FEBRUARY 21-22, 2020

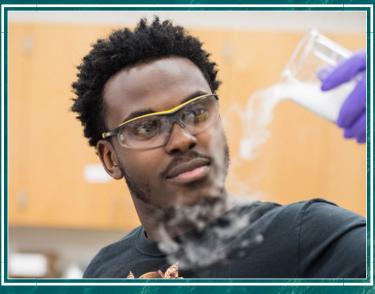
# 

FLORIDA UNDERGRADUATE
RESEARCH CONFERENCE













Presented by Florida Undergraduate Research Association Hosted by FGCUScholars & Florida Gulf Coast University, Fort Myers FL



# WELCOME TO FGCU!

We are proud and honored to welcome you - the very best student researchers from across the state of Florida — to Florida Gulf Coast University. Over the next two days, you are going to share insights, techniques, and ideas representing every possible discipline in academics. You will also have the opportunity to see what your peers are doing and how your collective efforts are helping to better inform each field and create a more just society. Your work adds not only to the discipline, it also provides the knowledge and evidence necessary to make improvements in our communities.

Even as a president, my roots are still faculty. In my work today I continue to draw upon my experiences as a teacher and researcher (in applied economics). My fondest memories include mentoring students and helping to support the next generation of academics and individuals who will use their research skills in industry and business. As much as you have learned and gained in your research experience, you have also benefited your faculty and your university.

Have a great FURC'ing time at the Florida Undergraduate Research Conference. Enjoy presenting your work, learning from others, and taking some time to explore our campus.

Go Eagles! Mike Martin, President





# WELCOME TO FURC

Welcome to the 10th annual (and largest ever!) Florida Undergraduate Research Conference (FURC). You are participating in one of the nation's largest multi-disciplinary research conferences for undergraduate students that has featured 2,558 student presentations since its inception. We are excited that you are here and look forward to celebrating the hard work and dedication that was necessary for you to reach the point of being ready to present your research. It is our hope that your FURC experience will benefit you in many ways, specifically:

- Improving your ability to explain your research in a clear and understandable way to a diverse audience.
- Making connections with students and faculty from other Florida colleges and universities.
- Receiving helpful feedback on your research.
- Acquiring valuable insights or tools for your future through the many professional development workshops offered.
- Learning amazing new things by speaking with other students about their research.
- Developing confidence in your ability to give a research presentation.

You may have heard an often repeated saying that "research not communicated is research not done." By informing the broader community about your findings at FURC, you are accomplishing a vital step in your research process. However, I encourage you to also consider publishing your research, whether through a discipline-specific journal, a journal of undergraduate research, or the Journal of Multidisciplinary Research, which is creating a special issue for students who attend FURC (see page 46 in the program for more details).

In addition to organizing this conference, the Florida Undergraduate Research Association (FURA) hosts an annual meeting, called the Florida Statewide Symposium, for faculty and staff to learn about best practices in supporting undergraduate student research. FURA also organizes a brand-new annual event, Undergraduate Research Posters at the Capitol, for students to present their research to Florida Legislators in Tallahassee to advocate for the importance of student research as an educational practice that benefits our community. You can learn more about these events at www.FloridaUndergradResearch.org.

Like most things in life, you will get out of this conference what you put into it! I encourage you to approach your experience here with enthusiasm for learning, connecting, sharing, and growing, and I wish you the best in your future endeavors.

Sincerely, Eric Freundt, Ph.D. Chair, FURA

# CONFERENCE SCHEDULE

### Friday, February 21

5:00 - 8:30 pm: Registration and Reception (Alico Arena)

7:30 - 8:15 pm: Keynote Speakers: Lyn Millner {Journalism} & Sharon Isern {Biology}

### Saturday, February 22

7:30 - 8:30 am: Registration and Poster Drop-off (2nd floor of Cohen Center)

• Breakfast served (Downstairs Lobby of Cohen Center)

8:30 - 9:30 am: Presentation Session I

• Poster Presentations (Cohen Center Ballroom & 201)

• Oral Presentations (Cohen Center 214 & 213)

9:45 - 10:30 am: Workshop Session I (Various Buildings)

10:45 - 11:45 am: Poster Session II

• Poster Presentations (Cohen Center Ballroom & 201)

• Oral Presentations (Cohen Center 214 & 213)

12:00 - 1:30 pm: Lunch (Outside of the Cohen Center)

1:45 - 2:45 pm: Poster Session III

• Poster Presentations (Cohen Center Ballroom & 201)

3:00 - 3:45 pm: Workshop Session II (Various Buildings)

4:00 - 5:00 pm: Poster Session IV

• Poster Presentations (Cohen Center Ballroom & 201)

5:00 pm: Mentor of the Year Award and Closing Remarks



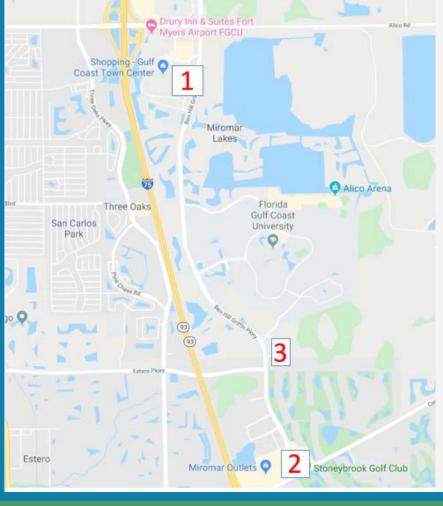
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# CAMPUS MAP







### **DINING OPTIONS**

#### **1** Gulf Coast Town Center

Red Robin

Olive Garden

P.F. Chang's

**Outback Steakhouse** 

and more...

#### 2 Miromar Outlets

Fords Garage

Naples Flatbread Kitchen and Bar

Aurelios Pizza

Subway

and more...

### **3** University Village

Mellow Mushrooms

**Skillets** 

Get Fried

Tacos & Tequila Cantina

# KEYNOTE ADDRESS

# Your Audience is Bigger Than You Think: Using Writing and Visuals to Communicate Your Research

### Lyn Millner and Sharon Isern

#### Lyn Millner



Professor Lyn Millner founded FGCU's Journalism program. She is the author of "The Allure of Immortality: An American Cult, a Florida Swamp, and a Renegade Prophet." The book was selected by the Wall Street Journal for its "Top Five Books on Cults." Her radio stories have been broadcast on NPR's Morning Edition and Weekend Edition, and on American Public Media's Marketplace and Weekend America. Her print work has appeared in the New York Times, USA Today, the Oxford American magazine and others. Her specialties include writing for a mass audience, narrative journalism, editing and news literacy.

#### Sharon Isern



Dr. Sharon Isern is a professor (@profpathogen), an artist, and an actor who spends her days teaching and doing virus research with undergraduate students at Florida Gulf Coast University. She teaches Visual Science Communication, Cell Biology, Virology, and develops undergraduate research courses. She has published her research in Nature, Science, and Cell and her art was featured on the cover of Cell. She received her B.S. in Chemical Engineering from the Johns Hopkins University and her Ph.D. in Biochemistry from the University of Alabama at Birmingham. She conducted postdoctoral work at the University of Alabama at Birmingham and Tulane University. She has received research support from the National Institutes of Health, the National Science Foundation, the Department of Defense, and the US Department of Agriculture. Dr. Isern was a chartered member of the National Institutes of Health Vaccines Against Microbial Diseases Study Section and Course Director for the Howard Hughes Medical Institute Science Education Alliance-Phage Hunters Advancing Genomics and Evolutionary Science Program Phage Discovery Workshops.

Oral Presentations (8:30-9:30AM - Cohen Center 214 & 213)

----- Cohen Center 214 -----

8:30 - 8:45am

Franz Liszt's Mephisto Waltz - A Lecture Recital\*

Arturo Fernandez, Florida Gulf Coast University

8:45 - 9:00am

West Side Story's "Cool" as a Vehicle for Ideological Imposition in Cold War America\*

Jamin Koster, Florida State University

9:00 - 9:15am

"The Town Cries": Cultural Identity in the Songs of Rosa Mercedes, Lima (Peru)\*

Paula Alva, Florida Gulf Coast University

--- Cohen Center 213 ------

8:00 - 8:10am

A Case for a Standard Elementary Math Education in Ancient Rome

Luis Sanchez, Florida State University

8:10 - 8:20am

Inmate Aggression: An In-Depth Study

Karina Polanco, Florida International University

8:20 - 8:30am

Impact of Work-Life Balance on Health-Related Quality of Life Among College Students

Emily Vernet, University of Central Florida

8:30 - 8:40am

Human Reasoning as Social Justification: Challenges to Traditional Epistemology

Jonathan Suarez, University of Florida

8:40 - 8:50am

Effect of mesenchymal stem cell application in a spinal cord injury in vivo model

Samuel Cockey, Esteban J Fiore, Guillermo D Mazzolini, Jorge B Aquino, Graciela L Mazzone, University of Florida

8:50 - 9:00am

Psychedelic Medicine and the Attenuation of Depressive Symptoms

Andrew Laino, University of Central Florida

### Poster Presentations (8:30-9:30AM - Cohen Center Ballroom and 201)

### 1. Sodium as a Biomarker of Breast Milk Production in Mothers of Critically Ill Infants

Lauren Cervantes, Meikim Wong, Aileen Gonzalez, Leslie Parker, *University of Florida* 

### 2. Flying Under the Radar: Tracking Trends and Parallels in the Illegal and Legal Wildlife Trades

Bristol Rigby, Megan Rogers, Christina Romagosa, *University of Florida* 

# 3. Mass Spectrometry Quantification of G12C Mutant KRAS in Lung Cancer

Brandon Stone, John Koomen, *University of Florida* 

# **4. Sepsis-Related Maternal Mortality: Saving Lives Through Early Detection**

Corinne Martin, Dylan Casto, Katarina Saba, Daniel Moseley, *Jacksonville University* 

# **5. Domestic Energy Usage in the United States**

Dallis Schaefer, Henderson DeLeon, Joshua Jean-Philippe, Hulya Yazici, *Florida Gulf Coast University* 

### 6. Decellularization Strategies and Techniques for Pancreatic Ductal Adenocarcinoma Tumor Samples

Maritza Rivera, Ketty Consuegra-Jimenez, Lyndsay Rhodes, *Florida Gulf Coast University* 

# 7. The role of microtubules on the coalescence of viral RNA polymerase and effects on TMEV production

Devon Grey, Eric Freundt, *University of Tampa* 

### 8. An Examination of Oppression Via Anti-Abortion Legislation

Saphronia Carson, Kenicia Wright, University of Central Florida

# 9. The role of GLP-1 producing neurons in regulating anxiety-like behaviors in transgenic mice

Natalia Valderrama, Marie Holt, Linda Rinaman, *Florida State University* 

### 10. So Fine A Set Of Men: The Influence Of Race Relations Between Civil War Soldiers And The Shift In PE

Matthew Feiler, Kathrine Mooney, *Florida State University* 

### 11. The Forgotten Voices of World War II: Narratives of the Home front from the Childhood Perspective

Laina Lamb, Joanna Salapska-Gelleri, *Florida Gulf Coast University* 

### 12. Chemistry GTAs' Perception of Cold Calling and Error Framing after Rehearsal in a Teaching Simulator

Andrew J. Cheshire, Ashley A. Geraets, Constance M. Doty, Tong Wan, Jacquelyn J. Chini, Erin K. H. Saitta, *University of Central Florida* 

### 13. Exploring Possible Routes to Queuosine Catabolism and Salvage

Melody Sze, Maria Martinelli, Yifeng Yuan, Valerie de Crecy-Lagard, *University of Florida* 

# 14. When Disasters Happen: An Analysis of Preparedness in the Occurrence of a Natural Disaster

Anthony Washko, Ghazal Jabbar, Monica Escaleras, *Florida Atlantic University* 

# 15. The Relationship Between Foster Care and Juvenile Delinquency

Delaina Zerafa, Marshall Jones, *Florida Institute of Technology* 

# 16. Can C-O infrared band help us understand the hydrogen bonding in alcohol-water mixtures?

Calah Dietrich, Khalique Ahmed, Lynn University

### 17. Street Art as Activism: Migration and Border Politics in France

Paris Gilstrap, Tenley Bick, *Florida State University* 

# 18. The Influence of Healthy Eating Habits on the Academic Performance of University Students

Bridget Forster, Sierra Brister, Peter Reuter, Florida Gulf Coast University

# 19. Constitutively active Rheb cloning strategy for co-transfection in neuronal cell lines

Leticia Lenkiu, David Engel, Linda Gavric, Alex Balfour, Alicia Hawthorne, *University* of Central Florida

### 20. The Necessity of Divine Silence

Daniel Riggins, Kyle Hodge, *University of North Florida* 

#### 21. Seawater Quality Monitor

Nick Ohlwein, Kenny Huffman, Festus Ogbaisi, Brandon Hilbert, Asa'ta Robinson, Emre Selvi, *Jacksonville University* 

# 22. Design of a Mechatronic System to Improve a Simple Wind Tunnel

Erik Peterson, Courtney Purcell, Andre Guaragna, Alfonso Garcia, Oghenevwogaga Erikson, Emre Selvi, *Jacksonville University* 

# 23. The Chemical Composition of a Star in the G21-22 Moving Group

Mohammed Mourabit, Simon Schuler, University of Tampa

### 24. Assessing tolerance to amphetamine using Celegans

Dayana Torres Valladares, Sirisha Kudumala, Lucia Carvelli, *Florida Atlantic University* 

# **25.** Cryptocurrency: Money Without Borders Corey Luckenbill, Devin Aylward, Monica Escaleras, *Florida Atlantic University*

# 26. Examination of Amphimedon compressa as a Complex of Cryptic Sponge Species

Deborah Olivier, Bobbie Renfro, *Florida* State University

### 27. Identifying Positive Selection in Various Human Adenovirus Proteins

Claudia Rivera, Padmanabhan Mahadevan, *University of Tampa* 

# 28. Enzymatic synthesis of thaxtomin analogs for agricultural and medical applications

Sarah Hylton, Yousong Ding, *University of Florida* 

### 29. Comparing Preschool Principals' Initiatives for STEAM in Southwest Florida

Leslie Gallegos, Izci Burcu, *Florida Gulf Coast University* 

### 30. How does weapon loss influence mating behavior in the coreid Narnia femorata?

Emily Angelis, Ginny Greenway, Christine Miller, *University of Florida* 

# 31. Globalization, Lifestyle patterns and Health in Developing Nations

Sarada Menon, Mehdi Zafar, *University of Florida* 

#### 32. Phytoremediation of Perchlorate

Jaxira Treminio, Lauren Redfern, *Florida Gulf Coast University* 

### 33. Monopoly and Monopsony: Antitrust Injury, Standing, and Damages

Tirza Angerhofer, Roger Blair, *University* of Florida

#### 34. Alcohol Abuse in the Zuni Pueblo

Kelly Rico, Debra Giambo, *Florida Gulf Coast University* 

### 35. The Impact of Office Décor on Perceptions of Competence, Assertiveness, Likability, and Warmth

Phillipa Robertson-Burnett, Renee Pack, Leilani Goodmon, *Florida Southern College* 

# 36. Controlling Regioselectivity of Polymerization in Silyl Ketenes using Computational Methods

Ian Baxter, Daniel Lambrecht, Florida Gulf Coast University

### 37. Is there an inequality between Male and Female Athletes?

Mohammad Islam, Cole Goldberg, Monica Escaleras, *Florida Atlantic University* 

### 38. Memory T cell Regulation of Innate Lymphoid Cell Repair Proteins Following Influenza A virus.

Mate Nagy, Tara Strutt, *University of Central Florida* 

# 39. The Effects of Kallosin and its unidentified byproduct on MCF-7 Breast Cancer Cells

Varad Gharat, Paul Scesa, Lyndon West, *Florida Atlantic University* 

# 40. The effects of the sphragis on male and female genitalia in Acraea (Nymphalidae) butterflies

Shannon Summers, Ana P. S. Carvalho, Akito Y. Kawahara, Ana Carvalho, *University* of Florida

### 41. Prostate Cancer, Fatigue, and Exercise Intervention

Jin Lee, Anay Patel, Eunkyung Lee, *University of Central Florida* 

# 42. Development of clinical salt-based compounds with improved solubility and bioavailability

Grace Anderson, Arsalan Mirjafari, *Florida* Gulf Coast University

# 43. The Institute for Justice Research: the Deferred Prosecution Program Guide

Vinchenzo assalotti, Antonella Maneiro, Antoinette Grier, *Florida State University* 

# **44.** The Societal of Drug Decriminalization Madison Nguyen, *University of North Florida*

# 45. Analyzing the invasive and native plant ratios in seed dispersal of the Galapagos Giant Tortoise

Adrian Rodriguez, Jordan Davidson, Angie Ruiz, Susana Calero, Emily Porter, *Florida SouthWestern State College* 

### 46. Identification of Toxic Metabolites Produced by Batrachochytrium dendrobatidis Fungus

Lyndsey Moore, Christine Theodore, *University of Tampa* 

### 47. Effects of plant essential oils against the pathogenic fungus Aspergillus fumigatus

Matthew Brown, Yainitza ernandez-Rodriguez, Florida Gulf Coast University

### 48. Beer-o-matics: A Bioinformatics Study of Biofilms and Microbes in Beer Lines

Laurie Agosto, Nikhil Bose, Sean Moore, University of Central Florida

# 49. Healthy Moms Mean Healthy Babies: The Role of Maternal Body Mass Index on Infant Feeding Practices

Katherynn Pledger, Jessica Bahorski, *Florida State University* 

# 50. Cultural Constructs and the Effects on Hispanic Depression

Nicole Wrheeler, Kathryn Glandorf, Robin White, *University of Tampa* 

### 51. Does Hair Coloring Pose Higher Breast Cancer Risks for Black Women; A Content Analysis of News Media

Ashlyn Denson, William Berry, *Bethune-Cookman University* 

# 52. Construction Cost Prediction Using Machine Learning and Deep Learning.

Henry Silva Quevedo, Hashem Izadi Moud, Florida Gulf Coast University

# 53. The purpose of this study is to record and monitor damaging influences on Thalassia testudium.

Caleb Phillips, Rhonda Rye, *Eastern Florida State College* 

### 54. Hybridization light-up probes for prediction of nucleic acid base-pairing

Mary Gomez, Adam Reed, Yulia Gerasimova, University of Central Florida

# 55. Are Planarian flatworm regeneration rates affected by light?

Anden Velez, Molly Reilly, Cassandra Korte, *Lynn University* 

### 56. How Free is "Free"?: Restrictive Agency and Optimism

Mel Tornin, Grace White, *University of Central Florida* 

### 57. Loneliness and its Effects on Interpretation and Attribution of Meaning in Emojis

Kaitlin Higby, Kendahl Krause, Dishanki Savla, Daniel McConnell, Janan Smither, Fernando Montalvo, *University of Central Florida* 

# 58. Malarial Proteins Interaction With The Cell Surface Receptor Siglec-9

Sawdah Ali, Jordan Merritt, Andrew Oleinikov, *Florida Atlantic University* 

### 59. Religious Conflict and Sexual Identity Among LGBT Adults

Alana Innerbichler, Mandi Barringer, University of North Florida

# 60. Metric and non-metric ancestry evaluation analysis of the craniofacial region in Greek-Cypriots

Madyson Stephenson, Xenia Kyriakou, Florida Gulf Coast University

# **61.** Assessment of Microbial presence on Waterpipe Tobacco Machines

Frederic Montz, Mary Martinasek, Kimberly Dobrinski, *University of Tampa* 

# 62. Novel non-radioactive in vitro phosphorylation assay of recombinant STKinase using azidoethyl ATP

Nairat Ahmed, Aakriti Gautam, Tracey Matthie, Vishwa Trivedi, *Bethune-Cookman University* 

### 63. Drug Delivery in Tissue-Engineered Vascular Grafts

Brittany Lemke, Florida State University

### 64. Cooperativity and Competition in Binding of Heterocyclic Diamidines and RNA Polymerases to PHIX174

Nidiathamayra Rodriguez, Stephen Winkle, *Florida International University* 

### 65. Girl, What Shade is That? Phthalates?

Tara Lunsford, Joshua Noreiga, Erika Doctor, *Lynn University* 

### 66. Effect Of A 21-Day Well-Formulated Ketogenic Diet On Cardiovascular Health Markers In Women

Martin Barragan, Heather Hausenblas, Ashlyn Knight, Terrance Orange, Abby Remenapp, Kevin Coyle, Tarah Lynch, Carena Winters, Catherine Saenz, *Jacksonville University* 

### 67. Shinrin-Yoku (forest bathing)

Delaney Plunkett, Ginger Sheridan, *Jacksonville University* 

# 68. West Side Story's "Cool" as a Vehicle for Ideological Imposition in Cold War America

Jamin Koster, Jen Atkins, *Florida State University* 

### 69. Comparing Geometric Definitions of Stacking in RNA Dinucleotides Through Molecular Dynamics Studies

Ivan Riveros, Ilyas Yildirim, *Florida Atlantic University* 

### 70. MicroRNAs as Potential Bio-Markers in Feline Kidney Disease

Taylor Bateman, Amy Bohan, South Florida State College

# 71. Does Screen Time Affect the Academic Performance of University Students?

Alexandra Smith, Arianna Turello, Peter Reuter, *Florida Gulf Coast University* 

#### 72. Aspergillosis Prevalence in Sea Fans and Pathogen Presence in the Adjacent Water Column

Stephanie Walker, Michael Slattery, University of Tampa

### 73. The Role of Religiosity, Gender and Economic Self Interest in Shaping Refugee Policy Opinion

Caroline Howard, Mandi Barringer, University of North Florida

# 74. An Alternate Feminist View of James Joyce's Portrayal of Women

Olivia Parsley, Kathleen Ochshorn, University of Tampa

# **75. Optimization of a Histidine Dependent RNA-cleaving Deoxyribozyme**

Liam Canning, Adam Reed, Collin Campbell, Yulia Gerasimova, *University of Central Florida* 

# **76.** Examining the Neural Activity of Self-Monitoring Using fNIRS

Ambriel Cohen, Paul Fuglestad, Katherine Hooper, Isabel Suazo, Lauren Toledo, Christopher Leone, *University of North Florida* 

# 77. Inhibition of Drosophila Oogenesis using Nanoparticles

Kirsten Bouck, Laurence von Kalm, University of Central Florida

### 78. The Effects of Agrochemical 2,4-D on Aedes Aegypti Life History Traits

Muhammad Parupia, Alexandra Aybar, Kenneth Fedorka, *University of Central Florida* 

### 79. Utilization of Unmanned Aircraft Systems During Natural Disaster Relief

Maria Ramsey, Victoria Malec, Ross Stephenson, *Jacksonville University* 

# 80. Is There a Link Between Olfactory Input and Whole-Body Metabolism?

Jessica Folsom, Destinee Gatlin, Brandon Chalette, Debra Fadool, *Florida State University* 

# 81. Plant essential oil Cinnamomum cassia inhibits the growth of the human pathogen Aspergillus fumigatu

Bryan Alvarez, Naysha Vega-Almodóvar, Yainitza Hernandez-Rodriguez, *Florida Gulf Coast University* 

### 82. In vivo characterization of miR-299-3p in Prostate Cancer Xenograft Animal Models

Stephen Staklinski, Ratna Chakrabarti, *University of Central Florida* 

# 83. What Factors Are Significant Predictors for Student Math Achievement? Are There Gender Differences?

Sasha Campbell, Colleen Ganley, *Florida State University* 

### 84. Assessing Carbon Sequestration Potential and Economic Value of the Natural Areas at FGCU

Kiah St. Onge-Yergi, Brian Bovard, *Florida Gulf Coast University* 

# 85. Progress towards novel vinylogous reactivity of cyclopentenones

Rachel Lee, Gregory Boyce, Florida Gulf Coast University

# 86. Domestic Violence & Sexual Assault in Paradise: Media Coverage of crime in the U. S. Virgin Islands

Loron Robles, Salvador Victor, *Bethune-Cookman University* 

# 87. Manganese uptake is essential for the fitness of oral pathogen Streptococcus mutants

Eshani Shah, Jessica Kajfasz, Jonathan Vargas, Jacqueline Abranches, José Lemos, *University of Florida* 

### 88. How Do Sexually Transmitted Infections Change Attitudes Towards Casual Sex among College Students?

Lesley Cruz, Daniela Aladro, Helen Morales, Nathan Pipitone, *Florida Gulf Coast University* 



# 89. The Role of dSLC12A8 in Polyamine Transport

Victoria Millington, Laurence von Kalm, University of Central Florida

### 90. Rain, Rain, Go Away: Identifying Wet and Dry Regions Near Tallahassee and in the Southeast US

Graham O'Donnell, Jon Ahlquist, *Florida* State University

# 91. Effects of various concentrations of KCL on germination and growth rates of Lens culinaris (Lentil)

Ricardo Torres, Eunice Laurent, *Valencia College* 

### 92. An interdisciplinary examination of student personality and preferences for experiential engagement

Marianna Pagan, Bryan Schaffer, *Florida Gulf Coast University* 

### 93. How Prepared are Faculty to Teach in a Synchronous Online Format?

Caldeira Ripine, Enilda Romero-Hall, *University of Tampa* 

# 94. Violence Risk Communication and Juror Perception

Desiree DeLuca, Marshall Jones, *Florida Institute of Technology* 

#### 95. Anti-Cancer Properties Associated to Carvacrol: A Plant-Derived Bioactive Molecule

Chloe Brown, Christopher Hickey, Belle Pierre, Cidya Grant, *Palm Beach Atlantic University* 

### 96. A Meta-Analysis of Applications of Augmented Cognition in Cyber Defense Training

Andres Rosero, Corey Walton, Ryan Wohleber, *University of Central Florida* 

# 97. The use of Staphylococcus aureus and MRSA as an indicator of human pollution in Tampa Bay

Hayley Kudzmas, Ella Hampson, Shannon Twyman, Bridgette Froeschke, *University* of *Tampa* 

### 98. Methionine sulfoxide reductase homologs in gram-positive bacteria and hyperthermophilic archaea

Hasin Sharma, Joshua Corbilla, Zachary Adams, Julie Maupin, *University of Florida* 

# 99. Triangles Galore: Unanswered Questions from an Alternate Reality Game

Alyssa Girod, Erika Ward, *Jacksonville University* 

#### 100. The Effects of Pendimethalin on Aedes Aegypti Immune Function and its Ability to Vector Diseases

Dania Rodriguez, Kassady Perkinson, Anamaria Perez, Kenneth Fedorka, *University of Central Florida* 

# 101. Impact of a brief web-based anxiety sensitivity intervention on alcohol use outcomes

Cameron Matoska, Christopher Zappi, Danielle Morabito, Thomas Preston, Norman Schmidt, *Florida State University* 

# 102. An auditory system with two-celled ears discriminates between mate and predator

Nila Lumpuy, Doris Cruz, Frank Coro, *Miami Dade College* 

### 103. Neural predictors of cognitivelydemanding walking performance in young and older adults

Justin Geraghty, Kathleen Hupfeld, Rachel Seidler, *University of Florida* 

# 104. Enhancing Autonomous Motivation for Exercise in an Elderly Population, a Pilot Study

Kalimah Small, Anamaria Astudillo, Wesly Simon, Blanca Palomino, Ricardo Gonzalez, Renata Pavanelli, Michael Perlett, Jason Kostrna, *Florida International University* 

### 105. The Changing Legal Status of Prostitution During the Medieval Church

Kayleigh Heister, Melodie Eichbauer, Florida Gulf Coast University

### 106. Thinking Beyond the Factory: Education for the Modern Era

Brianna Antle, Jamie Shaffer, *Florida Gulf Coast University* 

### 107. Inhibition of Amyloid Beta Aggregation by Protein Disulfide Isomerase

Jasmina Kovacevic, Haley Lehew, Baggio Evangelista, Ken Teter, *University of Central Florida* 

# 108. Exploring the factors contributing to small cell lung cancer progression

Annamarie Huy, Tengfei Bian, Yuzhi Wang, Chengguo Xing, *University of Florida* 

### 109. Is there a Relationship Between GDP, Personal Income and Birth Rates in US?

Macie Ryan, Vanina Speciale, Hulya Yazici, Florida Gulf Coast University

### 110. Ethical Considerations of the Military Use of Unmanned Aircraft Systems

Caelyn Gessler, Mahmmood Algafly, Ross Stephenson, *Jacksonville University* 

### 111. Investigating the Role of an Organizational Model on the Extracurricular Involvement of Students with Intellectual Disabilities

Caroline Hobson, Taylor Duffy, Andrea Doster, Carley Blades, *University of Central Florida* 

### 112. Precipitation Changes Over Time at Coastal and Inland Locations of Southern Florida, 1915-2015

Emily Marcus, L.D. Duke, Brian Bovard, Florida Gulf Coast University

### 113. China's Belt and Road Initiative and its Effects on International Support for Human Rights

Linnea Dulikravich, Aida Hozic, *University* of Florida

# 114. IoT-Enabled Smart Mobility Devices for Aging and Rehabilitation

Nafisa Mostofa, Kelly Fullin, Sharare Zehtabian, Safa Bacanli, Damla Turgut, Ladislau Boloni, *University of Central Florida* 



# WORKSHOP SESSION I

### Professional Development Workshops (9:45-10:30AM - Sugden Hall)

#### **Room 110**

#### **Getting Good Letters of Recommendation**

Aubrey Kuperman, University of Central Florida

Letters of recommendation are a requirement for graduate school and professional schools, scholarships, internships, summer research experience, and sometimes the job search. Learn more about when and how to ask for letters of recommendation, and how to follow up with those who write them for you.

#### **Room 111**

#### From Resume to CV: Planning your Research Roadmap

Tyler Campbell, University of Central Florida

Need a CV or Research Resume for Graduate School or other applications? This workshop will help you think about the elements of a CV or academic resume, how to frame them, and how to best utilize the time left in your undergraduate program to develop a spectacular CV or Resume for applying to whatever comes next.

#### **Room 115**

### Graduate Fellowship Applications - Promoting Yourself and Your Ideas

Daniel Lambrecht, Florida Gulf Coast University

This workshop will provide an overview to graduate fellowship applications. Specifically, students will learn about the National Science Foundation's Graduate Research Fellowship Program (NSF GRFP). The workshop will provide answers to common questions such as "Why should I apply to fellowships?", "How do I identify a strong scientific idea?", "How do I write a strong application package?", "When should I start?", and discuss some of the specific requirements and perks of the NSF GRFP. Students will discuss 1-2 short sample applications to identify examples of strong versus weak application strategies. Tips for successful applications will be discussed and students will be pointed at additional resources for fellowship application writing.

#### **Room 240**

### Understanding the Purpose and Structure of Literature Reviews

 ${\it Mary Tripp}, {\it University of Central Florida}$ 

Reading and writing literature reviews is an important aspect of research. Students must read literature in their fields before engaging in productive research, and at the end of the research process, are often expected to publish about their research. Literature reviews are very specialized forms of writing. Therefore, helping students understand the purpose and structure of literature reviews will help them prepare for research and publishing. Following the CARS model, I will help students see the purpose, function, and structure of a typical literature review. The CARS model, developed by John Swales, distills the essential moves in all literature reviews. Showing examples of literature reviews from various disciplines, students will begin to recognize these moves. In addition, a literature review matrix tool will help students write their own literature reviews by synthesizing sources and recognizing larger themes across multiple articles.

# WORKSHOP SESSION I

### Professional Development Workshops (9:45-10:30AM - Whitaker Hall)

#### **Room 101**

From Bureaucracy to Research Ethics: How to use IRB and IACUC proposals to your benefit Charles Gunnels, Florida Gulf Coast University

Just like eating boiled Brussels sprouts, we sometimes have to do something that on the surface seems unpleasant and burdensome but can provide value. This perspective is how many of us confront the Internal Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC) ethically review process. In research, we must conduct our work in both an ethical and responsible manner. As a result, we are required to submit IRB and/or IACUC proposals to a review board any time that we want to research human or vertebrate test subjects. In this session, we will learn a little about the history of these ethical review boards, discuss strategies that can make this a beneficial process, and consider how to respond to questions and revisions. Time permitting, we will also address some inherent limitations in IRB and IACUC that you may want to consider in your future endeavors.

#### **Room 103**

 $\textbf{Setbacks and Comebacks} - \textbf{Navigating Your Path to Success after Hitting the Roadblocks} \\ \textbf{John Williams}, \\ \textbf{Albany State University}$ 

In a perfect world, every student would matriculate seamlessly through an undergraduate program, and would leave fully prepared for graduate education. However, for many students, the path to graduation may contain setbacks that can discourage or derail their initial goals. In the sciences, navigating these setbacks is particularly crucial, as many post-graduate career plans are structured based on undergraduate performance. This session is designed to provide students with clear strategies that can be implemented to address roadblocks, such as poor grades, financial issues, or personal issues that may have interrupted matriculation. Additionally, this session will provide students with strategies for using these events as tools for self-reflection and self-improvement.

#### **Room 104**

### Summer Off-Campus Research Experiences

Kimberly Schneider, University of Central Florida

Summer is a great time to participate in research and there are numerous programs available to students away from their home institution. Summer programs are available at numerous universities and research institutions. Opportunities are available nationally and internationally and many provide a stipend, travel costs, housing, and/or board. Applications open in late fall and deadlines occur from early December through the end of March. Opportunities exist for all majors but more are available for students in the science and engineering areas. Fall and spring semester opportunities also exist. This workshop will provide an overview of these opportunities, information on how to create a strong application, and resources to help students through the process.

### Professional Development Workshops (9:45-10:30AM - Edwards Hall)

#### **Room 112**

How Undergraduate Research Helped My Professional Career

Derek Lura, Florida Gulf Coast University

This workshop will feature a panel of FGCU Alumni who went into industry after working on undergraduate research projects. The panel will discuss the impact of undergraduate research on their carriers, and how it affected their ability to find jobs after graduating.

# WORKSHOP SESSION I

### Professional Development Workshops (9:45-10:30AM - Marieb Hall)

**Room 100** 

Playing to Your Strengths

Jennifer Moses, University of Florida

This interactive workshop is designed to help students discover their strengths and to learn how they can use them strategically in relationships with others. Students will participate in a hands-on activity to help them identify their behavioral style and learn how this affects interactions with others. When we are able to identify and use our strengths we are better able to make positive changes within our lives. Strengths identified can be put into play in all situations that students may be facing, and these small changes can have an impactful difference in the outcome. Students are in constant contact with people of different styles, knowing their strengths can help them navigate these differences. Students will be able to use this interactive workshop experience to determine their strengths, identify relationship strategies, and learn how to be flexible in any environment.

#### **Room 200**

Pharmacy School Applications 101

Manny Rubrio, Belmont University - College of Pharmacy

How to construct a well balanced application that will catch the eye of admission committees wherever you choose to apply.

### Professional Development Workshops (9:45-10:30AM - Seidler Hall)

#### **Room 114**

I graduated: now what? Applying for and working with governmental agencies Matthew Eicholtz, *Florida Southern College* 

Would you like helpful information and strategies to better navigate the Federal hiring process or information on what it is like to work for a governmental agency? Join Dr. April Watson for a review of application process for governmental jobs, subcontracting, as well as working with various governmental agencies. You will learn practical tips and guidance on searching and applying for Federal jobs and internships. Dr. Watson will share her first-hand knowledge of the governmental job field including county, state, and federal legal aspects, and provide a review of CV tips and strategies.

### Oral Presentations (10:45-11:45AM - Cohen Center 214 & 213)

------ Cohen Center 214 ------

10:45 - 11:00am

Improving Tarsus Alignment by Strengthening Hip Musculature in University Dancers\*
Casey Copeland, Florida State University

11:00 - 11:15am

A Comparative Examination of the Oeuvre of Raymond Pettibon\*

Hailey Thrasher, Jacksonville University

11:20 - 11:30am

WiFi routers, power plants, and memes: an explanation of (t,r) broadcast domination Tom Shlomi, Florida Gulf Coast University

------ Cohen Center 213 ------

10:45 - 10:55am

Intergroup contact and social change: The crucial role of perceived antiprejudice of White friends in shaping minorities' collective action intentions

Imani Lewis, Florida State University

10:55 - 11:05am

The Shoe Fits: Cinderella and Women's Voice

Farrah Kurronen, University of Central Florida

11:05 - 11:15am

Borrowing Time: The Classical Tradition in the Poetic Theories of T. S. Eliot and Ezra Pound Nicholas Odom, *University of Central Florida* 

11:15 - 11:25am

The Role of Workplace Distribution on Dengue Dynamics in the Yucatan: A Modeling Approach

Dianela Perdomo, Thomas Hladish, Kok Ben Toh, Sanjana Barhava, University of Florida

11:25 - 11:35am

The Mafiosi en la dolce Vita

Gabriela Lovera, Jacksonville University

11:35 - 11:45am

Breaking the Glass Ceiling: Political Parity and Gender Equality in the Middle East

Selina Nevin, Florida State University

### Poster Presentations (10:45-11:45AM - Cohen Center Ballroom and 201)

# 1. Solar-Photon Sail Analysis: Incorporating tensile properties in the figure of merit

Morgan Barkhurst, Derek Buzasi, *Florida Gulf Coast University* 

### 2. Evaluation of Novel Interpretative Signage in a College Campus Pollinator Garden

Max Aaronsen, Maria Asad, Brian Ogle, Beacon College

### 3. Representations of the Cuntz Algebra Associated to Random Walks

Nicholas Christoffersen, Dorin Dutkay, University of Central Florida

# 4. False Confessions and Intellectual Disabilities

Samara Gallion, Marshall Jones, *Florida Institute of Technology* 

### 5. Alienating the Alien

Prema Dayal, Tanvi Vaidya, Monica Escaleras, *Florida Atlantic University* 

# 6. Empowering the Planet:How the Empowerment of Women and Girls is Vital to Innovation

Elsa Ingwersen, Taryne Taylor, *Embry-Riddle Aeronautical University* 

# 7. Plant essential oil Cinnamomum cassia inhibits the growth of filamentous fungus Aspergillus nidulans

Jake Goguen, Yainitza Hernández-Rodríguez, Jesse Beacker, *Florida Gulf Coast University* 

# 8. Development of Electrospray for Applications in Nanotechnology

Shannon O'Connor, Sahil Ghate, Riley Flanagan, Christopher Rivera, John Veracka, Foram Madiyar, *Embry-Riddle Aeronautical University* 

# 9. Fight or Flight: the inequalities and effects of travel between the NBA and the WNBA

William Webb, Samantha Kaye, Randall Croom, Stetson University

# 10. Recycling Behaviors at the University of Florida: Strategies versus Consumer Tactics

Yian Wu, Susan Gillespie, *University of Florida* 

# 11. Impact of Virtual Reality on False Memories

Gabriela Gonzalez, Daniel McConnell, University of Central Florida

# 12. Melodies of Mirages: Exoticism, Folklore, and "Performing" Santeria

Elias Larralde, Robinson Herrera, *Florida* State University

# 13. Development of an activatable fluorescent probe for imaging cellular senescence

Joyce Jiang, Jun Liu, Chao Cui, Lina Cui, *University of Florida* 

### 15. Water Level Response Time After Rain Events in Stormwater Ponds on the FGCU Campus, Fort Myers FL

Kayla Hickey, Madison Mullen, L D Duke, Florida Gulf Coast University

# 16. Synthesis of N-heterocyclic carbene based palladium catalysts for optimized C - C coupling reactions

Jennii Burrell, Aaron Cagle, Daniel Paull, Florida Gulf Coast University

### 17. Spatial Distribution of a Bahamian Population of the Lined Seahorse, Hippocampus erectus

Jessica Elson, Heather Masonjones, *University of Tampa* 

# 18. The Relationship between Moral Injury and PTSD in Suicide Attempt Survivors

Savannah Woller, Joseph Boffa, Norman Schmidt, *Florida State University* 

# 19. How Industry 4.0 will affect the future and the security of healthcare as a critical infrastructure?

Ashley Newsome, Ayush Enkhtaivan, Miloslava Plachkinova, *University of Tampa* 

# 20. Giving Robots a Voice in the Evaluation of Human Robot Interaction

Sean Hinkle, Janan Smither, *University of Central Florida* 

### 21. 3D Printing Large-Scale Homes

Ellie Cooke, Hasheem Moud, *Florida Gulf Coast University* 

# 22. Elucidating the Fate of the Cytolethal Distending Toxin "A" Subunit After Cell Binding

Nalysha Torres Mangual, Ken Teter, University of Central Florida

# 23. #Depressed: Social Media & the Romanticizing of Mental Illness

Alyce Rogers, Brittany Barron, *Florida State University* 

# 24. The 54th Massachusetts at Olustee: An Exposition of Valor

Bradley Paxton, Jeffrey Fortney, Florida Gulf Coast University

### 25. Semiotic Suits: Gender Performance in the Furry Fandom

Michael Hintz, Max Stein, Florida Gulf Coast University

# 26. Metal Analysis of Submerged Aquatic Vegetation in the Lower St. Johns River

Ksenja Llazar, Gretchen Bielmyer-Fraser, Jacksonville University

# 27. Identification of novel protein-protein interactions in the human oral cavity

Dominika Burbul, Bernadett Papp, University of Florida

### 28. Host Characteristics Impact Reproductive Success of the Symbiotic Shrimp Neopontonides beaufortensis

Mary Schuiteboer, Griffin Baughn, Louis Ambrosio, *University of Tampa* 

# 29. Comparing the PEACE Model of Interrogation and Reid Technique

Natalie Buczek, Marshall Jones, *Florida Institute of Technology* 

### 30. The function of highly expressed miRNA in Tumor Associated Stroma and Pancreatic Cancer

Gerik Alemán-Tushoski, Song Han, Steven Hughes, *University of Florida* 

# 31. Digital Property Rights: A Re-evaluation of Ownership and Speech Conflicts on the Internet

Atilla Sulker, Randall Holcombe, *Florida State University* 

### 32. Adverse Childhood Experiences, Sensation Seeking, and Substance Abuse Among College Students

Jenna Russo, Rachel Fidel, Javier Molina, Kimberly Renk, *University of Central Florida* 

### 33. The Effect of Natural and Human Development Tidal Restriction on Mangrove Seedlings

Paola Reyes-Serrano, Paola Reyes-Serrano, José Rivera-Lugo, Edwin Everham III, *Florida Gulf Coast University* 



# 34. The Extraction of Glitter and Shimmer from Cosmetics for Subsequent Instrumental Analysis

Velda Iskandar, Kandyss Najjar, Candice Bridge, *University of Central Florida* 

# 35. What Are Argentinean Public Schools Teaching Their Students About Citizenship Education?

Lewis Rincon Castano, Tony Lin, University of Central Florida 36. Searching for Evidence of Endocrine Distruption in Local Aquatic Systems Using Mosquito Fish

Antonio Nickel, Brooke Hollan, Ashley Marston, Cierra Canty, John Tracey, Bradley LaVecchia, Nora Demers, Florida Gulf Coast University

37. Creativity and Collaboration: The Relationship of Fact and Fiction in Personal Writing

Rachel Casey, Kevin Roozen, University of Central Florida38. Using fNIRS to Measure Emotional Processing Following Mindful Meditation

Jesse Macyczko, Cassandra Rosenberg, Amber Wengert, Katherine Hooper, *University of North Florida* 

# 39. Exploring the therapeutic potential of novel marine compounds and VLDR in prostate cancer

Joubin Jebelli, Davian Caraballo, Mariana Acevedo, Lyndon West, *Florida Atlantic University* 

40. Quantitative Survey and Classification of Macro Beach Debris in Volusia County, Florida

Alexandra France, Thea Sudeall, Yungkul Kim, *Bethune-Cookman University* 

### 41. Application of Brevetoxin in Coastal Marine Sediments as a Proxy for Historic Red Tide Events

James Javaruski, Puspa Adhikari, Jo Muller, Florida Gulf Coast University

### 42. Ubiquitin C-terminal Hydrolase-L1: A Diagnostic Neurobiomarker for Traumatic Brain Injury

Gabrielle Johnson, Sunny Yang, *University of Florida* 

#### 43. Qualia Re-Quined

Stephen Houchins, Hans-Herbert Kögler, University of North Florida

### 44. Great White Shark Predation Zone Identification with Unmanned Aircraft Systems

Carlin Kelly, Marcus Shields, Matthew Kimball, Ross Stephenson, *Jacksonville University* 

# 45. Effect of Water Reducing Admixtures and Construction Variability in Concrete Containing RCA

Joshua Vanadore, Claude Villiers, *Florida Gulf Coast University* 

### **46.** Long-Term Outcomes of Neonatal Herpes Simplex Virus Infection and Treatment

Genesis Brador, Humberto López Castillo, University of Central Florida

# **47.** Nonverbal Synchrony between Dyads as a Function of Protective versus Acquisitive Self-Monitoring

Taylor Santioni, Klebener Sophia, Leone Christopher, Kantor Arielle, Moulder Robert, *University of North Florida* 

### 48. Face Memory in Diverse Spaces

Michelle Mooney, Olivia Terranova, Nia Dyson, Lauren Sass, Adelina Primavera, Benjamin Marsh, *University of Tampa* 

### 49. Timescales of Global Tidal Flooding

Maria Bower, Thomas Wahl, *University of Central Florida* 

# 50. Assessing the perceptions and visitor outcomes of cheetahs used as ambassador animals

Nick Nelson, Brian Ogle, Beacon College

### 51. What's Wrong With the Way I Look? I Have a Brain Too; Media Portrayals of the Disabled Community

JaCorey George, William Berry, *Bethune-Cookman University* 

### 52. Taxonomic Investigation of Arthropods and their Endosymbionts Using Gene Sequence Analysis

Daisy Morrison, Corey Brookes, Jason Cantwell, Jennifer Garciga, Carolina Millan, Gilda Reyes, Jennifer Bess, John Whitlock, David Wingfield, *Hillsborough Community* College

# 53. Charting the Resiliency Pathway of Youth of Minority Descent

Denise Martinez, Florida State University

# 54. Association between adherence to WCRF/AICR cancer prevention guidelines & cancer antigen level

Vanessa Kady, Omar Ragab, Eunkyung Lee, University of Central Florida

# 55. Australian and New Zealand ANZACs of World War I: Public Memory and the Making of National Identity

Simran Pawar, Amelia Lyons, *University of Central Florida* 

# 56. Electro Optic Polymers: Preparation and Characterization Techniques

Andrew Phillips, Wei Zhang, Kaitlyn Crawford, *University of Central Florida* 

### 57. Edna O'Brien and the Rejection of Conformity

Jordan Huden, Kathleen Ochshorn, University of Tampa

# 58. Back to the Drawing Board: Self-Created Content and Visual Learning

Chloe Kindell, Leilani Goodmon, *Florida* Southern College

### 59. Modeling and Quantifying Vascular Structures in Pulmonary Arterial Hypertension Induced Rat Lungs

Siri Ravuri, Walter O'Dell, Shruti Siva Kumar, R James White, Deborah Haight, *University of Florida* 

# 60. The Relationship Between SSR and Suicide Attempts Explained by Capability for Suicide

Katie Sinsko, Naomi Lebhar, Austin Gallyer, *Florida State University* 

# 61. Cryptic coloration in the symbiotic shrimp Neopononides beaufortensis: limitation or benefit?

Griffin Baughn, Mary Schuiteboer, John Ambrosio, *University of Tampa* 

# 62. Enabling structure elucidation for polyglutamine peptides causing neurodegenerative diseases

Melissa Chen, Cassandra Blanco, Daniel Lambrecht, *Florida Gulf Coast University* 

### 63. Use Of Brn3a-LacZ Reporter Mice To Study Sensory Neuron Innervation In Familial Dysautonomia Model

Isabel Silva, Ioannis Dragatsis, *University* of Central Florida

# 64. Network resilience in a brain network for birdsong

Kerrianna Jadunandan, Frank Johnson, Derrick Shaughnessy, *Florida State University* 

# 65. Characterization of The Floral Meristem Identity gene LEAFY in Melaleuca quinquenervia

Rodrigo Tomas, Shawn Brunelle, Marilyn Cruz-Alvarez, *Florida Gulf Coast University* 

### 67. Text Mining of Public Comments on Power Restoration in Florida after Hurricane Irma

Nathalie Crespo, Anna Koufakou, *Florida Gulf Coast University* 

# 68. Observation of Retinal Cells Due to Effects of Microgravity

Carl Corgelas Corgelas, Sherri Emer, *Florida Gulf Coast University* 

### 69. Identification of Genes Involved in Drought Tolerance of Ball Moss (Tillandsia recurvata)

Arianna Smith, Takashi Ueda, *Florida Gulf Coast University* 

# 70. The Level of Importance of L1 in L3 Aquisition

Lauren Wilenski, Andrew DeMil, *University* of *Tampa* 

### 71. Understanding Medical Error in Surgical Stapler Use: A Philosophical and Scientific Analysis

Jacob Howard, Luciana Garbayo, *University* of Central Florida

### 72. Implementation of YOLOv3 to Detect Split Fruit in Images of mandarin Orange Trees

Quinlan Harsch, Matthew Eicholtz, *Florida* Southern College

### 73. Water Energy Food Nexus

Alisha Perez, Maximilian Honigfort, Amy He, Kaylei Kambak, Seneshaw Tsegaye, *Florida Gulf Coast University* 

# 74. Varying Incomes, Varying Overpopulation Perceptions

Lisa Campion, Monica Escaleras, Paloma Rossano, *Florida Atlantic University* 

#### 75. Novel reactions utilizing vitamin B6

Marie Bozor, Gregory Boyce, *Florida Gulf Coast University* 

### 76. Analysis of Axolotl Homologs for Proteins Implicated in Human Neurodegenerative Proteinopathies

Lucas James, Trey Polvadore, Ariel Walker, Malcolm Maden, Jada Lewis, *University of Florida* 

# 77. From Villains and Psychopaths to Superheroes and Everything in Between

Gaillot Andre, Marina Klimenko, University of Florida

### 78. Triggering the Autonomic Nervous System Using Suboccipital Decompression

Katie Clark, Barry Walsh, Kaylee Fichthorn, Rob Sillevis, *Florida Gulf Coast University* 

### 79. Utilization of Unmanned Aircraft Systems Within the Entertainment Industry

Mercedes St. George, Ross Stephenson, *Jacksonville University* 

# 80. The combinatorial effect of constitutively active Rheb and Taxol on axon outgrowth in vitro

Cathy Le, Luis Benitez, Lauren Martin, Neil Aleger, Alicia Hawthorne, *University of Central Florida* 

### 81. Social anxiety and sexual victimization: The roles of assertiveness, gender, and race

Samantha Berg, Amie Newins, *University of Central Florida* 

### 82. Interaction of Fluorescent Nucleic Acid Binding Dyes with Single-Stranded DNA Sequences

Colin Campbell, Yulia Gerasimova, University of Central Florida

### 83. How Valuable is Higher Education?

Emma Heitman, Hulya Yazici, *Florida Gulf Coast University* 

### 84. Parenting and Emerging Adulthood: Do Parents Still Matter?

Merari Flores Saldana, Larry Forthun, *University of Florida* 

### 85. Progress Towards The Synthesis Of The Natural Product Umbellulone

Ranjika Pingale, Gregory Boyce, *Florida Gulf Coast University* 

### 86. Perfectionism Personality Test Anxiety

Samantha Murray, Renee Benton, Alvaro Gomez, Starlette Sinclair, *Florida Gulf Coast University* 

### 87. Unfolding Model of Anabaena Sensory Rhodopsin Transducer, ASRT in PCC7120

Purva Lotwala, Vishwa Trivedi, *Bethune-Cookman University* 

# 88. Optimizing a Solar Power Plant's Efficiency

Adil Riahi, Shawn Putnam, *University of Central Florida* 

#### 89. Effect of Oral Vitamin D Supplementation on Blood Pressure in Hypertensive African American Adults

Anika Saxena King, Sarah Perez, Keith Brazendale, *University of Central Florida* 

# 90. Splintering Off: Catalonia's Search for Sovereignty

Sabrina Mato, Florida State University

### 91. Connectedness to Nature Through Affordances

Fatima Khan, Daniel McConnell, *University* of Central Florida

#### 92. Analyzing the Antibiotic Activities of a Novel Depsipeptide KTG3 & Two Novel Soil Bacterial Strains

Elizabeth May, Amy Donne, Alexis Martin, Diane Baronas-Lowell, *Florida Atlantic University* 

#### 93. 1926 Great Miami Hurricane's Impact on Lake Okeechobee and Moore Haven

Kyria Wickham, Camila Rimoldi, South Florida State College

# 94. The Correlation Between Algebra Nation Usage And Student's EOC Scores

Sarah Clerjuste, Walter Leite, *University of Florida* 

# 95. Expression of FGD4 positively correlates with the aggressive phenotype of prostate cancer

Ayman Khatib, Alexia Bossan, Richard Ottman, Thomas Andl, Md Hasan, Ratna Chakrabarti, *University of Central Florida* 

### 96. Achieving the Softest Landing on Mars

Sean Harrison, Keshav Acharya, *Embry-Riddle Aeronautical University* 

# 97. A Comparative Examination of the Oeuvre of Raymond Pettibon

Hailey Thrasher, Laura Winn, *Jacksonville University* 

# 98. Strange Frequencies: Development of a Post-Human Narrative

Jessica Young, Rachel Luria, *Florida Atlantic University* 

### 99. Using Novel Osteoblast Differentiation Marker EB1 to Improve In Vitro Osteoblast Models

Sydney Edwards, Yilin Li, Jiehong Liao, Florida Gulf Coast University

### 100. Education During World War Two: The Changes that Lead to America's School System Today

Matthew Hendrix, *Florida Gulf Coast University* 

### 101. An Assessment of the Impacts of EPA Superfund Sites on Central Florida Residents

Kurt Ramos, Vanessa Calkins, *University of Central Florida* 

### 102. Reduced Tetrahydrobiopterin (BH4) and Nitric Oxide (NO) Bioavailability in Peripheral Artery Disease

Kaitlyn Prezioso, Ahmed Ismaeel, Evlampia Papoutsi, William Bohannon, Robert Smith, Robert Brumberg, Jeffery Kirk, Panagiotis Koutakis, *Florida State University* 

### 103. Video Games and Aggression

Brandon Suitt, Tyler Towne, *Florida State University* 

# 104. Talking Planimals! The Bioacoustics of Cyphastrea Coral

Camila Rimoldi, James Hawker, South Florida State College

### 105. Franz Liszt's Mephisto Waltz - A Lecture Recital

Arturo Fernandez, Michael Baron, *Florida Gulf Coast University* 

### 106. Improving Tarsus Alignment by Strengthening Hip Musculature in University Dancers

 ${\it Casey Copeland, Tom Welsh, } Florida \, State \, \\ University$ 

### 107. DEHP-Induced Alterations In Molecular Processes Related To Lipid Transport And Physical Fitness

Caitlyn Parente, Amanda Buerger, Emily Watts, Jason Harris, Joseph Bisesi, *University of Florida* 

#### 108. An In-Silico Approach At NASBA Primer Probe Development: A Primer Design Software

Rohit Karnati, Yulia Gerasimova, University of Central Florida

### 109. Saving The World A Few Microbeads At A Time

Sharon Lucero, Eunice Laurent, *Valencia College* 

# 110. Quantifying expression of the master virulence regulator DosRS in Mycobacterium abscessus

George Walters-Marrah, Breven Gaines, Rashmi Gupta, Kyle Rohde, *University of Central Florida* 

### 111. Autonomous Surface Trash Collecting Vessel

Christopher Teti, Tai Cao, Joseph Simon, Michael Teti, Pak-Cheung An, *Florida Atlantic University* 

### 112. Wildlife Cameras for Organism Identification and Behavior Analyses Along Restored Shorelines

Julia Rifenberg, Jason Litwak, Rebecca Fillyaw, Linda Walters, *University of Central Florida* 

### 113. Functional Analysis of Melaleuca quinquenervia CAULIFLOWER-LIKE and LEAFY-LIKE genes

Gabriel Taggart, Shawn Brunelle, Rodrigo Tomas, Marilyn Cruz-Alvarez, *Florida Gulf Coast University* 



### Poster Presentations (1:45-2:45PM - Cohen Center Ballroom and 201)

### 1. Color Testing: Cortisone

Faith Moore, Alex Resto, Juan Zhuang, Alanna Lecher, *Lynn University* 

### 2. Does PA and Wellness Education Positively Impact Body Composition and Employee Wellness

Allison Burek, Rob Sillevis, *Florida Gulf Coast University* 

### 3. Plantbased Burgers? "How BK, McD, and other QSR's Use Media To Lure/Catch Health Conscious Consumers

Sierra Perry, Salvador Victor, *Bethune-Cookman University* 

# 4. The Red Coasts of Florida: Public Perception on the Impact of Karenia brevis on Human and Marine Life

Princianna Durosier, Starlette Sinclair, Florida Gulf Coast University

# 5. OxsR in chromatin remodeling in halophilic archaea.

Emily Winters, Angelina Nasthas, Ricardo Couto-Rodriguez, Paula Mondragon, Julie Maupin-Furlow, *University of Florida* 

### 6. Influence Of 5htp On Sensory Processing

Nick Wellman, Wen Li, *Florida State University* 

# 7. Crystallization of the fusion protein GST-EGFP

Nancy Flynn, Robert Borgon, *University of Central Florida* 

#### 8. Space Oddities

Jillian Fennessey, Ginger Sheridan, *Jacksonville University* 

# 9. Chronic sleep fragmentation exacerbates alcohol-induced sensitivity and toxicity in Drosophila

Courtney Camarillo, Aliza DeNobrega, *Florida State University* 

### 10. Biological Role of Tie2 in Vascular Endothelial Cells

Shruti Kolli, Tuncer Onay, Benjamin Thomson, Phoebe Leeaw, *University of Florida* 

# 11. Creating A Model Of Obesity Using Danio Rerio

Shivani Desai, Kimberly Dobrinski, *University of Tampa* 

# 12. Role of Solution pH on Self-Assembly of Aromatic Amino Acids

Blessing Akintunde, Ramesh Adhikari, Jacksonville University

### 13. Mẹ, Myself, and I: Multifarious Motherhood in Vietnam

Arria Hauldin, Elif Bulut, *Florida State University* 

### 14. Construction and Characterization of a Reporter KSHV Clone for Monitoring Lytic Infection

On Ki Grina Omaira Cheng, Zsolt Toth, *University of Florida* 

# 16. Refining the Vaccination Protocol Used to Induce Acquired Resistance in Amphibians to Batrachochytri

Alexis Garcia, David Civitello, Pieter Johnson, Jason Rohr, Taegan McMahon, *University of Tampa* 

#### 17. Neuroticism and Self Control

Jacqueline Bedard, Kaia Brewer, Edward Cascio, *Florida Gulf Coast University* 

# 18. Hispanic Health: Exploring Stress and Depression in Florida and the Dominican Republic

Amanda Barrie, Brianna Rubenstein, Alyssia Miller, Robin White, *University of Tampa* 

### 19. The Hunt for Novel Antimalarials: 2-Styrylquinoline Derivatives as Plasmodium Parasite Inhibitors

Justin Shaw, Claribel Murillo Solano, Guang Huang, Joel Melendez, Jennifer Collins, Andy Nguyen, Yu Yuan, Debopam Chakrabarti, *University of Central Florida* 

### 20. There's Something In The Water -Correlation Of Trihalomethanes With Head And Neck Cancer

Magen Hoch, Michele Crosby, Kimberly Dobrinski, *University of Tampa* 

### 21. Inmate Aggression: An In-Depth Study

Karina Polanco, Kristin Elink-Schuurman-Laura, *Florida International University* 

### 22. Influencing Attention And The Effects On Anxiety, Stress, Selfesteem, And Self-Efficacy

Roberto Porras, Diane Sasnett-Martichuski, *Florida Gulf Coast University* 

### 23. Perception or Reality? Perceptions of Abuse Supervision in the Workplace

Paul Amari, Steve Jex, *University of Central Florida* 

#### 24. Creative Approaches to Meeting Diabetes-Related Needs in Florida

Anudeep Udumula, Boon Phrathep, Cristina Figueroa, Judith Ortiz, *University of Central Florida* 

### 25. A Study of the Relationship Between Self-Rated Health and Projected Age of Death in College Students

Joanna Baerson, Morgan Haas, Connie Valli, Kelly Schuller, *Florida Gulf Coast University* 

# 26. Not Scared to Jump: Mitigating Fear of Failure in Entrepreneurial Entry Decisions

Elijah Campbell, Randall Croom, Areti Vogel, Luca Zambelli, *Stetson University* 

### 27. Effects Of Sex Stereotypes On Causal And Moral Attributions For Child Physical Abuse

Reema Sabella, Rachel Woolard, Christopher Leone, LouAnne Hawkins, *University of North Florida* 

# 28. Split probe detection of Influenza A Virus for improved diagnostics in a point of care system

Tamar Yishay, Ryan Connelly, Yulia Gerasimova, *University of Central Florida* 

### 29. The Legal Ethics of Death Row Volunteerism

Jay Pinckney-Cabal, Richard Coughlin, Florida Gulf Coast University

# 30. "Enlightened Adoration": Amity, Art, and Enlightenment in the Temple of Friendship at Sanssouci

Keely Luttrell, Sheryl Kroen, *University of Florida* 

# 31. Guns or Roses? How Americans view guns in this climate

Marvel Joseph, Chase Rydstrand, Donna Chamely-Wiik, *Florida Atlantic University* 

#### 32. The Perception, Usage, and Knowledge of Moringa in Haiti after Increased Education and Access

Phillip Sada, Chinelo Germain, Preethashree Anbukkarasu, Brandon Kaye, Leticia Ebihara, Mary Schmidt-Owens, *University of Central Florida* 

#### 33. Using Aquarium Test Strips and a Nix Pro Color Sensor to Precisely Measure Nitrate Runoff

Isabella Peedle, Kenneth J. Sweeney, Kayla Howard, Malcolm M. Manners, John L Griffifis, Jr., *Florida Gulf Coast University* 

# 34. The Use of Staphylococcus aureus and MRSA as an Indicator of Human Pollution in Tampa Bay

Brittany Small, Margaret Baker, Gabrielle Speca, Bridgette Froeschke, *University of Tampa* 

# **35.** The Relationship between Social Media Use and Depressive Symptoms

Cecelia Gordon, Ana Sardinha, Starlette Sinclair, *Florida Gulf Coast University* 

#### 36. Perceived Barriers of Informal Caregivers of Children with Special Healthcare Needs

Alana Swift, Mandy Bamber, *Florida State University* 

# 37. Novel Microbe-Resistant Clay Dressing for Healing Burns, Wounds and Scars

Kasey Rigby, Jodie Chen, John O'Brian, Judy Noel, Kausik Mukhopadhyay, *University of Central Florida* 

#### 38. 3D Tissue Perfusion Systems In Vitro: Pharmacological And Immunological Studies On Solid Tumors

Matthew Johnson, Padraic Levings, Juan Urueña, Eric McGhee, Alex McGhee, Derrick Hood, Kylie Van Meter, C. Anderson, W. Gregory Sawyer, *University* of Florida

### 39. Effect Of Elysia Clarki's Anti-Predatory Defense On The Feeding Behavior And Memory Of Blue Crabs

Samantha Schreiter, Samantha Schreiter, Michael Middlebrooks, *University of Tampa* 

### 40. Nutrients, Grazing, & Climate Effects on Turtle Grass in Pine Island Sound

Rachel O'Brien, Lauren Alvaro, Chloe Mikus, Amanda Sang, James Douglass, Florida Gulf Coast University

### 41. Assessing the Need for Vegan and Vegetarian Options at the Florida Gulf Coast University Food Pantry

Melissa Cottrill, Shelby Gilbert, *Florida Gulf Coast University* 

### 42. Florida Solar Energy Pricing: Cost-Benefit and Sensitivity Analysis of FPL's Solar Projects

Arnel Garcesa, Crystal Taylor, *Florida* State University

### 43. Regulation of FePer1 Gene Encoding 1-Cys Peroxiredoxin in Buckwheat: A Transgenic Study

Kathryn Koirtyohann, Shannon Bute, Takashi Ueda, *Florida Gulf Coast University* 

### 44. Developing a Low Cost Functional Prosthetic Socket that Fits Multiple Patients

William Marceau, Leia Holland, Derek Lura, *Florida Gulf Coast University* 

# 45. "The Town Cries": Cultural Identity in the Songs of Rosa Mercedes, Lima (Peru)

Paula Alva, Thomas Cimarusti, *Florida* Gulf Coast University

### 46. Quantifying the Shortage of Mental Health Care in Venezuela Through Media Content Analysis

Andrea Alfonsi, Humberto Lopez Castillo, University of Central Florida

### 47. A Crisis of Identity: The State and Japan: 1853-1889

Justin Keer, Elizabeth Bouldin, *Florida Gulf Coast University* 

# 48. Understanding the Role of Underwater Architecture in a Coastal Ecosystem

Eli Myron, Sandra Brooke, *Florida State University* 

# 49. Differential expression of the CCE1 gene in Brassica oleracea Caused by Differences in Methylation

Carolina Cora Pedroso de Moraes, Brandon Sanchez, Marilyn Cruz-Alvarez, *Florida Gulf Coast University* 

# 50. Positive Well-Being: A Study Of Positive Experiences In The Online Classroom

Samanth Shaner, Hannah Lehman, *University of North Florida* 

### 51. Developing Sustainable Techniques for the Production of Shea Butter to Assist West African Women

Michaela Clarke, Sari Paikoff, *Florida Gulf Coast University* 

### 52. Neural Implant-Associated Glial Scar Mitigation in a Regenerative Mammalian Model, the Spiny Mouse

Alexis Brake, Kevin Otto, *University of Florida* 

### 53. The Lasting Legacy of Chemical Weapons in Iraqi Kurdistan

Jenna Dovydaitis, Gunes Tezcur, *University* of Central Florida

#### 54. Placement Of Solar Panels To Provide Enough Electricity For An Average House In Florida

Viktoriya Bardenova, Erik Insko, *Florida Gulf Coast University* 

### 55. Heterodyne Phase Camera for Gravitational Wave Laser Interferometers

Cole Perkins, Kaden Loring, Paul Fulda, *University of Florida* 

### 56. Examination of Racial Disparities in Forensic Mental Health

Kyla Jones, Marshall Jones, *Florida Institute* of *Technology* 

### 57. Exploring Perceptions of Healthcare Access Among Rural Honduran Community Members Using Mixed-Method

Vincenzo Cornacchione, Rachel Core, *Stetson University* 

# 58. Breaking the Glass Ceiling: Gender Equity and Gender Parity in the Middle East

Selina Nevin, Zeina Schlenoff, *Florida State University* 

# 59. How Time and Race Affect Doctor-Patient Relationships

Lily Parker, John Taylor, Anthony Campbell, Florida State University

### 60. Home Runs or Batting Average? Which is more valuable to a MLB team?

Griffin Daly, Amir Neto, *Florida Gulf Coast University* 

#### 61. Jurors' Decision Making in a Registered Sex Offender Civil Trial

Alexis Mansfield, Christine Ruva, University of South Florida

# **62.** The Best Health & Safety Practices for University Fabrication Laboratories

Nicole Scotto, Tracy Zontek, *University of Tampa* 

# 63. Factors That Influence Division I Athletes: A Study of School Choice

Cortney VanLiew, Julie Yazici, *Florida Gulf Coast University* 

# 64. Untold: Testing, Development And Presentation Of Wood And Ceramic Sculpture

Korey Harrison, Patricia Fay, *Florida Gulf Coast University* 

### 65. ERPs Following Visual Targets and Working Memory Ability in a Transdiagnostic Psychiatric Sample

Samuel Naranjo Rincon, Giulia Salgari, Christopher Spencer, Chi Chan, Keira Monaghan, Jeffrey Bedwell, *University of Central Florida* 

### 66. Case Study: Perspectives on Corporal Punishment in Schools

Guadalupe Zepeda, Morgan Hamilton, Florida State University

# 67. Happy Body: The Relationship between Different Types of Meditation, Well-Being, and Body Positivity

Medhini Urs, Naneth Banos, Mallory Stiegler, *Florida Southern College* 

# 68. Social Media: What Does the Future Hold and How are we Using it?

Kira Nash, Monica Escaleras, *Florida Atlantic University* 

### 69. Effects Of Visual Context On Discomfort Elicited By Trypophobic Images

Emily Martin, KaLynn Bellmore, R. Nathan Pipitone, *Florida Gulf Coast University* 

### 70. Comorbidity of Anxiety Disorders and Conversion Disorder

Madelina Pellegrino, Amanda McGraw, *Jacksonville University* 

### 71. The Effects of Roundup on the Life History, Immune Function, and Stress Response of Aedes aegypti

Lindsay Martin, Kenneth Fedorka, University of Central Florida

#### 72. Psychopathy And Attitudes Towards Automated Vehicles

Olivia Teasdale, Jake Dively, Heather Maranges, *Florida State University* 

#### 73. Heterodyne Phase Camera Development for Gravitational Wave Laser Interferometers

Kaden Loring, Cole Perkins, Paul Fulda, University of Florida

# 74. Re-examining the Mozart Effect: The Sonata in D Major and the Influence of Rhythm on Spatial IQ

Wendi Y. Shi, Thomas Cimarusti, *Florida Gulf Coast University* 

### 75. Objective Assessments of Essential Tremor Severity Using Wearable Sensors

Zachary Boogaart, Stephanie Cernera, Aysegul Gunduz, *University of Florida* 

### **76.** 5HT3 Receptors in the Transgenic Mouse Pancreas

Malavika Nair, Richard Johnson, Thomas Taylor-Clark, Martha Campbell-Thompson, *University of Florida* 

### 77. Influencing Students to Recycle using Memes

Karla Adames, Diane Sasnett-Martichuski, Natalie Solla, *Florida Gulf Coast University* 

### 78. Detection of Drugs and Protein Concentrations from Latent Fingerprints on Different Substrates

Makenzie Freeman, Sulekha Coticone, Florida Gulf Coast University

### 79. Report on K-12 School Shootings in the U.S. from 1970-Present

Nicole Freire, Nicole Freire, Alejandro Jimenez, Hulya Yazici, *Florida Gulf Coast University* 

### 80. Risk Of Cognitive Decline In Caregivers Of Dementia

Ana Villa, Martina Luchetti, *Florida State University* 

# 81. Morphological and Molecular Analysis of Tampa Bay Copepods

Alexandra Perez, Sarah Cuccinello, University of Tampa

### 82. Self-Monitoring Differences in Spirituality vs. Religiousness: Intrinsic Orientation as Mediator

Tyler Phillips, Christopher Leone, University of North Florida

### 83. The Moderating Effect of Depression/ Anxiety on the Relationship Between Gender and Cognition

Diamond Taylor, Niah Washington, Julia Sheffler, *Florida State University* 

# 84. Female Genital Mutilation: A Contemporary Gendercide in France

Meagan McLaughlin, Richard Feiock, Florida State University

#### 85. Nrf2 Deficiency Exacerbates Cognitive Impairment And Reactive Microgliosis In Mouse Model

Alexandra Mazur, Lei Liu, Marie Kelly, Xiao Rui Yang, Tyler Fernandez, Erika Wierzbicki, Sylvain Dore, *University of Florida* 

# 86. Novice Meets Expert: What Happens When Students Interview a Scientist About Their Research?

Mainlyng Duenas, Melissa McCartney, Florida International University



# 87. Fighting for Recognition in a Race-Based Society: African American Artists in 19th Century America

Laine D'Orvilliers, Jeffery Fortney, *Florida Gulf Coast University* 

# 88. Juvenile on Juvenile Crime; How Often Does Tragedy Perpetuate Tragedy?

Nathaniel Baggs, Marshall Jones, *Florida Institute of Technology* 

### 89. The Effects of Roundup on Disease Transferability Probability of Aedes Aegypti

Jennifer Rote, Kenneth Fedorka, *University* of Central Florida

### 90. Wifi Routers, Power Plants, And Memes: An Explanation Of (t,r) Broadcast Domination

Tom Shlomi, Erik Insko, *Florida Gulf Coast University* 

### 91. Investigating the Effects of UV Filters in Sunscreens on Human and Environmental Health

Brittany Thompson, Melinda Donnelly, University of Central Florida

### 92. Design and Synthesis of Solid-Supported Palladium Catalysts for Greener Coupling Reactions

Aaron Cagle, Jennii Burrell, Daniel Paull, Florida Gulf Coast University

### 93. Evaluating Disinhibition and Decisionmaking Using a BART Task

Rachel Bowns, Christopher Patrick, Florida State University

# 94. Qualitative Inquiry into Vaping among College Students

Claudia Jimenez, Allison Barthel, Briana Lipski, Jenna George, Mary Martinasek, *University of Tampa* 

#### 95. Evaluation of Saline-Tolerant Florida Native Plants for Pre-treatment of Landfill Leachate

Marilia Mansano Soares, Austin Wise, Kim, Florida Gulf Coast University

# 96. Psychedelic Medicine and the Attenuation of Depressive Symptoms

Andrew Laino, Mohtashem Samsam, University of Central Florida

### 97. Spectral Effects of Parameters in Diffuse Reflectance IR and Visible Spectra of Regolith Simulants

Riley Havel, Christopher Bennett, University of Central Florida

### 98. Childhood Health Problems and Cognitive Reappraisal is Associated with Depression in Older Adults

Emily Capote, Julia Sheffler, *Florida State University* 

#### 99. Decreasing PSS Molecular Weight Increases Volumetric Charge Density of PEDOT:PSS Microwires

Erynne San Antonio, Scott Thourson, Kevin Otto, *University of Florida* 

### 100. Salivary Alpha Amylase As A Marker For Students' Stress Level Before And After Exams

Rachel Lee, Cho Thinzar Muang Muang, Peter Reuter, *Florida Gulf Coast University* 

#### 101. Anthropogenic Effects On Black Lemur Habitats

Josie Rivero, Cristina Gomes, *Florida Gulf Coast University* 

### 102. A Novel Approach to Evaluating HD-Related Aggression

Chloe LaRochelle, Amber Southwell, University of Central Florida

### 103. Developing Therapies for Athletic Recovery During Air Travel

Rachel Bauer, David Keck, *Embry-Riddle Aeronautical University* 

### 104. The Study of Free Will in the East and the West

Nicholas Colecio, Louise Kane, *University* of Central Florida

## 105. In-Situ Space Resource Utilization: A Review Of Economics, Geology, And Policy

Sarah Swiersz, Sam Baker, Christopher Bennett, *University of Central Florida* 

#### 106. Expression Of Genes Related To Lipid Metabolism And Adipogenesis In Zebrafish After DEHP Exposure

Emily Watts, Amanda Buerger, Caitlyn Parente, Joseph Bisesi, *University of Florida* 

#### 107. The Role of Workplace Distribution on Dengue Dynamics in the Yucatan: A Modeling Approach

Dianela Perdomo, Thomas Hladish, Kok Ben Toh, Sanjana Barhava, *University of Florida* 

### 108. Semiclassical Electron Paths in Weyl Metals

Christopher Vairogs, Selman Hershfield, *University of Florida* 

#### 109. Progress Towards The Concise Synthesis Of G-Curcumene

Daniel Quiroz, Jacob Foster, Gregory Boyce, Florida Gulf Coast University

#### 110. Does Noise Control Moderate the Effect of Music on Aerobic Exercise Experience

Ricardo Gonzalez, Jason Kostrna, *Florida International University* 

#### 111. Determining Optimal Solar Panel Configurations to Maximize Energy Efficiency

Jesus Ramos, Fenner Colson, *Florida Gulf Coast University* 

#### 112. An Investigation Of Flavanoid Diversity In Scutellaria To Identify Species With Medicinal Potential

Bryce Askey, Yeong Hun Song, Yoonkyung Lee, Ru Dai, Sangtae Kim, Jeongim Kim, *University of Florida* 

## 113. The Impact of Fashion Advertising on the Body Satisfaction of Collegiate Women

Sydney Green, Christopher Ferguson, *Stetson University* 

#### 114. An Analysis Of Odors In Émile Zola's L'Assommoir And Gabrielle Roy's Bonheur d'Occasion

Chanelle Dupuis, Aimée Boutin, *Florida* State University



#### Professional Development Workshops (3:00-3:45PM - Sugden Hall)

#### **Room 110**

Careers In Cancer Research: One Mission, Many Paths To Choose From

Rachel Newsome, University of Florida - Health Cancer Center

Cancer research is one of the most interdisciplinary pursuits in science and health, and the field is growing incredibly fast. With 39 NIH-designated comprehensive cancer centers around the US and growing grant funding from both public and privates agencies, studying cancer is a competitive and rewarding endeavor. But there are many different careers and paths that someone interested in cancer can take; from academia to clinical practice, the opportunities are endless. In this workshop we will discuss the different career opportunities in cancer research and how to pursue them. We will highlight the opportunities that the UF Health Cancer Center offers to both graduate and professional students interested in cancer research. We will also discuss some new discoveries made by high profile UF research faculty and students that may spark interest in new fields of cancer study for those not sure if cancer research is right for them.

#### **Room 111**

From Resume to CV: Planning your Research Roadmap

Tyler Campbell, University of Central Florida

Need a CV or Research Resume for Graduate School or other applications? This workshop will help you think about the elements of a CV or academic resume, how to frame them, and how to best utilize the time left in your undergraduate program to develop a spectacular CV or Resume for applying to whatever comes next.

#### **Room 115**

Graduate Fellowship Applications - Promoting Yourself and Your Ideas

Daniel Lambrecht, Florida Gulf Coast University

This workshop will provide an overview to graduate fellowship applications. Specifically, students will learn about the National Science Foundation's Graduate Research Fellowship Program (NSF GRFP). The workshop will provide answers to common questions such as "Why should I apply to fellowships?", "How do I identify a strong scientific idea?", "How do I write a strong application package?", "When should I start?", and discuss some of the specific requirements and perks of the NSF GRFP. Students will discuss 1-2 short sample applications to identify examples of strong versus weak application strategies. Tips for successful applications will be discussed and students will be pointed at additional resources for fellowship application writing.

#### **Room 240**

Social Media for Scholarship

Alanna Lecher, Lynn University

You've presented your poster at FURC; now how do you create an online presence to share your research with the wider world? From researchgate to google scholar, ORCIC to poster databases, this workshop will cover the many ways that scholars and scientists use social media platforms, repositories, and websites to create an online presence. You will leave this session with a plan to share your work on the World Wide Web. We will also discuss caveats and best practices of publishing research online.

#### Professional Development Workshops (3:00-3:45PM - Whitaker Hall)

#### **Room 101**

Rise of the IP Professional -- What You Need to Know about Intellectual Property Chris Turoski, *University of Minnesota* 

This workshop describes how IP and patents can support your education and career. A STEM degree prepares you for career roles in education and business. In academia, you get ahead by navigating a complex scheme of grants, publications, and teamwork, which can undercut or complement IP recognition for your work. In business, IP knowledge distinguishes you from your peers, and helps contribute to the bottom line. In addition to careers in education and business, the session will highlight an alternative career path such a patent agent or lawyer.

#### **Room 103**

Setbacks and Comebacks – Navigating Your Path to Success after Hitting the Roadblocks John Williams, *Albany State University* 

In a perfect world, every student would matriculate seamlessly through an undergraduate program, and would leave fully prepared for graduate education. However, for many students, the path to graduation may contain setbacks that can discourage or derail their initial goals. In the sciences, navigating these setbacks is particularly crucial, as many post-graduate career plans are structured based on undergraduate performance. This session is designed to provide students with clear strategies that can be implemented to address roadblocks, such as poor grades, financial issues, or personal issues that may have interrupted matriculation. Additionally, this session will provide students with strategies for using these events as tools for self-reflection and self-improvement.

#### **Room 104**

#### Summer Off-Campus Research Experiences

Kimberly Schneider, University of Central Florida

Summer is a great time to participate in research and there are numerous programs available to students away from their home institution. Summer programs are available at numerous universities and research institutions. Opportunities are available nationally and internationally and many provide a stipend, travel costs, housing, and/or board. Applications open in late fall and deadlines occur from early December through the end of March. Opportunities exist for all majors but more are available for students in the science and engineering areas. Fall and spring semester opportunities also exist. This workshop will provide an overview of these opportunities, information on how to create a strong application, and resources to help students through the process.

#### Professional Development Workshops (3:00-3:45PM - Edwards Hall)

#### **Room 112**

A Poster is Worth a Thousand Words: How to Best Present Your Research Matthew Eicholtz. Florida Southern College

Poster sessions offer an excellent opportunity to disseminate research findings and network with a broad audience of like-minded individuals. Yet, students often receive minimal instruction on how to appropriately design, create, and present an academic research poster. How big should the text be? How much text is too much or too little? Are my figures and images clear enough? How should I describe my work to people from various backgrounds and levels of expertise? In this hands-on workshop, we will answer these questions and more by examining actual research posters from multiple disciplines. Together, we will explore how to develop an eye-catching poster that entices people to learn more and discuss practical tips and tricks for confidently presenting your poster in a conference setting.

#### Professional Development Workshops (3:00 - 3:45PM - Marieb Hall)

#### **Room 100**

Mentor for Research to Recommendation Letter: Mentee's Gateway to Success Vishwa Trivedi, Bethune Cookman University

Mentors in undergraduate research play a significant role in stimulating their student's intellectual capability. It further advances mentee's aspirations ranging from graduate, professional programs to marketplace opportunities. Undergraduate research is an apprenticeship, where mentor teaches, build and test hypothesis while engaging mentee to address the core concern of a problem. Besides training, mentor takes extreme measure to navigate the undergraduate mentee for next step towards career building. The success of any such goal (graduate, professional etc along with scholarship) lies under the true assessment of mentor in form of letter of recommendation. Such testament is vital for the process as true litmus test. It is just a beginning of bonding, as such relationship last long after degree completion and ultimately transform into strong professional interactions. This workshop will outline the need and growth of such bonding.

#### **Room 200**

#### Librarians: The Research Mentors You Didn't Know You Had

Anna Carlin, *Florida Gulf Coast University* 

Librarians are experts at finding information and knowing how to navigate the literature of many academic fields, but their talents are often underutilized by students and faculty alike. In this workshop, FGCU Librarians will talk about the many ways that librarians can help researchers locate, collect, and make sense of existing literature. Our librarian presenters will also talk about how we have worked with researchers on an ongoing basis to continue to refine topics and searches and serve as another mentoring voice in research projects. Attendees will leave with ideas how to improve their literature searches and broaden their circle of faculty mentors through contact with librarians on their campuses.

#### Professional Development Workshops (3:00-3:45PM - Seidler Hall)

**Room 114** 

Engaging Leaders in Undergraduate Research: The Florida Undergraduate Research Leadership Summit

Alexis Brake, University of Florida

Inspired by the Florida Statewide Symposium for Best Practices in Undergraduate Research, the University of Florida Center for Undergraduate Research Board of students (CURBS) hosted the Florida Undergraduate Research Leadership Summit (FURLS): a completely student led meeting. This inaugural intercollegiate summit involved student leaders from across the state and served as a platform to discuss student-initiated efforts aiming to enhance the undergraduate research experience. This January, we hosted the second annual FURLS, engaging student representatives from 12 Florida institutions to discuss best practices in undergraduate research leadership and creating a network of communication between leaders. We propose the national expansion of FURLS as NURLS, the National Undergraduate Research Leadership Summit. Here, we present our findings from our first two years of FURLS and our plans to expand FURLS nationally while soliciting interest in joining the NURLS planning committee.

#### Poster Presentations (4:00-5:00PM - Cohen Center Ballroom and 201)

## 1. The Shoe Fits: Cinderella And Women's Voice

Farrah Kurronen, Charlotte Trinquet du Lys, *University of Central Florida* 

#### 2. Female Gender Presentation In Asian Literature

Catherine Le, Louise Kane, *University of Central Florida* 

#### 3. Law Enforcement Utilization Of Unmanned Aircraft Systems

Matthew Link, Haley Helms, Ross Stephenson, *Jacksonville University* 

#### 4. Calculation Of Diastereoselectivity

Alesia Borovikova, Qin Liu, *Florida* SouthWestern State College

#### 5. Testing Predictions Of Host Monopolization In A Symbiotic Amphipod And Its Ascidian Host

Samuel Dixon, Louis Ambrosio, University of Tampa

#### 6. The Great Dollar Divide

Juan Torres, Daniel Ortiz, Monica Escaleras, *Florida Atlantic University* 

#### 7. Being Good Without G-O-D?: How Religious And Non-Religious College Students Navigate Morality

Carter Montgomery, *University of North Florida* 

#### 8. Cholera Toxin Disassembly By Thioredoxin-Like Domains Of Protein Disulfide Isomerase

Antonio Torres, Antonio Mele, David Caraballo Delgado, Ken Teter, *University* of Central Florida

## 9. The Discovery Of A Pathogen That Is Eliminating Invasive Species

Kamila Hernandez, Erica Goss, *University* of Florida

#### 10. Phenolic Acid Analogs As A Potential Drug Formulation For Inflammatory Diseases

Haleema Irfan, Foram Madiyar, *Embry-Riddle Aeronautical University* 

#### 11. Symmetrical Structures

Pavel Zabela, Fritz Eugene, Andrew Tirado, Emma Thomas, Daniela Nikolova, *Florida Atlantic University* 

#### 12. Yellow Fever And The Rise Of The First Generation Of African American Leadership

Julian Wingert, Jeffery Fortney, *Florida Gulf Coast University* 

#### 13. A Sustainable New Process For The Catalytic Removal Of Toxic Mercury From Flue Emission

Zachary Loeb, Anwar Sadmani, *University* of Central Florida

#### 15. How Grain Size And Charcoal In Sediment Corresponds To Human Habitation In A Barrier Island

Cheree' Faulk, Alanna Lecher, *Lynn University* 

## 16. Decolonizing Land & Re-Indigenizing Body: The Recuperation Of Indigenous Identity In Brazil

Sebastian Mejia, Florida State University

### 17. Synthesis Of Cyclopropenone-Containing Natural Products

Joanna Muir, Ieda Andrade, Gregory Boyce, *Florida Gulf Coast University* 

#### 18. Initial Optical Profile Of Anthocyanins In Single- And Double-Bloom Hibiscus Rosa-Sinesis

Autumn N. Siegel, George / Amanda Kenney, Jr. / Newton, *Eastern Florida State College* 

#### 19. Population Dynamics Of Microbial Communities Among Cystic Fibrosis Patients Receiving CFTR Modulator

Anita Samadabadi, Taj Azarian, Shatha Yousef, *University of Central Florida* 

#### 20. Hermit Crabs (Coenobita Compressus) Personality, Development, And Habitat Choice

Yousi Espanol, Emily DuVal, Kevin Dixon, Florida State University

#### 21. Hydroxyapatite Formation On Coated Titanium Samples Submerged In SBF

Tatiana Aviles, Shu-Min Hsu, Josephine Esquivel, *University of Florida* 

#### 22. Replication Foci Patterns In HCT116 And H9 Cells In 16 Sub-Stages Of S Phase

Kristina Lynch, Takayo Sasaki, *Florida State University* 

#### 23. Investigating The Effect Of Family History On Pain Relief From Alcohol Consumption

Lauren Powell, Jeff Boissoneault, *University* of Florida

#### 24. Merging The Concepts Of Organic Extraction And IR Spectroscopy In The Organic Laboratory

Sipho Simwaka, Tariro Katuruza, Khalique Ahmed, *Lynn University* 

#### 25. A Statistical Analysis Of The Effectiveness Of Deceptive Strategies In Soccer Penalty Kicks

Diego Silva, Sheng Guo, Florida International University

## 26. Military Medical Delivery Utilizing Unmanned Aircraft Systems

Chris Benton, Micah Cowan, Ross Stephenson, *Jacksonville University* 

#### 27. Effect Of Mesenchymal Stem Cell Application In A Spinal Cord Injury In Vivo Model

Samuel Cockey, Esteban J Fiore, Guillermo D Mazzolini, Jorge B Aquino, Graciela L Mazzone, Anne Donnelly, *University of Florida* 

## 28. The Influence Of Mental Imagery Of Myofascial Restrictions

Juan Rodriguez, Brandon Launstein, Ramon Ramos, William Hanney, *University of Central Florida* 

#### 29. Economic Globalization And Within-Country Income Inequality

Kevin Nicolai, James Gwartney, *Florida* State University

#### 30. Characterization Of Contact Resistance Properties Of Different TLM Structure Designs

Nicole Karam, Kristopher Davis, University of Central Florida

#### 31. Effect Of A Dog-Assisted Reading Program On Reading Ability And Motivation Of Children With Dyslexia

Pippa Burnett, Renee Pack, Leilani Goodmon, *Florida Southern College* 

#### 32. Examining Momentary Emotional Functioning On Drinking And Non-Drinking Days

Katie Moskal, Ardhys Deleon, Robert Dvorak, *University of Central Florida* 

#### 33. Identifying The Contributing Factors To Nighttime Crashes At Freeway Mainline Segments In Florida

Fanny Kristiansson, Hongyun Chen, Embry-Riddle Aeronautical University

#### 34. Saving The World Before Bedtime

Samantha Ward, Warren Jones, *Eastern Florida State College* 

#### 35. Enabling Structure Elucidation For Polyglutamine Peptides Causing Neurodegenerative Diseases

Loygdna Laurissaint, Ieda Andrade, Daniel Lambrecht, *Florida Gulf Coast University* 

#### 36. Utilizing Geometric Morphometrics To Characterize Head-Shape Variation In The Brazilian Lance-Head

Jason Raiti, Matthew Holding, Darin Roktya, Tim Colston, *Florida State University* 

#### 37. Investigation Of Metabolic Rates Of Angiotensin II And Associated Bioactive Derivatives Of RAAS

Chelsea Mathews, Robert Speth, *Nova Southeastern University* 

#### 38. Focusing The Immune Response To A Pan-Malaria Transmission Blocking Vaccine Enhances Efficacy

Nicole Bender, Rhoel Dinglasan, University of Florida

## 39. Judicial Review And Public Opinion Of Democratic Performance

Taylor Lalor, Joseph Ross, *Florida Gulf Coast University* 

## **40. Social Feeding And Its Impacts On Mouthpart Development**

Kayli Sieber, Sara Zlotnik, Christine Miller, *University of Florida* 

#### 41. Characterization Of Transfection Agent Complexation With Ferucarbotran

Leyda Marrero-Morales, Nicole Sarna, Angelie Rivera-Rodriguez, Carlos Rinaldi, *University of Florida* 

#### 42. The Implications Of Compensating Student Athletes Through The Stipend And Olympic Models

Hussam Patel, Nicholas Smith, *Florida International University* 

#### 43. Combination Of Sulindac And Metformin As A Therapeutic Target In Lung Cancer

Heather Butler, Shailaja Allani, *Florida Atlantic University* 

#### 44. The Journey Of Human Trafficking: Where It Starts, Why It Happens, And How It Affects Tampa

Carmella Brazzale, Miloslava Plachkinova, *University of Tampa* 

#### 45. Adverse Childhood Experiences, Sensation Seeking, And Substance Abuse Among College Students

Jenna Russo, Kimberly Renk, *University of Central Florida* 

#### 46. Redeveloping Las Colonias

Atalya Santos, Andy Opel, *Florida State University* 

#### 47. Resilience In International Students

Maya Gummaraju, Karen Oehme, *Florida State University* 

#### 48. Increasing Chemical Engineering K-14 Involvement By Tackling Water Conservation

Anays Hernandez, Sindia Rivera-Jimenez, *University of Florida* 

## 49. Counting Vector Partitions In The Lie Algebra Of Type A\_3

David Melendez, Lucy Martinez, Pamela Harris, Joseph Rennie, Gordon Kirby, Marissa Loving, Rebecca Garcia, Daniel Tinoco, *University of Central Florida* 

#### 50. Social Stigma And Substance Use Disorder In Albani

Ediola Malkouari, Yovanna Pineda, University of Central Florida

#### 51. Arginine-170 Is Important In Stabilizing The Active Parkin Oligomer

Kariza Hossain, Oygul Mirzalieva, Jennifer Klein, Virginia Ronchi, Arthur Haas, *Florida State University* 

### **52.** An Independent Examination Of MSPE In NCAA Athletics

Jessenia Otalora, Sophia Sires, Anamaria Astudillo, Jason Kostrna, Renata Pavanelli, Michael Perlett, Aaron D'Addario, *Florida International University* 

#### 53. Does Savoring Mediate The Relationships Between Religious Service Attendance And Mood Outcomes?

Lauren Wangenstein, Lauren Olson, John Petrino, Jay Michaels, *University of South Florida, Sarasota* 

#### 54. Human Rights: The Idea Versus The Ideal

Abigail Reynolds, Donald Jones, *University* of Central Florida

#### 55. Rapid Urbanization And Waste Management In Verón, Dominican Republic

Elijah Crain, Leah Locascio, Tim Murtha, *University of Florida* 

## 56. Does Protein Storage Regulate The Growth Of Sexual Characters In A Model Pest Fly?

Valeriya Prytkova, Daniel Hahn, Clancy Short, *University of Florida* 

#### 57. Efficacy Of Natural Frequency Technology On Sleep Behavior Of Healthy Adults With Insomnia Symptoms

Tarah Lynch, Heatther Hausenblas, Stephanie Hopper, David Hopper, Kevin Coyle, *Jacksonville University* 

#### 58. Impact Of Work-Life Balance On Health-Related Quality Of Life Among College Students

Emily Vernet, Suha Saleh, *University of Central Florida* 

#### 59. Tropical East Pacific Convection Behavior Analysis Via Radiosonde And Dropsonde Data

Adriana Formby-Fernandez, Zeljka Fuchs-Stone, *Embry-Riddle Aeronautical University* 

### 60. Spanish Words Facilitate Gazing To Latino Faces

Bruna Ferreira, Ashley Myers, Daniella Zarate, Benjamin Marsh, *University of Tampa* 



#### 61. Borrowing Time: The Classical Tradition In The Poetic Theories Of T. S. Eliot And Ezra Pound

Nicholas Odom, Louise Kane, *University of Central Florida* 

## 62. Gun Ownership As A Political Expression Of Conservative Ideology

Jeremy Westergreen, Nathan Ancrum, Joseph Ross, *Florida Gulf Coast University* 

#### 63. Intergroup Contact and Social Change: The Crucial Role of Perceived Antiprejudice of White Friends in Shaping Minorities' Collective Action Intentions

Imani Lewis, Kristina Chamberlin, *Florida* State University

## 64. The Ukrainian Crisis, Violence In The East, And Its Effect On Ukrainian Internally Displaced

Emma Beyar, Tanu Kohli-Bagwe, *Florida State University* 

## 65. Small Modular Reactors And Their Implementation In Nuclear Engineering

Bryan Gros, Michael Lane, Daniel Moseley, Jacksonville University

#### 66. Light Curve Analysis Of Eclipsing Binary Stars Observed By The Kepler Space Telescope

Jennie LaComb, Michele Montgomery, University of Central Florida

#### 67. Generating A Model Of Human Obesity In Danio Reri

Byron Ward, Kimberly Dobrinski, University of Tampa

## 68. Neural Basis Of Sleep-Pan Interactions: A Preliminary Study

Priscilla Louis, Alejandra Mondino, Megumi Mast, Viviane Hambrecht-Wiedbusch, Giancarlo Vanini, *University* of Central Florida

## 69. Functional Prediction Of Hypothetical Proteins In Feldmannia Species Virus

Stephanie Panov, Padmanabhan Mahadevan, *University of Tampa* 

#### 70. Inducing Cellular Cytotoxicity Using Long And Short Wavelength Ultraviolet Radiation

Kelby Violette, Analise, Mustafa Mujtaba, Florida Gulf Coast University

#### 71. Evaluation Of Essential Oils As Anti-Cancer Therapeutic Agents In Triple-Negative Breast Cancer

Christy Doan, Olivia Romas, Lyndsay Rhodes, *Florida Gulf Coast University* 

#### 72. The Prevalence Of Deadly Mass Shootings In The United States From 1976-2018

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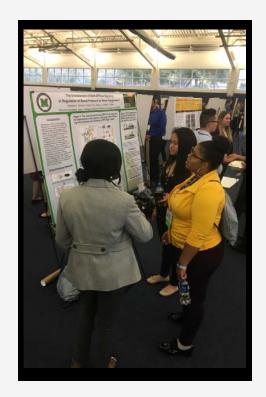
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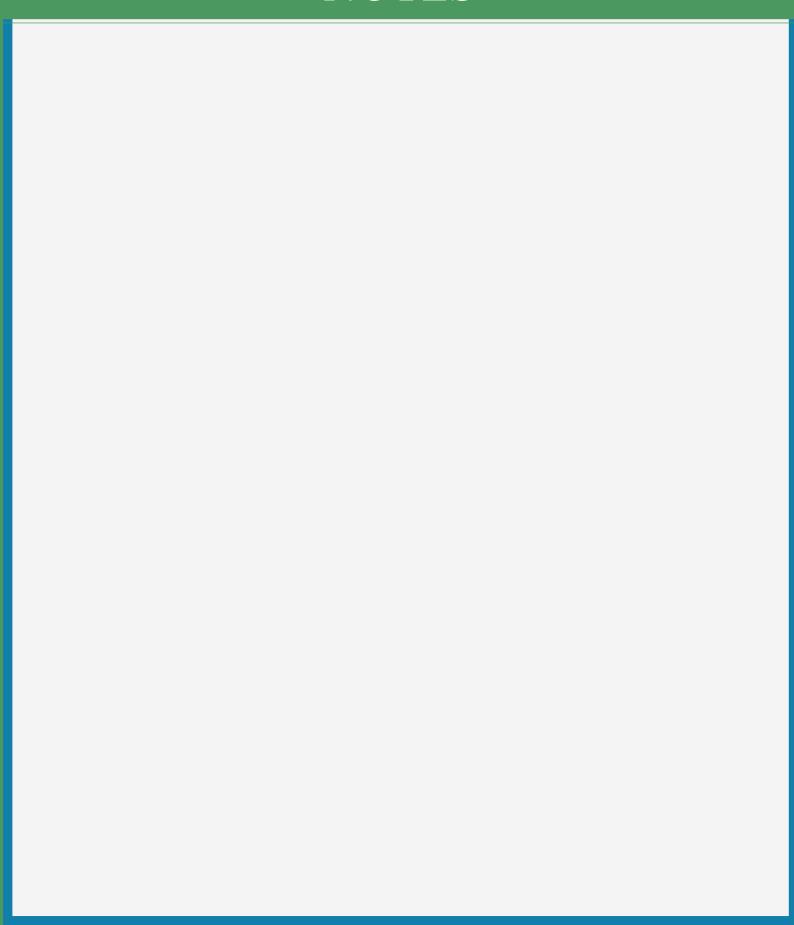




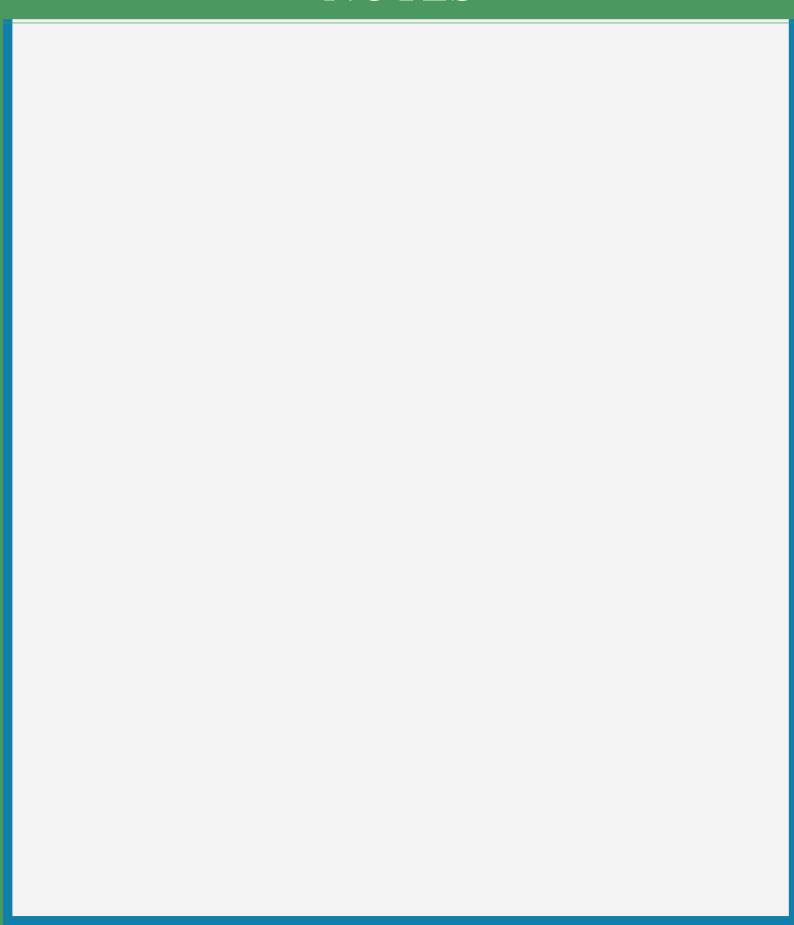




## NOTES



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