## 2022



## April 14, 2022

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

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

	EXTERNA	AL VISITOR TABLES (LOCATED ON THE 1 <sup>ST</sup> FLOOR – H2 ENTRANCE)
	Georgia Sta	ate-Robinson College of Business
	Mercer Un	iversity's Georgia Baptist College of Nursing
	Graduate P	Programs at Morehouse School of Medicine (Graduate Education in Biomedical Sciences)
	MS in Infor	mation Technology at Kennesaw State University
	PCOM Geo	rgia/PCOM South Georgia
	UGA Colleg	ge of Pharmacy PharmD/MS/PhD Programs
	GGC OR	GANIZATIONS TABLES (LOCATED ON THE 1 <sup>ST</sup> FLOOR – H1 ENTRANCE)
	Academic E	Enhancement Center
	Career Dev	relopment and Advising Center
	Counseling	and Psychological Services
	Office of Di	iversity and Equity Compliance's Diversity Advisory Council
	GGC Books	tore
	GGC Honor	rs Program
	Kaufmann	Library
	SST Study A	Abroad
	Time	FACULTY ACTIVITIES (LOCATED ON THE 1 <sup>ST</sup> FLOOR)
H1211	2-3pm	Kick it! & Algol, The Demon Star Dr. Battles
H1212	2-3pm	Physics Intern Presentation of Black Holes
111212	2 00111	Dr. Moses
OUTSIDE	12-2pm	Liquid Nitrogen Ice-cream
		Dr. Rudd
OUTSIDE	12-3pm	Peer Supplemental Instruction (PSI) Information Booth
		Dr. Anfuso & Dr. Awong-Taylor
H1243	12-3pm	GGC Bird Lab
		Dr. Malloy
H1210	12-3pm	VR gams Dr. Xu
H1245	2-3pm	The Bone Room
		Dr. Brown
H1212	12-1pm	Engage students in the class project in a pandemic-altered world Dr. Shao, Dr. Chen, Dr. Pang, Dr. Perell-Gerson, Dr. Li
H1211	12-2pm	Aerospace RSO
		Dr. Iken
Across	12-3pm	SNACKS!!!!!
from		JIVACKS::::
H1242		

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!

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

56.	Molecular Docking of the Interactions of Fluorinated Heterocyclic Sulfonamides with Human and Plasmodium DHFR
	Miki Nguyen, Dr. Sloop & Dr. Forlemu
57.	The Binding Modes and Affinities of Sulfonylamide DerivativesInteractions with Glycolytic Enzymes
37.	Porshaye Watkins & Dr. Forlemu
58.	The Folate Pathway as Target for Antimalarial Activity: Molecular Docking of Sulfonamides with
50.	Plasmodium and Bacterial Dihydropteroate Synthase
	Emile W Bongkiyung, Dr. Forlemu & Dr. Sloop
59.	Quantitative analysis of vitamin C in 27 fruits and vegetables: A cost-effective home-based chemistry lab
	Derek Kiddoo & Dr. Jenkins
60.	Lutetium: The History, Source, Properties, and Applications
	Mary Beth Johnson & Dr. Morton
61.	Ruthenium
	Mauricio Nunez-Vasquez & Dr. Morton
62.	Niobium
	Emmanuel Chua & Dr. Morton
63.	Method Development for Educational GC
	Melissa Molina & Dr. Kirberger
64.	Single-particle characterization of ambient aerosols from Skidaway Island, GA using atomic force
	microscopy
	Marlyne Serratos, Tram Cao, Dr. Zimmermann
65.	The Analysis of Heavy Metal Content in the Conasauga, Oostanaula andCoosa Rivers Utilizing the
	PerkinElmer NexION 350D ICP-MS
	Whitney Hudson, Chloe Fernandes & Dr. Zimmermann
66.	Measurement of hazardous air pollutants with regard to environmental justice policy in the Atlanta
	metropolitan region.
	Drasti Patel, Whitney Hudson, Max Dexter, Jessica Kerrigan, Amber Kimbrew, Denicia Williams, Santessa Young, Dr.
	Zimmermann & Dr. Young
67.	Synthesis and Characterization of Biofuel using GGC Dining Operations Waste Oil and Grease (O&G)
	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.	Comprehensive Game-based Learning Modules for CS1
00.	Dr. Xu, Dr. Jin, Dr. Park, Dr. Heinz, & Dr. Brannock
69.	Investigating impact of synaptic inputs in seizure models
	Boima Reuben Massaquoi & Dr. Gunay
70.	A crash course in computational neuroscience for undergraduate students
	Elijah Noisin, Eman Zaki, Don Charles Sugatapala & Dr. Gunay
71.	Motoneuron synaptic currents in a Drosophila seizure mutant
	Justin Kiet Vu, Don Charles Sugatapala, & Dr. Gunay
72.	AnalySim: A web platform for collaborative data sharing and analysis
	Jordan Vincent, Hieu Dinh, Daina Thomas, Dr. Doloc-Mihu & Dr. Gunay
73.	An Open Educational Resource for an Agile Software Engineering Course
	Dr. Gunay & Dr. Doloc-Mihu
74.	Assessing the Effectiveness of Teaching Programming Concepts through Online
	Dr. Robertson & Dr. Doloc-Mihu
75.	Student Perspectives on Open Educational Resources
	Dr. Abraham & Dr. Dekhane
76.	Developing a chronic dopaminergic neuron depletion adult zebrafish model to investigate the role that
	immune cells play in neuronal regeneration
	Gabriella Tyler & Dr. Hyde



