

## Schedule of Events

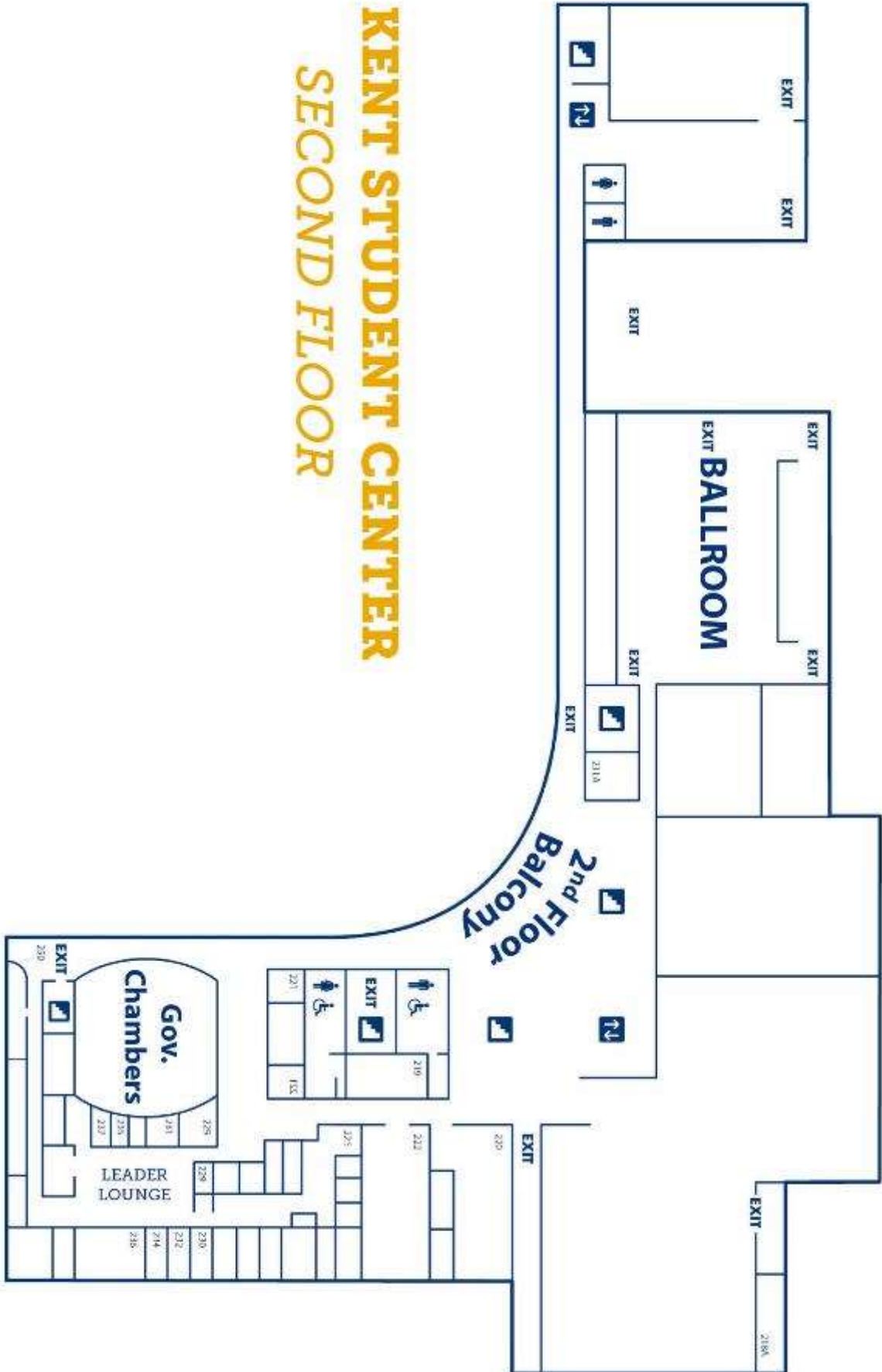
### Thursday, April 19

- 3:00 p.m. .... Registration Opens, Second Floor
- 4:00-5:30 p.m. ....Poster Presentations, Ballroom and Second Floor
- 4:00-5:30 p.m. .... Art Exhibit, Ballroom
- 5:30-8:00 p.m. ....Fine Arts Performances, Ballroom

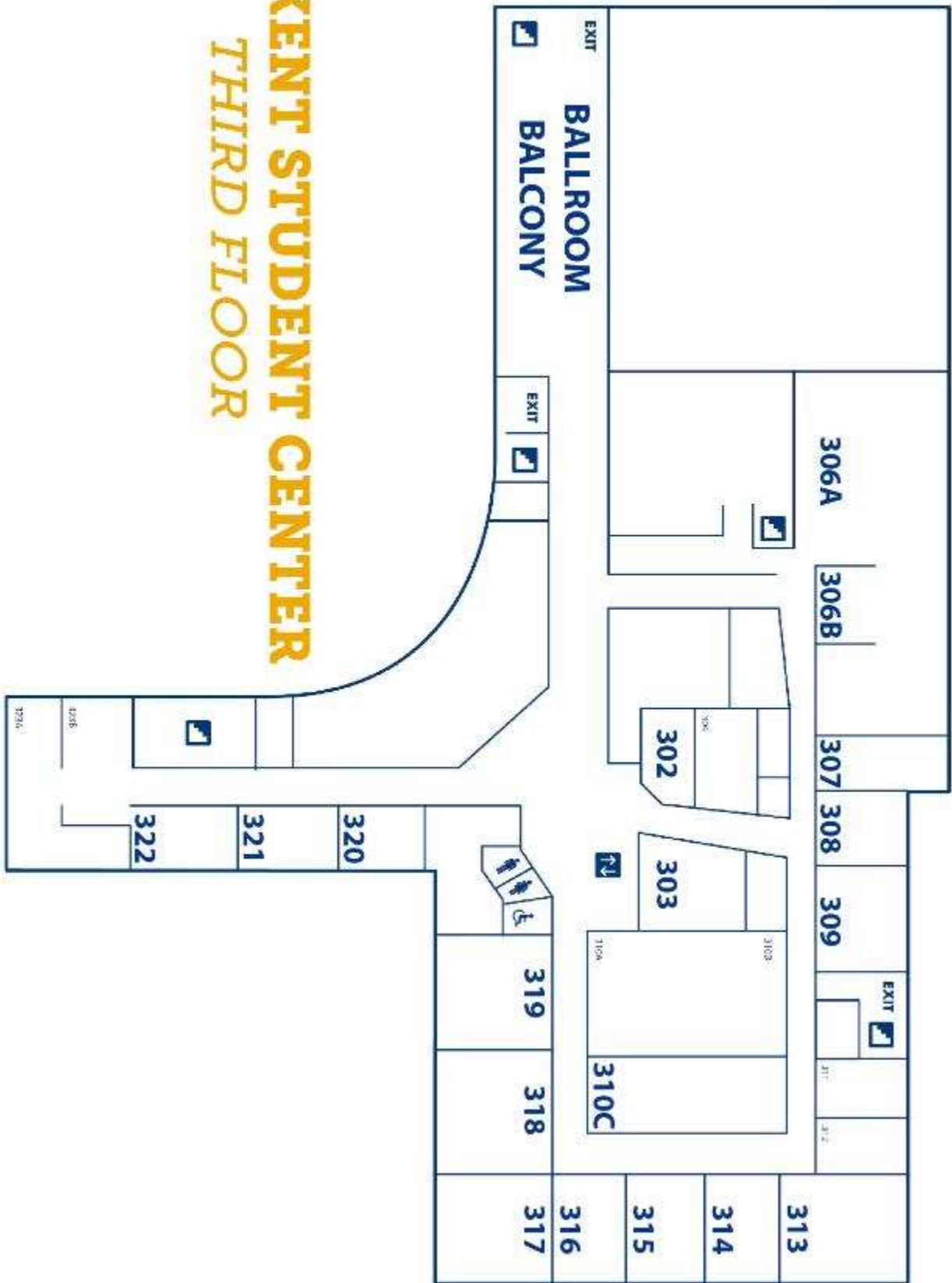
### Friday, April 20

- 8:00 a.m. .... Registration Opens, Second Floor
- 9:00-10:30 a.m. ....Oral Presentations I, Third Floor
- 10:45 a.m.-12:15 a.m. .... Oral Presentations II, Third Floor
- 12:30 p.m. ....Awards Luncheon, Ballroom

# KENT STUDENT CENTER SECOND FLOOR



# KENT STUDENT CENTER THIRD FLOOR



## Thursday, April 19

### Poster Presentations

4:00-5:30 p.m.

#### Poster Session 1: Anthropology

1. Danielle Jones, Anthropology  
*A Comparison of Serotonergic Innervation of the Amygdala within the Genus Macaca: Implications for the Evolution of Primate Sociality*
2. Cody A. Ruiz, Anthony J. Tosi, Anthropology  
*Y-Chromosome Introgression: An Analysis of Spermatogenesis Genes Between Two Macaque Monkey Species*
3. Samuel Thomas, Anthropology  
*Adventure in the Classroom: An Ethnographic Study of the Expedition Academy*
4. Rachel Hamilla, Anthropology  
*Orangutan Health and Behavior: Implications for Nutrition in Captivity*
5. Kristen Hirter, Anthropology  
*The Intersection of Genes and Behavior: Assessing Interspecies Variation of the Dopamine Transporter within the Macaca Genus*
6. Kayla Metzger, Anthropology  
*Comparing Health Disparities of Two Manners of Death in HTH Osteological Collection*

#### Poster Session 2: Architecture I

7. Jessica Schultz, Architecture  
*Setting the Record Straight: The Influence of Charles Morse Stotz in the Pittsburgh Region*
8. Rachel Zimmer, Architecture  
*The Home of the Monarch vs. The Home of the Monarchy*

9. Yu Zhang, Architecture  
*Digital Images: Instagram's Impact on Places and Things in the Built-Environment*

10. Tyler Kamczyc, Architecture  
*Bio-Inspiration: Natural Innovations for Sustainable Design*

11. Hao Gong, Architecture  
*A Solution to Sustainable Architecture Design: 3D Printed Wall System*

#### Poster Session 3: Architecture II

12. Steven Begg, Architecture  
*Architecture and the Cinema: The Continued Influence of Film on the Field of Architecture*

13. Joshua Fehrenbach, Architecture  
*Today's Architecture Originated from Yesterday's Sci-Fi Films*

14. Devin Heinlein, Architecture  
*Effects of Collective Memory on Perceptions of Architecture*

15. Matthew Carubia, Architecture  
*Video Games' Role as Digital Architecture*

16. Donna Grigonis, Architecture  
*Preliminary Investigation of the Impact of Music Festivals on the Environment*

17. Kayla Barko, Architecture  
*Sense of Place and Distance to a Region: Factors that Decrease Attachment and Identity*

#### Poster Session 4: Architecture III

18. Gwendolyn Frank, Architecture  
*Assessing a Sense of Community in a New Era of the West Side Market*

19. Matt Tolodzieski, Architecture  
*Millennial Interest in Professional Design Organizations*

20. Peter Nogay, Architecture  
*Linking the Physiological Benefits with the Morphological Characteristics of the Tiny House Movement*

21. Samata Shrestha, Architecture  
*The Impact of Unplanned Building Demolition and Neighborhood Morphology on Urban Air Pollution Dispersion*

22. Amir Allenbey, Architecture  
*User Outlook on Residential*

23. Katelyn Hannigan, Architecture  
*Experience Versus Memory*

#### **Poster Session 5: Architecture IV**

24. Cody Chambers, Architecture  
*Impact of Daylighting on CAED Students' Cognitive Function*

25. Kate Sabin, Architecture  
*A Solution to Poor Workplace Ergonomics*

26. Jack Kritzman, Architecture  
*Glare Effecting Learning Environments*

27. Mary Myers, Architecture  
*Assessing Workplace Stress in Women and the Utilization of Biophilic Design as a Coping Mechanism*

28. Caitlin Raymond, Architecture  
*Behavioral Health Facilities Designed for the Adolescent Suffering from Anxiety and Depression*

29. Anthony Wahl, Architecture  
*Reshaping American Malls through Adaptive Reuse*

#### **Poster Session 6: Architecture V**

30. Aditi Karadesai, Architecture

*Hospice Care Center: A Holistic Approach to End-of-Life Care in India Using the US Based Hospice Model*

31. Ethan Snider, Architecture  
*Lighting Levels: Changing Bulb Types Can Provide the Elderly with the Appropriate Amount of Light*

32. Anastasia Christine Markiw, Architecture  
*Lighting in Healthcare: An In-Depth Approach to a Holistic Design*

33. Anthony Marinakos, Architecture  
*House, Hurricane, Rebuild House?*

34. Sarah Clark, Architecture  
*The Modulated Application of Large Scale Additive Manufacturing*

35. Nicholas Mellon, Architecture  
*Urban Forest: The Embodied Energy of Trees on High-Rise Buildings*

#### **Poster Session 7: Architecture VI**

36. Brad Bowman, Architecture  
*VR Implications on Architectural Design Process*

37. Elizabeth Nicklas, Architecture  
*Auditory Design*

38. Elizabeth Swearingen, Architecture  
*Arbotecture*

39. Nicholas Greenaway, Architecture  
*The Possibilities of Architecture Beyond Earth*

40. Caitlyn M. McClausland, Architecture  
*Construction Methods and Materials in a Lunar Environment*

#### **Poster Session 8: Art, Music, and Architecture**

41. Andy Alex Martinez, Ethnomusicology  
*Kumi Odori: Okinawa's Musical Theater*

42. Amanda Paniagua, Art History  
*An American Woman's Gaze: Mary Cassatt's Spanish Portraits*

43. Eli Crisafio, Architecture  
*Impact of Julius Shulman's Photography on Modern Architecture*

44.a Hannah Petit, Architecture  
*The Influence of Exiled Artists, Picasso and Miró, on the Establishment of Spanish Modern Architecture*

44.b Hannah Petit, Architecture  
*The Most Effective Wayfinding Tools as Perceived by Students at Kent State University*

#### **Poster Session 9: Engineering, Design, and Technology**

45. Thomas Davis, Aerospace Engineering  
*Development and Characterization of a UAS Propulsion Test Bench*

46. Mujeeb Ur Rehman Syed Abdul, Engineering  
*Compared Evaluation of Vendor Selection Using Different Methods*

47. Hai Feng, Engineering  
*Current Collector of Tubular Solid Oxide Fuel Cell*

48. Naser Al Madi, Michelle Park, Param Degin, Elena Blaginykh, Fashion Design, Product Design  
*Firefly: The Smart Purse of the Future*

49. Reem Al Suhaibani, Software Engineering  
*Lexical Categories for Source Code Identifiers*

50. Pavan Poudel, Computer Science  
*Adaptive Logging Framework for Persistent Memories*

#### **Poster Session 10: Biological Sciences I**

51. Cynthia Perkovich, Biological Sciences  
*Do Herbivorous Insects Cause a Differential Investment in Secondary Metabolites of Plants?*

52. Emma Given, Ecology  
*Flood Scouring and Macroinvertebrate Community Assembly Processes in Costa Rican Headwater Streams*

53. Nashrah Ahmad, Biological Sciences  
*Imperatorin Inhibits the Expression of IL-1 $\beta$  Induced iNOS: A Potential Therapeutic Agent for the Treatment of Osteoarthritis*

54. Binaya Adhikari, Biological Sciences  
*Understanding Natural Expression of Cytoplasmic Male Sterility in Gynodioecious *Lobelia siphilitica* L*

55. Alyx Weaver, Biological Sciences  
*The Effect of Exercise on Brain Hemoglobin Expression in Rats*

#### **Poster Session 11: Biological Sciences II**

56. David F. Barnard, Kristin M. Gabella, Adam Kulp, Austin D. Parker, Biological Sciences  
*Effects of Repeated Stress on the Ying-Yang of Catecholamines and Glucocorticoids in the Regulation of Brain Cytokines*

57. Megan Linscott, Biological Sciences  
*Epigenetic Regulation of FGF8 Expression in the Olfactory Placode during Gonadotropin-Releasing Hormone Neuron Emergence*

58. Jesse Kowalski, Biological Sciences  
*Calorie Restriction Suppresses Predator Odor-Induced Skeletal Muscle Thermogenesis in Rats*

59. Mohammed Romman Hossain, Microbiology  
*Roles of Physicochemical Properties of Microplastics in Determining Plasticsphere in Freshwater*

60. Kholoud Alkhayer, Biological Sciences  
*Euronal Hemoglobin Beta Regulates Levels of H3K4me3*

61. Elizabeth Aulino, Biological Sciences

*Fetal Disruption of Oxytocin Signaling Results in Increased Agonistic Behavior in Adult Male Mice*

### Poster Session 12: Ecology

62. Lauren Baldarelli, Ecology  
*The Effect of Macronutrient Additions on Biological Soil Crusts at the Sevilleta Long-Term Ecological Research Site in the Chihuahuan Desert, New Mexico, U.S.A.*

63. Alescia Roberto, Ecology  
*Distribution of Antibiotic and Metal Resistance Genes in Biofilms of an Anthropogenically Impacted Stream*

64. Bethany M. Schmidt, Christopher T. Boehler, Ecology  
*Influence of Micronutrients on Nitrogen Fixation Rates in Northern Ohio Lakes*

65. Sean Nussle, Ecology  
*Trichopterans as Biomonitoring of Trace and Heavy Metals in Northeastern Ohio Urban Streams*

66. Jonathan Van Gray, Ecology  
*Increased Chloride Stress on Biofilm Succession in an Artificial Stream System*

67. Andrea Fitzgibbon, Ecology  
*More than One Way to Limit Algae: Trace Metal-Nutrient Colimitation of Algal Production*

### Poster Session 13: Biomedical Sciences I

68. Devanshi Mitesh Mehta, Biomedical Sciences  
*The Importance of Diurnal Corticosterone Rhythms in Regulating Mood*

69. Monica Ghosh, Spencer Andrei, Biomedical Sciences  
*TRPA1 Ion Channels Stimulation Enhances Cardiomyocyte  $[Ca^{2+}]_i$  and Contractile Function via a CamKII-dependent Pathway*

70. Crystal Oechsle, Biomedical Sciences  
*Th1 Cytokines and Statin Drugs Enhance Apoptotic Cell Death Coincident with Delocalization of Ras from the Cell Membrane*

71. Karla M. Rodriguez, Biomedical Sciences  
*Increased Voluntary Alcohol Consumption and Preference in Female, but not Male, Oxytocin Receptor Knockout Mice*

72. Abdulaziz Aloliqi, Biomedical Sciences  
*The Role of Connexin43 in Prostate Cancer Motility*

### Poster Session 14: Biomedical Science II

73. Ashley Davis, Amber Titus, Biomedical Sciences  
*Intermittent Fasting is More Effective than Caloric Restriction for Weight Loss in the Obesity Prone*

74. Adam Kulp, Neuroscience  
*Effect of Chronic Stress on GRK2 Expression in the BNST and PFC*

75. Alexandra M. Yaw, Biomedical Science  
*Paternal Cocaine Use Alters Social Interactions in F1 Offspring*

76. Spencer Servizi, Sara Patrick, Andrew Paliobeis, John Grizzanti, Neuroscience  
*Localization of RAMP 1 & 3 in AD Mouse Model Mice*

77. John Grizzanti, Priya Raman, Neuroscience  
*APP Cleavage Product  $\beta$ -CTF Positively Correlates with Body Weight in a Rodent Model of Diabetes and Obesity*

78. Sabina Bhatta, Jeffrey Blair, Neuroscience

*Expression of Luteinizing Hormone Subunit Alpha, Beta and Its Receptor in the CNS*

**Poster Session 15: Biomedical Science III**

79. Tim Niepokny, Biomedical Sciences  
*Timed Restricted Feeding in Mice Alters Gene Expression in the SCN*

80. Courtney Stewart, Neuroscience  
*Cuprizone Induced GFAP Astrocyte Activation is FGF8 Dependent*

81. Sohini Dutta, Neuroscience  
*Glutamatergic Signaling within the Nucleus Accumbens Underlies Extinction Retention*

82. Lana Frankle, Akhil Kumar Goud Koothal, Neuroscience  
*Automated Detection of Markers of Astrocyte Activation*

83. Rachel Corrigan, John Grizzanti, Neuroscience  
*Central Inhibition of Amylin Receptors Blocks Therapeutic Effects of Peripherally Administered Pramlintide in Alzheimer's Disease*

84. Ian Farnkopf, Biomedical Sciences  
*Ontogeny of the Respiratory Tract in Dolphins*

**Poster Session 16: Chemistry and Biochemistry I**

85. Srijana Bhandari, Chemistry and Biochemistry  
*Excitonic Interactions in Bacteriochlorin Homodiyads Enable Charge Transfer: A New Approach to the Artificial Photosynthetic Special Pair*

86. Sarah Sternbach, Naveen K. Singhal, Kholoud Alkhayer, Biochemistry  
*The Role of BHMT in Methionine Metabolism in Multiple Sclerosis*

87. John Shelestak, Tomor Riely, Nicholas Penman, Nathan Beals, Soumitra Basu, Chemistry and Biochemistry

*Enhancing Structural Contrast in T1 MRI Protocols using Multimodal Targeted Tissue Probes*

88. Nicholas Penman, Bogdan Benin, Chemistry and Biochemistry  
*Synthesis, Characterization and Anticancer Activity of Au@Cu<sub>2</sub>MoS<sub>4</sub> Nanoparticles*

89. Kumudie Jayalath, Biochemistry  
*Pseudouridylation Enzyme RsuA Influence 30S Ribosome Assembly*

90. Mir M. Hossain, Sriramakrishna Yarabarla, Nick Penman, Biochemistry  
*Synthesis, Characterization and Anticancer Activity of Copper-Based Nanoparticles*

91. Keshav GC, Biochemistry  
*RsmC Shows RNA Chaperone Activity During Ribosome Biogenesis*

92. Han Wang, Chemistry and Biochemistry  
*A New Strategy to Control Drug Loading Precisely: Coordination-Driven Self-Assembly of a Pt (IV) Prodrug-Conjugated Supramolecular Hexagon*

**Poster Session 17: Chemistry and Biochemistry II**

93. Arosha Dassanayake, Chemistry  
*Use of Dual Catalysts Synergistically for One-Pot Synthesis of Activated Magnetic Graphitic Carbon Spheres*

94. Tejas Dnyaneshwar Dudhade, Chemical Engineering  
*Sealing Development of Tubular Solid Oxide Fuel Cell Testing Fixture*

95. Huda Alamri, Chemistry and Biochemistry



*Antibacterial Studies of Bismuth-Based Nanoparticles*

96. Sagun Jonchhe, Chemistry and Biochemistry  
*A New Concentration Jump Strategy Reveals the Lifetime of  $i$  Motif at Physiological pH without Force*

97. Eva A. Gilker, Biological Sciences  
*The Role of Protein Phosphatase I in Mammalian Oocytes*

**Poster Session 18: Teaching, Learning, and Curriculum**

98. Kaelin Hudak, Special Education and Teaching  
*Effects of Prelinguistic Milieu Teaching Strategies on Children's Early Communication Skills*

99. Emily Suzuki, Special Education and Teaching  
*Milieu Teaching: The Effects of Parent-Implemented Interventions on Pre-Linguistic Communication Skills*

100. Ashley Hausmann, Special Education and Teaching  
*Positive Behavior Supports*

101. Erica Noel, Special Education and Teaching  
*Effects of Parent-Implementation of Enhanced Milieu Teaching Strategies on Their Child's Expressive Communication Skills*

102. Sarah Stratton, Special Education and Teaching  
*Effects of Parent-Implemented Pre-linguistic Milieu Teaching Strategies on Their Child's Expressive Language Skills*

103. Abigail Ball, Special Education and Teaching  
*The Effects of Prelinguistic Milieu Teaching: a Naturalistic Language Intervention, on Child Communication in the Natural Environment*

**Poster Session 19: Geology, Geography, and Mathematics**

104. Matthew Stiller, Geography  
*Microclimate Regulation Across the Urban Transect*

105. Robert Squires, Geography  
*A Longitudinal Comparison of Fine Scale Environmental Risk Factors and Waterborne Bacterial Presence in Haiti*

106. Catherine Ruhm, Geology  
*Geomorphic Conditions of Abandoned Surface Mines and the Effects of Deep-Ripping Reclamation*

107. Abdulrahman Alajmi, Mathematics  
*Lattice Size of Empty 3-Polytopes*

108. Hessah Alqahtani, Mathematics  
*Simplified Anti-Gauss Quadrature Rules with Applications in Linear Algebra*

**Poster Session 20: Exercise and Sports Sciences**

109. Cody S. Dulaney, Tyler Singer, Sports Sciences  
*Oxygenated Tissue Response to Single and Double-Leg Cycling in Normoxia and Hypoxia*

110. Erica M. Marshall, Jason C. Parks, Alaina Glasgow, Leslie Sensibello, Yu Lun Tai, Sports Sciences  
*Different Restrictive Devices to Achieve Blood Flow Restriction on Pulse Wave Reflection*

111. Savannah Hall, Ellen Glickman, Jeremiah A. Vaughan, Brittany N. Followay, Elliott Arroyo, Cody Dulaney, Joseph A. Laudato, Exercise Science  
*Thermoregulatory Responses to Moderate-Intensity and High-Intensity Cycling in the Heat*

112. Savannah Hall, Ellen Glickman, Jeremiah A. Vaughan, Brittany N. Followay, Elliott Arroyo,

Cody Dulaney, Joseph A. Laudato, Exercise Physiology  
*Physiological Response in Time to Exhaustion Trial Across Varied Environmental Conditions*

113. Alaina Glasgow, Kathryn Geither, Jason C. Parks, Erica M. Marshall, Yu Lun Tai, Exercise Science  
*Acute Resistance Exercise Effects on Blood Flow in Resistance-Trained Versus Untrained Individuals*

#### **Poster Session 21: Health and Sports Sciences**

114. Jason C. Parks, Erica M. Marshall, Alaina Glasgow, Leslie Sensibello, Kathryn Geither, Yu Lun Tai, Sports Sciences  
*Resistance Exercise on Pulse Wave Reflection and Arterial Stiffness between Trained and Untrained Individuals*

115. Joseph Laudato, Jeremiah A. Vaughan, Brittany N. Followay, Cody S. Dulaney, Savannah R. Hall, Elliott Arroyo, Health Sciences  
*Effect of Thermal Stress on Cycling and Plasma Volume Shifts, Body Weight and Water Intake*

116. Tyler Singer, Sports Sciences  
*Influence of Cuff Pressures on Blood Flow During Knee Extension Exercise with Blood Flow Restriction During and After Exercise*

117. Kathryn Geither, Leslie Sensibello, Alaina Glasgow, Jason C. Parks, Erica Marshall, Yu Lun Tai, Exercise Physiology  
*Free-Weight Resistance Exercises Versus Weight Machines on Pulse Wave Reflection*

#### **Poster Session 22: Public Health**

119. Chelsea Kennedy, Jessica Mulvany, Public Health  
*Is There a Need for More Mental Health Services at Kent State University Campuses? A Study*

*Using the Healthy Minds Survey at Four Different Campuses*

120. Justin R. Bowman, Public Health  
*Portrayal of Electronic Nicotine Delivery Systems (ENDS) on Instagram*

121. Obianuju Genevieve Anguolu, Public Health  
*Development and Evaluation of a Theory-Informed, Culturally Specific, Comic Book about HPV and HPV Vaccination for College Students in Northeast Ohio: An Application of the Integrative Model of Behavioral Prediction*

122. Lorraine Odhiambo, Ezinne Anaba, Public Health  
*Feasibility of a Knowledge and Text-Messaging Intervention Delivered in African American Churches to Adults with Asthma or COPD*

123. Geethika Kodukula, James Cairns, Public Health  
*Sexual Violence and Health Outcomes Among University Students*

124. Junghyae Lee, Public Health  
*Investigating the Influence of Teacher's Motivation Types and Resource Utilization in Physical Education on Elementary Students' Leisure-Time Physical Activity: A Multilevel Analysis*

#### **Poster Session 23: Psychological Sciences I**

125. Logan Kochendorfer, Developmental Psychology  
*The Continuity of Quality from Friendships to Romantic Relationships: Meta-Analytic Evidence*

126. Jessica Labuda, Social Psychology  
*Accuracy and Cue Availability in Perceptions of Romantic Partners' Approach and Avoidance Motives*

127. Aimee Hammer, Stephanie Silberman, Psychological Sciences  
*Dyadic Synchrony and Children's Receptive Language Abilities Predict Subsequent Emotion Regulation Among Young Latina Mothers and Their Toddlers*

128. Jordan Weith, Aimee Hammer, Clinical Psychology  
*Associations Between Cultural Orientation, Dyadic Relationship Quality, and Externalizing Behavior among Puerto Rican Adolescent Mothers and Their Toddlers*

129. Carli A. Obeldobel, Developmental Psychology  
*Parent-Child Attachment Security in Middle Childhood and Positive Emotions*

130. Amy Kelly, Social and Behavioral Sciences  
*Child-Mother Attachment and Parental Relationship Stability in Families Experiencing Interparental Violence*

#### **Poster Session 24: Psychological Sciences II**

131. Lisa Manderino, Jason R. Anderson, Psychological Sciences  
*Earlier Age of First Exposure and Position Predict Lower Neurocognitive Scores in Collegiate Football Players*

132. Monica Garcia, Psychological Sciences  
*Pain, Disability, and Psychological Correlates of Chiari Malformation*

133. Angela Junglen, Biological Psychology  
*The Role of CAMK2A in the Comorbidity of PTSD/SUD in Individuals Seeking Detoxification Treatment*

134. Victoria E. Sanborn, Clinical Psychology  
*Cognition and Quality of Life in Bariatric Surgery Candidates*

135. Nola Daley, Cognitive Psychology

*Self-Explanatory Feedback Enhances Long-Term Learning*

136. Shelly Evans, Social and Behavioral Sciences  
*Looking from the Outside In: Hurdles, Needs, and Successes of Refugees during Acculturation into American Life as Perceived by Refugee Service Providers*

137. Maeson S. Latsko, Courtney Costanzo, Psychological Sciences  
*Corticosterone Amerliorates the Adult Social Behavior Deficits Caused by Periadolescent Social Defeat*

#### **Poster Session 25: Medical Care, Medical Devices, and Nursing**

138. Shadi Kanan, Nursing  
*Integrative Review: Characteristics of Physical Activity Programs Associated with Physical Activity Adherence in Adults Post-Myocardial Infraction*

139. Samir Abdelmagid, Podiatry  
*Percutaneous Kirschner Wire Repair of Failed Digital Arthrodesis Using Pulsed Electromagnetic Field Therapy*

140. Joseph Fleck, Kelsi Nutter, Podiatry  
*Comparison of the Forefoot Axial Radiographic Image and Weight-Bearing CT Scan in Determining the Coronal Plane Angle of Sesamoid Rotation in Patients with Adult Hallux Valgus Deformity*

141. Tung V. Dao, Podiatry  
*Findings of the Anomalous Fibularis Digiti Quinti Muscle and Implications of its Associated Variable Presentations from Cadaver Dissections*

142. Chandler Ligas, Joslin Seidel, Podiatry  
*The Lapidus Arthrodesis: Examining the Effect of the Metatarsal Base Transfixation Screw*

143. Comrun Yousefzadeh, Chemical Physics

*"Achromatic Limits" of Pancharatnam Phase Lenses*

**Art Exhibit 4:00-5:30 p.m.**

Allison Smith, Textiles  
*162 Springcrest*

Emma Anderson, Painting

Alysia Klein, Painting  
*It's Gone to the Dogs*  
*Inequality and Transparency I*  
*Inequality and Transparency II*

David Braun, Sculpture and Expanded Media  
*Sculpture Garden v1.11*

Oxana Dallas, Textiles  
*Thread of Life*  
*Inferno*  
*Incarnation*  
*Born from Stardust*  
*New Born*  
*Her Guardian*

Audrey Wilson, Visual Art  
*Bleach Wash*  
*Atomizer Mist Gun*  
*The Small Hadron Collider*  
*Intemperance Detox Simulation*

**Fine Arts Performances 5:30-8:00 p.m.**

**Music**

Nattapol Wisuttiapat, Ethnomusicology  
*Aa Hia: A Ranat Thum Solo*

Kevin Alexander Wilson, Ethnomusicology  
*Interpreting Culture Through Composition*

Shasha Zhu, Music, Ethnomusicology  
*Popular Music Study*

Efferus String Quartet, Music

**Creative Writing**

Erin Lawrence, English: Creative Writing  
*Undermined: A Novel*

Molly Fuller, English: Creative Writing  
Excerpts from *For Girls Forged by Lightning: Prose and Other Poems*

Sony Ton-Aime, English: Creative Writing, Poetry  
*The Woman They Made Me Call Mother*  
*Matriphagy*  
*History-less*  
*Her Man's Travail*  
*Homage to Jacques Stephen Alexis*  
*Coumbite*  
*There Are Better Ways to Say I Love You*  
*Solo Waltz*  
*Love Flew Out*

Adam Yeich, English: Creative Writing  
*The Only Thing He Never Told Them*

Mahmoud Kambris, Creative Nonfiction  
*in-complete*

Ronald Book, English: Creative Writing

**Friday, April 20**

**Oral Presentations I: 9:00-10:30 a.m.**

**Oral Session 1: Architecture and Engineering Room 306A**

9:00 a.m. Brigid Callaghan, Aditi Sharag-Eldin, Architecture  
*Developing Concrete Blocks with Embedded Three-Dimensionally Printed Thermal Resistive Forms, Inspired by Biomimicry*

9:15 a.m. Trevor Swanson, Architecture  
*The Built Environment and the Effects on Mental Health: A Study of the Kent State Architecture Program*

9:30 a.m. Michael Hoffman, Architecture

*The Parallels between Content Studied and Work Produced*

9:45 a.m. Jessica Schultz, Architecture  
*Miguel Fisac: An Investigation into Spanish Architectural Innovation*

**Oral Session 2: Anthropology and Geology  
Room 306B**

9:00 a.m. Ashley Rutkoski, Archeological Anthropology  
*Imitation or Innovation: Understanding the Emergence of Limestone in Southern Ohio*

9:15 a.m. Stacy Leigh Deraway, Biological and Physical Anthropology  
*Insights into the Evolution of Language: A Comparative Analysis of Dopaminergic Innervation of Thalamic Nuclei among Humans and Primates*

9:00 a.m. Garrett Blauch, Geomorphology  
*Urban Influence on Large Wood Abundance in Streams*

**Oral Session 3: Biological, Biomedical, and Exercise Sciences  
Room 308**

9:00 a.m. Yu Lun Tai, Erica Marshall, Jason C. Parks, Alexa DeBord, Kathryn Geither, Leslie Sensibello, Exercise Sciences  
*Upper and Lower-body Resistance Exercise With and Without Blood Flow Restriction on Pulse Wave Reflection*

9:15 a.m. Anna Droz, Ecology  
*Green Roofs in the Great Lakes Region: How the Relationship between Plants and Soil Can Impact Green Roof Functioning*

9:30 a.m. Noel-Marie Plonski, Biological Sciences

*The Fetal Brain on Zika Virus: Pathogenesis of Congenital Zika Syndrome*

9:45 a.m. Nazar Hussein, Asaad Aladlaan, Fatima Jaber, Ava Lonneman, Fayeze Safadi, Biological Sciences  
*A Novel Regulatory Role of TRAPPC9 in OA Development*

10:00 a.m. Kevin M. Budge, Biomedical Sciences  
*A Novel Neuroprotective Effect of GPNMB in Parkinson's Disease*

**Oral Session 4: Fine Arts and Communication  
Room 309**

9:00 a.m. William Kelvin, Communication Studies  
*Keystone XL Pipeline News: Expressions of U.S. Attitudes toward Fossil Fuel Extraction*

9:15 a.m. Lydia Snyder, Musicology  
*Heidelberger Frühling: Classical Music and Germany's Musical Identity*

9:30 a.m. Sony Ton-Aime, English: Creative Writing  
*Researching Your Past*

9:45 a.m. Erin Lawrence, English: Creative Writing  
*The Importance of World in Alternate History Fiction*

**Oral Session 5: Teaching and Learning I  
Room 310C**

9:00 a.m. Ahlam Alghamdi, Evaluation and Measurement  
*Multitasking and GPA: A Moderated Mediation Analysis of the Role of Academic Self-Efficacy and Gender*

9:15 a.m. Tracy Arner, Rachael Todaro, Educational Psychology  
*Investigating the Impact of the Flipped Classroom Model on Student Performance and Motivation*

9:30 a.m. Amal Alhadabi, Evaluation and Measurement  
*Psychometric Assessment and Cross-Cultural Adaptation of the Grit-S Scale among Omani and American Universities' Students*

**Oral Session 6: Chemistry and Biochemistry  
Room 319**

9:00 a.m. Sumirtha Balaratnam, Chemistry  
*A piRNA Utilizes HILI and HIWI2 Mediated Pathway to Down Regulate Ferritin Heavy Chain 1 mRNA in Human Triple Negative Breast Cancer Cells*

9:15 a.m. Morgan Stilgenbauer, Chemistry and Biochemistry  
*Development of New Platinum-Based Anticancer Agents Targeting Ovarian Cancer Stem Cells*

9:30 a.m. Hao Wang, Chemistry  
*Comparison of Material Parameters among Dimer, Trimer, and Tetramer Homologues in the Nematic Phase*

9:45 a.m. Arosha Dassanayake, Chemistry  
*In-Situ Activated Nitrogen-Doped Carbon Spheres for Extraordinary CO<sub>2</sub> Adsorption*

**Oral Session 7: Psychological Sciences  
Room 318**

9:00 a.m. Michelle L. Rivers, Jessica Janes, John Dunlosky, Cognitive Psychology  
*Investigating Memory Reactivity with a Within-Subject Manipulation of Judgments of Learning*

9:15 a.m. Haylee DeLuca, Developmental Psychology  
*Developmental Competence of Young Adult Adoptees*

9:30 a.m. Liz Baker, Haylee DeLuca, Developmental Psychology

*Intimate Partner Violence and Body Mass Index During Young Adulthood: Dyadic Investigations*

9:45 a.m. Erin Graham, Cognitive Psychology  
*Explicit and Implicit Processes in Category Learning*

**Oral Session 8: English in Contact with Other Languages  
Room 317**

9:00 a.m. Anne Neveu, Modern Languages  
*Designing Reading Tasks Fostering Critical Thinking in Translator Training*

9:15 a.m. Antonina Pakholkova Mohamed, English: Teaching English as a Second Language  
*The Use of Customized Board Games for Vocabulary Learning*

9:30 a.m. Kevin Spence, Higher Education Administration  
*Unplanned English Encounters: A Comparative Analysis of the Rationales and Implementation of English Language Policies in Cuba, Panama and Colombia*

**Oral Presentations II: 10:45 a.m.-12:15 p.m.**

**Oral Session 9: Chemistry and Biochemistry  
Room 306A**

10:45 a.m. Thiloka Dassanayake, Chemistry  
*Improved Antimicrobial Properties of Copper and Ascorbic Acid Based Nanoparticle Systems: Advanced Drugs for a Post-Antibiotic Era*

11:00 a.m. Shankar Mandal, Deepak Koirala, Sangeetha Selvam, Chiran Ghimire, Hanbin Mao, Chemistry and Biochemistry  
*A Molecular Tuning Fork in Single-Molecule Mechanochemical Sensing of Antibody*

11:15 a.m. Prakash Kharel, Soumitra Basu, Biochemistry  
*Investigation of RNA Oxidation in Human Neurons Reveals the Correlation Between NAT8L mRNA Damage and Multiple Sclerosis Pathophysiology*

**Oral Session 10: Physics  
Room 308**

10:45 a.m. Daniel Gavazzi, Biological and Chemical Physics  
*Coarse Grained Modeling on  $\alpha$ -Spectrum Protein to Capture Folding Complexities*

11:00 a.m. Greta Babakhanova, Chemical Physics  
*Fabrication of Responsive Liquid Crystalline Elastomer-Based Microchannels*

11:15 a.m. Zeinab Parsouzi, Physics  
*Comparison of Material Parameters among Dimer, Trimer, and Tetramer Homologues in the Nematic Phase*

11:30 a.m. Parastoo Maleki, Hamza Balci, Physics  
*Cancer, G-Quadruplex, and Small Molecule Drugs*

11:45 a.m. Mohammad Nopoush, Physics  
*The Most Perfect Liquid Ever*

**Oral Session 11: Computer Science, Engineering, and Mathematics  
Room 309**

10:45 a.m. Sai Charan Reddy Nallapu, Digital Sciences  
*Clever Water Tank*

11:00 a.m. Basma Alqadi, Software Engineering  
*An Analysis of Debugging Patterns of Novices Programmers*

11:15 a.m. Nasim Eshghi, Lothar Reichel, Numerical Analysis and Computation  
*Estimating the A-norm and L2-norm of Error for Approximation of Matrix Function with the Help of Lanczos Algorithm*

11:30 a.m. Mirjeta Pasha, Mathematics  
*Iterated Tikhonov with GSVD*

11:45 a.m. Divya Haritha Katari, Aeronautics and Engineering  
*Application of Artificial Intelligence in Construction*

**Oral Session 12: Geography  
Room 310C**

10:45 a.m. Kathryn Hannum, Geography  
*Linking Language, Literature & Landscape in Galicia, Spain*

11:00 a.m. Christopher Willer, Geography  
*A Comparative Analysis of Census Definitions in Identifying and Tracking Small Towns*

11:15 a.m. Sokvisal Kimsroy, Geography  
*Reconstructing Politics of Irrigation and Daily Life through Spatial Video Geonarratives: A Case Study of Trapeang Thmar*

11:30 a.m. Chhunly Chhay, Geography  
*Decision Making in Female Cambodian Migrant Workers*

**Oral Session 13: Studies in Japan and China, Japanese and Chinese  
Room 319**

10:45 a.m. Sarah Mortland, Translation Studies  
*Japan's Nuclear Protective Action Guidelines*

11:00 a.m. Lydia Snyder, Ethnomusicology  
*Seiha Hōgaku-Kai Summer School: Learning Shakuhachi and Shamisen in Tokyo*

11:15 a.m. Xin Hong, Geography  
*Exploring the Influence of Land Use and Land Cover Change on Water Quality in Cancer Villages: A Case Study of Shenqiu County, China*

11:30 a.m. Josiah Murphy, Clara Fodera, English:  
Teaching English as a Second Language  
*Hu Is He: Chinese ELL Problems With English Pronouns*

**Oral Session 14: Psychological Studies  
Room 318**

10:45 a.m. Grace W. Murray, Educational Psychology  
*Can Physical Activity Breaks Reduce Attentional Failures and Improve Children's Learning Outcomes?*

11:00 a.m. Bushra Aldosari, Educational Psychology  
*A Comparison of Traditional Lecture and Flipped Classroom Models for Teaching Undergraduate Child Development Course*

11:15 a.m. Christina Kuchmaner, Marketing  
*"My Brand" Behaved Badly: Psychological Ownership and Consumer Responsibility for Helping Brands Recover from Transgressions*

**Oral Session 15: Biological Sciences  
Room 317**

10:45 a.m. Anjali Krishnan, Ecology

*Identifying a New Pathway for Microcystin Degradation in Bacteria*

11:00 a.m. Zahra Ghasemahmad, Biological Sciences  
*Behavioral Response of Male and Female Mice to Positive Affect Vocal Sequences*

11:15 a.m. Manasi Agrawal, Neuroscience  
*Reduction in the Ribosomal Binding Function of RACK1 Can Rescue Axon Length Defects in Fragile X Syndrome*

11:30 a.m. Sohini Bhattacharyya, Ecology  
*Role of Freshwater Insect Gut Denitrifiers in Nitrous Oxide Production*

**Oral Session 16: Teaching and Learning II  
Room 306B**

10:45 a.m. Yu Li, Foundations of Education  
*Life Paths of Young Rural Migrant Women: Rural Schooling and Aspirations*

11:00 a.m. Jennifer Lowers, Curriculum and Instruction  
*A Genealogy of New Literacies in Education from 1915 to Present*

11:15 a.m. Yong Seng Tan, Curriculum and Instruction  
*Review of Massive Open Online Courses (MOOC)*



## Awards and Keynote Luncheon 12:30 p.m., Kent Student Center Ballroom

Welcome and Opening Remarks: Elizabeth Melick, Symposium Chair

Monologue by Jess Tanner, Theater and Dance: A Selection from *Irena's Vow* by Dan Gordon

Keynote Address: Marie Bukowski, Director of the School of Art

Presentation of Awards: Graduate Student Senate Executive Board

### Keynote Speaker: Marie Bukowski, Director of the School of Art



Marie Bukowski began her art studies at Carnegie Mellon University where she received her Bachelor of Fine Arts with a double major in Painting and 19th Century German Literature and a double minor in Printmaking and Linguistics & Rhetoric in 1992. She received her Certificate in Art History and Polish language from the Jagiellonian University in Krakow, Poland in 1999. Bukowski went on to receive her Master of Fine Arts with Honors with a double degree in Painting and Printmaking in 2000 from the University of Pennsylvania. Upon receiving her MFA, Bukowski took a position in the School of Art at Louisiana Tech University where she was Professor of Art, Graduate Program Coordinator, and BFA Studio Program Coordinator for 13 years. She served as the Director of the School of Art and Design at Southern Illinois University Carbondale for 4 years and is currently the Director of the School of Art at Kent State University.

Bukowski is an internationally recognized printmaker, included in public collections and museums in countries such as Belgium, Bulgaria, Croatia, The Czech Republic, Mexico, The Netherlands, Poland, Portugal, Romania, and Spain. Throughout her career, she has had eighteen solo exhibitions, forty-nine invitational exhibitions, and sixty-three juried exhibitions; thirty-five of which are on the international level. Bukowski has received eight artist-in-residence positions with prestigious institutions such as Tamarind Institute in Albuquerque, New Mexico, Anchor Graphics in Chicago, Illinois, the Frans Masereel Centrum in Kasterlee, Belgium and Milkwood International in Cesky Krumlov, Czech Republic. She has received over a dozen grants to support her work since 2002 including a grant from the National Endowment for the Arts. Bukowski is represented by Cole Pratt Gallery in New Orleans, Louisiana and Stowarzyszenie Miedzynarodowe Triennale Grafiki in Krakow, Poland. Bukowski enjoys teaching introductory through graduate printmaking and graduate seminar.

The Graduate Student Senate

The Graduate Student Senate (GSS) represents the concerns of the graduate student community at Kent State University. By serving as an allocation body, the Graduate Student Senate is responsible for assisting with graduate student travel and research funding. Additionally, the Graduate Student Senate organizes and provides financial support for social activities for graduate students. Each spring the Graduate Student Senate sponsors the Graduate Research Symposium, an event that displays, recognizes and celebrates research and scholarship across all academic disciplines. The Graduate Student Senate meets four times each semester, and lunch is always provided. The Friday following every meeting, a social event known as GradFest is held at a local establishment. All graduate students are welcome to become involved with the Graduate Student Senate.

#### 2017-2018 GSS Executive Board

Mark Rhodes, Executive Chair,

Kate Klonowski, Vice Executive Chair

Suparna Navale, Finance Chair

Morgan Chaney, Information Services Chair

Elizabeth Melick, Symposium Chair

Yeo Jung Yoon, Administrative Services Chair

Dr. Melody Tankersly, Advisor

#### Acknowledgements

The following KSU faculty, staff, and students made this event possible: Kevin Wilson, Heather Sinclair, Jordyn Stoll, Lindsey James, Catherine Ruhm, Michael Chunn, Yuko Kurahashi, Craig Paulenich, Marie Bukowski, Kristan Dolan, Kyle Reynolds, Elizabeth Richardson, Grace Ortiz, Jennifer Butto, Ann Gosky, Dr. Melody Tankersly, and everyone who distributed hotcards and sent emails to publicize our event. Many thanks to our volunteers and faculty judges as well, for their valuable service.

#### 2018 Graduate Research Symposium Program Corrections

The title of Han Wang's poster presentation, (number 92) has been changed to *Coordination-driven Self-Assembly of a Pt(IV) Prodrug-Conjugated Supramolecular Hexagon*.

Stacy Leigh Deraway will be presenting *Insights into the Evolution of Language: A Comparative Analysis of Dopaminergic Innervation of Thalamic Nuclei among Humans and Primates* in Poster Session 1.

Shannah Witchey will present *Endocannabinoid receptor 1 knockout mice display normal maternal care but decreased pup weights* in Poster Session 10

The title of Megan Linscott's poster presentation (number 57) has been changed to *Tet1 regulates Fgf8 expression in the developing hypothalamus during gonadotropin-releasing hormone neuron emergence*.

The titles of Emma Anderson's pieces in the Art Exhibit are *Open Your Eyes Peanut, Turn a Blind Eye, Worn Out Faces Are Familiar Friends*.

The title of Hao Wang's presentation in Oral Session 6 is *Halogen Bonded Chiral Molecular Switch Drives Full Color Reflection Color Reflection Photochemically and Thermally*.

Abdulrahman Alajmi will present in *Lattice Size of Empty 3-Polytopes* in Oral Session 11 at 12:00 p.m.

Manasi Agrawal will present *Reduction in the Ribosomal Binding Function of RACK1 Can Rescue Axon Length Defects in Fragile X Syndrome* in Poster Session 14.

Alaa A. Eisa, Alexander Ignatious, Sumit Bhutada, Souvik Dey, Srinivasan Vijayaraghavan, and Douglas Kline will present *YWHAE is Important for Male Fertility in Mice* in Poster Session 10.

Kayla Morehead will be presenting *Note-taking Devices in the Classroom* in Oral Session 14 at 11:30 a.m.

Sarah Kearney will present *Influence of Cuff Pressure on Cardiovascular Responses to Knee Extension Exercise with Blood Flow Restriction* in Poster Session 20.

Morgan Stilgenbauer will present *Development of New Platinum-Based Anticancer Agents Targeting Ovarian Cancer Stem Cells* in Poster Session 17.

Erin Lawrence will give her oral presentation, *The Importance of World in Alternate History Fiction* in Oral Session 16 at 11:30 a.m.

Theresa Wolanin will present *The breakdown of plant-pollinator relationships: climate change, bee population declines, and mistimed flowering events in Costa Rica* in Oral Session 15 at 11:30 a.m.

The title of Sony Ton-Aime's oral presentation in Oral Session 4 is *In My Mom's Faulty Words*.

Scott Maslar will be presenting *A Case Study in Translating Architecture into Music for an Electric Bass Guitar* in Poster Session 3.

Anusha Yarava will be presenting *Race and Gender Specific Life Style Behaviors among US Adults with the History of Kidney Disease* in Oral Session 2 at 9:45 a.m.

Sohini Dutta will be presenting *Glutamatergic signaling within the nucleus accumbens underlies extinction retention* in Oral Session 15 at 11:45 a.m.

Lydia Snyder will be performing during the Music Session.

The Efferus Quartet, Paula Castanada, Irene Guerra, Cristian Diaz, and Maria Florez, will be performing two movements of Ravel's string quartet.

Eric Yehle will be presenting *The Effects of Parent Implemented Prelinguistic Milieu Teaching Intervention on the Child Functional Communication Skills* in Poster Session 18.

Naser Al Madi will present *Are Eyes Windows to the Mind? From Eye-Movement to Comprehension* in Oral Session 11 at 12:15 p.m.

Nashrah Ahmad will present *Imperatorin Inhibits the Expression of IL-1 $\beta$  Induced iNOS: A Potential Therapeutic Agent for the Treatment of Osteoarthritis* in Oral Session 15 at noon.

Paige Bosich will present *The Associative Stigma of Mental Health Professionals* in Poster Session 23

Erik Capra will present *Color Stimuli's Impact on the Perception of Mid-Range Statistical Fractal Geometrics* in Poster Session 2.

The following students will be unable to give their presentations:

Kathryn Geither

Kayla Metzger

Anjali Krishnan

Tim Niepokny

Alaina Glasgow