UNDERGRADUATE STUDENT RESEARCH AND INTERNSHIP SYMPOSIUM

WEITZ CENTER FOR CREATIVITY COMMONS
4:30 - 6:00 PM
OCTOBER 15, 2021

www.carleton.edu/research/symposium/2021-symposium/
1. Akyianu, Awurama
   Title: *An enolase inhibitor for the targeted treatment of ENO1-deleted cancers*

2. Alexander, Ariel
   Title: *Summer Public Policy Internship with Laura Baker Services Association*

3. Arch, Evan
   Title: *Magnetic Configurations of Mesoscale Permalloy Dots*

4. Arora, Aryan
   Title: *Community Organizing with the IAF*

5. Ashurst, Dan
   Title: *Grateful Gatherings: Sharing Stories of Hope*

6. Bailon, Avi
   Title: *Immigration Law at the James H. Binger Center for New Americans at the University of Minnesota*

7. Bassekle, Grace
   Title: *Affordable Housing with Beacon Interfaith*

8. Bastimar, Ruken
   Title: *Assessing Ways of Knowing and Preferences for Online vs. In-Person Learning*

9. Bastimar, Ruken
   Title: *The Academic Experiences Survey (AES): Assessing Undergraduate Perception of the Liberal Arts Experience*

10. Bauer, Nate
    Title: *Intern for State Representative Todd Lippert (D-20B)*

11. Block, Alison
    Title: *Room-Temperature Fabrication of Dielectric Ceramics*

12. Bloom, Malachy
    Title: *Dispersion Analysis of Gravitational Waves*

13. Bobadilla Riquelme, Vicente
    Title: *Network Loss Prediction for Low Latency Video Steaming*

14. Boerma, Sally
    Title: *Investigating the Function of Histone 3 Lysine 36 in X-Chromosome Dosage Compensation*
15. **Boulis, Maddie**  
Title: *Quantifying the Microbiome of the Lost City Vent Field*

16. **Brewster, Ben**  
Title: *Probing C–H Activation by Rhodium Silyl Pincer-Type Complexes*

17. **Brooks, Athena**  
Title: *Disrupting leukemia-meningeal cell adhesion to overcome acute lymphoblastic leukemia chemoresistance in the central nervous system*

18. **Bui, Kevin**  
Title: *Discussify*

19. **Cai, Eway**  
Title: *Discovering Emerging Medical Technology*

20. **Callahan, Corrina**  
Title: *Kirigami and Tunable Adhesives*

21. **Cameron, Alison**  
Title: *Keep your frenemies close: Lysogenic bacteriophage benefitting their hosts evolve to be temperate populations*

22. **Cannell, Isabel**  
Title: *Characterization of Secondary Metabolites in Marine Egg Mass Microbiomes*

23. **Cauthorn, Sarah**  
Title: *Probing a Proposed Hydroxylation in the Biosynthesis of Bleomycin in Streptomyces verticillus*

24. **Chaffee, Isabella**  
Title: *Summer Internship with URACA Basiliade*

25. **Chappell, Garrett**  
Title: *Evolution and Radiation of Bacterial Sulfur Cycling Genes*

26. **Chen, Theresa**  
Title: *Using Machine Learning Techniques and ICESAT-2 Data to Analyze Sea Ice Features*

27. **Cheng, Allen**  
Title: *Investigating Immune Cell Abundance in Pediatric Osteosarcoma*

28. **Cheng, Eric**  
Title: *Classical Conditioning of Asian Carp*
29. Chu, David
Title: *Behavior Analysis in Starcraft II*

30. Cleveland, Jackson
Title: *Achieving Regioselective C-H Activation Through Silicon/Iridium Cooperation*

31. Cohen, Ashley
Title: *Designing a New Website for Anega Energies*

32. Coker, Acacia
Title: *TMEM127 Regulation of RET Accumulation and Activation*

33. Cooney, Mika
Title: *Diophantine m-Tuples*

34. Cordova, Ineke
Title: *Pay Attention*

35. Cota, Alé
Title: *Queer-Romancing: Sensuality, Futurity, and the War on Intimacy in Ocean Vuong’s On Earth We’re Briefly Gorgeous*

36. Crown Manesis, Isaac
Title: *Facets 2021 Summer Internship Festival Programing Assistant and Summer Camp Assistant*

37. Cunningham, Ella
Title: *Farm Intern in Windham, VT*

38. Danks, Maia
Title: *Interning at Kids Saving the Rainforest*

39. Davis, Hannah
Title: *Analyzing the Efficacy and Ethicality of Wisconsin’s GPS Tracking Program*

40. Delgado, Andi
Title: *Reduce, Reuse, Respire: Two Environmental Factors’ Effects on Mussel Respiration*

41. Delgado, Jennifer
Title: *The Mill Creek Dam Removal: Re-rooting STEM in Indigenous Knowledge*

42. Dilulio, Lydia
Title: *In the Community with Growing Up Healthy*
43. DiNardo, Zach  
Title: *Computational Investigation of C-H Activation by Group 9 Transition Metal Silyl Complexes*

44. Donahue, Larry  
Title: *Continuing Development of a Search Tool for LIGO Noise Data*

45. Donnelly, Marc  
Title: *Understanding the Relationship between Gray Whale Behavior and Habitat Across Spatial Scales*

46. Drennan, Allison  
Title: *Historic Preservation in Charleston, South Carolina*

47. Ellis, Angela  
Title: *Life at an Anglican Monastery with Forty-Four Cashmere Goats*

48. Emlen, Tali  
Title: *Food Access Summer Internship*

49. English, Keyra  
Title: *White: a Stop Motion Short*

50. Eriksen, Dawson  
Title: *Public Scholarship in Religious Studies: ReligionMN*

51. Eversoll, Soren  
Title: *The Carleton Student Farm*

52. Fan, Pinchen  
Title: *Comparison of Skymaps from Multiple Gravitational-Wave Event-Finding Methods*

53. Farr, Elizabeth  
Title: *The Role of miR9 and its 5q14.3 Enhancer in Retinal Vasculature*

54. Farwell, Grace  
Title: *What Features of a Talking Facilitate Speech Recognition?*

55. Feldberg-Bannatyne, Maya  
Title: *Reconstruction of the Mid Atlantic Bight Oceanic Conditions Using Sclerochronology*

56. Felland, Max  
Title: *Visualizing molecular chaperones in C. elegans using a system of split fluorescence*

57. Fick, Lydia  
Title: *Automated Leveling Apparatus for Probe-Tack Tests*
58. Fisher, Keely  
Title: *The Benefits of Outdoor Adventure Recreation: A Longitudinal Study of Impacts and Young Adults’ Perspectives*

59. Forster, Brie  
Title: *Sex Differences in Liver Ugt1a9 Gene Expression in Heterogenous Stock Rat Founding Inbred Strains*

60. Franco, Jocelyn  
Title: *The Influence of Marianismo in the Experiences of Latinx Daughters as Represented Throughout I Am Not Your Perfect Mexican Daughter*

61. Franzen, Elias  
Title: *Water Policy Internship with the Environmental Policy Innovation Center*

62. Freedman, Miriam  
Title: *Summer Internship Work*

63. Gao, Eunice  
Title: *Carleton Farm Internship*

64. Geist, Katherine  
Title: *Molecular Insights in Cation Behavior in Zeolites*

65. GhaneaBassiri, Kamala  
Title: *Exhibition Research for the Oregon Jewish Museum and Center for Holocaust Education*

66. Gillen, Fiona  
Title: *Lakota Language Preservation on Pine Ridge Reservation*

67. Goenka, Maanya  
Title: *systemd-analyze*

68. Goldberg, Elijah  
Title: *My Summer Experience Working at Dodge Center Ambulance Services*

69. Grader, Louisa  
Title: *Todd Lippert Campaign*

70. Graham, Esme  
Title: *Exploring Curation at the Rochester Art Center*

71. Gudgel, Riley  
Title: *Measuring the Effects of Community Development Initiatives in Dublin, Ireland*
72. Gunnarsson, Marianne
Title: From Wanghong to Tuhao: The Culture of Livestreaming in Contemporary China

73. Gwin, Anna
Title: Collaboration in Conservation: Tracking Marmots & NGO Relationships

74. Haddock, Clay
Title: Social Justice Internship: Lakota Immersion Program

75. Hadjiyanis, Eva
Title: Community Organizing Internship: IAF Northwest

76. Hall, Charlie
Title: Characterizing Nanobubbles at the Copper-Graphene Interface

77. Han, Wenlai
Title: Metal-Silicon Cooperative Conversion of Alkyl Azide to Isocyanate Enabled by a Labile Si-OTf Interaction

78. Harmon, Bailey
Title: Differences in In Vivo and In Vitro cDC1 Maturation After Stimulation with Different TLR Agonists

79. Hazen, Gavin
Title: Creating Cheaper Mixed Metal Oxide Films for Renewable Hydrogen Production

80. He, Sue
Title: Direction, Locus of Control, and Target-Trigger Distance Have Little Impact on Phonological Learning of Sibilant Harmony

81. Hein, Ella
Title: Cooking Should Not Kill: Indoor Air Quality in Urban Ethiopian Households

82. Hettle, Arlo
Title: Community Organizing in Des Moines Iowa

83. Heuchert, Klara
Title: Animal Care Internship at the Wildlife Science Center

84. Hodge, Shakeal
Title: Evolutionary stability of host-endosymbiont mutualism is decreased by multi-infection

85. Hofmann, Maya
Title: What's Your FQI? Using Floristic Quality Indices to Foster Urban Conservation
86. Hope Csikszentmihalyi, Kinga  
Title: Comprehensive Medication Management Internship, California Department of Public Health

87. Horne, Lily  
Title: Podcast Production Intern

88. Horwitz, Becca  
Title: Investigating the Overlap between the Mid-Atlantic Bight Cold Pool and Leased Off-Shore Wind Sites

89. Hussain, Khalid  
Title: Data for Organizing Intern at TakeAction Minnesota

90. Ifedi, Chiamaka  
Title: Expanding Speech Perception Research Beyond “Native English Speakers”

91. Intasin, Pear  
Title: Viral Tissue Tropism of a Picornavirus in Two Different Zebrafish Lines

92. Jaffar, Shaheer  
Title: Economic opportunity Intern

93. Jehng, Moses  
Title: Environmental Law Centers and Policy

94. Jin-Lee, Helen  
Title: The Effects of a New Anti-PD-L1 Antibody on CD8+ T Cell Tumor Infiltration and Functionality

95. Johnson, Teagan  
Title: Dragon Architect 2.0

96. Johnston, Julia  
Title: Grave Regrets: The Psychology of Farewell During the COVID-19 Pandemic

97. Jones, Trevor  
Title: Leveraging The Cancer Dependency Map to Predict Novel Functional Interactions in the Ubiquitin System

98. Julie, Shira  
Title: Linear Dependence Relationships of Canonical Algebraic Curvature Tensors as Described by Weighted Directed Graphs

99. Kadam, Simran  
Title: Carleton Organic Farm Student Manager
100. Kaushikkar, Nina  
Title: *A Feminist Transitional Justice: Jineology in Syrian Conflict Resolution*

101. Keen, Ally  
Title: *Correcting Telluric Absorption Lines with TelFit*

102. Kelly, Riaz  
Title: *Animal Guessing Game at SayKid*

103. Kline, Miah  
Title: *Hyperglycemia Induced Endoplasmic Reticulum Stress in Cardiomyocytes*

104. Knutsen, Elise  
Title: *Simulation of Magnetic Configurations In Mesoscale Permalloy Dots*

105. Knutson, Logan  
Title: *Summer Intern - Criminal Defense Paralegal*

106. Kortanek, Evie  
Title: *Neural Mechanisms of Aging and Cognitive Decline: Tamarins as a Model of Human Aging and Alzheimer’s Disease*

107. Kotler, Alec  
Title: *The Effects of Asparagine Synthetase on Cellular Metabolism across Leukemia and Liver Cancer Cells*

108. Kropp, Amy  
Title: *Examining the Feasibility of Adding a Facility Dog to the Rice County Attorney's Office*

109. Lazo, Bethany  
Title: *Science Writing at Concussion Alliance*

110. Leone-Getten, Siena  
Title: *MN350 Communications Internship - Andersen Foundation Fellowship*

111. Lo, Carly  
Title: *Impact of Temperature on Vertical and Latitudinal Ranges of Four Barnacle Species Along the California Coast*

112. Lopez, Naomi  
Title: *Children of Incarcerated Caregivers*

113. Luo, Jadie  
Title: *Programming Intercultural Conversations at the Hong Kong International Literary Festival*
114. Maag, Sophia
Title: Understanding Healthy Masculinity and Work Culture with Maine Boys to Men

115. Majumdar, Manjari
Title: Institution-Based Organizing in Portland, OR

116. Malter, Astrid
Title: Rooftop Films Summer Internship

117. Maneenoi, Jeep
Title: The Influence on the Expansion Rate of Soundless Cracking Demolition Agents (SCDAs) By Different Concentration of Chemical Accelerators and Viscosity Enhancing Agents (VEAs)

118. Mangena, Thandie
Title: Enhancement of type 1 interferon induction with drug and radiation treatments to increase anti-tumor immunity

119. Martin, Aidan
Title: Exploring the Neuropathology Of PTSD

120. Maxwell, [Redacted]
Title: Internship With Yes4Minneapolis

121. McGehee, James
Title: U/Pb Detrital Zircon Provenance of the Chugach-Prince William Terrane, Baranof Island, SE Alaska

122. Meesena, Ton
Title: Minimizing Age of Information in Uplink Networks with Processing Constraints

123. Mer, Elie
Title: Processing X-ray Free-Electron Laser (XFEL) Data for Protein X-ray Crystallography

124. Michael, Sidra
Title: The Black Arts Movement in 1960s and '70s Chicago

124.5 Colleen Milligan
Title: Why so late? Flowering phenology and pollination activity in four species of late-flowering asters (Symphyotrichum)

125. Misra, Arya
Title: Convivencia Triumphant in La Catedral del Mar on TV/ Netflix

126. Misra, Arya
Title: Original Programming at HBO
127. Mohamed, Suad
Title: Glycolysis Increases Multivesicular Bodies in Hepatic Stellate Cells

128. Moriyama, Ayaka
Title: Electrowetting Pump on a Chip (E-PunCh) Project – Experimental Characterization of Efficient Tesla Valves

129. Mukherji, Anwesha
Title: Murphy Avenue Pet Clinic: Veterinary Internship

130. Nachreiner, Libby
Title: Nelson for WI Campaign Internship

131. Navarro, Jordan
Title: Effects of Preview Advertisements on Attitudes About Full-Length Advertisements

132. Nguyen, Chi
Title: Evaluating the Integrals of Grashteyn and Ryzhik

133. Nowak, Katherine
Title: Effects of Different TLR Agonists on in vivo cDC1 and in vivo cDC2 Activation

134. Nystrom, Kenyon
Title: Analysis of Viral Composition at the Lost City Hydrothermal Vent Field Using Modern ‘Omics’ Pipelines

135. Oda, Katy
Title: Exploring the Distribution of Nearby M Dwarfs in the Context of the Habitable Zone Planet Finder

136. O'Grady, Frances
Title: GrowingChange: Flip the Prison

137. Oguh, Chisom
Title: Decoding Tech Support: Expertise Identification From a Tech Support Dataset

138. Ooi, Win Wen
Title: Markets, Chickens, and Hungry Ghosts: Cultural Heritage in the Age of COVID-19 in Penang, Malaysia

139. Orepo-Orjay, Sade
Title: Hallelujah Nation Productions

140. Paine, Mark
Title: Purification and Quantification of HIV Genomic RNA
141. Pandey, Kanishk
Title: Galactic Isotopic Decomposition for the Sculptor Dwarf Spheroidal Galaxy

142. Petropoulos, Astrid
Title: Effects of Age are Not Uniform Across Cognitive Processes: A Repeated-measures ERP Study

143. Polley, Michaela
Title: Recycling Photopolymerizable 3D Printing Resin

144. Qi, Leo
Title: Broadening the Scope of a Spectrophotometric Aminoacylation Assay

145. Qin, Shaw
Title: Online Collaborative Library Research in Educational Psychology and Organizational Psychology

146. Rabago, Alek
Title: Cooking Should Not Kill: Indoor Air Quality in Rural Households in Ethiopia

147. Rahman, Samihat
Title: CsPbBr3 Perovskite Nanocrystals: The Effect of Changing Surface Ligands on Photoluminescence

148. Ramirez, Trent
Title: Financial Analyst Summer Internship at Yavrucu Capital

149. Randa, Lora
Title: Stabilizing an Unstable and Pathogenic Mutant Protein

150. Reyes Rojas, Carlos
Title: The Immigrant Law Center of Minnesota

151. Rhyneer, Silas
Title: Machine Vision Engineering at Clean Energy Associates

152. Rodriguez, Diana
Title: Cooking Should not Kill: Restaurant Indoor Air Quality in Addis Ababa, Ethiopia

153. Rogers, Maya
Title: Mapping Misperceptions: Ideological Threat Shapes Visual Representations of Public Health Organizations

154. Rohde, Magdalena
Title: Investigation into Potential Supernova Remnant Candidate “Bubbles” in Galaxy M33
155. Safdar, Hashir
   Title: Software Engineer Internship

156. Satish, Adi
   Title: The Community Action Center of Faribault

157. Schulenberg, Emily
   Title: Ocean Memory

158. Shafer, Scott
   Title: Translating the Life of Jean Bolland: A Study in the Hagiography of Scholarship in the 17th-Century

159. Shah, Ananya
   Title: Clinical Characteristics and Outcomes of Patients with Myocardial Infarction with No Obstructive Coronary Arteries (MINOCA) Presenting with ST-Segment Elevation

160. Shahid, Mehdi
   Title: Assessing the Speed and Accuracy of Real-time Motion Tracking Algorithms for Abdominal Organ Motion Management in a 1.5T MR-Linac System

161. Shapiro, Lucy
   Title: Food Systems and Reclamtion Research Internship

162. Shen, Ming
   Title: Determining a Pathological Model for Delayed Gut Transit in Parkinson’s Disease Using Drosophila

163. Shen, Yicheng
   Title: Exploring the Finite-sample Behavior of Residual Diagnostics for Linear Mixed-effects Models

164. Simons, Isaac
   Title: Travelers Insurance: A Case Study to Explain Reinsurance

165. Smith, Cassie
   Title: Effects of heterogeneity on inferred stress directions using borehole breakout orientations: A physical modeling approach

166. Smith, Collin
   Title: The Importance of Being Discrete: Dynamics of Flow-Kick Disturbance Models

167. Smith, Madi
   Title: Interacting With Nature: Research With The Watson Lab
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<td>Investigating the Drift of the Habitable Zone Planet Finder Astro-Etalon Calibration System</td>
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<td>Ditransitives in Insular Scandinavian and Korean</td>
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182. Uyeda, Hana
Title: *Resisting Line 3*

183. Vadnais, Saraswati
Title: *LearningWorks Summer Teaching Fellowship*

184. Vera Leyva, Samantha
Title: *The Politics of Deservingness for Queer Asylum Seekers at the US-Mexico Border*

185. Villanueva, Jed
Title: *Investigating the Effect of Noise on Listening Effort and Passage Recall*

186. Viswanathan, Aswath
Title: *Industry Analyst at Arnell Capital*

187. Walker, Bryson
Title: *Investment Analyst Research Presentation*

188. Walsh, Mickey
Title: *The Advocates for Human Rights: Communications Internship*

189. Walters, Alexis
Title: *Detrital Zircon U-Pb Dating of the Charleston Metamorphic Group, South Island, New Zealand*

190. Wang, Hongshen
Title: *Quantification of DNA Repair Related Foci Rad51 by Utilizing Fluorescence Intensity*

191. Way, Lauren
Title: *Can transition state analogs be used to predict properties of a chemical reaction?*

192. Wege, Sam
Title: *Small Cycladic Islands Project 2021*

193. Welch, Piper
Title: *Endosymbiosis or Bust: Influence of Ectosymbiosis on the Evolution of Obligate Endosymbiosis*

194. White-Davis, Julian
Title: *Balkan Echoes: Archival Assistant*

195. Williams, Jan
Title: *Data-Driven Sensor Placement for Fluid Flow Reconstructions Using a Shallow Decoder*
196. Wilson, David
Title: *Exploring Helminth Aminoacyl-tRNA Synthetases*

197. Winston, Lea
Title: *Summer in Museum Education*

198. Woollen, Beck
Title: *Climate Justice Internship at MN350*

199. Wright, Ada
Title: *Screen Time and Student Behavior: An Examination of Emotional Health and Physical Activity*

200. Wu, Josh
Title: *Internship at Versiti Blood Research Institute*

201. Xiang, Xinyan
Title: *Weak S-Process Nucleosynthesis in Massive Stars*

202. Xiang, Xinyan
Title: *Gravitational Wave Veto Algorithm Comparison*

203. Xiong, Xavier
Title: *Lipid Energetics of Bullnose Rays: Comparison of TAG and FFA Concentration in Different Tissue Types*

204. Yambing, Jaren
Title: *Field trials and greenhouse experiments quantifying the carbon sequestration of enhanced weathering with basaltic soil amendments*

205. Yanai, Jill
Title: *Methodologies, Barriers, and the Politics of Space: A Fieldworker’s Approach to Recruitment and Retention of Participants for Clinical Trials at a Rural South African Clinic*

206. Yang, Michael
Title: *Dispersion Analysis of Gravitational Waves*

207. Yum, Karina
Title: *"Deconstructing" the House Upon the Rock: An Analysis of Ex-Evangelical Media*

208. Zappa, Mathew
Title: *Rare Plant Surveys in the Carleton Arboretum*

209. Zhang, Mary
Title: Developing a Cell-based Sensor for Ang1-7 and AngII