UNDERGRADUATE SYMPOSIUM ON RESEARCH AND CREATIVE ACTIVITY 2019
### Schedule of Events

**Saturday, April 27, Scianna Hall**

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<th>Time</th>
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<tr>
<td>7:30 a.m.</td>
<td>Registration</td>
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<tr>
<td>8:30–9:30 a.m.</td>
<td>Concurrent Panels Session I</td>
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<tr>
<td>9:45–11:15 a.m.</td>
<td>Poster Presentations</td>
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<tr>
<td>11:30 a.m.–1 p.m.</td>
<td>Lunch and Keynote Address, Trent Lott Center</td>
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<td>Keynote Speaker: <strong>DEREK WATKINS</strong></td>
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<td>Graphics Editor, <em>The New York Times</em></td>
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<tr>
<td>1–2:15 p.m.</td>
<td>Concurrent Panels Session II</td>
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<tr>
<td>2:30–3:30 p.m.</td>
<td>Concurrent Panels Session III</td>
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<tr>
<td>3:45–4:45 p.m.</td>
<td>Arts Showcase (Scianna Hall Auditorium)</td>
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<td>5 p.m.</td>
<td>Awards Ceremony (Scianna Hall Auditorium)</td>
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</table>
The Symposium began as an annual event in the Department of History under the direction of Dr. Phyllis Jestice. In 2011, USM alumnus Donald Drapeau began sponsoring a series of awards for student presenters, and the next year, the Symposium was expanded to include students from across campus. The Undergraduate Symposium on Research and Creative Activity has grown since that time to an event that includes a keynote address, art, dance, music, and theatre, as well as oral and poster presentations. In 2018, approximately 300 people attended the Symposium, with more than 150 students presenting and performing.

DONALD DRAPEAU, the Symposium’s generous benefactor, completed his Bachelor of Science in history at Southern Miss before going on to earn a master’s degree at the University of Pennsylvania. He has enjoyed great success as founder and chief executive officer of the Man-Drapeau group of companies, which employs financial engineers and maintains offices on multiple continents. In the 1970s, he founded Drapeau and Co. and became a member of the Chicago Mercantile Exchange.

A Fulbright Fellow in Belgium and a Kress Fellow at the Harvard Business School, Mr. Drapeau is a passionate advocate of undergraduate students at Southern Miss and enjoys the opportunity to foster their sense of initiative, personal drive, and lifelong commitment to education and personal growth. His passion has led not only to his sponsorship of the prizes at the Symposium, but also to his support for the Donald Drapeau Summer Research Grants, which provide funds for students to devote full-time to their research, and to the Eagle Wings program, which provides support for a number of students to present their scholarly findings at professional conferences. In 2016, Mr. Drapeau announced a gift to Southern Miss that resulted in the renaming of the Center for Undergraduate Research to the Drapeau Center for Undergraduate Research.

The Symposium could not exist without Mr. Drapeau, whose vision for valuing expanded opportunities for undergraduates has driven this enterprise and has shaped Southern Miss and the lives of hundreds of its students. We thank him for his commitment and his generosity.
DEREK WATKINS is a designer, developer, reporter, and geographer on the graphics desk at The New York Times, where he uses maps and other visuals to build narratives that explain the news online and in print. The stories he works on are often about how geography influences people’s interactions with their environment and with each other. Much of his technical focus is on the ways in which new technologies and creative visuals can combine with traditional journalism to make stories on the web more engaging and informative.

Projects that Derek has been involved in at The Times have been recognized by the Emmy Awards, the Gerald Loeb Awards, Pictures of the Year International, World Press Photo, the Webby Awards, and by multiple New York Times Publisher’s Awards. His work has also won several annual Best of Show and Best Map awards at the global Malofiej competition, known as the “Pulitzers for Infographics.”

He has also worked at Columbia University’s Graduate School of Architecture, Planning, and Preservation. An alumnus of the Honors College, he holds a bachelor’s degree in geography from The University of Southern Mississippi and a master’s degree in geography from the University of Oregon.

To see a video of a recent talk, examples of his fascinating work, and a list of his awards, visit his website at dwtkns.com/portfolio.
The Drapeau Center for Undergraduate Research (DCUR) was established in October 2011, assuming the name of its benefactor, Donald Drapeau, in 2016. The mission of the center is to enhance the undergraduate experience by promoting and supporting student-faculty collaborations in research, creative projects, and scholarship. The benefits of active participation in faculty-mentored research are myriad both to the student experience and the University community at large.

DCUR works with undergraduates to identify potential faculty mentors and also sponsors a number of competitive programs to assist students in their independent scholarship activities. They include the Eagle Scholars Program for Undergraduate Research (Eagle SPUR), which provides up to $1,000 to support travel, to purchase equipment and supplies, and/or to be used as a stipend; Eagle Wings, which funds external conference travel; and the Drapeau Summer Research Grants, which allow students to work full-time during the summer on their research projects. You may learn more about these programs at usm.edu/research/cur.
The oldest honors college in Mississippi and one of the oldest in the nation, the Southern Miss Honors College was founded in 1976 in an effort to offer enhanced educational experiences for high-achieving students. From its founding, the Honors College has required every student to undertake original research in the form of an Honors Thesis, making the College a fitting host for the Undergraduate Symposium.

Through a supportive and challenging intellectual community and by valuing engaged and active learning, the College encourages its students to seize opportunities and boldly determine their own paths—both at the university and beyond. Upon graduation, Honors Scholars have the independence and confidence to pursue their passions, the knowledge and tools with which to chart a fulfilling future course, and a lifelong commitment to using their capacities for the public good. For more information about the Honors College, visit usm.edu/hc or contact us at honors@usm.edu.
THANK YOU!

THE 2019 SYMPOSIUM PLANNING COMMITTEE

This year’s Symposium was organized and developed through the hard work of a university-wide committee, which met throughout the 2018-19 academic year to put this event together. These faculty and staff members gave of their time and energy so that students and faculty could enjoy a successful Symposium. Thanks to all of them for their service!

Dr. Joanne Cao, MARKETING
Dr. Matthew Casey, HISTORY
Mr. Allen Chen, ART AND DESIGN
Dr. Jeremy Deans, GEOGRAPHY AND GEOLOGY
Ms. Christina Foreman, OFFICE OF THE PROVOST
Dr. Jamye Foster, MARKETING
Ms. Jessica Francis, HONORS COLLEGE
Ms. Michele Frasier-Robinson, UNIVERSITY LIBRARIES
Dr. Sabine Heinhorst, CHEMISTRY AND BIOCHEMISTRY/HONORS COLLEGE
Ms. Brianna Jahn, DANCE
Ms. Jo Ann Johnson, DRAPEAU CENTER FOR UNDERGRADUATE RESEARCH/OFFICE OF THE VICE PRESIDENT FOR RESEARCH
Dr. Jennifer Lemacks, NUTRITION AND FOOD SYSTEMS
Dr. Elena Stepanova, PSYCHOLOGY
Dr. Lachel Story, NURSING
Dr. Alexandra Valint, ENGLISH
Dr. Ellen Weinauer, ENGLISH/HONORS COLLEGE
Ms. Cyndi Wyles, OFFICE OF THE VICE PRESIDENT FOR RESEARCH
FACULTY JUDGES

We are grateful to the following Southern Miss faculty members for volunteering their time and energy to the UGS.

Laura Alberti, Communication Studies
Katie Angus, Foreign Languages
Randolph Arnau, Psychology
Jonathan Barron, English
Ashley Batastini, Psychology
Heather Broadhead, Polymer Science
Quincy Brown, Human Capital Development
Gordon Cannon, Biochemistry
Joanne Cao, Marketing
Craig Carey, English
Allen Chen, Art and Design
Nicholas Ciraldo, Music
Kate Cochran, English
Jeremy Deans, Geology
Elif Filiz, Economics
Jamy Foster, Marketing
Song Guo, Chemistry
Andrew Haley, History
Halvor Halvorson, Biological Sciences
Bridget Hayden, Sociology
Joshua Haynes, History
Sabine Heinhorst, Biochemistry
Joshua Hill, Criminal Justice
Joyce Inman, English
Brianna Jahn-Malinowski, Dance
Nicolle Jordan, English
Joann Judge, Kinesiology
Shahid Karim, Biological Sciences
Lucas Keefer, Psychology
Sherry Kinkopf, English
Ann Marie Kinnell, Sociology
Kevin Kuehn, Biological Sciences
Brian LaPierre, History
Jennifer Lemacks, Nutrition
Kelly Lester, Dance
Robert Lochhead, Polymer Science
Alisa Lowrey, Education
Tina Masterson, Chemistry
Dmitri Mavrodi, Biological Sciences
Stephanie McCoy, Nutrition
John Meyer, Communication Studies
John Miller, Marketing
Beddhu Murali, Computer Science
Marlene Naquin, Mathematics
Joe Olmi, Psychology
Julie Pigza, Chemistry
Lina Pu, Computer Science
Keltoum Rowland, Foreign Languages
Candice Salyers, Dance
Jeremy Scott, Physics
Partha Sengupta, Computer Science
Yoan Simon, Polymer Science
Laura Stengrim, Communication Studies
Elena Stepanova, Psychology
Gopinath Subramanian, Polymer Science
Monica Tisack, Polymer Science
Rebecca Tuuri, History
Alexandra Valint, English
Wei Wang, Marketing
Ellen Weinauer, English
Jeffrey Wiggins, Polymer Science
Zhifu Xie, Mathematics
Hao Xu, Biological Sciences
Gallayanee Yaoyuneyong, Marketing

THE SYMPOSIUM TAKES A GREAT DEAL OF PLANNING AND SUPPORT, AND WE WANT TO THANK ALL OF THOSE WHO HAVE CONTRIBUTED TO THE EVENT!
THANK YOU

OUR CAMPUS SPONSORS
We would like to extend a special thank you to the College of Business and Economic Development for opening the doors of Scianna Hall to the Symposium and to these sponsors for their generous support.

Vice President for Research
Vice President for Student Affairs
College of Arts and Sciences
College of Business and Economic Development
College of Education and Human Sciences
College of Nursing and Health Professions
The Graduate School
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We’d like to extend a special thank you to these donors for their kind support of our student scholars.

Mississippi INBRE
iDeA Network of Biomedical Research Excellence

Supplemental Prizes for Best Presentation on a Biomedical Topic
Provided easels and boards for poster presenters

DALE CENTER
FOR THE STUDY OF
WAR & SOCIETY

The University of Southern Mississippi

The Jack Lucas Award and the Virginia Culpepper Memorial Award
THE SYMPOSIUM TAKES A GREAT DEAL OF PLANNING AND SUPPORT, AND WE WANT TO THANK ALL OF THOSE WHO HAVE CONTRIBUTED TO THE EVENT!

OUR COMMUNITY SPONSORS
Please help us thank our local sponsors by letting them know that Hattiesburg appreciates their support of student achievement at Southern Miss!

SPECIAL THANKS

to American Graphics and Java Moe's for their especially generous support!
### 8:30-9:30 A.M. CONCURRENT PANELS SESSION I

#### SCI 1008 CIVIL RIGHTS AND LIBERTIES IN THE U.S. SOUTH

**A**
- **MODERATOR:** TAYLOR LEWIS, HISTORY
- **The Lights in the Darkness: The Supportive Effort for the Mississippi Freedom Democratic Party Election Challenge of 1965**
  - KRISTEN MCGUIRE, HISTORY
- **A “Mischief-Making Rabbi”: The Jewish Community’s Relationship with the Civil Rights Movement Under Rabbi Charles Martinband, Hattiesburg, Mississippi, 1951-63**
  - JONATHAN PUCKETT, ENGLISH, HISTORY
- **Civil Rights Through the Lens of New Orleans Voodoo**
  - KENDRA COLE, INTERNATIONAL STUDIES

#### SCI 1014 BUSINESS, COMMUNITY, AND SOCIETY

**B**
- **MODERATOR:** SERENA BUCKLEY, HONORS COLLEGE
- **New Orleans’ Nightlife Culture**
  - MARIO MARSET EHRLE, SOCIOLOGY
- **What Community Bank Ads Are Actually Saying: A Content Analysis of Community Banking Advertisement Materials in Southern Mississippi and Southern Louisiana**
  - MATTHEW KELLER, FINANCE (BANKING AND FINANCE)
- **Does It Just Mean More? An Investigation Into the Involvement and Motivations of College Football Fans at The University of Southern Mississippi**
  - CAMERON KENNEY, MARKETING

#### SCI 1015 TOOLS OF THE TRADES: ASSESSMENT, TECHNIQUE, IMPROVEMENT

**C**
- **MODERATOR:** RAY JONES, KINESIOLOGY
- **Assessing Diabetic Self-Management Skills to Improve Quality of Life and Prevent Foot Complications**
  - HALEY SUMRALL, NURSING
- **Quantifying the Assessment of Sexual Dimorphism in the Tipu Population Using 3D Modeling of the Crania**
  - NATALIE HOSCH, FORENSIC SCIENCE (ANTHROPOLOGY)
- **EBL: English as a Bilingual Language, the Most Effective and Efficient Way to Study English**
  - RIKU SHINODA, LIBERAL STUDIES

#### SCI 1040 CHEMICAL SYNTHESIS

**D**
- **MODERATOR:** GARRETT ABRAHAMSEN, POLYMER SCIENCE
- **Enantioselective Addition of Masked Acyl Cyanides to B-nitrostyrenes**
  - CAROLINE DEGRAW, CHEMISTRY (ACS CERTIFIED CHEMISTRY)
- **Synthesis of a Model Thermoset via Reaction of Phenoxy Resins with Isocyanate Crosslinkers**
  - DAVIS BRENT, POLYMER SCIENCE
- **Synthesis of Thiolactone Polymer Brushes to Design Multifunctional and Patterned Brush Surfaces**
  - BRITTANY THOMPSON, POLYMER SCIENCE AND ENGINEERING
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<tr>
<th>SCI 2004</th>
<th>PSYCHOLOGICAL ASSESSMENT IN THREE DIMENSIONS</th>
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<tr>
<td>MODERATOR: KENDAL SMITH, PSYCHOLOGY</td>
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<tr>
<td>Perfectionism and Alcohol Use Outcomes in College Students: The Moderating Role of Alcohol Protective Behavioral Strategies</td>
<td>TIARA WATSON, PSYCHOLOGY</td>
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<td>Do Expectations of Study Tasks Actually Affect Memory Performance? Evaluating the Role of Task Expectancy in the Levels-of-Processing Framework</td>
<td>LANDRY SMITH, PSYCHOLOGY</td>
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<td>The Effects of Disease Contamination on Memory for Word Lists</td>
<td>LAURA PAZOS, BIOLOGICAL SCIENCES</td>
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<th>SCI 2005</th>
<th>HISTORY AND LITERATURE OF THE 19TH CENTURY</th>
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<td>MODERATOR: JESSICA RAMER, ENGLISH</td>
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<tr>
<td>Lack of Free Will and Victimization: A Naturalist Reading of Stephen Crane’s “The Clan of No Name”</td>
<td>LILY BRADY, ENGLISH, FRENCH</td>
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<td>Examination of the Tactical Strategies of Andrew Jackson and British Commanders in the Historical Battle of New Orleans</td>
<td>ANGELICA FIKES, HISTORY</td>
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<td>Backwoods Mystery: Zion Seminary in War and Memory</td>
<td>BILLY LOPER, HISTORY</td>
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<th>SCI 2009</th>
<th>GENDER ON THE JOB</th>
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<td>MODERATOR: ARIEN FAUCETT, KINESIOLOGY</td>
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<td>A Defiant First Lady</td>
<td>CAMERON CLOUD, COMMUNICATION STUDIES, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)</td>
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<td>The Impact of State Political Party Association on the Gender Pay Gap</td>
<td>AUDREY KELLY, ACCOUNTING</td>
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<td>The Notorious RBG: A Rhetorical Analysis</td>
<td>MCKENNA STONE, COMMUNICATION STUDIES</td>
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**9:45-11:15 A.M. POSTER PRESENTATIONS**

**GRADUATE STUDENT ASSISTANTS:**
- GARRETT ABRAHAMSEN, POLYMER SCIENCE
- ARIEN FAUCETT, KINESIOLOGY
- RAY JONES, KINESIOLOGY
- TAYLOR LEWIS, HISTORY
- KENDAL SMITH, PSYCHOLOGY

**SCI FIRST FLOOR, NORTH HALLWAY**

1. A Test of Algal Priming Effects During *Typha latifolia* Decomposition Under Contrasting Dissolved Nutrient Levels
   TORE HERBERT, MARINE BIOLOGY
2. Parenting Behaviors Predict Institutional Misconduct Among Youths in Military-Style Residential Program
   LAQUITA SIMPSON, PSYCHOLOGY
3. Exploring Financial Literacy of Independent Musicians in the Gig Economy
   BENJAMIN MILLEN, FINANCE (BANKING AND FINANCE)
4. A Comparison of Plankton Productivity and Artificial Reef Substrates in the North Central Gulf of Mexico
   ANNA MILLENDER, MARINE BIOLOGY
5. Synthesis of Acrylamide-Based Cationic Glycopolymers for RNAi in Ticks
   BISHAL UPADHYAY, POLYMER SCIENCE
6. Metal Casting Arts and Practices: The Construction of a Blast Furnace
   ALEX TOWNSEND, ART (DRAWING AND PAINTING, SCULPTURE)
7. A Test of Algal Priming Effects on Red Oak Wood Decomposition in a Lake Ecosystem
ETHAN NETTLETON, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)

8. Functional Analysis of Conserved Hypothetical Genes from Mycobacteriophage Hammy and the Quest for Cytotoxic Genes
VICTORIA WILLIAMS, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)
GARRETT WATTS, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)
DANIEL SINCLAIR, BIOLOGICAL SCIENCES (MICROBIOLOGY)
TAIYA JARVA, COMPUTER SCIENCE
JASMINE RANSOM, BIOLOGICAL SCIENCES
KATHLEEN JOHNSON, BIOLOGICAL SCIENCES

9. Masked Acyl Cyanide Addition to Heterocyclic Aldehydes as a Method to Access Mandelic Acid Derivatives
SAYRE WEAST, CHEMISTRY

PROMISE LEMOINE, PSYCHOLOGY

11. Survivorship and Growth Rates of Hybrid and Pure Topminnow Recruits in Experimental Hybrid Zones
SIERRA ORTIZ, MARINE BIOLOGY

SCI FIRST FLOOR, SOUTH HALLWAY

12. Synthesis and Characterization of PA-6 Films Containing Reinforcing Nanocarbon Materials
DANE WEDGEWORTH, POLYMER SCIENCE

13. Efficacy of Intervention on the Hearing Conservation Attitudes and Behaviors of College Students
REBECCA SABINE, SPEECH PATHOLOGY AND AUDILOGY

14. 2D Scene Image-Based 3D Scene Retrieval: A Semantic Approach Based on R-CNN
HAMEED ABDUL-RASHID, COMPUTER SCIENCE

15. Effects of Light and Nutrient Availability on Algal Stimulation of Microbial Heterotrophs Associated with Decomposing Wood
CODY POPE, BIOLOGICAL SCIENCES (ENVIRONMENTAL BIOLOGY)

16. Determination of Critical Concentrations of Polyelectrolyte Thickeners by Observing the Motion of Microorganisms
COLTON ALLGOOD, POLYMER SCIENCE

17. The Direction of Association Affects Illusions of Competence in Cued-Recall of Word Pairs
EMILY CATES, PSYCHOLOGY

18. Checklist of the Vascular Flora, Restoration Plans, and Educational Interpretive Signs for a Remnant Prairie at the Lakewood Memorial Cemetery, Hinds County, Mississippi
OLIVIA SHELTON, BIOLOGICAL SCIENCES

19. Self-Healing, Metal Modified Thiol-ene Networks for Gas Separation
RIMSHA BHATTA, POLYMER SCIENCE AND ENGINEERING

20. America Ain't No Fortunate One: The War That Broke America
JORDAN WESLEY, HISTORY

21. Can Habitat Fragmentation Predict the Success or Disruption of Parasites Living in and on Fundulus jenkinsi?
MCKENZI TURPIN, MARINE BIOLOGY

22. Synthesis and Characterization of UV-Active Bottlebrush Polymers
JARED BOWMAN, POLYMER SCIENCE

SCI SECOND FLOOR, NORTH HALLWAY

MARY GRACEN FULLER, BIOLOGICAL SCIENCES (ENVIRONMENTAL BIOLOGY)

24. The Effects of Error Detection Instructions on Additive and Contradictory Misinformation
ASHLEY WOOD, PSYCHOLOGY

25. Slickenline Analysis of Fault Planes at Atlantis Bank, SWIR: Implications on the Brittle History of an Oceanic Core Complex
PATRICK BURDEN, GEOLOGY
TRENT JACKSON, GEOLOGY

26. The Effects of Nhumirim Virus Infection on Mosquito C6/36 Cells
MARIAM ATOBILIOYE, BIOLOGICAL SCIENCES

27. Daily Hassles and Coping Strategies Among School Aged Children
ASHLEY FISHER, PSYCHOLOGY

28. An Automated System for Pedestrian Facility Data Collection
ANDREW FINK, COMPUTER SCIENCE

29. The Effects of Comonomer Distribution on the Ring Closure and Carbonization of Polyacrylonitrile Carbon Fiber Precursors via RAFT
ROGER DIAS, POLYMER SCIENCE
DAVID WALKER, POLYMER SCIENCE AND ENGINEERING

30. Evaluating the Importance of Probiotic Membrane Proteins and the Use of Metal Supplements in Facilitating Probiotic Binding to Pathogenic Bacteria
SUKRITI BHATTARAI, BIOLOGICAL SCIENCES (MICROBIOLOGY)
31. Coping Styles, Posttraumatic Stress Symptoms, and Alcohol Outcomes in College Students  
TATUM FREEMAN, PSYCHOLOGY

32. Varying Soft Segments of Polyurethanes to Achieve Tailorability of Mechanical Properties, Hydrophobicity, and Degradation for Regenerative Medicine  
COLLINS DYKES, POLYMER SCIENCE

SCI SECOND FLOOR, SOUTH HALLWAY

33. EBP-COT Assignment: Increasing the Use and Understanding of EBPs in Preservice Teachers  
MARGARET BOWMAN, SPECIAL EDUCATION

34. The Development of Southern Dialectical Features in Native Spanish-Speaking Students at The University of Southern Mississippi and the Explanatory Factors That Correlate with Varying Degrees of Dialectical Adaptation  
ANA CHUA, SPEECH PATHOLOGY AND AUDIOLOGY, SPANISH

35. The Stress-Response Protein DDR48 is not Involved in the Yeast-to-Mold Dimorphic Shift in the Pathogenic Fungi Histoplasma capsulatum  
SYDNEY JACKSON, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)

36. Determination of Critical Viscosity of Graphene Nanoplatelets to Limit Reagglomeration During Cure in a Glassy Thermoset Polymer Matrix  
HAYDEN HANNA, POLYMER SCIENCE AND ENGINEERING

37. Integrated Marketing Communications Plan for Boys and Girls Country of Houston  
EVELYN LAWSON, MARKETING

38. Effects of Humor and Desire on Thoughts and Attention  
SHIANNE GALUSKA, PSYCHOLOGY

39. Covalent Tethering of Bacteriophages on Polyelectrolyte Crosspolymer Matrices  
CLAYTON JOHNSON, POLYMER SCIENCE AND ENGINEERING

40. Genomic Analysis and Identification of Cytotoxic Genes in Hammy, a K Cluster Bacteriophage That Infects Mycobacterium smegmatis  
SUDIKSHA RATHAN KUMAR, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)  
SARA DAO, BIOLOGICAL SCIENCES  
GRACE DITTMAR, BIOLOGICAL SCIENCES (MICROBIOLOGY)  
GIORGII KENKEBASHVILI, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)  
BREANNA SMITH, BIOLOGICAL SCIENCES

SECOND FLOOR, CENTRAL HALLWAY

41. Detecting Manganese and Rhenium Concentrations in Southern Ocean Sediments  
EVAN ROHDE, MARINE SCIENCE (HYDROGRAPHY)

42. Influence of Oxygen and the Effect of Resveratrol on Stress Survival of Pseudomonas aeruginosa  
CHAZMYN RILEY, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)

43. Counseling Within the Black Community: College Students’ Perception Towards Seeking Psychological Help  
LATERRICA MOORE, PSYCHOLOGY

44. Characterizing Degradation Profiles of Acetal-Containing Thiol-ene Networks Based on Substituent Manipulation  
SAMUEL ROLAND, POLYMER SCIENCE

45. Clarifying the Biosynthesis of the Long-Chain Polyunsaturated Fatty Acid, Eicosapentaenoic Acid, in the Seed Triacylglycerols of Arabidopsis thaliana  
AUSTIN ROSS, CHEMISTRY (BIOCHEMISTRY)

46. Comparing Results Between Two Versions of a Work Values Assessment  
ANDREW HATCH, PSYCHOLOGY

47. Force Extension Curves on a Molecular Basis  
MICHELLE MCCULLUM, POLYMER SCIENCE AND ENGINEERING

48. Identification of Bacterial Proteins Targeted by Cytotoxic Proteins of the Mycobacteriophage Hammy  
SAVANNAH UNDERWOOD, BIOLOGICAL SCIENCES (MICROBIOLOGY)  
TAYLOR GORE, BIOLOGICAL SCIENCES (MICROBIOLOGY)  
AUDRA THOMPSON, BIOLOGICAL SCIENCES  
JC GARDNER, BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)

49. Characteristics of Smokers Who Would Use E-Cigarettes to Quit Compared to Traditional Cessation Treatments  
HANNAH GUICHET, NURSING

50. Biofilm Prevention via Covalently Anchored Bacteriophages on Polymeric Surface  
CHASE PERRITT, POLYMER SCIENCE AND ENGINEERING
   CARLEY WALKER, MATHEMATICS

55. Brexit: The United Kingdom's Uncertain Future
   ALLYSON STATON, JOURNALISM (PUBLIC RELATIONS)

56. Synthesis of HIV-1 Integrase Inhibitors Containing a Quinoline Scaffold
   KAITLIN MCNEELY, CHEMISTRY (BIOCHEMISTRY)

57. 3D Printing of Benzoxazines with Dual-Cure Functionality
   CHRISTOPHER MILLER, POLYMER SCIENCE AND ENGINEERING

58. Attitudes of Men and Women Towards Sexual Assault: Stigma, Self-Stigma, and Gender Roles
   ANNIE HENDRICKS, CHILD AND FAMILY STUDIES

59. Distortional Diamines: Aryl Ketone Ether Diamine Alloys for Increased Processability
   JADE PEARSON, POLYMER SCIENCE AND ENGINEERING

60. Music Scenes, the Creative Economy, and Changing Your Backyard
   WILLIAM FORD, JOURNALISM (PUBLIC RELATIONS)

61. Block Copolymer Lithography to Create Ultra-Thin Isoporous Silicon Membranes
   ZACHARY RODGERS, POLYMER SCIENCE

1-2:15 P.M. CONCURRENT PANELS SESSION II

SCI 1008 ARTISTS, ART, AND AUDIENCES
MODERATOR: KELLY LESTER, DANCE

The Importance of Speech in Drama: The Collaborative Contribution of a Vocal Coach in the Development of a Play
HARLEY (SAVANNAH) BAUER, THEATRE (ACTING)

Bridging the Gap Between Audience Members and Choreographers
JENNIFER ALAFAT, DANCE (PERFORMANCE AND CHOREOGRAPHY)

Three Forms of Death in Two David Rabe Plays
SLOAN GARNER, THEATRE

SCI 1014 ANALYSIS AND BEHAVIOR OF MATERIALS
MODERATOR: ALISON HART, CHEMISTRY

Analysis of Poly(3-hexylthiophene) (P3HT) Fractions Obtained Through Soxhlet Extraction
TRISHAL ZAVERI, CHEMISTRY (ACS CERTIFIED CHEMISTRY)

Co-Assembly Behavior of Linear Amphiphilic Triblock Copolymers in the Fabrication of Polymer Vesicles
ELINA GHIMIRE, POLYMER SCIENCE

Ghost Particles: Effects of Constrained Space on Microsphere Reinforced Glassy Polymer Networks
JORDAN WINETROUT, POLYMER SCIENCE AND ENGINEERING

Epoxy Microparticles for the Interlaminar Toughening of Aerospace Composite Materials
JOHN PEYREFITTE, POLYMER SCIENCE AND ENGINEERING

SCI 1015 PROTEINS OF BIOMEDICAL IMPORTANCE
MODERATOR: ANUKOOL BHOPATKAR, BIOCHEMISTRY

HIV-1 Integrase Multimerization by Quinoline-Based Drugs
SAMER BEAUTI, CHEMISTRY (BIOCHEMISTRY)

The Importance of RND-Type Efflux Pumps in the Interactions of Pseudomonas aeruginosa with 4-Methoxybenzaldehyde
SANCHIRMAA NAMJILSUREN, BIOLOGICAL SCIENCES (MICROBIOLOGY)

Cloning, Expression, and Purification of FadK and Its Application in CoA-RNA Capture
JON MICHAEL STORK, CHEMISTRY (BIOCHEMISTRY)

Recombinant Expression and Purification of Granulins
MARY MADDOX, CHEMISTRY (BIOCHEMISTRY)

SCI 1040 BACTERIA, FUNGI, AND ANIMALS IN HUMAN HEALTH
MODERATOR: JHINUK SAHA, BIOCHEMISTRY

The Histoplasma capsulatum Stress-Response Protein DDR48 Is Required for the Cellular Oxidative Stress Response and for Optimal Survival Within Murine Macrophages
KAURI RUNGE, BIOLOGICAL SCIENCES
Functional Role of Tick α-D-Galactosidase in Carbohydrate Metabolism and Red Meat Allergy
AHMED MOHAMED, BIOLOGICAL SCIENCES (MICROBIOLOGY)

The Impact of Oxygen on the Intracellular Survival of Listeria monocytogenes
AMBER COATS, BIOLOGICAL SCIENCES (MICROBIOLOGY)

The DNA Damage Response Gene DDR48 Is Required for Resistance to Antifungal Drugs in the Pathogenic Fungus Histoplasma capsulatum
GABRIELLA REYES, BIOLOGICAL SCIENCES (MOLECULAR BIOLOGY)

SCI 2004 BIOLOGY, COMPUTERS, AND ROBOTS IN THE ENVIRONMENT
MODERATOR: CHEYENNE BRADY, BIOLOGICAL SCIENCES

The More the Merrier? The Effects of Larval Density on Mosquito Success
JACLYN EVERLY, BIOLOGICAL SCIENCES

Stomach Content Comparison of Four Coastal Shark Species in the North Central Gulf of Mexico
BECKAH CAMPBELL, MARINE SCIENCE

Predator-Prey Interaction Model with Hunting Cooperation Among Predators and Allee Effect in Prey
AADITYA KHAREL, COMPUTER SCIENCE, MATHEMATICS

Coordinated Autonomy of Unmanned Aerial Vehicles
PARIBARTAN DHAKAL, COMPUTER SCIENCE

SCI 2005 MATHEMATICAL AND COMPUTATIONAL SOLUTIONS TO COMPLEX PROBLEMS
MODERATOR: CHARAN GUDLA, COMPUTER SCIENCE

AI Singularity: Skynet or Savior?
ZACHARY JONES, COMPUTER SCIENCE
OMER ARSHAD, COMPUTER SCIENCE, ECONOMICS
RIKESH BASNET, INFORMATION TECHNOLOGY
BRENTAN BREITHAUP, COMPUTER SCIENCE
YUMI MAHARJAN, MATHEMATICS
JOSHUA MCGEHEE, COMPUTER SCIENCE

Digital Communication Patterns of Twitter Bots and Humans During 2013 Rome Municipal Election
PUJAN PAUDEL, COMPUTER SCIENCE

Probabilistic Analysis of Revenues in Online Games
NISHCHAL SAPKOTA, COMPUTER SCIENCE, MATHEMATICS

Comparative Error Analysis of Numerical Methods for the Black-Scholes Equation
CHUAN CHEN, MATHEMATICS

SCI 2009 CONSTRUCTING GENDER AND FAMILY IN LITERATURE
MODERATOR: JESSICA CARRELL, ENGLISH

Blues for an Alabama Sky
MOLLIE WEST, THEATRE (DESIGN AND TECHNOLOGY)

Original Research on Mother-Feminism in Paley
HANNAH JANE LEDUFF, ENGLISH, SPANISH

Cather’s Critique of the Patriarchal Modernist Movement
KARIGAN TEER, ENGLISH

2:30-3:30 P.M. CONCURRENT PANELS SESSION III

SCI 1008 MARKETING PLANS FOR THE COMMUNITY
MODERATOR: SARAH STEWART, HONORS COLLEGE

4th Street CrossFit: An Integrated Marketing Plan
PARKER WILKINS, MARKETING

Integrated Marketing Communications: Boys and Girls Country of Houston
TREVOR TERRY, MARKETING
SCI 1014  INTERNATIONAL RELATIONS: PAST AND PRESENT

MODERATOR: SEAN BUCKELEW, HISTORY

Hershey, Cuba: A Case Study in American Paternalism
EMMA SEMRAU, HISTORY

Immigrant Women's Rights at the U.S.-Mexico Border: Violations and Why
LILLIE BUSCH, JOURNALISM (PUBLIC RELATIONS)

The Disneyfication of Great Britain
EMILY RASCH, ENGLISH

SCI 1015  PEDAGOGY, EDUCATION, AND PRACTICE

MODERATOR: SEAN FOURNEY, COMMUNICATION STUDIES

Direct Behavior Observations and Teachers’ Ratings of Internalizing Problem Behaviors
LAUREN PARKER, PSYCHOLOGY

Understanding the Challenges and Barriers That International Students Face in Higher Education Institutions in the U.S.
SARA-LEE KIDD, SOCIAL WORK

The Queer Student’s Agenda: Positive Relational, Educational, and Administrative Experiences from Recent LGBTQ High School Graduates in the Deep South
JACK HODA, ENGLISH

SCI 1040  SOCIAL STRUCTURES AND INSTITUTIONS: FUNCTIONS AND REFORMS

MODERATOR: ZOE LIVENGOOD, CRIMINAL JUSTICE

In for a Shock?: Discretion and Disparity in Program Assignment
BRIANNA MATHIS, CRIMINAL JUSTICE

When Saliva Is a Crime: Reforming Mississippi’s HIV Criminalization Law Utilizing the Center for Disease Control and Prevention’s Policy Analytical Framework
ANASTASIA WALROD, PUBLIC HEALTH (HEALTH EDUCATION)

Family Structure: Big Picture
LAUREN-HUNTER GAUDET, POLITICAL SCIENCE (PRE-LAW)

SCI 2004  LITERARY CONSTRUCTIONS OF SELF AND OTHER

MODERATOR: BRITANI BAKER, ENGLISH

Escaping Alienation in Winesburg, Ohio
DAVID HII, ENGLISH

An Analysis of Racial Embodiment Through Victor Lavalle's The Destroyer and Mary Shelley's Frankenstein
ASHLEY HOBSON, ENGLISH, BIOLOGICAL SCIENCES

The Nature of the Native
GAVEN WALLACE, ENGLISH

SCI 2005  GENDER AND SEXISM IN THE PUBLIC SPHERE

MODERATOR: EMILY GRUZINSKAS, HONORS COLLEGE

Hostile Sexism Predicts Perceptions of Poor Relational Outcomes Among Surname-Retaining Women
KELSEY DREA, PSYCHOLOGY
MARY MEDLIN, PSYCHOLOGY
MITCH BROWN, PSYCHOLOGY

Academic Feminist Analyses of Female Celebrities from the 1980s to Today
BRITTANY CAREY, HISTORY

Call-Out Culture and Post-Discursive Ontology
JOHN STRICKLAND, ANTHROPOLOGY
Join us for a celebration of creative activity by undergraduates at Southern Miss.

_Hommage à Z. Kodály_ by Bela Kovács on clarinet
PERFORMED BY MADISON HANSEN, MUSIC (PERFORMANCE-WINDS) AND BIOLOGICAL SCIENCES (BIOMEDICAL SCIENCES)

_Beneath the White Picket_ (excerpt)
WRITTEN AND READ BY POET ABBE GARCIA, ENGLISH

_Singlesword Ninjutsu_, a scene from _Naruto_ by Masashi Kishimoto
FIGHT CHOREOGRAPHY BY CAITLYN HERZLINGER (THEATRE FACULTY)
PERFORMED BY USM THEATRE MAJORS MOLLYE LADNER AND MOSES WILLIAMS

_Bathroom Break_
CHOREOGRAPHY, VIDEOGRAPHY, AND EDITING BY CASEY COLLIER, DANCE (PERFORMANCE AND CHOREOGRAPHY)
PERFORMED BY USM DANCE MAJORS MORGAN GOODWIN, TARRAH MILLS, MAGGIE POPE, AND GABRIELA SALAZAR

_Choose One or More_ (excerpt)
WRITTEN AND READ BY CREATIVE WRITER DAVID HII, ENGLISH

_Individual Release: A Harlem Production_ (excerpts)
PERFORMED BY HARLEM PERFORMANCE GROUP, USM THEATRE MAJORS

_The N Word_
WRITTEN BY ESSENCE WASHINGTON
PERFORMED BY ESSENCE WASHINGTON AND JULIUS BRIDGEFORTH (HARLEM PRESIDENT)

_Queen_
WRITTEN AND PERFORMED BY RAKAELA THOMPSON

_A Statue’s Exhibit_
CHOREOGRAPHY BY LEVONTE WORD
MUSIC: _NEVER ALONE_ BY TORI KELLY (FEAT. KIRK FRANKLIN)
PERFORMED BY LEVONTE WORD, MARISSA GILLIAM, TIMEIYA HARRIS, AND CHRISTIN PRINCE

Q&A and Recognition of Visual Artists

_Soul Searching_
BY MARY REBECCA SCHLOEGEL, ART (DRAWING AND PAINTING)

_Seated Figure_
BY MORGAN ELISE CLARK, ART (DRAWING AND PAINTING)

_Geometric Studies_
BY AUSTIN LAWRENCE, ART (SCULPTURE)

_Different Approaches to Drawing_
BY HOLLY BOONE, ART (DRAWING AND PAINTING)

5 P.M. AWARDS CEREMONY

Please join us for the Awards Ceremony as we recognize all our competitors for their hard work and dedication to research and creative activity and as we award prizes to the top presentations of the Symposium.
Hosted by the
Drapeau Center for Undergraduate Research
and the Honors College
at The University of Southern Mississippi