21st Annual Conference

Attend the Virtual Conference

President’s Welcome

It is with great pleasure that I welcome you to Augusta University’s 21st annual Phi Kappa Phi Student Research and Fine Arts Conference. Since 1897, Phi Kappa Phi – the nation’s oldest, largest, and most selective all-discipline honor society—has displayed a perfect blend of academic and personal excellence, and this event offers students and professionals the opportunity to showcase their scholarly and artistic endeavors.

Our focus at Augusta University is to encourage students to become life-long learners in their fields of study through discovery, collaboration and innovation. In fact, I encourage you to immerse yourself in the comprehensive and stimulating presentations highlighting the research and creative concepts developed by our students.

I appreciate the volunteers and faculty whose hard work made this conference possible. Enjoy today’s experience and congratulations to all of our student presenters and performers.

Go Jags!
Dr. Brooks Keel, President of Augusta University
The National Honor Society of Phi Kappa Phi

Established in 1897, The Honor Society of Phi Kappa Phi is a century-old, non-profit organization that recognizes and promotes academic excellence in all disciplines of higher education. The society was founded to cultivate deep appreciation and respect for scholarship and is convinced that in recognizing and honoring those persons of good character who have excelled in scholarship, in whatever field, it will stimulate others to strive for excellence.

With more than one million members from across the globe and over 300 chapters located on university campuses throughout the United States, Puerto Rico and the Philippines, Phi Kappa Phi is among the oldest and most respected academic honor societies. Students elected to membership in Phi Kappa Phi include the upper 7.5 percent of last-term juniors and the upper 10 percent of seniors, along with outstanding graduate students, faculty and alumni.

The Center for Undergraduate Research and Scholarship

Established in 2008, Augusta University's Center for Undergraduate Research and Scholarship supports research and scholarly activity by undergraduate students. Our mission is to support undergraduates in the pursuit of discovering new information, investigating factors of influence, and innovating original work under the collaborative guidance of a faculty mentor. We are proud to co-host this conference with PKP showcasing the hard work, thoughtful discovery and innovation of our students.
Summary Schedule of Events

Conference Webpage

Opening Ceremony
12:00-12:30

Welcome by Dr. Edgar Johnson, Chapter President, Phi Kappa Phi

Opening remarks by Dr. Zach Kelehear, Vice Provost for Instruction

Navigating the Conference by Dr. Quentin Davis,
Director Center for Undergraduate Research and Scholarship

Oral Sessions
Session A 12:30 – 2:00
Session B 2:00 – 3:00
Session C 3:00 – 4:00

Poster Sessions
Session B 2:00 – 3:00
Session C 3:00 – 4:00

Closing Ceremony
4:00 – 5:00

Introduction by Dr. Quentin Davis, Director Center for Undergraduate Research and Scholarship

Keynote Address by Ms. Amanda Behr, Program Director and Associate Professor, Department of Medical Illustration

Awards by Dr. Kevin Frazier, Vice Dean, Dental College of Georgia, President-Elect Phi Kappa Phi Chapter 324

Closing remarks by Dr. Neil MacKinnon, Executive Vice President for Academic Affairs, Provost, CAO

Acknowledgements by Dr. Quentin Davis, Director Center for Undergraduate Research and Scholarship
Schedule of Events

Opening Ceremony
(click link to join the session)

Augusta Virtual Room, 12:00-12:30 p.m.

12:00 – 12:10  Welcome
Dr. Edgar Johnson, Chapter President,
AU Phi Kappa Phi Chapter 324

12:10 – 12:15  Opening Remarks
Dr. Zach Kelehear, Vice Provost for Instruction and Innovation

12:15 - 12:20  Navigating the Virtual Conference
Quentin Davis, Director, Center of Undergraduate Research and Scholarship

12:20 – 12:30  Transition Time for Virtual Rooms

Technology Note: This year’s conference is virtual and hosted in MS Teams. Please ensure proper software is downloaded to view or participate in the conference. You may join the sessions by clicking underlined links in this digital program or visit the PKP Conference Website.
## Schedule of Events

### Oral Symposia & Poster Sessions

**Virtual Rooms 12:30 – 4:00 p.m.**

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<th>Bell Tower</th>
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<td>Complex A15: Agents of Invasion – Coming to a theater near you!</td>
<td>Urate injury? The law offices of Ablates, Rosiglitazone, and Parkinson can get you paid</td>
<td>Fear, Bias, and Inequality in the Pandemic: How it Started vs. How it’s Going</td>
<td>Rho Ren and Darth Microrna Attack the Leptin Receptor on Stellate</td>
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<td>Quantum Automata: The Electro-Vehicle of the Future</td>
<td>Deep in the Pediomelum Region of Oxidase we Find the Rare Metaformin Endothelial Cell</td>
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<td>Your Raspberry Pi and Brownian Desserts are Dripping Superfluid all over the Dosimeter</td>
<td>Striking the Right Ketone: Maestro Valgus Performs the Mouse Role in the upcoming Production of Alveolar</td>
<td>On Today’s Podcast, Creative Cab, we talk about Jeffrey Dahmer’s Early Piano Education</td>
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Schedule of Events

**Closing Ceremony**
*(click link to join the session)*

Augusta Virtual Room, 4:00 – 5:00 p.m.

4:00 – 4:25  *Introduction & Keynote Address*
Professor Amanda Behr, MA, CCA, CMI, FAMI

4:25 – 4:45  *Awards*
Dr. Kevin Frazier, Vice Dean, Dental College of Georgia, President Elect Phi Kappa Phi Chapter 324

4:45 – 4:55  *Closing Remarks*
Dr. Neil MacKinnon, Executive Vice President for Academic Affairs, Provost, CAO

4:55 – 5:00  *Acknowledgements*
Dr. Quentin Davis, Center for Undergraduate Research and Scholarship
Special Thanks

PKP Conference Committee and Planning Team

We are very grateful to the many people who have helped make this conference a reality. In no particular order we recognize the time, effort, and support of the following:

Mr. Jeff Mastromonico, Director Center for Instruction and Innovation
Mr. Josh Childers, IT Support
Ms. Amy Triano, Director, Information Technology Customer Experience
Ms. Susan Floyd, Instructional Design and Support
Dr. Elizabeth Culatta, Department of Social Sciences

Ms. Sarah Jane Ellaissi-Smith, Coordinator, Classroom and Event Services
Ms. Jessica Cooley, Manager, Classroom and Event Services
Ms. Danielle Harris, Division of Communications and Marketing
Mr. David Durand, Abstract submission and web design
Dr. Josefa Guerrero-Millan, Abstract submission and web management
Ms. Maryska Connoly-Brown, Oral Session Title Wordsmith
Ms. Jennifer Davis, Library Services and Arsenal Editor
Mr. Jason Leary, Information Technology Services
Mr. A.B. Osborne, Public Relations Art Design
Mr. Arthur Takahashi, Center for Instruction and Innovation,

Special Recognition of Financial Contributions and Support

Phi Kappa Phi Chapter 324
Dr. Michael Diamond, Sr. VP for Research
Coca-Cola Co.

On behalf of the Chairs of the Phi Kappa Phi
Undergraduate Research and Fine Arts Committee

Dr. Ruchi Patel
Dr. Colleen Davis
Ms. Melissa Knapp
Dr. Quentin Davis
Special Thanks to Judges and Moderators

Oral Session Moderators
Gregg Murray (Political Science)
Holly Goodson Rubio (Institutional Effectiveness)
Lorraine Evans (Academic Success Center)
Tiana Curry-McCoy (Undergraduate Health Professionals)
William Parker (Radiology)
Amy Abdulovic-Cui (Biological Sciences)
Duygu Minton (English and World Languages)
Jack Ellis (Hospital Medicine)
Jay Hegde (Neuroscience & Regenerative Medicine)

Oral Session Judges
Clément Aubert (Cyber and Computer Science)
Lee Flood (Advanced Studies and Innovation)
Kenneth Kwon (Cellular Biology and Anatomy)
Catherine Jauregui (Dental College)
Ellen LeMosy (Cellular Biology and Anatomy)
Titilayo Oluwabusi (Internal Medicine)
Thomas Weeks (Libraries)
Emma Geister (Graduate Student, Biology)

William Bryant (Communications)
Gaye Morris (Communications)
Stacy Roberts (Business)
Emma Kate Poindexter (Reese Library)
Jennifer Jaremski (Graduate Student, Social Sciences)
Paul O’Connor (Physiology)
Gokila Dorai (Cyber and Computer Science)
Kim Capehart (General Dentistry)
Emily Burns (Graduate Student, Physiology)
Lisbeth Sanchez Velazquez (Graduate Student, Mental Health)
Nathan Yanasak (Radiology)
Nirmal Nischal (Chemistry & Physics)
Angie Spencer (Chemistry & Physics)
Ferenc Deak (Neuroscience)
Nabin Karki (Hemocology & Oncology)
Khadijah Alexander (Graduate Student, Pharmacology)
Susan Murray (Accounting)
Jessica Stewart (Population Health)
Phyllis Anderson (Music)
Vy Ong (Graduate Student, Population Health)
Hoda Maleki (Cyber and Computer Science)
Steven Harris (Savannah River National Lab)
Marissa Seamon (Graduate Student, Neuroscience)
Ronda Greaves (Graduate Student, Nursing)  
Rebecca Nalloor (Pharmacology)  
Jessica Faulkner (Vascular Biology Center)  
Arjunan Pachiappan (Periodontics)  
Sarah Ray (Graduate Student, Physiology)  
Austin Alan Kohler (Graduate Student, Kinesiology)  

Poster Session Judges  
Christy Ledford - Family medicine  
Quanguang Zhang - Neuroscience  
Dan Rudic (Pharmacology & Toxicology)  
Sangeetha Sukumari Ramesh (Pharmacology and Toxicology)  
Joshua Shan (Vascular Biology)  
Kenny Osorio (Graduate School, MPA)  
Rhucha Samudra (Political Science)  
Lynn Glenn (Nursing)  
Ravirajsinh Jadeja (Biochemistry and Molecular Biology)  
Shannon Gregory (Biological Sciences)  
Arnoneel Sinha (Graduate Student, Population Health)  
Katie Anne Fopiano (Graduate Student, Physiology)  

Poster Session Moderators  
Catherine Slade (Business)  
Rhia Moreno (Advanced Studies & Innovation)
Keynote Speaker

Amanda Y. Behr
Program Director and Associate Professor, Department of Medical Illustration
Anaplastologist, DCG Anaplastology

Amanda Y. Behr, MA, CCA, CMI, FAMI is a board certified Medical Illustrator and Certified Clinical Anaplastologist. She serves the Department of Medical Illustration as Program Director and works clinically as an anaplastologist at Dental College of Georgia’s Anaplastology Clinic where she makes facial and somatic prosthetics for individuals with missing facial anatomy. Prior to joining AU, Ms. Behr served as Director of Medical Illustration for Quality Medical Publishing, Inc (QMP) for over 8 years. Ms. Behr’s research interests include the integration of 3D printing and 3D scanning technologies in medicine.

"YES, AND": INTERDISCIPLINARY INSPIRATION FOR CREATIVITY AND INNOVATION

“Yes, And” stands as a principle of improvisational comedy where actors acknowledge the performance of fellow actors and expand the act. Shutting down the discourse is considered taboo. The performance thrives through cooperation. This principle applies across disciplines. In fact, I came across this concept while reading an article about management. The value of this concept resonates with me as a way to approach my interaction with colleagues and students. When applied to professional relationships, “Yes, And” allows one to recognize and value the ideas of others and expand upon their ideas through a spirit of cooperation and mutual respect. This principle provides a space for brainstorming where all ideas are considered. I find that this outlook supports my creative process. I remain open to new and different ideas without limitation in initial phases of development. We’ll explore how keeping an open mind, asking questions, setting goals, and seeking new experiences impacts innovation.
ORAL SYMPOSIA

Session A: 12:30-2:00pm
Virtual Room: Bell Tower A
(click link to join the session)

Session A: 12:30-2:00pm
Moderator: Dr. Gregg Murray

Presenter: Nellie McKinney
Implementing an Algorithm for Locating Complex Zeros of Analytical Functions in the Complex Plane

Authors: Nellie McKinney and Josefa Guerrero-Millan
Faculty Sponsor(s)/Collaborator(s): Dr. Josefa Guerrero-Millan
Institution/College/Department: Chemistry and Physics

Presenter: Khang Kieu
Superconductivity and Magnetism in the A15 Phase of Alkali-doped Fullerides

Authors: Khang Kieu and Theja de Silva
Faculty Sponsor(s)/Collaborator(s): Dr. Theja de Silva
Institution/College/Department: Chemistry and Physics

Presenter: Garrett Zills
Role of Cell Mechanical Properties in Facilitating Tumor Invasion

Authors: Garrett M. Zills, Abdul N. Malmi Kakkada, and Trinanjan Datta
Faculty Sponsor(s)/Collaborator(s): Dr. Abdul N. Malmi Kakkada, and Dr. Trinanjan Datta
Institution/College/Department: Chemistry and Physics

Presenter: Margaret Wade
Ibuprofen Conjugates as Potential Anti-Inflammatory Agents

Authors: Margaret Wade and Siva Panda
Faculty Sponsor(s)/Collaborator(s): Dr. Siva Panda
Institution/College/Department: Chemistry and Physics
Virtual Room: Frog Hollow A  
(click link to join the session)

Session A: 12:30-2:00pm

Moderator: Ms. Holly Goodson-Rubio

Presenter: Derrian Wright  
*Endothelial Mineralocorticoid Receptor Deletion ablates Leptin-induced Preeclampsia Characteristics in Pregnancy*

Authors: Derrian Wright¹, Simone Kennard¹, Galina Antonova¹, Iris Z Jaffe³, Eric J Belin de Chantemele¹², Jessica L Faulkner¹  
Faculty Sponsor(s)/Collaborator(s): Dr. Simone Kennard¹, Dr. Galina Antonova¹, Dr. Iris Z Jaffe³, Dr. Eric J Belin de Chantemele¹², Dr. Jessica L Faulkner¹  
Institution/College/Department: ¹Vascular Biology Cntr, ²Dept of Medicine (Cardiology), ³Mol Cardiology Res Inst, Tufts Univ, Boston, MA

Presenter: Alexis Ezeanil  
*Investigating Parkinson’s Disease Mechanisms in Caenorhabditis Elegans*

Authors: Alexis Ezeanili and Danielle Mor  
Faculty Sponsor(s)/Collaborator(s): Dr. Danielle Mor  
Institution/College/Department: Department of Neuroscience and Regenerative Medicine

Presenter: Jayvon Nougaissse  
*Investigating the Effects of Rosiglitazone on Short-term Memory Through a ppar-gamma Dependent Pathway*

Authors: Jayvon M. Nougaissse, Yun Lei, Xinyun Lu  
Faculty Sponsor(s)/Collaborator(s): Dr. Yun Lei and Dr. Xinyun Lu.  
Institution/College/Department: Department of Neuroscience & Regenerative Medicine

Presenter: Udochukwu Amanamba  
*Blinding Crystals: Monosodium Urate and Diabetic Retinopathy*

Authors: ¹Udochukwu Amanamba, ²Bartoli Manuela and ²Menaka Thounaojam  
Faculty Sponsor(s)/Collaborator(s): Dr. Bartoli Manuela and Dr. Menaka Thounaojam  
Institution/College/Department: ¹Psychological Sciences, ²Department of Ophthalmology
Presenter: Andrew Ensley

12/15-Lipoxygenase Contributes to Retinal Neuronal Injury in Diabetic Retinopathy

Authors: Andrew Ensley1,2,3, Mohamed Moustafa2,3, Ahmed Ibrahim2,3, Allan Saul3, Mohamed Al-Shabrawey2,3

Faculty Sponsor(s)/Collaborator(s): Dr. Mohamed Moustafa, Ahmed Ibrahim, Allan Saul, Mohamed Al-Shabrawey

Institution/College/Department: 1College of Science and Mathematics, 2Oral Biology and Diagnostic Sciences, Dental College of Georgia, 3Culver Vision Discovery Institute and Ophthalmology, Medical College of Georgia
Virtual Room: Jaguar A
(click link to join the session)

Session A: 12:30-2:00pm
Moderator: Dr. Lorraine Evans

Presenter: Sandra Bangiyev
Breathing the Bias Away

Authors: Sandra Bangiyev and Richard Topolski
Faculty Sponsor(s)/Collaborator(s): Dr. Richard Topolski
Institution/College/Department: Psychological Sciences

Presenter: Chloe Johnson
Different Types of Inequality in Body Image

Authors: Chloe Johnson and Melissa Powell-Williams
Faculty Sponsor(s)/Collaborator(s): Dr. Melissa Powell-Williams
Institution/College/Department: Sociology, Criminal Justice, & Social Work

Presenter: Lindsey Cook
Cultural Changes In A Pandemic Through An Anthropological Lens

Authors: Lindsey Cook and Angela Bratton
Faculty Sponsor(s)/Collaborator(s): Dr. Angela Bratton
Institution/College/Department: History, Anthropology, & Philosophy

Presenter: Keturah Stewart
Fear and the Frontier: The Role of Terror in Territory Defense and Identity Definition in the Colonial Period

Authors: Keturah Stewart, Matthew Pope and Hubert VanTuyll
Faculty Sponsor(s)/Collaborator(s): Dr. Matthew Pope and Dr. Hubert VanTuyll
Institution/College/Department: History, Anthropology, & Philosophy
Virtual Room: Arsenal A
(click link to join the session)

Session A: 12:30-2:00pm
Moderator: Dr. Tiana Curry-McCoy

Presenter: Bithika Halder
Pancreatic Stellate Nox 1-derived Reactive Oxygen Species Facilitate Invasion of Pancreatic Cancer Cells Via Matrix Metalloproteinase 9

Authors: Bithika Halder\textsuperscript{1}, Ananya Chakraborty\textsuperscript{1}, Souravi Mondal\textsuperscript{1}, Gabor Csanyi\textsuperscript{2}, Maria Sabbatini\textsuperscript{1}
Faculty Sponsor(s)/Collaborator(s): Dr. Gabor Csanyi\textsuperscript{2} and Dr. Maria Sabbatini\textsuperscript{1}
Institution/College/Department: \textsuperscript{1} Department of Biological Sciences, \textsuperscript{2} Department of Pharmacology and Toxicology

Presenter: Arsheen Kudchikar
Distribution of Leptin receptor-expressing Cells in Various Regions of Mouse Brain

Authors: Arsheen Kudchikar and Yun Lei
Faculty Sponsor(s)/Collaborator(s): Dr. Yun Lei
Institution/College/Department: Department of Neuroscience & Regenerative Medicine

Presenters: Hisham Kashif and Dilan Shah
Assesment of Microrna Regulation After Intracraneal Hemorrhage: Role in Neuroinflammation

Authors: Hisham Kashif\textsuperscript{1}, Dilan Shah\textsuperscript{1}, Sangeetha Sukumari-Ramesh\textsuperscript{2}
Faculty Sponsor(s)/Collaborator(s): Dr. Sangeetha Sukumari-Ramesh
Institution/College/Department: \textsuperscript{1} Department of Biology, \textsuperscript{2} Department of Pharmacology and Toxicology, Medical College of Georgia
Presenter: Sneha Chauhan

*Attenuation of Rho Kinase Activity and Pro-inflammatory Cytokine Release by Niacin in Parkinson's Disease*

**Authors:** Sneha Chauhan¹,²,³, Banabihari Giri¹,²,³, Marissa Seamon²,³,⁴, Sharad Purohit¹,²,³, and Chandramohan Wakade¹,²,³,⁴

**Faculty Sponsor(s)/Collaborator(s):** Dr. Banabihari Giri, Dr. Marissa Seamon, Dr. Sharad Purohit, and Dr. Chandramohan Wakade

**Institution/College/Department:** ¹Department of Physical Therapy, ²Charlie Norwood VA Medical Center, ³Center for Biotechnology and Genomic Medicine, ⁴Department of Neuroscience
ORAL SYMPOSIA

Session B: 2:00pm – 3:00pm
Virtual Room: Bell Tower B  
(click link to join the session)

Session B: 2:00pm – 3:00pm

Moderator: Dr. William Parker

Presenter: Benjamin Overlie  
*Minimum Flow Rate in Electro-coflow*

Authors: Benjamin Overlie and Josefa Guerrero Millan  
Faculty Sponsor(s)/Collaborator(s): Dr. Josefa Guerrero Millan  
Institution/College/Department: Chemistry and Physics

Presenter: Andrew Liebig  
*Magnetic Monopoles, Landau Levels, and Bosonic Quantum Hall Effect*

Authors: Dr. Theja De Silva and Andrew Liebig  
Faculty Sponsor(s)/Collaborator(s): Dr. Theja De Silva  
Institution/College/Department: Chemistry and Physics

Presenter: Mark Holcomb  
*The Implicit Computational Complexity Flavor of Automata*

Authors: Clément Aubert, Mark Holcomb  
Faculty Sponsor(s)/Collaborator(s): Dr. Clément Aubert  
Institution/College/Department: School of Computer and Cyber Sciences

Presenter: Patrick Woolard  
*Vision-based Navigation and Control of Unmanned Aerial Vehicles*

Authors: Mark Holcomb, Zack Pye, Patrick Woolard, and Weiming Xiang  
Faculty Sponsor(s)/Collaborator(s): Dr. Weiming Xiang  
Institution/College/Department: School of Computer and Cyber Sciences
Virtual Room: FROG HOLLOW B
(click link to join the session)

Session B: 2:00pm – 3:00pm

Moderator: Dr. Amy Abdulovic-Cui

**Presenter: Ananya Chakraborty**  
*Characterizing the NADPH Oxidase 1-evoked Pancreatic Stellate Cell Secretome*

**Authors:** Ananya Chakraborty\(^1\), Souravi Mondal\(^1\), Wenbo Zhi\(^2\), Gabor Csanyi\(^3\) and Maria Sabbatini\(^1\)  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Wenbo Zhi, Dr. Gabor Csanyi and Dr. Maria Sabbatini  
**Institution/College/Department:** \(^1\)Biological Sciences, \(^2\)Center for Biotechnology and Genomic Medicine, and Department of Pharmacology and Toxicology\(^3\)

**Presenter: Vinay Mehta**  
*The Effect of Selective Deletion of Leptin Receptor in Endothelial Cells on High-Fat-Diet-Induced Vascular Endothelial Function*

**Authors:** Vinay Mehta, Reem T. Atawia, Eric J. Belin de Chantemèle  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Reem T. Atawia and Dr. Eric J. Belin de Chantemèle  
**Institution/College/Department:** Vascular Biology Center, Department of Biological Sciences

**Presenter: Eyana Thomas**  
*Design and Synthesis of Metformin Derivatives as Anticancer Agents*

**Authors:** Eyana Thomas and Siva Panda  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Siva Panda  
**Institution/College/Department:** Chemistry and Physics

**Presenter: Matthew Zimmerman**  
*An Investigation of a Rare Plant Species, Pediomelum Piedmontanum*

**Authors:** Matthew Zimmerman and Stacy Bennetts  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Stacy Bennetts  
**Institution/College/Department:** Biological Sciences
Virtual Room: JAGUAR B  
(click link to join the session)

Session B: 2:00pm – 3:00pm

Moderator: Dr. Duygu Minton

Presenter: Felina Thomas  
*Depression, Body Image, and Anxiety Influencing Bariatric Surgical Outcomes*

Authors: Felina Thomas¹, Tracey Puig-Baker², Lufei Young²  
Faculty Sponsor(s)/Collaborator(s): Dr. Tracey Puig-Baker and Dr. Lufei Young  
Institution/College/Department: ¹Augusta University, ²College of Nursing

Presenter: Hannah Smith  
*Telehealth in Assisted Reproductive Technology to Improve Disparities in Access to Care in Rural Georgia*

Authors: Hannah Smith¹, Sasha Mikael,¹,² Anna Gaidis,¹,² and Larisa Gavriloava-Jordan¹,²  
Faculty Sponsor(s)/Collaborator(s): Dr. Sasha Mikael, Dr. Anna Gaidis, and Dr. Larisa Gavriloava-Jordan  
Institution/College/Department: ¹Augusta University and ²Medical College of Georgia

Presenter: Lauren Jackson  
*Student Perceptions of Mental Health Services at Augusta University*

Authors: Lauren Jackson¹, Candace Best², Josefa Guerrero-Millan³ and Vahe Heboyan⁴  
Faculty Sponsor(s)/Collaborator(s): Dr. Candace Best, Dr. Josefa Guerrero-Millan and Dr. Vahe Heboyan  
Institution/College/Department: ¹Department of Psychiatry and Health Behavior, ²Chemistry and Physics, ³College of Allied Health Sciences
Presenter: Megan Tychsen

Does the Presence of a USG institution impact economic variables within Georgia Metropolitan Statistical Areas?

Authors: Megan Tychsen and Simon Medcalfe

Faculty Sponsor(s)/Collaborator(s): Dr. Simon Medcalfe

Institution/College/Department: Hull College of Business
ORAL SYMPOSIA

Session C: 3:00 pm - 4:00 pm
Virtual Room: BELL TOWER C
(click link to join the session)

Session C: 3:00 pm - 4:00 pm
Moderator: Dr. Jack Ellis

Presenter: Andrew Vincent
Analytical results for two-band atomic superfluid system as a guidance for superconducting materials

Authors: Andrew Vincent and Theja DeSilva
Faculty Sponsor(s)/Collaborator(s): Dr. Theja DeSilva
Institution/College/Department: Chemistry and Physics

Presenters: Maxwell Recht and Chase Inglett
Feasibility of Reusable Radiochromic Plastics as Dosimeters

Authors: 1Maxwell Recht, 1Chase Inglett, 1Joseph A. Hauger, 1Joseph Newton and 2John Adamovics
Faculty Sponsor(s)/Collaborator(s): Dr. Joseph A. Hauger, Dr. Joseph Newton and Dr. John Adamovics
Institution/College/Department: 1Chemistry and Physics (Augusta Univ.), 2Chemistry (Rider Univ.)

Presenter: Taejung Park
Chaotic Dripping

Authors: Taejung Park and Josefa Guerrero-Millan
Faculty Sponsor(s)/Collaborator(s): Dr. Josefa Guerrero-Millan
Institution/College/Department: Chemistry and Physics

Presenter: Seyon Punchbeddell
Brownian Motion of a Raspberry Pi Controlled Robot

Authors: Seyon Punchbeddell, Trinanjan Datta and Andrew Hauger
Faculty Sponsor(s)/Collaborator(s): Dr. Trinanjan Datta and Dr. Andrew Hauger
Institution/College/Department: Chemistry and Physics
Virtual Room: FROG HOLLOW C
(click link to join the session)

Session C: 3:00 pm - 4:00 pm
Moderator: Dr. Jay Hegdé

Presenter: Tammy Eboigbe
*The Relationship Between Dynamic Knee Valgus and Lower Extremity Muscle Activity in Patients with Chronic Ankle Instability*

Authors: Tammy Eboigbe, Valerie Hogan  
Faculty Sponsor(s)/Collaborator(s): Dr. Valerie Hogan  
Institution/College/Department: Kinesiology and Health Science

Presenter: Jordan Locklin
*Does Chronic Ketone Salt Supplementation Alter BP, CBC, or CMP Results in Adults Diagnosed with PTSD*

Authors: Jordan Locklin¹, A. Maleah Holland¹ and Andrew Moore¹  
Faculty Sponsor(s)/Collaborator(s): Dr. Angella Holland¹, Dr. H. David Hunt² and Dr. Tadd Patton³  
Institution/College/Department: ¹Kinesiology and Health Science, ²Sociology, Criminal Justice, & Social Work, ³Psychological Sciences

Presenter: Jaimini Patel
*Role of Dendritic Cells in Post-Extraction Alveolar Bone Healing*

Authors: Jaimini Patel¹, Ranya El Sayad², Mohammed E. Elsalany³, Christopher Cutler²  
Faculty Sponsor(s)/Collaborator(s): Dr. Jennifer Bradford, Dr. Christopher Terry, Dr. Ranya El Sayad, Dr. Mohammed E. Elsalany, Dr. Christopher Cutler and Dr. Jennifer Gerber  
Institution/College/Department: ¹Augusta University, ²Department of Periodontics, Dental College of Georgia, Medical Anatomical Sciences, and ³College of Osteopathic Medicine of the Pacific, Western University of Health Sciences
Presenter: Souravi Mondal
Validation of a Carbohydrate Antigen-19-9 Enzyme-like Immunosorbent Assay Kit Using a Mouse Model of Pancreatic Cancer

Authors: Souravi Mondal, Maria Sabbatini
Faculty Sponsor(s)/Collaborator(s): Dr. Maria Sabbatini
Institution/College/Department: Biological Sciences
Virtual Room: JAGUAR C
(click link to join the session)

Session C: 3:00 pm - 4:00 pm
Moderator: Ms. Jennifer Davis

Presenter: Fabiha Anwar
Exploring Jeffrey Dahmer’s Sexual Development

Authors: Fabiha Anwar, Michael Holman
Faculty Sponsor(s)/Collaborator(s): Dr. Michael Holman
Institution/College/Department: Psychological Sciences

Presenter: Elyse M. Garrett
Children, Philosophy, and Early Education

Authors: Elyse M. Garrett
Faculty Sponsor(s)/Collaborator(s): Dr. Lee Maynard
Institution/College/Department: English and Foreign Languages

Presenter: Aurora Kenison
Suite for Piano -- Blending Styles and Discovering Creative Process

Authors: Aurora Kenison
Faculty Sponsor(s)/Collaborator(s): Dr. Martin Jones
Institution/College/Department: Music

Presenter: Madeline Burgin
Scythe & Halo Cab Co.: A Creative Activity in Podcasting

Authors: Madeline Burgin
Faculty Sponsor(s)/Collaborator(s): Dr. Edgar Johnson
Institution/College/Department: Communications
POSTER SESSIONS

(Note: There is no Poster Session A)

Session B: 2:00pm – 3:00pm

View Posters Online (March 30 - )

Join the Question and Answer Session Poster Discussion (April 1, 2:00 – 3:00)
Virtual Room: ARSENAL B
(2:00 – 3:00 IN TEAMS)
(click link to join the Q&A session)
Moderator: Dr. Cathy Slade

View the Arsenal B POSTERS (IN PADLET; click link to view the posters)

Presenters: Karen Aikhionbare, Chelsea Appiah, Aminah Wood and Logan Ouellette
**Development of Transparent Transgenic Zebrafish Strain to Study Nf-Kb, Annexin 5, and the Microglia**

**Authors:** Karen Aikhionbare, Chelsea Appiah, Aminah Wood, Logan Ouellette and Surendra Rajpurohit
**Faculty Sponsor(s)/Collaborator(s):** Dr. Surendra Rajpurohit
**Institution/College/Department:** Georgia Cancer Center

**Presenter:** Jakeline Juarez
**Melatonin Triggers ER Stress-associated Apoptosis in Head and Neck Cancer Cells**

**Authors:** Jakeline Juarez\(^1\), Liwei Lang\(^2\), Reid Loveless\(^3\), Yong Teng\(^2,3,4\)
**Faculty Sponsor(s)/Collaborator(s):** Dr. Liwei Lang, Dr. Reid Loveless and Dr. Yong Teng
**Institution/College/Department:** Department of College of Science and Mathematics, \(^2\) Department of Oral Biology and Diagnostic Sciences, \(^3\) Georgia Cancer Center, \(^4\) Department of Biochemistry and Molecular Biology

**Presenter:** Helena Blackburn
**Establishing a GFP Marker in Zebrafish to Study the Localization of Tinagl1**

**Authors:** Helena Blackburn\(^1\) and Ellen LeMosy\(^2\)
**Faculty Sponsor(s)/Collaborator(s):** Dr. Ellen LeMosy
**Institution/College/Department:** \(^1\) Biological Sciences, \(^2\) Cellular Biology and Anatomy
**Presenter: Leslie Duncan**  
_Degradation of EGFR Contributes to Anti-cancer Effects on HDAC Inhibitor in Head and Neck Cancer_

**Authors:** Leslie Duncan¹, Caleb Jensen¹, Leilei He², Liwei Lang², Yong Teng²,³  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Leilei He, Dr. Liwei Lang and Dr. Yong Teng  
**Institution/College/Department:** ¹Biological Sciences, ²Department of Oral Biology and Diagnostic Sciences, Dental College of Georgia, ³Georgia Cancer Center, Medical College of Georgia

**Presenter: Zhidong Wang**  
_Correlation of Genetic Variations to Biochemical and Clinical Features in Phelan-McDermid Syndrome_

**Authors:** Zhidong Wang¹,², Lavanya Jain³,⁴, Sujata Srikanth³, Lauren Cascio³ and Luigi Boccuto³,⁴  
**Faculty Sponsor(s)/Collaborator(s):** Lavanya Jain, Sujata Srikanth, Lauren Cascio and Dr. Luigi Boccuto  
**Institution/College/Department:** ¹Augusta University, ²Bob Jones University, ³Greenwood Genetic Center, and ⁴Clemson University

**Presenter: Nadine Long**  
_Routine Use of Nonsteroidal Anti-inflammatory Drugs (NSAID) is Effective, Safe and does not Lead to a Higher Risk of Bleeding and Renal Failure When Used Postoperatively in Pediatric Patients_

**Authors:** Nadine Long¹, Danielle Crethers² and Renuka Mehta³  
**Faculty Sponsor(s)/Collaborator(s):** Danielle Crethers and Dr. Renuka Mehta  
**Institution/College/Department:** ¹Augusta University, ²Department of Surgery, ³Department of Pediatrics, Medical College of Georgia

**Presenter: Queen Tran**  
_Curcumin Conjugates as Potential Therapeutics for Breast Cancer_

**Authors:** Queen Tran and Siva Panda  
**Faculty Sponsor(s)/Collaborator(s):** Dr. Siva Panda  
**Institution/College/Department:** Chemistry and Physics
POSTER SESSIONS

Session C: 3:00 pm - 4:00 pm

View Posters Online (March 30 - )

Join the Question and Answer Session Poster Discussion (April 1, 3:00 – 4:00)
**Virtual Room: ARSENAL C**

(IN TEAMS)

(click link to join the Q&A session)

Moderator: Dr. Rhia Moreno

View the Arsenal C POSTERS (IN PADLET; click link to view the posters)

Presenter: Karen Rex Pius Vincent

*Expertise and Sex Identification in Dogs*

Authors: Richard Topolski\(^1\), Karen Rex Pius Vincent\(^2\), Nicole Morel\(^3\), Chandani Patel\(^4\)

Faculty Sponsor(s)/Collaborator(s): Dr. Richard Topolski

Institution/College/Department: Psychological Sciences

Presenter: Elinita Pollard

*Phone Separation Anxiety and Test Performance*

Authors: Elinita Pollard, Blessing Adeyemo, Keylanni Hatfield, Tadd Patton, Michelle Johnson

Faculty Sponsor(s)/Collaborator(s): Dr. Tadd Patton and Dr. Michelle Johnson

Institution/College/Department: Psychological Sciences

Presenter: Palak Patel

*Racial Segregation and COVID-19 Health Outcomes: Evidence from the State of Georgia*

Authors: Palak Patel, Simon Medcalfe and Catherine Slade

Faculty Sponsor(s)/Collaborator(s): Dr. Simon Medcalfe and Dr. Catherine Slade

Institution/College/Department: Hull College of Business

Presenter: Olivia Ertz

*Running a Food Bank During COVID-19*

Authors: Olivia Ertz and Nicole Peritore

Faculty Sponsor(s)/Collaborator(s): Dr. Nicole Peritore

Institution/College/Department: College of Education
Presenter: Nicholas Trussell
*Development of a Learning Module on the Legal Implications in Primary Care Nursing*

Authors: Nicholas Trussell, Dwayne Hooks and Susan Nicosia
Faculty Sponsor(s)/Collaborator(s): Dr. Dwayne Hooks and Dr. Susan Nicosia
Institution/College/Department: College of Nursing

Presenter: Sydney Dains-McGahee
*Bound Relativistic Motion in One Dimension*

Authors: Sydney Dains-McGahee and Sam Robinson
Faculty Sponsor(s)/Collaborator(s): Dr. Sam Robinson
Institution/College/Department: Mathematics

Presenter: Colin Miller Jr.
*Conjugation of Tryptamine to Biologically Active Carboxilic Acids in Order to Create Prodrugs*

Authors: Colin Miller Jr., Iryna O. Lebedyeva
Faculty Sponsor(s)/Collaborator(s): Dr. Iryna O. Lebedyeva
Institution/College/Department: Chemistry and Physics