Our Communities of Research

34th Annual Graduate Research Symposium

Kent State University
With great enthusiasm, I welcome each of you to the 34th Annual Graduate Research Symposium at Kent State University. Whether you are a presenter, a judge, a staff member, a volunteer, or an attendee, this event could not exist without you. Also, I am thrilled that our 2019 Graduate Research Symposium takes place during Graduate Student Appreciation Week, as increasing visibility and celebration of graduate students are things we should emphasize more frequently.

When reviewing the past several years of symposia, I saw themes of unity, sharing, progress, and forward movement at both local and global levels. Indeed, this push for progressive movement extends from the by-lines of academic publications to social media hashtag movements, but movement is only positive and possible with structure, dedication, and collective effort. Instead of pushing to signify progress through physical growth, my focus as Symposium Chair has been on sustainability and fostering an event that highlights intersections of graduate research and inquiry that includes all graduate students in all programs and in all disciplines. No one exists or succeeds in a vacuum, and graduate work, though often isolating, reinforces the vital nature of community and support. Collaborative efforts garner more attention both more quickly and more sustainably in personal and professional arenas, and KSU community-wide collaboration was my inspiration for this year's theme, “Our Communities of Research.”

Building on the two-day event schedule that the 2018 Symposium Chair, Elizabeth Melick, introduced, I chose to offer both individual and session registration options for oral presentations, which allows for students to get experience being session chairs and requires them to put together a cohesive list of presenters. I also offered several special interdisciplinary sessions that focus on a particular intersections of various disciplines, including Bioinformatics, Digital Humanities, Materiality, Material Studies, and Medical Humanities.

To our presenters, I am simply astounded both by the incredible quality of your research and by the accomplishments of your academic careers, and on behalf of the GSS Executive Board, thank you for sharing your work with us. Our event celebrates your research, and I can’t wait to see the new connections you create, communities you found, and contributions you make. I am also deeply indebted to the GSS Executive Board, as each member has contributed to our event substantially. To our judges, staff, and volunteers, this event simply could not be successful without you. Thank you all for your time, expertise, and support.

Our event is a celebration of research, but remember this, as captivating and as vital as your research is, you are more than your research. To that end, I’ve invited our Keynote Speaker, Tayo Aluko, a former architect who is now an internationally-acclaimed actor, singer, and playwright. His work “is dedicated to encouraging and inspiring progressive activism by showing how Black History is everybody’s history.” After the Symposium concludes, Tayo is graciously offering a full performance of “Call Mr. Robeson” at 6:00 p.m. in the Cartwright Hall Auditorium, which is open and free to the KSU community and public, so I hope you to see you there. No matter where your research takes you—whether you remain in academia or move across the globe—you will always be a member of our communities of research.

Sincerely yours,
Danielle French
GSS Symposium Chair, 2018-2019
Kent State University
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Schedule of Events

Thursday, April 4

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

Friday, April 5

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

FREE SPECIAL EVENT OPEN TO ALL KSU COMMUNITY AND THE PUBLIC:
Tayo Aluko and Friends in “Call Mr. Robeson: A Life, with Songs” from 6:00-9:00 p.m.
in the Cartwright Hall Auditorium (see poster next page).
PERFORMED BY TAYO ALUKO
WITH PIANO ACCOMPANIMENT BY BILL MEYER

A ROLLER-COASTER JOURNEY
THROUGH PAUL ROBESON’S REMARKABLE AND EVENTFUL LIFE
HIGHLIGHTS HOW HIS PIONEERING AND HEROIC (BUT LARGEY
FORGOTTEN) POLITICAL ACTIVISM LED MANY TO DESCRIBE HIM
AS THE FORERUNNER OF THE CIVIL RIGHTS MOVEMENT.

CARTWRIGHT HALL
FRIDAY, APRIL 5, 2019 | 6 P.M.
DOORS OPEN AT 5:30 P.M.

OPEN TO ALL STUDENTS, FACULTY, STAFF AND COMMUNITY MEMBERS!
DONATIONS WELCOME FOR THIS FREE EVENT.

NIGERIAN-BORN TAYO ALUKO IS BASED IN LIVERPOOL, UK,
WHERE HE WORKED PREVIOUSLY AS AN ARCHITECT.
ALONGSIDE HIS OTHER SHOWS, HE HAS PERFORMED CALL MR.
ROBESON AT CARNEGIE HALL, ACROSS CANADA, AUSTRALIA,
NEW ZEALAND, NIGERIA, JAMAICA, AND MANY MANY OTHER
PLACES THROUGHOUT THE WORLD.
This quiet room is a space for all presenters or attendees to collect their thoughts. Please be quiet and respect others using the space. This quiet room is a space for all.
Thursday, April 4

Poster Presentations
4:00-5:30 p.m.

Poster Session 1: Art Exhibit, Theater, and Dance

1. Lauren Mohoric, Art
   Weaving, clothes, and India: Historic textiles and art education

2. Meagan Smith, Art
   Sequential Natural Phenomenon: Synthesizing paradoxes and systems compacted within nature displayed in a ceramic and textile art installation

3. Suwatana Rockland, Theater & Dance
   A comparison learner of two country [LC]

4. Yee Lin Elaine Yuen, Theater & Dance
   A Deconstruction of Traditional Japanese Haori

Poster Session 2: Architecture & Design

5. Babita Neupane, Architecture & Environmental Design, Lessons learned from the traditional construction techniques of masonry vaults without formwork

6. Hajar Rajab, Architecture & Environmental Design, Floating lightweight concrete blocks made from dredged material

7. Tawk Tawk, Architecture & Environmental Design, Cryptogamic landscapes and living building skins

8. Mary Myers, Architecture & Environmental Design, Bioiphilic Design in the Workplace

Poster Session 3: Biological Sciences

9. Lauren Baldarelli, Biological Sciences, How does elevation and/or substrate affect the composition of biocrusts?

10. M Rumman Hossain, Biological Sciences, Bacterial colonization on different microplastics in a local stream in Northeast Ohio

11. Raissa Mendonca, Biological Sciences, Effect of nickel on growth and oxidation ability of a manganese-oxidizing benthic bacteria

12. Chelsea Smith, Biological Sciences, Understanding how microorganisms influence the bioavailability of iron-bound phosphate under shifting redox regimes in nutrient poor soils.

Poster Session 4: Biomedical Sciences I

13. Ashley Davis, Biomedical Sciences, Intermittent fasting vs. daily caloric restriction in obesity-prone and -resistant rats

14. Ian Farnkopf, Biomedical Sciences, Nasal chambers of the bowhead whale: Embryology and histology

15. Cody Ruiz, Biomedical Sciences, The Question of Y: Copy number variation of Y-chromosome genes between two species of macaque monkeys


Poster Session 5: Biomedical Sciences II

17. Kayla Metzger, Anthropology, An examination of chronic alcoholism and bone pathology in the Hamann-Todd Human Osteological Collection

18. Nashrah Ahmad, Biomedical Sciences, Imperatorin, A Plant-Derived Small Molecule, inhibits Oxidative Stress and suppresses IL-1β induced iNOS expression via inhibition of C/EBP β in Human OA Chondrocytes

19. Michelle Bebber, Biomedical Sciences, A comparative functional analysis of Old Copper
2019 Graduate Research Symposium

Culture utilitarian implements via artifact replication, materials testing, and ballistic analyses

21. Devanshi Mehta, Biomedical Sciences, The importance of diurnal corticosterone rhythms in regulating mood

Poster Session 6: Communication, Information, and Computer Science

22. Andrew Kaczor, Communication & Information, Golf; it's not just your father's game anymore!

23. Adam Whiteside, Communication & Information, Globalizing sexual violence: Charting a path for future research


25. Pavan Poudel, Computer Science, Adaptive versioning in transactional memories

Poster Session 7: Chemistry & Biochemistry I

26. Mary Brintha Croos Anburaj, Chemistry & Biochemistry, A G-rich sequence within the coding region of NAT8L mRNA modulates its translation

27. Srijana Bhandari, Chemistry & Biochemistry, Enhancing Charge Mobilities in Selectively Fluorinated Oligophenyl Organic Semiconductors: A Design Approach Based on Experimental and Computational Perspective

28. Payel Datta, Chemistry & Biochemistry, Liposomal Formulation of a Cholesterol-Conjugated Pt(IV) Prodrug of Cisplatin

29. Kumudie Jayalath, Chemistry & Biochemistry, Pseudouridylation enzyme RsuA influences 30S ribosome assembly

30. Amarasooriya M D S Jayawardhana, Chemistry & Biochemistry, Polymeric Nanoparticles of Organoplatinum Compounds Designed to Overcome Platinum-Drug Resistance in Ovarian Cancer

Poster Session 8: Chemistry & Biochemistry II

31. Sagun Jonchhe, Chemistry & Biochemistry, Decreased water activity in nanoconfinement contributes to the folding of G-quadruplex and i-motif structures

32. He Liu, Chemistry & Biochemistry, Suppression on tumor growth

33. Pramila Poudyel Ghimire, Chemistry & Biochemistry, Development of nickel-incorporated MCM-41-carbon composites and their application in nitrophenol reduction

34. Morgan Stilgenbauer, Chemistry & Biochemistry, Development of New Fatty Acid-Like Platinum-Based Cancer Therapy

Poster Session 9: Ecology and Evolutionary Biology I

35. Christopher Boehler, Ecology and Evolutionary Biology, A Comparison of Methodology Employed to Determine Rates of Nitrogen Fixation

36. Christian Bullion, Ecology and Evolutionary Biology, Using Crowdsourced Data to Analyze Patterns in Odonate Phenology

37. Samia Hamati, Ecology, What are the effects of a stress gradient and competition on the growth of Juniperus virginiana?

38. Katherine Manning, Ecology and Evolution, Understanding biodiversity services in urban and analogous natural systems: The case of green roofs
39. John Miller, Ecology and Evolutionary Biology, *Does the clay content of a soil affect growth in Lobelia siphilitica L.?*

**Poster Session 10: Ecology and Evolutionary Biology II**

40. Thomas Mitchell, Ecology and Evolutionary Biology, *Preliminary Results from an Analysis of Fine-scale Spatial Genetic Structure (FSGS) in Lobelia siphilitica [LC]*

41. Cheyan Pace, Ecology and Evolutionary Biology, *Fostering a people’s forest: Using Citizen Science-driven biodiversity monitoring to understand restoration processes*

42. Cynthia Perkovich, Ecology and Evolutionary Biology, *Protein: carbohydrate ratios in the diet of Lymantria dispar (gypsy moth) affect its ability to digest tannins*

43. Thomas Ruggles, Ecology and Evolutionary Biology, *Chronosequence of soil properties and vegetative communities of reclaimed surface mines inside Cuyahoga Valley National Park*

44. Jordyn Stoll, Ecological and Evolutionary Biology, *Nutrient and trace metal co-limitation of algal blooms in the Great Lakes*

**Poster Session 11: Education, Health, and Human Services I**

45. Michael Pfahl, Foundations, Leadership, & Administration, *A quantitative-forward mixed methods study examining reported distress by international students enrolled in Juris Doctorate programs at U.S. Midwestern law schools*

46. Miad Bahashwan, Lifespan Development & Educational Sciences, *The effect of exercise on Foreign Language Acquisition*

47. Justine DeFrancesco, Teaching, Learning, & Curriculum, *Culture sharing platforms: An innovative approach to understanding how overseas student teachers become globally competent educators*

48. Hakan Dundar, Teaching, Learning, & Curriculum, *Syrian Refugees in Turkish Textbooks*

49. Shabnam Moini Chaghervand, Teaching, Learning, & Curriculum, *ESL teachers’ perception of being an effective instructor*

**Poster Session 12: Education, Health, and Human Services II**

50. Emily Cavanaugh, Lifespan Development & Educational Sciences, *Effect of caregiver implemented strategies to promote expressive language development of young children with communication delays*

51. Michaela Crawford, Lifespan Development & Educational Sciences, *The effects of parent-implemented enhanced milieu teaching strategies on communication of a child with a delay*

52. Shelby Montgomery, Lifespan Development & Educational Sciences, *The effects of parent-implemented naturalistic communications strategies*

53. Samantha Rini, Lifespan Development & Educational Sciences, *Parent promoting a child’s language development with enhanced milieu teaching strategies*

54. Victoria Scarnati, Lifespan Development & Educational Sciences, *The effects of parent-implemented dialogic book reading on their child’s expressive language*

55. Stephanie Schafer, Lifespan Development & Educational Sciences, *The effects of caregiver-implemented strategies on child’s communication skills*
Poster Session 13: Fashion


58. Jiahui Chen, Fashion, Social aspects of breast cancer patients’ aesthetics and awareness of body image and lingerie design concept

59. Erin O’Brien, Fashion, A study in the dyeing of three dimensionally printed objects as integrated accessories for garments

60. Michelle Park, Fashion, Disrupting lymphedema through garment design and coloration

61. Michelle Park, Fashion, Flori Decidenti

62. Michelle Park, Fashion, Sustainable innovations and empowerment: Redirecting pedagogy strategies in fashion

63. Evelyn Rossol, Fashion, Enslaved to Cotton

Poster Session 14: Geography

64. Sandra Bempah, Geography, Monitoring Health Environments in Slums

65. Corrine Coakley, Geography, The performance of vegetation indices when applied to early Landsat data for irrigation system detection in Cambodia

66. Alexander Evans, Geography, Multilevel regression and poststratification for small-area estimation of Ohio health outcomes and risk factors [LC]

67. Kathryn Hannum, Geography, Exploring the transnational nature of the Galician community in Buenos Aires, Argentina

68. Omon Obarein, Geography, Rainfall timing: Variation, characteristics, coherence, and interrelationships in Nigeria

70. Huali Xiang, Geography, The Short-term and Long-term Effects of Environmental Pollution on Health Capital

Poster Session 15: Geology

71. Maximilian Barczok, Geology, Influence of iron (oxyhydr)oxide crystallinity on phosphate bioavailability in contrasting redox and hydrological conditions

72. Md Abu Raihan Chowdhury, Geology, Colloidal metal transport in soils developing on historical coal mine spoils

73. Sydney Laubscher, Geology, Manganese dissolution kinetics and uptake rates by red maple trees in soils

Poster Session 16: Liquid Crystal

74. Ahlam Nemati, Liquid Crystal Institute, Amplification of chirality in axial chiral ligand by an enhancement of anisotropy factor of nanorods

75. Sasan Shadpour and Ahlam Nemati, Liquid Crystal Institute, Chiral helical nanofilament and nanocylinder phases and a new type of polymorphism in liquid crystals

76. Comrun Yousefzadeh, Liquid Crystal Institute, Tunable polarization grating devices

Poster Session 17: Mathematics

77. Abdulrahman Alajmi, Mathematics, The Lattice Size: Replacing a multi-variable polynomial with one that has a lesser multi-degree

78. Naira Chevelidze, Mathematics, PageRank Algorithm and Applications
79. Mirjeta Pasha, Mathematics, Medical Image reconstruction by linearized Bregman iteration with non-negativity constraint

Poster Session 18: Neuroscience I

80. Timothy Niepokny, Neuroscience, Timed daily food restriction desynchronizes circadian clocks in the HPG axis

81. Sohini Dutta, Neuroscience, Glutamatergic signaling within the nucleus accumbens underlies extinction retention

82. Eric Dyne, Neuroscience, Effects of Variable Amyloid-Beta Fragment Size on the Expression of Pro-Inflammatory and Autophagy Genes in Human Microglia Cells

83. Zahra Ghasemahmad, Neuroscience, Valence of Mating but not Restraint Vocalizations is Perceived Differently by Male and Female mice

Poster Session 19: Neuroscience II

84. Adam Kulp, Neuroscience, The effect of IL-1β and CORT on enhanced fear memory [LC]

85. John Shelestak, Neuroscience, Early effects of Cuprizone administration on the blood-brain barrier

86. Sarah Sternbach, Neuroscience, Oligodendrocytes, BHMT, and Multiple Sclerosis

87. Alyx Weaver, Neuroscience, The Effect of Exercise on Brain Hemoglobin Expression in Rats

88. Lana Frankle, Neuroscience, Changes to astrocyte morphology at different stages of cuprizone treatment

Poster Session 20: Nursing

89. Ezinne Anaba, Nursing, Influence of food price on incidence and prevalence of obesity

90. Lauren Bruwer, Nursing, Ventriculitis: A QI Initiative for Improved Clinical Practice

91. Jason Fisher, Nursing, (Re)defining the economic value of nursing

92. Jasmine Hoff, Nursing, Medical Marijuana: A Thematic Review

93. Shadi Kanan, Nursing, Integrative Review: Characteristics of Physical Activity Programs Associated with Physical Activity Adherence in Adults with Coronary Artery Disease

94. Dawn Troup, Nursing, Enhanced recovery after surgery for hysterectomy

Poster Session 21: Physiology I

95. Megan Linscott, Physiology, Regulates Fgf8 Expression in the Developing Hypothalamus During Gonadotropin-Releasing Hormone Neuron Emergence [LC]

96. Bryan Dowdell, Exercise Physiology, Does high-cadence cycling improve emotional recognition in individuals with Parkinson’s Disease?

97. Cody Dulaney, Exercise Physiology, Circulating MCP-1 associated with prolonged cycling in hot temperature

98. Kayla Hare, Exercise Physiology, Sex-specific Differences in Pulse Wave Reflection and Arterial Stiffness After Resistance Exercise

Poster Session 22: Physiology II

99. Sarah Kearney, Exercise Physiology, Greater reliance on carbohydrates during single leg versus double leg cycling

100. Brandon Miller, Exercise Physiology, The role of knee wraps on passive force production
101. Jason Parks, Exercise Physiology, *Heavy rope exercise on cardiovascular hemodynamics and arterial stiffness in resistance-trained individuals*

102. Meredith Paskert, Exercise Physiology, *Aging and autonomic modulation in women: Using resistance exercise as a countermeasure*

**Poster Session 23: Psychological Sciences I**

103. Jordan Adkins, Psychological Sciences, *Differences Exist for training intensity required for safety learning in male and female mice*

104. Pallavi Aurora, Psychological Sciences, *Positive emotions predict engagement in adaptive health behaviors*

105. Logan Kochendorfer, Psychological Sciences, *Adaptation of a measure for parental emotion socialization in early adolescence*

106. Jessica LaBuda, Psychological Sciences, *Accuracy and Bias in Perceptions of Romantic Partner Sacrifice Motives*

**Poster Session 24: Psychological Sciences II**

107. Karin Nylocks, Psychological Sciences, *Influence of rumination on downstream negative emotion during simulated peer-rejection*


109. Kyrsten Sackett-Fox, Psychological Sciences, *Better together: The impacts of exercising with a romantic partner*

110. Victoria Sanborn, Psychological Sciences, *The Impact of LGG Probiotic Supplement on Cognition in Middle-Age and Older Adults: Pilot Study*

111. Antonia Santoro, Psychological Sciences, *Investigating the impact of short-term self-compassion inductions*

**Poster Session 25: Public Health and Education**

112. Megan Anderson, Public Health, *Analysis of mental health referrals by university status and personality characteristics following Mental Health First Aid training*

113. James Cairns, Public Health, *A Comprehensive Approach to Considering Risk from Birth to One Year: Embracing the Complexity of Risk Reduction*

114. Fatemeh Dehghan Manshadi, Counseling, *Integrating Spirituality into Counseling Education/Training*

115. Anna Adams and Katelyn Thomas, English, *One on one: Writing conferences with writers with limited proficiency*

**Poster Session 26: Sociology**

116. Tierra James, Sociology, *Death and Discourse: A Thematic Analysis of Death Row Inmates’ Last Statements*

117. Kelly Markowski, Sociology, *Should We Befriend Those with Which We Work? An Identity-Based Approach to Multiplexity and Authenticity*

118. Brennan Miller, Sociology, *Status Ideology: How is Status Information Interpreted?*

119. Rusty Schnellinger, Sociology, *Contextualizing the epidemic: The role of neighborhood in non-medical use of prescription drugs*
**Fine Arts Performances 5:30-8:00 p.m.**

**Music**

Efferus String Quartet with Maria Florez, Paula Castaneda, Irene Guerra, and Cristian Diaz, *Music, String Quartet #9 in E-flat major, op. 117. D. Shostakovich*

**Creative Writing**

Melanie Cook Murphy, NEOMFA, *O’Morchoe*

Bonné de Blas, NEOMFA, *Excerpts from: La Ciudad de las Calles de Ramón y Cajal*

Monica Kaiser, NEOMFA, *Environmental Impacts*

We conclude the Fine Arts Performances with a special short performance by our Keynote Speaker, Tayo Aluko.
Friday, April 5

*Room 317 is a Quiet Room, and the room is open and available from 9:00-12:15 p.m.*

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

Oral Session 1: Anthropology, History, and Communications  
Room 313


9:15 a.m. Joel Baehler, History, "Protective Custody": Stephen Donaldson, Prison Activism, and Confinement in an Era of Liberation

9:30 a.m. Ashley Rutkoski, Anthropology, *Ceramic Variation: A glimpse into understanding Human Behavior*

9:45 a.m. Michael Wilson, Anthropology, *Does it stick? Using thermoplastic vs. organic-based adhesives in experimental prehistoric ballistics weaponry testing*

Oral Session 2: Bioinformatics  
Room 308

9:00 a.m. Nazar Hussein, Cellular and Molecular Biology, *A novel Regulatory Role of TRAPPC9 in Osteoarthritis*

9:15 a.m. Noel-Marie Plonski, Cellular and Molecular Biology, *ADAR-mediated RNA editing and neuropsychiatric disorders*

9:30 a.m. Golam Mustafa, Physics, *Short looped DNA as Force Transducer: Conversion of fluorescence signal into force information*

Oral Session 3: Biological Sciences  
Room 306A

9:00 a.m. William Feng, Biological Sciences, *The role of the fatty acid transporter CD36 in the therapeutic resistance of HER2-positive breast cancer cells*

9:15 a.m. Anjali Krishnan, Cellular and Molecular Biology, *Characterization of microcystin-induced apoptosis in HepG2 cells*

9:30 a.m. Priyanka Rana, Biological Sciences, *Calibration and characterization of intracellular Asante Potassium Green probes, APG-2 and APG-4*

9:45 a.m. Kevin Budge, Cellular and Molecular Biology, *Transgenic Overexpression of GPNMB Ameliorates MPTP-Induced Dopaminergic Degeneration*

10:00 a.m. Fathima Nafrisha Cassim Bawa, Biomedical Sciences, *Role of Retinoic Acid Receptor - Alpha in protecting against Nonalcoholic Steatohepatitis*

Oral Session 4: Chemistry & Biochemistry  
Room 319*

9:00 a.m. Srijana Bhandari, Chemistry & Biochemistry, *How Does the Anisotropic solvation affect the Photoinduced Charge Transfer in the Special Pair?*

9:15 a.m. Thiloka Dassanayake, Chemistry & Biochemistry, *Synergistic effects of copper-vitamin C incorporated alumina nanocomposite hydrogels for burn wound healing*

9:30 a.m. Keshav GC, Chemistry & Biochemistry, *Protein RsmC shows RNA annealing and chaperone activities during ribosome biogenesis*

9:45 a.m. Pramila Poudyel Ghimire, Chemistry & Biochemistry, *Histidine-assisted nickel incorporation in MCM 41-carbon composite and its application in nitrophenol reduction*
10:00 a.m. Mohammad Rahman, Chemistry & Biochemistry, Development of N-hydroxysulfonamide-caged photoactivatable nitroxy (HNO)-releasing compounds using (coumarin-4-yl)methyl-based phototriggers

**Oral Session 5: Digital Humanities I**  
**Room 310AB**

9:00 a.m. Noor Agustina, Curriculum and Instruction, The Teacher Perception and the Implementation of Teacher Peer Observation at Language Center [LC]

9:15 a.m. Josiah Murphy, Teaching English as a Second Language, Want to buy some snake oil? Enhance listening and speaking fluency in the English as a second/foreign language classroom

9:30 a.m. Susi Rakhmawati, Translation Studies, Packaging 'Buru Quartet' in the English speaking reception

9:45 a.m. Feng Wang, Translation Studies, On the English translation of Song ci-poetry under the Harmony-guided criteria

10:00 a.m. Shannon Smith, Educational Psychology, Impact of computer-based and robotic training on student ability and engagement

10:15 a.m. Ahmad Albeshri, Teaching, Learning, & Curriculum, Individual and social meaning among children

**Oral Session 6: English & Library Science**  
**Room 318**

9:00 a.m. Abdulrahman Abu Shal, English, "Why So Paranoid?: The Case of Conspiracy Theory (Not as Paranoia)

9:15 a.m. Muhammad Farooq, English, Kipling's 'Lispeth': The Myth of Absolute Identity

9:30 a.m. Rosann Gage, English, Losing sight of Guinevere: The medieval memory and its relationship to the senses of sight and touch in Chrétien de Troyes' "The Knight and the Cart"

9:45 a.m. Ted Daisher, Teaching English as a Second Language, Do the Authentic and Graded Reader Versions of Texts Differ in their Collocation Content?

10:00 a.m. Lanson Wells, Library & Information Science, Demystifying rare books and manuscripts for the modern librarian - a handbook

**Oral Session 7: Teaching & Pedagogy I**  
**Room 315**

9:00 a.m. Mustafa Aydogan, Counselor Education and Supervision, Cross-Cultural Perceptions on Teaching Counseling Theories: A Q Methodology Study

9:15 a.m. Mohsine Bensaid, Curriculum and Instruction, Self-study exploring how an experienced ESL teacher enacts a course driven by 3S Understanding

9:30 a.m. Dongyan Li, Curriculum & Instruction, Building Chinese College Students' Fluency and Comprehension through Reading Theatre

9:45 a.m. Ilfa Zhulamanova, Curriculum and Instruction, Learning, NOT playing: Mixed methods analysis of early childhood preservice teachers' perceptions of children's play

10:00 a.m. Tracy Arner and Rachael Todaro, Educational Psychology, Flipping the Educational Psychology classroom: Investigating the relation between instructional design, learning strategy use, and retention

**Oral Session 8: Higher Education in Global Perspective**  
**Room 306B**

9:00 a.m. Radha Bodapati, Cultural Foundations of Education, Sociocultural adaptation and acculturation of forcibly
displaced Nepalese-Bhutanese refugee youth in North East Ohio public Schools: A Narrative Inquiry

9:15 a.m. Yu Li, Cultural Foundations of Education, Han and Mongolian migrant girls’ educational empowerment: A comparison

9:30 a.m. Liangtao Ni, Cultural Foundations of Education, China’s “world-class universities” reform policy and the experiences of the Chinese higher education faculty in the American universities

9:45 a.m. Humberto Carro, Higher Education Administration, International Student Engagement: How to help international students to adapt to the life and culture of American Universities

Oral Session 9: Material Science I
Room 306C

9:00 a.m. Arosha Dassanayake, Chemistry & Biochemistry, Inventing novel routes for the synthesis of functional carbon nanospheres for gas capture and energy storage applications using industrially feasible single-step and low-temperature carbonization strategies

9:15 a.m. Runa Koizumi, Liquid Crystal Institute, Swimming bacteria swirl around nematic attractors

9:30 a.m. Taras Turiv, Liquid Crystal Institute, Human cells patterned by liquid crystal

9:45 a.m. Hao Wang, Liquid Crystal Institute, Chiral Molecular Switch Enable Liquid Crystal Self-assemble to Helical Superstructure and Show Dynamic Color Tuning

Oral Session 10: Medical Humanities I
Room 309

9:00 a.m. Natalie Ricciutti, Counselor Education and Supervision, Process and Substance Use Addictions: Differences in Diagnosis, Treatment, and Successful Outcomes

9:15 a.m. Eun Jin Lee, Nursing, Correlations between auricular tenderness and symptoms in Korean adults

9:30 a.m. Samantha Ortiz, Behavioral Neuroscience, Corticosterone administration after early adolescent stress selectively blocks stress-induced potentiation of morphine place preference in adulthood

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

Oral Session 11: Identity in a Global Context
Room 319

This special session will focus on “Communicating Gender in a Global Context: International Constructions of Identity.”

Nahla Bendefaa, Session Chair, Communication Studies
Elaina Eakle, Communication Studies
Abby Achauer, Communication Studies
Matt Mullins, Communication Studies

Oral Session 12: Materiality
Room 313

10:45 a.m. Brittany Hujar, Art History, Kozo Miyoshi: An Interpretation of Water Through Photography

11:00 a.m. Lana Sugarman, Theater & Dance, Conjuring Up a 312-year-old Female Physicist in Theatre

11:15 a.m. Qiaorong Wang, Music, Applying American Pedagogical Approaches in Music Theory Fundamentals to First-Year Chinese University Classrooms

11:30 a.m. Terence Cranendonk, Theater & Dance, Physical action and energetic flow:
Refining the awareness of impulse at the Workcenter of Jerzy Grotowski and Thomas Richards

Oral Session 13: Material Science II Room 306C

10:45 a.m. Fareha Atetalla, Physics, Measurements of Do and anti-Do meson anisotropy in Au+Au collisions at 200 GeV using the STAR detector at RHIC

11:00 a.m. Shiva Bhattarai, Physics, Small Angle Neutron Study of a Ferromagnetic Alloy

11:15 a.m. Prabesh Gyawali, Physics, A Single Molecule Study of the Impact of Small Molecules on Intermolecular G-quadruplex Formation

11:30 a.m. Babak Salehi Kasmaei, Physics, Production and flow of dileptons from quark-gluon plasma

11:45 a.m. Vikash Kaphle, Physics, PEDOT: PSS Based High Performance Organic Electrochemical Transistor: Working Mechanism and Possible Applications as Biosensor

Oral Session 14: Medical Humanities II Room 309

10:45 a.m. Michelle Rivers, Cognitive Psychology, High-stakes exams offer formative evaluation of category-level knowledge

11:00 a.m. Kristen DeBois and Shelly Evans, Public Health, Unexpected risks in long-term care: A mixed methods analysis of fatal resident-to-resident aggression

11:15 a.m. Stacie Humm, Exercise Physiology, Alterations in vagal tone after acute resistance exercise in resistance-trained and untrained individuals

11:30 a.m. Erica Marshall, Exercise Physiology, Autonomic Modulation After High-Intensity Heavy Rope Exercise in Resistance-trained Individuals

Oral Session 15: Music & Ethnomusicology Room 318

10:45 a.m. Andrew Blake, Music Theory, Voice-leading and implied tonality in quarter tone spaces: “Chorale”, from Ives’ “Three Quarter-Tone Pieces”

11:00 a.m. Nicole Muffitt, Ethnomusicology, FaSoLa: The Shaping of American Traditional Music

11:15 a.m. Yuan Ni, Ethnomusicology, The Development Trend of the Erhu Virtuosos after the Twentieth Century in the Perspective of Gender

11:30 a.m. Jiaqi Sun, Music Theory, Integration of Pentatonicism and Serialism: Twelve-Tone Technique in Luo Zhongrong’s Music

Oral Session 16: Political Science Room 306A

10:45 a.m. Maxwell Adjei, Political Science, Ending Civil War through Nonviolent Resistance: The Women of Liberia Mass Action for Peace Movement

11:00 a.m. Ikhsan Darmawan, Political Science, E-voting Adoption in Many Countries: A Review of the Literature

11:15 a.m. Laura Mendez, Political Science, Aid effectiveness literature: Approaches and complexity theory

11:30 a.m. Michael Palmieri, Political Science, The social dimensions of worker cooperative emergence and success

11:45 a.m. Md Harun Or Rashid, Political Science, Rethinking Relationship between Violent Extremism and Education system: A Literature Review and Future Research Agenda
Oral Session 17: Student Voice after Parkland
Room 306B

This session highlights humanities-based explorations of student voice in the wake of the Parkland shooting.

10:45 a.m. Paul Geis, Session Chair, Cultural Foundations, Hope for Democracy or the Elimination of Student Voice? Student Activism Post-Parkland

11:15 a.m. Danielle Weiser-Cline, Cultural Foundations, I Am Not Throwing Away My Shot: Theatre Education, Political Engagement, and the #NeverAgain Movement

11:45 a.m. Dialogue and Discussion

Oral Session 18: Environmental Science
Room 308

10:45 a.m. EmmaLeigh Given, Ecology, From golf green to green stream: Does typical restoration hit a hole in one?

11:00 a.m. Theresa Wolanin, Ecology, How climate change ruins relationships: a story of flowering delays and local bee extinction in Costa Rica

11:15 a.m. Lindsey Yazbe, Geology, Speciation and transport in a coal mine drainage impacted stream

Oral Session 19: Teaching and Pedagogy II
Room 315

10:45 a.m. Charles Fitzsimmons, Psychological Sciences, Do adults treat equivalent fractions equally?

11:00 a.m. Rachael Todaro and Bradley Morris, Educational Psychology, Fading into interleaved practice

11:15 a.m. Kayla Morehead, Cognitive Psychology, How much mightier is the pen than the keyboard for note-taking? A replication and extension of Mueller and Oppenheimer (2014)

11:30 a.m. Erin Graham, Cognitive Psychology, A Little Less Conversation: Using Non-Declarative Learning Techniques to Improve Math Education

11:45 a.m. Jennifer Lowers, Curriculum and Instruction, Exploring multimodal composition and pedagogy: Insights from research and practice

Oral Session 20: Digital Humanities II
Room 310AB

10:45 a.m. Naser Al Madi, Computer Science, Poor Man's Research Eye-tracking Kit

11:00 a.m. Jeff Rozner, Computer Science, Building a truth machine: blockchain, prediction markets, evidence, and interested stakeholders

11:15 a.m. Reem AlSuhaibani, Computer Science, Empirical study on using markov chain models on function identifiers for analyzing common grammatical patterns

11:30 a.m. Erik Smith, Geography, Analysis of cold air outbreaks across the globe

11:45 a.m. Louisa Catalano, Mathematics, On maps preserving products of matrices

12:00 p.m. Mona Matar, Mathematics, Importance in a Network Via Line Graphs and the Matrix Exponential
Awards and Keynote Luncheon
12:30 p.m., Kent Student Center Ballroom

Welcome and Opening Remarks: Danielle French, Symposium Chair

Keynote Address: Tayo Aluko

Presentation of Awards: Graduate Student Senate Executive Board

Keynote Speaker: Tayo Aluko

Nigerian-born Tayo Aluko is based in Liverpool, UK, where he worked previously as an architect.

With his one-man play CALL MR. ROBESON, he won the coveted Fringe Review Outstanding Theatre Award at the Brighton Festival Fringe in June 2016. He also won the Best Actor, Best Original Work and Impresario awards at the London Fringe in Ontario, Canada in Summer 2012; the Best Solo Show at the Stratford Fringe in June 2013 and the award for Best Musical Performance at the Atlantic Fringe in Halifax, Nova Scotia in September 2013. He sold out all his eighteen performances at the New Zealand and Adelaide Fringes in 2015. The play has also been performed on a number of occasions in Nigeria and Jamaica, to great acclaim, and also at New York’s Carnegie Hall in February 2012.

As a baritone, he won a Gold Medal at the Grand Festival of Festivals held in commemoration of the 75th Anniversary of the British Federation of Festivals, in competition with singers and instrumentalists from all over the UK. He appeared as soloist at the Bridgewater Hall, Manchester, accompanied by the Hallé Orchestra, and has also performed lead roles in various operas and stage musicals including Nabucco, Kiss Me Kate and Anything Goes. Oratorio roles have included Faure’s Requiem, Brahms Requiem, Samson, C Minor Mass, Carmina Burana, Elijah and The Messiah.

Tayo researched, wrote and narrated to camera a film on the history of West Africa before the TransAtlantic Slave Trade, which forms part of the permanent exhibit at the National Museum Liverpool’s International Slavery Museum. Published writings include articles for the UK’s The Guardian, Morning Star, NERVE Magazine, Liverpool Daily Post and Echo; North West Chronicle; Punch and ThisDay Newspapers in Nigeria, and modernghana.com. He has also written and performed a lecture-cum-concert titled FROM BLACK AFRICA TO THE WHITE HOUSE, which deals with African History, and particularly Black Resistance to White domination, illustrating it with live renditions of Black Spirituals. This has also been performed on three continents.

With The Maltings Theatre, Berwick-upon-Tweed, he developed a new piece titled WHAT HAPPENS? featuring the writings of African American Langston Hughes (with songs from the era), performed to live jazz accompaniment. In October 2013 he produced the inaugural Paul Robeson Art Is A Weapon
Festival in Covent Garden, London, which featured speakers and performers from as far afield as South Africa and Canada.

As writer-on-attachment with the Liverpool Everyman and Playhouse theatres, he developed a new play titled JUST AN ORDINARY LAWYER which premiered at the Edinburgh Fringe Festival in August 2016, received its international premiere in Victoria, Canada in February 2017 and is scheduled for performances in Lagos, Nigeria in June and September 2017, and was one of the mainstage performances at the National Black Theatre Festival in Winston-Salem, North Carolina in August 2017.

Find out more about Tayo Aluko and his work at http://www.tayoalukoandfriends.com.

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.

2018-2019 GSS Executive Board
Mark Rhodes, Executive Chair,
Tim Rose, Vice Executive Chair
Xin Hong, Finance Chair
Mitchell Powers, Advocacy Chair
Danielle French, Symposium Chair
Morgan Chaney, Information Services Chair
Jenn Mani, Administrative Services Chair
Dr. Melody Tankersley, Advisor

Acknowledgements

I could not have put this event together without the GSS Executive Board, who has been a part of the planning of this event from the beginning. The following KSU faculty, staff, and students made this event possible: Macy McClure, Grace Ortiz, Parry Lopez, Katie Goldring, Kristan Dolan, Kyle Reynolds, Lana Whitehead, Odeh Halaseh, Jennifer Butto, Barb Spencer, Ann Gosky, Dan Pompili, Melody Tankersley, Victoria Reynolds, and everyone who distributed hotcards, put up posters, and sent emails to publicize our event.

Endless thanks to all our volunteers and faculty judges for their invaluable service and time.
2019 Graduate Research Symposium
Program Corrections

Oral Session 4: Chemistry & Biochemistry was listed under the wrong room number previously. The correct room is Room 319.

Megan Linscott’s title is *Mechanisms of Fgf8 Transcription and Signaling in Developing GnRH Neurons.*

Noor Agustina's title is *The Teacher Perception and the Implementation of Teacher Peer Observation at English Language Education Department.*

Suwatana Rockland’s title is *A comparison education between two countries.*

Maame Amoah, Fashion, withdrew her presentation titled,”*Yaa Kuona*: An Ode to Ancestry.

**The following students will be unable to give their presentations:**

*Poster Presentations:*
10. David Barnard, Biological Sciences, *Sex Differences in the Regulation of Brain IL-1 in Response to Chronic Stress*

40. Thomas Mitchell, Ecology and Evolutionary Biology, *Preliminary Results from an Analysis of Fine-scale Spatial Genetic Structure (FSGS) in Lobelia siphilitica*

66. Alexander Evans, Geography, *Multilevel regression and poststratification for small-area estimation of Ohio health outcomes and risk factors*

69. Alicia Sloan, Geography, *Finding their Niche: A study of the interactions between central cities and their neighboring suburbs*

84. Adam Kulp, Neuroscience, *The effect of IL-1^P and CORT on enhanced fear memory*

*Oral Presentations:*
Shankar Mandal, Chemistry & Biochemistry, *Single-molecule investigation of specific and high affinity binding of ligands to the human telomere G-quadruplex*

Greta Babakhanova, Liquid Crystal Institute, *Guiding cell migration and alignment using polymerized liquid crystal nanostructures*

Matt Wong, Teaching English as a Second Language, *Want to buy some snake oil? Enhance listening and speaking fluency in the English as a second/foreign language classroom*
Index of Presenters

PS: Poster Session
OS: Oral Session
AE: Art Exhibit
FAM: Fine Arts, Music
FACW: Fine Arts, Creative Writing
(LC): Check list of corrections

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