

∞ Guide to 2019
Undergraduate Research and Arts Exposition ∞

Wednesday May 29, 2019

- 10:00-11:30 AM **Northwestern University Poster Session One**
Louis Room – Norris second floor
- 11:00-12:30 PM **Northwestern University Oral Presentation Session One**
Lake Room, Arch Room, Rock Room, Armadillo Room
– Norris second floor
- 1:00-2:30 PM **Northwestern University Oral Presentation Session Two**
Lake Room, Arch Room, Rock Room, Armadillo Room
– Norris second floor
- 2:30-4:00 PM **Northwestern University Poster Session Two**
Louis Room – Norris second floor
- 8:00-9:30 PM **Creative Arts Festival**
Black Box Theater 101 – Wirtz Center for the Performing Arts
- 9:30-10:30 PM **Post-Show Reception**
Lobby (first floor) – Wirtz Center for the Performing Arts

🌀 Poster Session One

10:00-11:30, Louis Room (205)

Humanities, Social Sciences, & Journalism

1. **Aleksandra Grabowski**, “Decolonizing Digging? Critical Approaches for Contemporary Archaeologies”
2. **Allyson Snyder**, “Preschoolers’ Creativity During STEM Play”
3. **Annie Lee**, “Interlocutor Identity and Proactive Control During Language Production”
4. **Augusta Saraiva and Keyla Carvalho**, “Spanish Speakers’ Perceptions and Performance When Learning Portuguese”
5. **Brian Ingersoll**, “Micromanaging Nature: Navigating Between Policy and Practice in Chicago Parks”
6. **Carlyn Zuckert**, “Organized for Harassment: Sexual Harassment Risk Factors and Organizational Configuration”
7. **Charlotte Grimm**, “Cognitive Fatigue and Ability to Regulate Eating Behavior”
8. **Che Justice**, “Effects of Verb-Definite Description Pairings on Acceptability in Frequency Adjective and Weak Definite Constructions”
9. **Emma Meyerhoff**, “An Exploration of the Instagram Body Positivity Movement”
10. **Grishma Reddy**, “Perceptual Illusion Performance in Non-Clinical Psychosis”
11. **Hassan Al-Jahni**, “Qatar’s Museum Landscape: A 12-Month Launch Campaign”
12. **Jamilah Silver**, “Examining Early Childhood Profiles that Reliably Differentiate Young Children at Highest Risk for Depression”
13. **Jason Levin**, “Cardiometabolic Risk as a Mediator Between Positive Affect and Memory”
14. **Jannah Thompson-Vasquez**, “The Allure of the Market: Navigating Indigeneity, Identity, and Inequality in the Bolivian Amazon”
15. **Jennifer Martinez**, “Examining the Downstream Effects of Sense of Belonging on Black Medical Students’ Psychological Well-Being”
16. **Julia Borland**, “A Comparison of Mother-Preschooler Book Reading Practices in Thailand and the United States”
17. **Keldon Lin**, “Controversial Topics Increase Skepticism of Data Visualizations”
18. **Kimberly Rowghani**, “Facial Expressivity in Non-Clinical Psychosis”
19. **Mia Weed**, “Gender Norm Consistency and Women’s STEM Engagement”
20. **Monica Hsu**, “Under Pressure: College Women in Sports”
21. **Patrick Lin**, “Challenges in Adjective Learning: An Investigation of how to Improve Adjective-Property Mappings in Children and Adults”
22. **Prianka Murthy**, “Racial Differences in Narrative Meaning-Making Based on Hardiness”
23. **Ruthie Charendoff**, “The Sexual Health of Modern Orthodox Jewish Women”
24. **Sarah Neubert**, “Understanding the Experiences and Triggers of Binge Eating and Obesity to Inform the Design of a Mobile Intervention”
25. **Seongsik Kim**, “Developing Measures of Human Autonomy in Relation to Assistive Agents”
26. **Sharmain Siddiqui**, “Unani Tibb as Resistance: Bodily Practice at the Intersection of Colonial and Postcolonial Systems of Power”
27. **Tess Brieva**, “Aspirational Careers and Representation: Is Numeric Representation of Collective Identity Important for Aspirational Career Choice Among Middle School Students?”

Natural Sciences & Engineering

28. **Alice Schaack**, “Acute Stress Alters Social Behavior in a Sex and Strain-specific Manner and Increases Aggression in Male Rats of a Genetically Stress-Reactive Strain”
29. **Angie Chen**, “Spoken Discourse Impairments in Vascular Cognitive Impairment (VCI)”
30. **Avi Dravid**, “Hygrosensation in the Fruit Fly *Drosophila*: Examining the Role of Sacculus Structure and the Hygroreceptor IR40a in Humidity Preference”
31. **Avrati Agarwal**, “Synthesizing Biomimetic Polymers using Photopolymerization”
32. **Azmair Alamgir**, “Label-Free Platform for High-Throughput Analysis of Analytes using SAMDI-MS”
33. **CJ Patel**, “The Role of Dop in Hedgehog Signaling in *Drosophila melanogaster*”
34. **Diana Velazquez**, “Comparing Aliphatic and Aromatic Content as a Function of Soil Depth across the Critical Zone Observatories”
35. **Elizabeth Schauer**, “Investigating soluble split-TEV protease to create new tools for synthetic protein circuits”
36. **Grace Park**, “Identifying Genetic Determinants of Avermectin Resistance in *Caenorhabditis elegans*”
37. **Helena Haddad**, “Assessment of pancreatic islet PEGylation for mitigating coagulation and complement activation upon transplantation”
38. **Jacob Baran & Robert Gray**, “Room Temperature MWIR Free Space Optical Communication System”
39. **Joseph Cummings**, “CLARK: Towards an Appraisal Based Model Exploring the Role of Context in Identifying Emotion in Conversation”
40. **Joshua Saltzberg**, “Engineering a Light-Responsive DNA Polymerase for Data Encoding”
41. **Karol Bisaga**, “Identifying the mechanisms of genetic interactions that impact *C. elegans* bleomycin response”
42. **Katherine Su**, “Chemical vapor deposition of large-area uniform monolayer molybdenum disulfide on soda-lime glass”
43. **Katherine Haile**, “Unusual coastal mangroves decoupled from marine tidal forcing: Yucatan Peninsula, Mexico”
44. **Kelsey Fields**, “Influence of Aging and Autoclave Sterilization on Mechanics of Silicone-Elastomers for Biomedical Wearable Devices”
45. **Mari Brady**, “The Role of the Super Elongation Complex in Epidermal Progenitor Maintenance”
46. **Nicolette McManus**, “The Impact of Habitat Degradation on the Gastrointestinal Microbiota of Black-and-White-Ruffed Lemurs (*Varecia Variegata Variegata*)”
47. **Olivia Pritchard**, “Catalytic ring-closing reactions of gold compounds containing bis(phosphino)ferrocene ligands”
48. **Rachel So**, “Soil and Sediment Carbonate Quantification by Diffuse Reflectance Infrared Fourier Transform Spectroscopy (DRIFTS)”
49. **Regina Friction**, “ECM Proteins of Cortical and Medullary Ovarian Stromal Cells”
50. **Robert Belson**, “Examining Inflight Wi-Fi Performance”
51. **Samuel Kim**, “Effect of Colloidal Particles on a Drop”
52. **Sean Hu**, “Elucidating the Impact of Traceless Conjugation Chemistry on the Immunostimulatory Efficacy of Protein Spherical Nucleic Acids”
53. **Serena Tolani, Nathan Weston, Chris Holland, & Danny Callahan**, “Behavioral Contrast Threshold Detection in Mice with intrinsically-photosensitive Retinal Ganglion Cells Subpopulations Ablated”
54. **Sophia Jenz and Kasia Przybyl**, “Prior Stress and Fear Conditioning Intensity Interact to Generate Sex-, and Strain- Specific Enhanced or Attenuated Fear Memory”
55. **Ulyana Kurylo**, “Computational Model of Gaze”
56. **Vivian Chen and Nathan Coirier**, “An Overview of Semiconductor Laser and Photodetector Technologies and their Application Towards the Detection of Art Forgery”

57. **Wendy Luo**, “Circadian Rhythm Disruption in Maternal Behavior Concomitant with Decreased Expression of Vasopressin Signaling and Litter Survival in a Genetic Rat Model of Depression”

Oral Presentation Session One

11:00-12:30

Cognitive Insights and Social Impacts: Developments in Mental Health

Lake Room (203)

Moderator: Renee Engeln, Psychology Department

Hollyn Cetrone, “Participating in Agriculture and Nutrition Workshops Decreases Depression among Female Farmers in Singida, Tanzania”

Amelia Emery, “White Fragility and Lay Theories of Racism”

Irina Huang, “‘I’m So OCD:’ Obsessive-Compulsive Disorder as a ‘Model Minority’ of Mental Illness”

Rachel Johnstone, “Prevalence and Etiology of Depression in U.S. Symphonic Orchestra Musicians”

Anne Zola, “Brains Over Beauty: A Conceptual Replication of the Effect of Objectification on Women’s Cognitive Performance”

Innovations in Science and Engineering

Arch Room (206)

Moderator: Anis Contractor, Physiology Department

Jeremy Brooks, “How Moon Orbits Have Changed Over Time: The Gravitational Influence of Close Encounters”

Claire Hilburger, “Controlling Secretion from Vesicles through Remote Control of Membrane Protein Insertion”

Alexandra Johnson and Emily Patnaude, “Fabrication of Soft, 3D Microfluidic Coolers for Peripheral Nerve Blocking”

Sarah McDougald, “Applying Statistical Learning to Personality Psychology: BISCUIT and Other Methods”

Christina Shehata, “Applying a Novel Bioinformatic Method to Study Plant Evolution”

Carson Wilmouth, “Characterization and Correction of Sensory and Social Processing Deficits in a Whisker-Dependent Behavioral Task in a Mouse Model of Fragile X Syndrome”

Combatting Injustice

Rock Room (207)

Moderator: Ji-Yeon Yuh, History and Asian American Studies Departments

Agneska Bloch, “Combatting Epistemic Injustice through (Epistemic) Affirmative Action”

Alana Farkas, “Rape Culture and Institutional Response: Perspectives from Men in Greek Life”

Katherine Lo, “Orientalism in Mexican Imaginaries of Indigeneity”

Samantha Oberman, “Evaluating Interactive Social Justice Education: An Analysis of the Relationship between Responsive Fiction on Social Empathy”

Brittany Owens, “Examining Cross-Racial Linked Fate and Immigration Reform: Evidence from the 109th and 111th Congresses”

The Influence and Impact of Art

Armadillo Room (208)

Moderator: James Hodge, English Department

Kelsey Allen-Niesen, “Chinese Contemporary Art as Soft Power: How the Biennale Shaped Chinese Contemporary Art”

Yiran Chi, “‘Now You Have No Gender’: CGI Feet, China’s Digital Working Class, and a New Bodily Discourse in Li Shuang’s T”

Meghan Considine, “Demythologizing Art and Artist: The Revolutionary Pedagogy of the Chicago Mural Movement”

Alessandra El Chanti, “Lebanon's Politics, Economy, and Art - Revive The Lira's Glory”

Zoe Morfas, “Techno from Production to Performance”

∞ Oral Presentation Session Two

1:00-2:30

Government of the People?

Lake Room (203)

Moderator: Jennifer Nash, African American Studies and Gender & Sexuality Studies
Departments

Omer Alaoui, “Marriage in Qatar: An Intimate Choice or a Sociopolitical Duty?”

Claire Bugos, “Creating a Wilderness Park: How the Sierra Club Saved and Shaped Kings Canyon National Park”

Maya Glenn, “A Critical Look at Breastfeeding Discourse and its Meaning-Making Work for Mothers”

Sara Saltzer, “The Year of the (Democratic) Woman?: Partisan Voter Responses to Female Candidates”

Abhishek Shah, “Winning Whose Hearts and Minds? Counterinsurgency in India-Administered Kashmir”

Advancements in Science and Engineering

Arch Room (206)

Moderator: Tina Grieco-Calub, Communications Sciences and Disorders Department

Kelsey-Ann Leslie, “Birefringence of Polymer Gels Under Stress”

Tyus Loman, “Investigating the Effect of Bilingualism on Auditory Selective Attention”

Madeleine Lucas, “Improving Seismic Hazard Forecasts in California and Surroundings
Using Historical Documentation of the 1918 San Jacinto Earthquake”

Daniel Peters, “Public Health and Climate Co-Benefits of U.S. Vehicle Electrification
Scenarios”

Henry Raeder, “Redundant Functions of PduA and PduJ in Bacterial Microcompartment
Formation”

Yufan Yang, “Rational Design of Nanocarrier Morphology and Surface Charge for
Targeted Cellular Delivery”

Processing Information/Processing Experience

Rock Room (207)

Moderator: Kelly Wisecup, English Department and the Center for Native American and
Indigenous Research

Courtney Chatterton, “‘Music Was Life!’: An Examination of Music and Memory in the
Holocaust”

June Choe, “Social Information in Sentence Processing”

Sarah Dinagar, “Type 2 Diabetes Care in Germany and the U.S. Compared”

Erin Leary, “(Re)imagining the Upper Mississippi River Valley: From the Colonial Roots
of Climate Change to Contemporary Indigenous Artistic Interventions”

William Pahutski, “294,094 Minutes, or Seasons of (TV) Love: Using Qualitative
Characteristics to Create Linear Models, Predicting Television Show Longevity”

How Do We Know Ourselves?

Armadillo Room (208)

Moderator: Wendi Gardner, Psychology Department

Sophie Chen, “Black and White: Exploring African American disillusionment with the
USSR from 1932-1939”

Amanda Davis, “Challenging Traditional Dating Scripts: Female Initiator Requirements
in Dating Apps”

Nicholas Liou, “Looking Homeward: The Troubled Nostalgia of Chiang Kai-shek
Memorial Hall”

Ella Lombard, “One Person, Many Groups: Collective coherence in LGBTQ+
individuals”

Jun You, “The Prospect of Moral Artificial Agents”

Poster Session Two

2:30-4:00, Louis Room (205)

Humanities, Social Sciences, & Journalism

58. **Alara Ozsan**, “Exploring the Psychosis Continuum: Reward Processing in Non-Clinical Psychosis”
59. **Amanda Bennett**, “Self-Management Education to Reduce Frailty in Older Adults”
60. **Ankita Ajith**, “Project Thea: Morocco, an examination of female entrepreneurship”
61. **Annamarie Jedziniak**, “The Effects of Photography on Facial Reconstructive Plastic Surgery Between the 19th and 20th Century”
62. **Christina Foo**, ““There’s not many people who are willing to stand up these days”: Racial Counternarratives in Middle Childhood”
63. **Christine Hwang and Shari Gordon**, “The Role of Resistance: Black Adolescent Girls’ Reports and Responses to Discrimination and links to Mental Health”
64. **Courtney Skula**, “Mansplaining and Classroom Discourse: Interruptions and STEM Learning”
65. **Dayanara Padilla**, ““There’s Racist People Out There, Like Donald Trump”: Children’s Spontaneous Reflections on Current Politics”
66. **Eliza Beth**, “Challenging the Objectives of Sex Education: Themes of Pleasure and Desire in Comprehensive Sex Education Curricula”
67. **Ennely Medina**, “Preserving Best Interests: Unaccompanied Minors in Detention”
68. **Hannah Yi**, “Too distracted to listen? Investigating how young and older adults allocate attention to understand speech while multitasking”
69. **Imani Minor**, ““You’re pretty for a dark skin”: Rejecting and Endorsing Colorism in an All-Black, All-Girls High School”
70. **Jessica Collins**, “Constructing Successful Citizens: The EU, Erasmus+, and the Reproduction of Class”
71. **Julia Shenkman**, “Redefining the Borders of Medical Tourism: Navigating Healthcare in an Evolving Local Knowledge System”
72. **Katherine Conte**, “Impact of Political Candidates on Voter Engagement in Chicago Aldermanic Elections, 2003-2019.”
73. **Katia Valdez**, “Gesture Performance in a Sample of Clinical High-Risk Individuals”
74. **Kristen VanTine**, “The Calculative Mindset and the Propensity to Dehumanize Others”
75. **Laura Zajac**, “Learning from Whom and from What? How Performance Feedback Affects the Diffusion of New Practices”
76. **Lydia Wuorinen**, “Understandability and Title IX Compliance at the Undergraduate Level”
77. **Maddie Hong**, “Haptic Memories and Visualities in Film: How Films Touch and Feel”
78. **Mary Parker**, ““It’s Not Just, ‘Hey Cookie, Let’s Go Out.’ It’s More Like Being Shoved Against the Wall.” A Qualitative Exploration of Mechanisms of Sex Segregation in Fine-Dining Restaurants in Chicago”
79. **Nicole Rinne**, “Examining Conversation Breakdowns in Parkinson’s Disease Versus Alzheimer’s Dementia”
80. **Pallas Gutierrez**, “In the World We Manifested: Homonormativity, Gender Roles, and Sexism Within Queer Fan Fiction”
81. **Rachel Epstein**, “Cosmetics Use and Body Image in Women: Motivations Matter”
82. **Ryan Millman**, “Exploring the Use of Comparisons During Families’ Conversations at a Children’s Museum STEM Exhibit”
83. **Samantha Buresch**, “The First-Generation Student Transition Experience into the Working World”
84. **Talia Waxman**, “Chicago Teen Girls Participatory Photovoice”

85. **Adam Watts**, “Can Machine Learning Read CEO’s Better Than a Human: An NLP Analysis of Quarterly Earnings Calls and Stock Returns?”

Natural Sciences & Engineering

86. **Avery Wallace**, “Coral Bleaching in the Florida Keys: The Impact of Accumulated Heating Stress on Bleaching and Mortality in Corals”
87. **Catherine Walker**, “Increasing Stability of Iron Nanolayers for Use as Energy Transducers”
88. **Charles Costakis**, “Inverse Mapping in Resistance Tomography”
89. **Charles Stark**, “Small Molecule Synergy to Improve Protein Folding in Neurodegenerative Diseases”
90. **Dani Lewittes**, “The Effect of Intramolecular Hydrogen Bonding on the Solution-Phase Conformation of Tertiary Amines”
91. **Div Dasani**, “Image Colorization with Convolutional Neural Networks”
92. **Erica Littman**, “Efflux Pumps Contributing to Antibiotic Resistance are Conserved Across Pseudomonas Species”
93. **Faraz Khan**, “Super-resolution SERS—Investigation of Raman Image Dependence On Laser Wavelength”
94. **Fiona Worsfold**, “Relating the bleaching response of coral species to that of its assemblages”
95. **Gina Johnson**, “Concussed football players display enhanced sound processing compared to healthy, non-athlete peers”
96. **Harrison Pearl**, “Coordi: A Virtual Reality Application for Reasoning about Mathematics in Three Dimensions”
97. **Isabella Borgula**, “Effect of zinc on mouse spermatozoa function”
98. **Juan Sanabria**, “Injectable Biodegradable Elastomer to Aid in Healing of Bone Fractures”
99. **Katherine Duncker**, “Cell-free Glycoprotein Synthesis and Screening Platform”
100. **Larry Wang**, “Agent Orange Effects on Sensorimotor Function of Transtibial Prosthesis Users”
101. **Madeline Corrigan and Sophia Wong**, “Determining a model for harbor seal whisker geometry from extensive data analysis”
102. **Michael Montoya and Ryne Montoya**, “Anthropogenic Effect on Diversity in Cedar Glade Habitat”
103. **Neha Pashankar**, “Meta-analysis and Pathway Identification of Genes Associated with Anxiety Disorders”
104. **Nell Borys**, “Structural Elucidation of Regulatory Domains Found in ABC Transporters”
105. **Orazio Alaimo**, “EMG signal processing of muscle activations during transtibial prosthetic gait”
106. **Peter Puleo**, “A ~14,500-year Paleoenvironmental and Paleoclimate Record from Sediments of Geneva Lake, Wisconsin”
107. **Stephen Johnson and Katherine Riedel**, “Sem(eye)conductors: Treating Ocular Diseases With Semiconductor Technologies”
108. **Wan Phua**, “Total Synthesis of (–)-trans-Solamin: A Bioactive Compound with Unique Stereochemical Properties”

Creative Arts Festival

8:00-9:30 Wirtz Black Box 101


Emcee – Morgan Buckley


Visual Art Showcase

Kira Nutter – Spacing Out (painting)

Valerie Slowing – Behind My Smile (painting)

Nur Munawarah – What I Learned in School (photography)

Deniz Turkoglu – By the Water (video/sound installation)

Performances (in scheduled order of appearance)

Gibran Wirjawan – Gibs: Live (Music)

Nadalyn Bangura – Rainy Season (Poetry)

Sana Ansari – Batch 10 (Documentary Film)

Lauren Loesberg – Janek to the River (Narrative Film)

Simran Bal – a nomadic woman’s journey back home (Staged Reading)

Jake Curtis – Adult Foleys (Web Series)

Maha Essid – 426 (Narrative Film)

Rae Covey – Focus On Your Hands (Staged Reading)

Sloane Scott – Ode to Times Beach, MO: 1925-1985 (Poetry)

Cesar Almeida – The Drummer’s Spotlight (Music)


Stage Manager – Olivia Zapater-Charrette
