and Between Three Slow Loris Species.	Stephanie Poindexter	Anthropology
27	Jasmi Ruponte (Environmental Science)	Behavior Patterns and Space Use of a Captive Breeding Pair of Pygmy Loris (Xanthonycticebus)	Stephanie Poindexter	Anthropology
28	Saana Mankotia (Marketing and HR)	Does Repeated Viewing Resolve Narrative Uncertainty?	Lindsay Hahn	Communication
29	Jiawen Gu (Mathematics)	Beyond the Numbers: Career Tips for Mathematics Students	Lance Rintamaki	Communication

30	Aisha Makama (Biochemistry, Political Science)	Interaction Between Selfie Exposure and Contingencies of Self-Worth, and Psychological Well-Being: A Policy Proposal for Transparent Algorithm	Michael A. Stefanone	Communication
31	Aidan Maturo (Economics)	A Benefit-Cost Approach to Rain Barrels in Syracuse, New York.	Michael Coury	Economics
32	Neetu Nijjar (Economics)	Day of the Week Effect on the Stock Market	Joanne McLaughlin	Economics
33	Kaiyi Wang (Economics)	Complements or Substitutes? AI Exposure and the Evolving Returns to Social Skills	Joanne McLaughlin	Economics
34	Suhayma Suha (Economics, Mathematics)	Power, Culture, and Participation: Rethinking Digital Infrastructure and Female Labor in South Asia	Joanne McLaughlin	Economics
35	Mia Maines (Geography)	Visualization of Bicycle Crashes, Biking Level of Traffic Stress, and Bicycle Equity Index in New York City	Irina Benedyk	Civil, Structural and Environmental Engineering (School of Engineering ad Applies Sciences)
36	Lauren Phung (Geography)	Routes of Removal: Statistical Analysis of U.S. Deportation Flights	Sara Metcalf	Geography
37	Rachel Mavrovich (Philosophy, Cognitive Science)	The Ontology of Criminal Psychology and Its Current Representation in the Law	Barry Smith	Philosophy
38	Daniel Nyamollo (Mathematics)	Lifestyle as Data: Unpacking YouTube “Day in the Life” Videos Through Large-Scale Analysis	Kenny Joseph	Computer Science and Engineering (School of Engineering ad Applies Sciences)
39	Ash Ferguson (Classics)	Intoxication or Divine Connection?: Drug and Alcohol Use in Ancient Greek Cults	Jackie Murray	Classics
40	Katie Pohlman (Art)	Vecinos: Designing a Research-Driven Brand Bringing Spanish Food Culture to a Buffalo Audience	Domenic Licata	Art
41	David John Jones III (History, Education)	Imprint: The Role of Dutch Print Culture in Northeast American Immigration Propaganda and an Expanding Multicultural Society of New Netherland During the Seventeenth Century	Julia Lillie	Art
42	Basil Thomas (English, Political Science, and Legal Studies)	Narratives of Freedom and Belonging from Pauli Murray	Miriam Thaggert	English
43	Ciah Courtney (English, Law)	Representing Displacement: A Critical Discourse Analysis of U.S. Media Narratives on Refugees and Forced Migrants in 2025	Dimitrios Anastasopoulos	English
44	Juliana Yanik (History, Social	Cold War Television and American National Identity	Victoria Wolcott	History

	Studies Education)			
45	Paige Bedell (History, Social Studies Education)	The Life of Lady Jane Grey and the Relationship Between Women and Religion in Modern US Politics	Claire Schen	History
46	Brennan Spruck (History, Global Affairs)	History of the Cold Spring Fire Department	Cari Casteel	History
47	Luke Carey (History)	Dark Entries: Patient Experiences of Madness in the 19th Century American Asylum	Michael A. Rembis	History