

# 2022



## April 14, 2022

	<b>JUDGED STUDENT POSTERS (LOCATED ON THE 1<sup>ST</sup> FLOOR)</b>
Poster	Poster Title
1.	<b>Augmented Reality for Education</b> Jadon Richardson & Dr. Robertson
2.	<b>Ethical Hacking</b> Bradley Haynes & Dr. Khokar
3.	<b>Grizzly Paths</b> Michael Murillo-Martinez, Hugh Smith & Dr. Doloc-Mihu
4.	<b>Hackathons: A Learning Experience from Students' Perspective</b> ReAnn Hollins, Khamilah Nixon, Giselle Lara, Anaya Yorke, Michelle Ramos, Chenanniah Mac-Cephas, Jennifer Ong, Jessica Simao, Rian Teyani, Chizoba Okeke, Genesis Harper, Miranda Darlington, Eraj Iftikhar, Hannah Lee, Ngoc Thao My Nguyen, Timothy Abesi, Kristoffer Hendricks, Anh Thu Nguyen, Marco Chairez, Dr. Jonassen, Dr. Dekhane, & Dr. Park
5.	<b>Using Virtual Reality to Teach the Fundamentals of Primitive Data Types, Variables, and LogicStatements in Python</b> Connor Murdock, Alan Oliver, David Torres, Tylor Rowe, Dr. Gunay & Dr. Barakat
6.	<b>DubMix - A rhythm game for teaching coding</b> Richard Rodas, Alexis Cochrane, Jin Lee, Dr. Barakat & Dr. Gunay
7.	<b>TapIn - a Digital Business Card for Outreach</b> Michael Murillo, Michelle Watson, Cameron Ventimiglia, Jesse Simao, Dr. Gunay & Dr. Barakat
8.	<b>Structural Analysis Using Contact-less Evaluation</b> Byron Fisher, Khamilah Nixon, Valerie Morse, Matteo Kitic, Kristoffer Hendricks, Samuel McKinney, Dr. Tangirala & Dr. Lee
9.	<b>A Prototype for Demonstrating Structural Analysis Using Contact-less Evaluation</b> Byron Fisher, Khamilah Nixon, Matteo Kitic, Kristoffer Hendricks, Samuel McKinney, Dr. Tangirala & Dr. Lee
10.	<b>Mini Excitatory Postsynaptic Current Analysis in Drosophila Motor Neurons</b> Ekechi Nzewi & Dr. Gunay
11.	<b>Ecological Complexity of the Rhizosphere</b> Patricia Gherman, Isabel Tavera, Dr. Ward & Dr. Kurtz
12.	<b>Investigating the Presence of GMO Markers P35S and CP4 EPSPS in Popular Soy Based Baby Formulas</b> Christian Claros, Dipal Shah, Kotryna Diktonaite, Nathan Nguyen, Thuy Le & Dr. Ricks
13.	<b>Little Sticky Monsters Found on Buildings: Are They Here to Stay?</b> Ryan Davenport, Hannah Talbert, Kelly Simpson, Ninknee Kongmanichanh, Dr. Brown, & Dr. Fiorillo
14.	<b>Be a winner with chemistry outreach at Georgia Gwinnett College</b> Alex Bercian, Jeanne Cooper, Crystal Ivey, Benjamin Shepard, Dr. Sublett Breeden & Dr. Rudd
15.	<b>Comparative Analysis of Secondary and Tertiary Amines for Extraction Efficiency for Desalination</b> Richard Forson, Jordi Lainez, Diana Kem, Elizabeth Humphries, & Dr. Lee

16.	<b>Comparing the Adsorption and Desorption Capabilities of Various Hydrogels</b> Nouzong Ashlynn Yang, Tyler Donnelly, & Dr. Lee
17.	<b>Synthesis, characterization, and fluorescence properties of acridinyl and quinolinyl derivatives of aminobenzenesulfonamides</b> Klaudia Figueroa, Dr. Mallia & Dr. Forlemu
18.	<b>Molecular modeling of binding affinities of acridinyl, quinolinyl, and pyridinyl benzenesulfonamides with enzymes in the <i>Plasmodium falciparum</i> folate pathway</b> Aakesh Mallia & Dr. Forlemu
19.	<b>Computational Simulations of the interactions between Cyclotides and Lipid Bilayers</b> Shannon Simpson, Dr. Forlemu & Dr. Tangirala
20.	<b>A simple at-home titration: Quantifying citric acid in lemon juice with baking soda and Mentos</b> Jennifer Nguyen, Dr. Akdeniz, Dr. Anfuso & Dr. Morris
21.	<b>Self-assembly and aggregation studies of cyclic peptides</b> Jeanny Cooper, Diana Kim, Dr. Mallia, Dr. Mwongela, Dr. Forlemu & Dr. Tangirala
22.	<b>Structure-property comparisons, mechanical and thermal properties of molecular gels based on alkanolic acids and ammonium alkanolates</b> Joel Suazo, Brian Matei, Farisha Sultan & Dr. Mallia
23.	<b>Synthesis, Characterization, and Spectroscopic Studies of Acridinyl and Quinolinyl Derivatives of Aminobenzenesulfonamides</b> Klaudia Figueroa & Dr. Mallia
24.	<b>Self-assembly, Gelation, and Spectroscopic Studies of 4-Hydroxy-1-anthraquinonylalkanamides.</b> Bao Dang & Dr. Mallia
25.	<b>Targeting the Plasmodium falciparum Folate Pathway: Molecular Modeling of the Affinity of Sulfonamide Derivatives and Isoforms of Dihydrofolate Reductase</b> Cedrick Mukinay, Rotimi Babalola, Dr. Forlemu & Dr. Sloop
26.	<b>Interactions of iron zero nanoparticles with surfactants and deep eutectic solvents</b> Justin Bindewald & Dr. Mallia
27.	<b>Reproductive Biology of Redbreast Sunfish in an Urban Watershed</b> Hannah Talbert & Dr. Sakaris
28.	<b>Synthesis, characterization and photo physical studies of 2-(4-methoxy-benzylidene)indan-1-one</b> Khoa Pham, Dr. Mallia & Dr. Sloop
29.	<b>Gelation and photophysical studies of N-aminophenylalkanamides as low molecular mass gelators</b> Byron Fisher & Dr. Mallia
30.	<b>The Theory and Construction of Laser Induced Breakdown Spectroscopy (LIBS) Utilizing a Cosmetic Pulse Laser</b> Alexander Merryman, Dr. Lee, Dr. Lee, Dr. Guo, & Dr. Pibel
31.	<b>Analysis of Simulated Lunar Dust Particles for Lunar Exploration: NASA MINDS Project</b> Matthew Elenteny, Benjamin Pibel, Aneri Amin, Ikechukwu Okolocha, Tyler De Austria, Dr. Ametepe, Dr. Khan, & Dr. Pibel
32.	<b>Association of Sleep Quality and Injury in High School-Aged Dancers</b> Tyler McKine & Dr. Wludyga
33.	<b>Depression, Anxiety, and Stress among NAIA Student Athletes</b> Erika Malpica Abad, Dr. Caillouet, Mr. Williams, Dr. Routon
34.	<b>Effect of a Technology-Based Health Education Intervention on Physical Activity Levels among Participants in a Worksite Wellness Program: A Pilot Study</b> Ayotoni Ariyo, Jaskaran Bhatia, Dr. Caillouet & Dr. Doan
39.	<b>Analysis of synthetic neuromelanin and sepia melanin fluorescence in the presence of nicotine and reducing agents</b> Iulia Bradeanu & Dr. Haining

	<b>EXTERNAL VISITOR TABLES (LOCATED ON THE 1<sup>ST</sup> FLOOR – H2 ENTRANCE)</b>	
	Georgia State-Robinson College of Business	
	Mercer University's Georgia Baptist College of Nursing	
	Graduate Programs at Morehouse School of Medicine (Graduate Education in Biomedical Sciences)	
	MS in Information Technology at Kennesaw State University	
	PCOM Georgia/PCOM South Georgia	
	UGA College of Pharmacy PharmD/MS/PhD Programs	
	<b>GGC ORGANIZATIONS TABLES (LOCATED ON THE 1<sup>ST</sup> FLOOR – H1 ENTRANCE)</b>	
	Academic Enhancement Center	
	Career Development and Advising Center	
	Counseling and Psychological Services	
	Office of Diversity and Equity Compliance's Diversity Advisory Council	
	GGC Bookstore	
	GGC Honors Program	
	Kaufmann Library	
	SST Study Abroad	
	<b>Time</b>	<b>FACULTY ACTIVITIES (LOCATED ON THE 1<sup>ST</sup> FLOOR)</b>
H1211	2-3pm	<b>Kick it! &amp; Algol, The Demon Star</b> Dr. Battles
H1212	2-3pm	<b>Physics Intern Presentation of Black Holes</b> Dr. Moses
OUTSIDE	12-2pm	<b>Liquid Nitrogen Ice-cream</b> Dr. Rudd
OUTSIDE	12-3pm	<b>Peer Supplemental Instruction (PSI) Information Booth</b> Dr. Anfuso & Dr. Awong-Taylor
H1243	12-3pm	<b>GGC Bird Lab</b> Dr. Malloy
H1210	12-3pm	<b>VR gams</b> Dr. Xu
H1245	2-3pm	<b>The Bone Room</b> Dr. Brown
H1212	12-1pm	<b>Engage students in the class project in a pandemic-altered world</b> Dr. Shao, Dr. Chen, Dr. Pang, Dr. Perell-Gerson, Dr. Li
H1211	12-2pm	<b>Aerospace RSO</b> Dr. Iken
Across from H1242	12-3pm	<b>SNACKS!!!!</b>

The STaRS Committee of the School of Science and Technology wishes to thank President Jann Joseph, Provost George S. Low and Dean Chavonda Mills for their continued and unwavering support of faculty-mentored undergraduate research in the School of Science and Technology. Without this support, none of the student projects highlighted at today's event would be possible.

The STaRS Committee also wishes to express our sincere gratitude to Rachel Barrueta from the Barnes and Noble GGC College Bookstore for providing the prizes for best posters for this year's and past years' competitions. Your support of this event is greatly appreciated.

Finally, the STaRS Committee would like to thank GGC faculty, students and our invited guests for helping make this, our first in-person, post-COVID STaRS event, successful.

We look forward to seeing you all again next year!

	<b>FACULTY &amp; ALMNI POSTERS (LOCATED ON THE 1<sup>st</sup> FLOOR)</b>
35.	<b>The Effect of Specifications Grading on Students' Learning and Attitudes in an Undergraduate Level Cell Biology Course</b> Mary Diaz, Dr. Katzman & Dr. Anzovino
36.	<b>CUREs: part of a holistic approach to learning, inclusivity, and sense of belonging in STEM education</b> Dr. Runck, Dr. Awong-Taylor, Dr. D'Costa, Dr. Leader, Dr. Achat-Mendes, Dr. Anfuso, Dr. Pursell, & Dr. Jamalooden
37.	<b>A CURE in an introductory biology course improves students experimental design skill</b> Dr. D'Costa, Dr. Achat-Mendes, Dr. Awong-Taylor, Dr. Edwards, Dr. Hammonds-Odie, Dr. Uelmen Huey, Dr. Javazon & Dr. Timpfe.
38.	<b>Qualitative Analysis of Bacteria and Biofilmdynamics Inwater Distribution Networks</b> Dr. Ortiz Lugo
39.	
40.	<b>PROGESTERONE AND THE INFLAMMATORY RESPONSE: The Effects of Progesterone Receptor Activation on Nitric Oxide and TNFa Production in RAW 264.7 Cells</b> Margarita Pate, Darien Woodley, Dr. Brandon, Dr. George
41.	<b>B. subtilis sporulation and bio degradation</b> Nouzong Yang, Nicky Bowen Campbell, Dr. Ward & Dr. Kurtz
42.	<b>Water quality and Pathogens</b> Dipal Shah, Diem Thuy Le, Dr. Ward & Dr. Kurtz
43.	<b>Fungal spores</b> Lea McFadden, Patricia Delgado, Dr. Ward & Dr. Kurtz
44.	<b>Fitness Related to Stressor Response and Recovery: Autonomic Nervous System Modulation of Heart Rate</b> Evan Cunningham, Justin Lunt, Luis Sanchez, & Dr. Crabbe
45.	<b>Physical Activity and Dietary Behavior Patterns during the COVID-19 Pandemic</b> Ruth Jones, Sierra Gordon & Dr. Doan
	<b>FACULTY &amp; ALMNI POSTERS (LOCATED ON THE 3<sup>rd</sup> FLOOR)</b>
46.	<b>Biodiesel Synthesis from Campus Waste Oil and Grease using a Deep Eutectic Solvent: Fuel Characterization, Blend Performance and Combustion Analysis</b> Carlove Bourdeau, Evelyn Calina, Lorraine Kadima, Dr. Pursell, Dr. Khan, Dr. Park, Dr. Edmonds
47.	<b>Synthesis, Gelation and Structure Property Relationship Studies of N-(4-Hydroxyphenyl)Alkanamides as Low Molecular Mass Gelators</b> Sandra Farre & Dr. Mallia
48.	<b>Self-assembly, Gelation, and Mechanical Properties of Molecular Gels Based on Tyramine Based Alkanamides and N-(4-hydroxyphenyl)alkanamides as Low Molecular Mass Gelators</b> Jacob Miller & Dr. Mallia
49.	<b>Synthesis, characterization and gelation studies of N-(hydroxyalkyl)alkanamides</b> Janaki Patel & Dr. Mallia
50.	<b>Synthesis, characterization, gelation, and DNA binding molecular docking studies of 9-aminoacridine derivatives</b> Arinzechukwu Aniekwe, Sokhna Ndiaye, Tyler Sawyer, Chelsea Campbell, & Dr. Mallia
51.	<b>Systematic study on the gelation properties of simple alkanolic acid metal salts as low molecular mass gelators</b> Cassandra Dill & Dr. Mallia
52.	<b>Synthesis and Gelation Studies of Anthraquinonylalkanamides as Low Molecular Mass Gelators</b> Erica Lee & Dr. Mallia
53.	<b>Self-assembly, gelation studies and mechanotropic properties of molecular gels based on N-phenyloctadecanamides as gelators</b> Katelyn Galinat & Dr. Mallia
54.	<b>Synthesis, characterization and photo isomerization studies of chalcone derivatives</b> Madeline Faass, Dr. Mallia & Dr. Sloop

55.	<b>Synthesis, self-assembly and gelation studies of ninhydrin based unnatural <math>\alpha</math>-amino acids as low molecular mass gelators</b> Farzana Zerin, Dr. Mallia & Dr. Sloop
56.	<b>Molecular Docking of the Interactions of Fluorinated Heterocyclic Sulfonamides with Human and Plasmodium DHFR</b> Miki Nguyen, Dr. Sloop & Dr. Forlemu
57.	<b>The Binding Modes and Affinities of Sulfonylamide Derivatives Interactions with Glycolytic Enzymes</b> Porshaye Watkins & Dr. Forlemu
58.	<b>The Folate Pathway as Target for Antimalarial Activity: Molecular Docking of Sulfonamides with Plasmodium and Bacterial Dihydropteroate Synthase</b> Emile W Bongkiyung, Dr. Forlemu & Dr. Sloop
59.	<b>Quantitative analysis of vitamin C in 27 fruits and vegetables: A cost-effective home-based chemistry lab</b> Derek Kiddoo & Dr. Jenkins
60.	<b>Lutetium: The History, Source, Properties, and Applications</b> Mary Beth Johnson & Dr. Morton
61.	<b>Ruthenium</b> Mauricio Nunez-Vasquez & Dr. Morton
62.	<b>Niobium</b> Emmanuel Chua & Dr. Morton
63.	<b>Method Development for Educational GC</b> Melissa Molina & Dr. Kirberger
64.	<b>Single-particle characterization of ambient aerosols from Skidaway Island, GA using atomic force microscopy</b> Marlyne Serratos, Tram Cao, Dr. Zimmermann
65.	<b>The Analysis of Heavy Metal Content in the Conasauga, Oostanaula and Coosa Rivers Utilizing the PerkinElmer NexION 350D ICP-MS</b> Whitney Hudson, Chloe Fernandes & Dr. Zimmermann
66.	<b>Measurement of hazardous air pollutants with regard to environmental justice policy in the Atlanta metropolitan region.</b> Drasti Patel, Whitney Hudson, Max Dexter, Jessica Kerrigan, Amber Kimbrew, Denicia Williams, Santessa Young, Dr. Zimmermann & Dr. Young
67.	<b>Synthesis and Characterization of Biofuel using GGC Dining Operations Waste Oil and Grease (O&amp;G)</b> Talib Araim, Jake Bond, Matthew Derosa, Lennox Hamilton, Jorielle King, Ahla Ko, Syed Hyder, Saman Muhammad, Marlyne Serratos, Evan Sheffield, John Vazquez, Anirudh Veludhandi, Nailah Williamson, Dr. Pursell, Dr. Zimmerman, Dr. Park, Dr. Khan, & Dr. Lee
68.	<b>Comprehensive Game-based Learning Modules for CS1</b> Dr. Xu, Dr. Jin, Dr. Park, Dr. Heinz, & Dr. Brannock
69.	<b>Investigating impact of synaptic inputs in seizure models</b> Boima Reuben Massaquoi & Dr. Gunay
70.	<b>A crash course in computational neuroscience for undergraduate students</b> Elijah Noisin, Eman Zaki, Don Charles Sugatapala & Dr. Gunay
71.	<b>Motoneuron synaptic currents in a Drosophila seizure mutant</b> Justin Kiet Vu, Don Charles Sugatapala, & Dr. Gunay
72.	<b>AnalySim: A web platform for collaborative data sharing and analysis</b> Jordan Vincent, Hieu Dinh, Daina Thomas, Dr. Doloc-Mihu & Dr. Gunay
73.	<b>An Open Educational Resource for an Agile Software Engineering Course</b> Dr. Gunay & Dr. Doloc-Mihu
74.	<b>Assessing the Effectiveness of Teaching Programming Concepts through Online</b> Dr. Robertson & Dr. Doloc-Mihu
75.	<b>Student Perspectives on Open Educational Resources</b> Dr. Abraham & Dr. Dekhane





# Georgia Gwinnett COLLEGE

## BUILDING H

FL3

CLASSROOMS & LABS

