



UNIVERSITY *of*
LOUISIANA
L A F A Y E T T E[®]

Honors Program
presents the

13th Annual Fall Undergraduate Research Invitational

Monday, November 9th, 2020 & Tuesday, November 10th, 2020
Virtually Via Microsoft Teams Rooms

Participating Schools

Baton Rouge Community College
Grambling State University
Louisiana College
Louisiana State University
McNeese State University
Northwestern State University
Southern University and A&M College
University of Louisiana at Lafayette

This conference is brought to you with the support of the:

University Honors Program
Office of the Vice-President for Research
LaCOEUR
College of Liberal Arts
College of Sciences
College of Engineering
College of Education

Table of Contents

Room Assignments & Schedule	3
Acknowledgments	12
About the University & Honors Program	13
Night 1: Oral Presentation Abstracts	14
Night 1: Poster Presentation Abstracts	17
Room B	17
Room C	22
Night 2: Oral Presentation Abstracts	27
Night 2: Poster Presentation Abstracts	32
Room B	32
Room C	39
Room D	45
Room E	53
Room F	60

Night 1: Monday, November 9, 2020 (Oral Presentations) Biology, Chemistry, Computer Science, & Engineering					
Moderator: Karen Smith					
Room A	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:15	Sarah Bush	Identification of Endolithic Cells During Exploration of Rhodoliths' Endolithic Microenvironment	Night 1 Room A
	6:20	6:35	Joshua Johnson	Analysis of Cyber Attack Techniques to Ordinary Users	Night 1 Room A
	6:40	6:55	Samantha Ritter	Identification of Endolithic Cells During Exploration of Rhodoliths' Endolithic Microenvironment	Night 1 Room A
	6:55	7:10	Chau Vuong	Defining the Louisiana Freshwater Sponge diversity with COX1-R1, COX1-D2 Barcoding: A Database Development Study for Classroom	Night 1 Room A
Break 7:15 – 7:30					
	7:35	7:50	Cazembe Zubari	Biometric Privacy Laws	Night 1 Room A
	7:55	8:10	Matthew Heyer & Rebecca Lee	An overview of species richness and abundance in Louisiana freshwater sponges.	Night 1 Room A
8:15 – 9:00 Optional Discussions & Questions					

Night 1: Monday, November 9, 2020 (Poster Presentations) Biology, Chemistry, Computer Science, & Engineering					
Moderator: Beenish Chaudhry					
Room B	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:10	Jalen Brooks	Differentiating Darknet Traffic from Benign Network Traffic	Night 1 Room B
	6:15	6:25	Jessica Couson	Slow Magnetic Relaxation in Penta-coordinate Cobalt (II) Field-induced Single-ion Magnets (SIMs)	Night 1 Room B
	6:30	6:40	Dante Davis & Bhanu Mullamuri	Simulation of Quantum Cheques Circuits in Five-qubit IBM Quantum Computer	Night 1 Room B
	6:45	6:55	Juan Fierro	Organocatalysis Using Ionic Liquids	Night 1 Room B
	7:00	7:10	Tia Fisher	Simulating Urban Mobility of Smart Cities as Cyber-Physical Systems	Night 1 Room B
Break 7:15 – 7:30					
	7:35	7:45	Rayven Joubert	Data Preprocessing of Big Geological and Hydrological Data Sets	Night 1 Room B
	7:50	8:00	Saeid Ranjbar & Kayla Brumfield	Review of Machine Learning Applications in Psychology	Night 1 Room B
8:05 – 9:00 Optional Discussion & Questioning					

Night 1: Monday, November 9, 2020 (Poster Presentations) Biology, Chemistry, Computer Science, & Engineering					
Moderator: Heather Birdong					
Room C	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:10	Elsa Arroyo, Tary Glover, Ariel Viator (Group)	Identifying Freshwater Sponges Along with Creating a New Database	Night 1 Room C
	6:15	6:25	Cristina Boone	Inducing Spicule Malformations Within Freshwater Sponges by Relocation	Night 1 Room C
	6:30	6:40	Lelia Deville	Flash Tester for Characterization of Solar Cells	Night 1 Room C
	6:45	6:55	Tyler Hayes	Using Python and principal component analysis to define the chemoinformatics of the cola acuminate	Night 1 Room C
	7:00	7:10	Hayle Jonacus	Racial Differences in Rate of Infection and Morbidity by COVID-19 in Louisiana	Night 1 Room C
Break 7:15 – 7:30					
	7:35	7:45	Julia Le Grande	Copper (II) Complexes with Piperazine Appended Symmetrical Pyridyl Arms: DNA Cleavage and Cytotoxicity	Night 1 Room C
	7:50	8:00	Payne Tochet	Biomass Gasification: Catalytic Tar Removal Using Nickel Ceramic Filter	Night 1 Room C
8:20 – 9:00 Optional Discussion & Questioning					

Night 2: Tuesday, November 10, 2020 (Oral Presentations)				Education, Psychology, & Humanities	
Moderator: Jessica Pearce					
Room A	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:15	Kyreil Felton	The Importance of False Beliefs on Drinking Alcohol and Academic Experiences	Night 2 Room A
	6:20	6:35	Natalie Duphinet	Is "Fake News" Just a New Name for Propaganda?	Night 2 Room A
	6:40	6:55	Eden Sliman	"Into the Beyond: This Way for the Gas, Ladies and Gentlemen"	Night 2 Room A
	6:55	7:10	Louise Wells	Attitudes Impacting Accessing Mental Healthcare in African American	Night 2 Room A
Break 7:15 – 7:30					
	7:35	7:50	Deja June & Madison Cobb (Group)	Overcoming Barriers to Teacher Certification: Perspectives of Preservice Teachers at an HBCU	Night 2 Room A
	7:55	8:10	Bailey Davis, Bailee Deville, Nathalie Fortier, Camille Harrington, & Noel Johnson (Group)	Designing a clinical tool for the phonological assessment of Louisiana French.	Night 2 Room A
8:15 – 9:00 Optional Discussion & Questioning					

Night 2: Tuesday, November 10, 2020 (Poster Presentations)				Education, Psychology, & Humanities	
Moderator: Christine Briggs					
Room B	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:10	Emily Andries	Shaping our minds and muscles	Night 2 Room B
	6:15	6:25	Jules Blevins	Throwing Out Out Bursts	Night 2 Room B
	6:30	6:40	Jean-Marie Boullion	Keeping Our Classmates Close ... From a Distance	Night 2 Room B
	6:45	6:55	Briana Campbell	Positive Reinforcement in the Classroom	Night 2 Room B
	7:00	7:10	Emily Delahoussay	Implementing Movement/Exercise and Class Games to Increase Student Participation	Night 2 Room B
Break 7:15 – 7:30					
	7:35	7:45	Alyssa Hebert	Kindness is Key	Night 2 Room B
	7:50	8:00	Hannah Laporte	Blurt No More!	Night 2 Room B
	8:05	8:15	Natalie Leger	Points for Positivity	Night 2 Room B
	8:20	8:30	Rikki Love	Transitions made easy	Night 2 Room B
	8:35	8:45	Brooke Savoy	Restroom Breaks: Helpful or Hurtful?	Night 2 Room B
8:50 – 9:00 Optional Discussion & Questioning					

Night 2: Monday, November 10, 2020 (Poster Presentations)				Education, Psychology, & Humanities	
Moderator: Bobbie DeCuir					
Room C	Start	End	Presenter(s)		Link to Room
	6:00	6:10	Emma Terpening Falgout	Ready Readers Rise at Home	Night 2 Room C
	6:15	6:25	Cailin Thrahan	Play Hard, Work Hard	Night 2 Room C
	6:30	6:40	Lydia Tramonte	Implementing Physical Activity Brain Breaks to Increase Student Focus Time	Night 2 Room C
	6:45	6:55	Danielle Vercher	1, 2, 3, Look at Me!	Night 2 Room C
	7:00	7:10	Erin Paulk	Motivate to Accelerate	Night 2 Room C
Break 7:15 – 7:30					
	7:35	7:45	Natalie St. Martin	Engagement and Participation	Night 2 Room C
	7:50	8:00	Daphne Trahan	Bright Lights, Bright Minds	Night 2 Room C
	8:05	8:15	Louby Trahan	The Desk Standoff	Night 2 Room C
8:20 – 9:00 Optional Discussion & Questioning					

Night 2: Tuesday, November 10, 2020 (Poster Presentations)				Education, Psychology, & Humanities	
Moderator: Brooke Harrington					
Room D	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:10	Blair Bergeron	Prioritize Plan Stressless	Night 2 Room D
	6:15	6:25	Leslie Briggs	Advanced Readers Engagement and Interest	Night 2 Room D
	6:30	6:40	Madeline Comeaux	Mac and Cheese, Focus Please!	Night 2 Room D
	6:45	6:55	Allison Convoy	Effectively Engaging Students in Learning Centers during RTI (Response to Intervention)	Night 2 Room D
	7:00	7:10	Sophia Cramer	Class Dojo and Motivation	Night 2 Room D
Break 7:15 – 7:30					
	7:35	7:45	Emily Gallet	Thinking About Your Thinking	Night 2 Room D
	7:50	8:00	Ryan Hanks	Students Learn by Teaching	Night 2 Room D
	8:05	8:15	Taylor Lanclos	Go Nuts for Go Noodle	Night 2 Room D
	8:20	8:30	Heather Legnon	Cue More Participation	Night 2 Room D
	8:35	8:45	Emily Lohman	Proactive Learning	Night 2 Room D
8:50 – 9:00 Optional Discussion & Questioning					

Night 2: Tuesday, November 10, 2020 (Poster Presentations)				Education, Psychology, & Humanities	
Moderator: Heather Stone					
Room E	Start	End	Presenter(s)	Presentation Title	Link to Room
	6:00	6:10	Caroline Fields	Tech-y Teachers	Night 2 Room E
	6:15	6:25	Jill Johnson	Extrinsic Motivation in the High School Classroom	Night 2 Room E
	6:30	6:40	Kristen Arnaud Latiolas	Accelerated comprehension: An approach to decrease student Inattentiveness in adolescents	Night 2 Room E
	6:45	6:55	Wesley Lejune	Well I Guess Everyone Else Is Doing It: A Study on the Effects of Group Competition on Student Participation	Night 2 Room E
	7:00	7:10	Emily Miller	Brain Breaks in the Secondary Classroom	Night 2 Room E
Break 7:15 – 7:30					
	7:35	7:45	Chloe Moreau	Integrating Meditation in the Classroom	Night 2 Room E
	7:50	8:00	Marquis Spearman	Uniformity Calls for Uniforms	Night 2 Room E
	8:05	8:15	Ethan Venable	Classroom Discourse: How Does Communication Affect High Order Thinking Skills	Night 2 Room E
	8:20	8:30	Micaela Washington	Dealing with the Awkward Silence: How to Increase Student Participation by using Interactive Formative Assessment Strategies.	Night 2 Room E
8:35 – 9:00 Optional Discussion & Questioning					

Night 2: Tuesday, November 10, 2020 (Poster Presentations)				Education, Psychology, & Humanities	
Moderator: Amy Brown					
Room F	Start	End	Presenter(s)		Link to Room
	6:00	6:10	Caroline Crawford	An Endogenous Solution for the Pension Fund Crisis	Night 2 Room F
	6:15	6:25	Wade Johnson	Stress shapes the associations of attachment anxiety with depression, anxiety, and somatic symptoms.	Night 2 Room F
	6:30	6:40	Sierra Laing	Presence of Apis and Native Pollinators in Agricultural Rosaceae	Night 2 Room F
	6:45	6:55	Olivia Deroun, Callie Pitre, & Kathie Li (Group)	Intergenerational Continuity of Adverse Childhood Experiences across Generations	Night 2 Room F
	7:00	7:10	Krystal Dean & Tayla Weary (Group)	Why Don't People Die? An Exploration of Factors that Might Influence the Production of Death-Related Language	Night 2 Room F
Break 7:15 – 7:30					
	7:35	7:45	Madison Knott & Aidan Guidry (Group)	Differences in Adverse Childhood Experiences, Attachment Insecurity, and Their Association between Two Generations	Night 2 Room F
	7:50	8:00	Haley Dunagain & Kade Theriot (Group)	Bystander Intervention: Greek and Non-Greek Members' Attitudes and Opportunities to Intervene	Night 2 Room F
	8:05	8:15	Prynceston Fant, Madeline Jones, & Hunter Harrington (Group)	The Association of Adverse Childhood Experiences with Anxiety Symptoms Varies with Perceived Level of Stress	Night 2 Room F
	8:20	8:30	Bonnie Lahman, Olivia Frey, & Mikaila Kinsland (Group)	Childhood Adversity and Well-being: Differences between College Students and Their Primary Caregivers	Night 2 Room F
8:35 – 9:00 Optional Discussion & Questioning					



Acknowledgements

I would like to take the opportunity to thank a number of people who made this possible. No undertaking this large is ever created by one person. The thanks go to Dr. Ramesh Kolluru, Vice President for Research, Innovation, and Economic Development, Dr. Terrence Chambers, and the Undergraduate Research Committee, without whose help this would never have happened. Thanks to the staff at Honors, Mr. Ryan Winters, Mrs. Renauda Helaire, Mr. Ethan Gautreaux, and Ms. Baylee Guillory for their continuous support and service to this project. Thank you also to our esteemed college deans for their unwavering enthusiasm and support. Additional thanks to the faculty for their tireless efforts in helping and encouraging students to pursue undergraduate research. I thank all of our volunteer moderators who have dedicated personal time and effort to help this virtual event run smoothly. Lastly, we wish to acknowledge all the time and energy that the students who attend this conference expend to create their work and share it.

About the University of Louisiana at Lafayette

Founded in 1900, the University of Louisiana at Lafayette (then the Southwestern Louisiana Industrial Institute, the largest member of the University of Louisiana System, is a public institution of higher education offering Bachelor's, Master's, and Doctoral degrees. Within the Carnegie classification, UL Lafayette is designated as a research university with high research activity. The University's academic programs are administered by the Colleges of Arts, Education, Engineering, General Studies, Liberal Arts, Nursing & Allied Health Professions, Sciences, the B.I. Moody III College of Business Administration, and Graduate School.

The University is dedicated to achieving excellence in undergraduate and graduate education, in research, and in public service. For undergraduate education, this commitment implies a fundamental subscription to general education, rooted in the primacy of the traditional liberal arts and sciences as the core around which all curricula are developed. The graduate programs seek to develop scholars who will variously advance knowledge, cultivate aesthetic sensibility, and improve the material conditions of humankind. The University reaffirms its historic commitment to diversity and integration.

Thus, through instruction, research, and service, the University of Louisiana at Lafayette promotes regional economic and cultural development, explores solutions to national and world issues, and advances its reputation among its peers.

About the University Honors Program

The Honors Program at the University of Louisiana at Lafayette provides serious and highly motivated undergraduate students with an enhanced set of educational opportunities so that those students who seek added dimension, enrichment, and challenge in their studies may find realization of their potential. In a society where Honors programs are short-lived and superior education is no longer highly valued, UL Lafayette stands proud as one of the earliest established programs of its kind in Louisiana.

With over 1,500 students, the UL Lafayette Honors Program, one of the largest in the state, is an active member of the Louisiana, Southern Regional, and National Honors Councils. We are known nationwide as leaders in collegiate Honors education. The program is based on the philosophy *per sapientiam felicitas* – “through knowledge, happiness”.

Oral Presentations
Monday, November 9th, 2020 6:00 pm to 9:00 pm
Listed in order of Schedule

Analysis of Cyber Attack Techniques to Ordinary Users

Room & Time: Room A, 6:00 p.m. to 6:15 p.m.

Presenter: Joshua Johnson

Area of Study: Computer Science

Advisor/Co-Author: Prasanthi Sreekumari

School: Grambling State University

Abstract: As technology advances so do the way hackers can compromise your data. While many consumers were enjoying their new gifts and purchase of technology, many may not know the alarming rate of certain techniques hackers used to hack those devices. In this research, 48 techniques of attacks are being studied in order to follow trends of attack being used. Over a ten-month period data was collected and the amount of times per month the attack was performed. The main goal of this study is to better understand how hackers are able to provide a higher frequency of a certain attack and figure out how to prevent them from being successful.

***Defining the Louisiana Freshwater Sponge diversity with COX1-R1, COX1-D2
Barcoding: A Database Development Study for Classroom***

Room & Time: Room A, 6:20 p.m. – 6:35 p.m.

Presenter: Chau Vuong

Area of Study: Biology

Advisor/Co-Author: Dr. Mary Miller

School: Baton Rouge Community College

Abstract: DNA barcoding of freshwater sponges has proved to be difficult for students due to the limited sequences found in the NCBI database. This difficulty stems from the inconsistent use of primers in the literature and the lack of dissimilarity in the targeted genome. The primers chosen for this study were COX1-R1 and COX1-D2. These target the cytochrome oxidase gene and an extension intron that provides variability to differentiate organisms at the species level. To contribute to the database, 195 freshwater sponge samples were collected in a Louisiana survey. The sponges were initially identified based on their spicule and gemmule morphology using standard light microscopy and SEM. Forward and reverse sequences were aligned using MEGA software to provide sequences to deposit in the database. This study provides reference sequences for the most

commonly found freshwater sponges in Louisiana: *A. argyrosperma*, *E. fluviatilis*, *E. fragilis*, *H. baileyi*, *R. cerebellata*, *R. ryderi*, *S. alba*, *S. lacustris*, *T. horrida*, *T. leidyi*, *T. pennsylvanica*.

Biometric Privacy Laws

Room & Time: Room A, 6:40 p.m. to 6:55 p.m.

Presenter: Cazembe Zubari

Area of Study: Computer Science & Digital Technologies

Advisor/Co-Author: Prasanthi Sreekumari

School: Grambling State University

Abstract: Biometric technologies are advancing at a fast rate. As with most any new technology, laws governing this technology are being developed as quickly as the technology. However, at least three states have already enacted privacy laws related to biometric technology: Illinois, Texas, and Washington. Other states are considering similar legislation. This project presents the biometric privacy laws in different states and identifies the areas in which existing laws share common features or requirements

Identification of Endolithic Cells During Exploration of Rhodoliths' Endolithic Microenvironment

Room & Time: Room A, 6:55 p.m. to 7:10 p.m.

Presenter(s): Sarah Bush & Samantha Ritter

Area of Study: Biology

Advisor/Co-Author: William Schmidt, Suzanne Fredericq & Sherry Krayesky-Self

School: University of Louisiana at Lafayette

Abstract: Within rhodolith-forming crustose coralline algae we find ample endolithic eukaryotic life. Neither the extent of endolithic diversity, nor the scope of the endolithic microenvironment (ELME) is well understood. We continue to culture and describe such endolithic cells and compare them to cells previously identified by our group. We are employing new equipment and are becoming more efficient at establishing cultures and at identifying endolithic cells.

An overview of species richness and abundance in Louisiana freshwater sponges.

Room & Time: Room A, 7:35 p.m. to 7:50 p.m.

Presenter: Matthew Heyer & Rebecca Lee

Area of Study: Biology

Advisor/Co-Author: Dr. Mary Miller

School: Baton Rouge Community College

Abstract: Freshwater sponges are environmental health indicators as they are sensitive to changes within water systems. Observing the freshwater sponge population can predict how well the water system can filter biological contaminants from surrounding systems. The last extensive survey of the freshwater sponge population in Louisiana was conducted in 1969. The purpose of this study was to provide a baseline of species richness and abundance for future projects.

Building an information ‘backbone’ for freshwater sponges is paramount to setting concrete baselines, which in turn will aid in better predictive analysis to determine the environmental, chemical or physical variables driving the presence or absence of freshwater sponges.

The current study began in June of 2019, spanning 40 of 64 parishes that have had freshwater sponge samples collected from 85 individual sites within Louisiana. Identification methods such as scanning electron microscopy, DNA extraction, and sequencing have been used to confirm the species of collected samples and has thus far resulted in 11 different species of freshwater sponge in Louisiana. The species confirmed, as a result of this study are *A. argyrosperma*, *E. fluviatilis*, *E. fragilis*, *D. radiospiculata*, *H. baileyi*, *R. cerebellata*, *R. ryderi*, *S. lacustris*, *T. horrida*, *T. leidyi*, and *T. pennsylvanica*. *T. horrida* was found to show the highest species abundance in the state of Louisiana with 21 sites. The highest level of species richness at any given site has been 4 species. The findings of this study allow for future research to be conducted on topics such as factors that negatively or positively impact freshwater sponge abundance.

End of Room A

Poster Presentations

Monday, November 9th, 2020 6:00 pm to 9:00 pm

Listed in order of Schedule

Differentiating Darknet Traffic from Benign Network Traffic

Room & Time: Room B, 6:00 p.m. to 6:10 p.m.

Presenter: Jalen Brooks

Area of Study: Computer Science

Advisor/Co-Author: Dr. Yaser Banadaki

School: Southern University A&M College at Baton Rouge

Abstract: This paper uses a systematic approach to assess the capability of machine learning algorithms to be employed for analyzing, testing, and evaluating darknet traffic. The Darknet is a subnet of the Deep Web that consists of unused internet address space where there are no legitimate, active servers or hosts. Trace communications remain a challenge because the darknet is a decentralized network. However, the network traffic from our dataset can be used to predict whether traffic is from the darknet. This paper presents a two-layer approach to distinguish benign traffic from darknet traffic by analyzing the flow of network packets using machine learning algorithms. The machine learning model differentiates benign traffic from darknet traffic and flags any traffic that comes from an IP address within the dark web as malicious activities. The CICDarknet2020 dataset provides various categories of network traffic datasets, including Audio Streaming, Browsing, Chat, Email, P2P, File Transfer, Video Streaming, and VOIP. Our machine learning model uses various features containing information about the traffic: packet flow ID's, source & destination IP's, flow durations, forward/backward packets data, TCP flags, etc., to distinguish malicious darknet traffic from regular benign activities. The capability of machine learning classifiers is evaluated considering their accuracy, precision, recall, and F-score, confusion matrices, ROC curves, and feature importance.

Slow Magnetic Relaxation in Penta-coordinate Cobalt (II) Field-induced Single-ion Magnets (SIMs)

Room & Time: Room B, 6:15 p.m. to 6:25 p.m.

Presenter: Jessica Couson

Area of Study: Chemistry

Advisor/Co-Author: Salah S. Massoud, Franz A. Mautner, Michal Čajan, Zdeněk Trávníček

School: University of Louisiana at Lafayette

Abstract: Two penta-coordinate complexes of the general formula $[\text{Co}(\text{L}^n)(\text{NCS})]\text{ClO}_4$, where $\text{L}^1 = \{\text{bis}[(3,5\text{-dimethyl-1H-pyrazol-1-yl)ethyl}]-(3,4\text{-dimethoxypyridin-2-yl)methyl}\}$ amine and $\text{L}^2 = \{\text{bis}[(3,5\text{-dimethyl-1H-pyrazol-1-yl)ethyl}]-(4\text{-methoxy-3,5-dimethylpyridin-2-yl)methyl}\}$ -amine, have been synthesized and characterized. Each of the cobalt(II) atoms is penta-coordinated in the $\{\text{CoN}_5\}$ donor set with a distorted square-pyramidal geometry in $[\text{Co}(\text{L}^1)(\text{NCS})]\text{ClO}_4 \cdot \text{MeOH}$ (1), while the vicinity of the central atom can be described as a distorted trigonal-bipyramidal in $[\text{Co}(\text{L}^2)(\text{NCS})]\text{ClO}_4$ (2). Differences in interatomic parameters among the cobalt(II) and donor atoms in 1 and 2 have a definite impact on magnetic features of both the compounds. The complexes show an easy-axis magnetic anisotropy ($D = -38.5 \text{ cm}^{-1}$ for 1 and $D = -8.5$ for 2), and both complexes reveal a large rhombicity with $E/D = 0.21$ for 1 and $E/D = 0.29$ for 2. The frequency dependent out-of-phase susceptibility has been observed in external magnetic field ($B_{dc} = 0.1 \text{ T}$) revealing the following parameters of slow relaxation of magnetization for 1: energy of the spin reversal barrier, $U_{\text{eff}} = 16.0 \text{ cm}^{-1}$ ($U_{\text{eff}}/k_B = 23.0 \text{ K}$) and the relaxation time, $\tau_0 = 1.28 \times 10^{-6} \text{ s}$. In case of complex 2, no maxima of frequency dependent out-of-phase susceptibility have been observed and thus, the value of $U_{\text{eff}} = 17 \text{ cm}^{-1}$ has been estimated using the expression of $U_{\text{eff}} = |D| \times (S^2 - 1/4)$. The results demonstrated that the degree of substitution and type of substituents on the pyridyl moieties of the used tripodal ligands (L^1 and L^2) in these penta-coordinate cobalt(II) complexes have significant impact on structural and magnetic features.

Simulation of Quantum Cheques Circuits in Five-qubit IBM Quantum Computer

Room & Time: Room B, 6:30 p.m. to 6:40 p.m.

Presenters: Dante Davis & Bhanu Mullaamuri

Area of Study: Computer Science

Advisor/Co-Author: Dr. Yaser Banadaki

School: Southern University A&M College at Baton Rouge

Abstract: Quantum computers could spur breakthroughs in computer science, computational modeling, artificial intelligence, commerce, materials science, chemistry, and physics. A cheque is a printed document issued by an account holder to order the bank to pay a specified amount of money to the party carrying the cheque. It is much essential as taking a huge amount of money physically is not safe. However, this physical form of cheque still faces the problem of forgery and misuse. In order to avoid physical handling as well as the delays associated with manual processing of cheques and, most importantly, to improve the security of the transaction, a concept of quantum cheques is proposed. By using a quantum

cheque, it is estimated that any sort of forgery is almost impossible. In the current work, the quantum cheque transaction is simulated and run experimentally by the IBM quantum experience platform using 5-qubit quantum computers. For this, quantum circuits for quantum cheque generation and quantum cheque verification are designed and tested. Our results are verified by theoretical results achieved by simulation.

Organocatalysis Using Ionic Liquids

Room & Time: Room B, 6:45 p.m. to 6:55 p.m.

Presenter: Juan Fierro

Area of Study: Chemistry & Molecular Biology

Advisor/Co-Author: Vidura Thalangamaarachchige, Kiran Boggavarapu, Niwanthi Dissanayake Ralalage

School: McNeese State University

Abstract: Ionic Liquids (ILs) possess useful properties such as high thermal stability, non-flammability, and unique solution features. Studies have shown that imidazolium-based ILs are used as pre-catalysts for N-heterocyclic carbene (NHC) catalyzed reactions, whereby the catalyst is obtained by deprotonation. When treated with basic anions such as acetates, Imidazolium-based ILs undergo equilibrium to generate carbenes, used to catalyze benzoin condensation reactions. The focus of this study is to generate a series of ILs to understand the effect as the length, aromaticity, and size of the alkyl group of the imidazolium ring is altered, subsequently affecting the solubility and temperature of the benzoin reactions in which the ILs is being used. The goal is to target the most efficient ILs to be used in the synthesis of α -Hydroxy ketones (benzoin derivatives); these compounds are known for their utility in the pharmaceutical industry as anti-depressants, antibacterial, anti-inflammatory, diuretic, and sedatives agents.

Simulating Urban Mobility of Smart Cities as Cyber-Physical Systems

Room & Time: Room B, 7:00 p.m. to 7:10 p.m.

Presenter: Tia Fisher

Area of Study: Computer Science

Advisor/Co-Author: Dr. Xiangyu Meng, Shaopan Guo

School: Baton Rouge Community College

Abstract: Urban mobility is an important factor for the economic productivity, life quality and access to basic health services and education. Modern cities are facing unprecedented challenges for sustainable development, especially energy crisis, traffic congestion, and air pollutions. Connected and autonomous vehicles (CAVs) are considered as the driving change for smart cities, providing an intriguing opportunity for increased safety, increased efficiency in energy consumption, and

lower congestion in urban traffic. The purpose of this research is to simulate the urban mobility of future smart cities as cyber-physical systems. The software SUMO is used for traffic simulation and analysis of the performance of a four-arm signalized intersection. From each direction, the identical volume of traffic approaches the intersection but in different vehicle composition: conventional cars from the west, autonomous vehicles (AVs) from the north, a mix of AVs and CAVs from the east, and CAVs from the south. The data collected from the simulation are then used to confirm the positive impact of AVs and CAVs in terms of the average stops per vehicle and the fuel consumption of the vehicles. We have continued to build a hardware testing environment using Micro:bit and Ozobot. It shows that vehicle-to-vehicle (V2V) communication and vehicle-to-infrastructure (V2I) communication could be realized by radio in Micro:bit and by color coding in Ozobot, respectively. Deployment of CAVs is one viable way to lead to environmentally sustainable and economically successful smart cities.

Data Preprocessing of Big Geological and Hydrological Data Sets

Room & Time: Room B, 7:35 p.m. to 7:45 p.m.

Presenter: Rayven Joubert

Area of Study: Computer Science & Geology

Advisor/Co-Author: Soha Ghaemimood, Yuqi Song, Frank T.-C. Tsai, Dr. Yaser Banadaki

School: Southern University A&M College at Baton Rouge

Abstract: In this study, the implementation of the image processing and optical character recognition techniques are investigated to convert a large number of handwritten geotechnical information into the spreadsheets to be further analyzed for groundwater modeling and study for the Southeastern US region. The automated procedure was successfully tested to convert the scanned data into images, crop the images to grab the desired pieces of information, and convert the data from the image format to ASCII files. The proposed method was proved to be highly promising for efficient management of the unused scientific data in the form of scanned handwritten documents. The approach presented in this paper significantly reduces data manipulation time and accelerates the big data preparation to train an accurate and comprehensive machine learning model.

Review of Machine Learning Applications in Psychology

Room & Time: Room B, 7:55 p.m. to 8:00 p.m.

Presenters: Kayla Brumfield & Saeid Ranjbar

Area of Study: Computer Science & Psychology

Advisor/Co-Author: Saied Ranjbar, Dr. Yaser Banadaki

School: Southern University A&M College at Baton Rouge

Abstract: Rapid technological advances in digitization and data analytics reshape our society and impact various scientific disciplines. Artificial Intelligence (AI) methods are already improving the areas that directly impact humans, such as psychology and medical diagnosis. Psychology is the science of mind and behavior and tries to explain the causal mechanisms that give rise to learning behavior. Machine learning is a subset of AI that has recently demonstrated an immense potential to enhance diagnostic and intervention research in psychology. The development of assessment and prediction tools that can accurately predict human behavior is one of the most exciting machine learning applications in psychological science. This paper provides a brief review of machine learning applications in various psychological research such as autism, learning disability, and depression. The paper also highlights the usefulness of machine learning methods, the current limitations of machine learning approaches, and provide evidence of their potential impacts on future clinical translation and mental illness diagnosis.

End of Room B

Identifying Freshwater Sponges Along with Creating a New Database**Room & Time:** Room C, 6:00 p.m. to 6:10 p.m.**Presenters:** Elsa Arroyo, Tary Glover, Ariel Viator**Area of Study:** Biology**Advisor/Co-Author:** Dr. Mary Miller**School:** Baton Rouge Community College

Abstract: Freshwater sponges are widely distributed throughout the world. Freshwater sponges are sessile invertebrates, living in rivers, lakes, or slow streams. They filter water flow through their bodies to obtain nutrients. In a 1969 study, Dr. Michael Poirrier at Louisiana State University conducted a freshwater sponge survey in Louisiana and identified the species strictly on morphological characteristics. Due to the limitations at the time, no molecular work was conducted in the original study. In the current survey being conducted in Dr. Miller's lab, the same morphological techniques from Poirrier's study are being used with the addition of molecular data for identification. The purpose of this study is to identify freshwater sponges using a new molecular database developed using Louisiana freshwater sponges. Since June 2019, over 125 sites have been surveyed and over 160 sponge samples have been collected. DNA was extracted, and a portion of the cytochrome oxidase gene was sequenced. Sequences were checked and edited for ambiguities using the MEGA X (Molecular Evolutionary Genetics Analysis) software. Maximum-likelihood phylogenetic trees were then constructed using Muscle alignments within the MEGA X software. NCBI (National Center for Biotechnology Information) BLAST was then used to further confirm the species on the molecular level. Throughout the study over 150 Louisiana freshwater sponges were identified. The development of this database has been tested to be used as an identification tool for freshwater sponges in Louisiana. It will be used by future student interns and by students who are conducting freshwater sponge research as part of their course work.

Inducing Spicule Malformations Within Freshwater Sponges by Relocation**Room & Time:** Room C, 6:15 p.m. to 6:25 p.m.**Presenter:** Cristina Boone**Area of Study:** Biology**Advisor/Co-Author:** Dr. Mary Miller**School:** Baton Rouge Community College

Abstract: Freshwater sponges are not only common in everyday waterways but also act as environmental health indicators. In order to use these organisms as indicators more research and data need to be collected. Spicule malformations are the focal point of this study. Spicules are microscopic elements that make up the majority of the sponge's body.

Malformations in the spicules have been observed in previous studies when a sponge is exposed to certain environmental factors. The purpose of this study is to induce malformations by relocating a sponge specimen to a different environment with different nutrient availability. This study will help improve the database on how the sponges can be used as environmental health indicators. In this study freshwater sponges were relocated, measured, and sampled every day for three weeks. The malformations were documented as well as the frequency of their appearance. The tissue of the sponge was also measured and photographed over time. Water analysis was also conducted to determine the impact of the water quality on the malformations. After three weeks the relocated specimens were documented to have a decrease in sponge tissue and an increase in frequency of malformations. Interestingly, the sponges were documented to have a higher frequency of a certain type of malformation depending on the location they were relocated to. The data we have collected can be set into a database of indicators to help understand an environment depending on the sponge samples. Additionally, sponge tissue was also preserved for RNA extraction to further understand gene expression related to the malformations.

Flash Tester for Characterization of Solar Cells

Room & Time: Room C, 6:30 p.m. to 6:40 p.m.

Presenter: Lelia Deville

Area of Study: Mechanical Engineering

Advisor/Co-Author: Dr. Terrence Chambers, Charlyne Peltier, Shelbie Cormier, Delaney Vallo, Connor Green

School: University of Louisiana at Lafayette

Abstract: To allow for further expansion of research, the Photovoltaic Applied Research and Testing, or PART, Lab has requested the design, build, and testing of a flash tester for solar cells. This device produces a flash at a wavelength of light ranging from 340-840 nm. The excitation causes the solar cell to begin producing current and voltage which is then measured and mapped on an IV curve. IV curves give vital information about the efficiency of the performance of a solar cell. This device can be used to pilot new technologies without making any commitment to a large, expensive purchase. The device's size allows for it to be used for demonstrative and educational purposes.

Using Python and principal component analysis to define the chemoinformatics of the cola acuminata

Room & Time: Room C, 6:45 p.m. to 6:55 p.m.

Presenter: Tyler Hayes

Area of Study: Bioinformatics/ Biology/ Computer Science

Advisor/Co-Author: Dr. Wesely Gray, Dr. Shuju Bai, Dr. Yaser Banadaki, Tyler M. Hayes, Alexis M. Thornton, Marios Giannakis, Levi Garraway, Angela N. Brooks

School: Southern University and A&M College

Abstract: Cancer is an enduring problem for the world. Once it is inside the body, it causes cells to grow uncontrollably. Scientists have conducted research for years to find a cure for cancer. Among their research, there is a plant native to Jamaica and commonly used to flavor beverages. The cola acuminata also known as the “bizzy nut” has properties that hinder cancer cell growth. My peers have made 5 extracts of the bizzy nut and quantified them in a high-powered liquid chromatograph (HPLC). One extract has shown to have more anti-cancer activity than the others. We want to know what is in that extract that gives it the ability to hinder cancer cell growth, but the HPLC has generated a lot of data with multiple features associated with it. Analyzing the data is too difficult by hand so we are using a form of dimension reduction known as principal component analysis (PCA). More specifically, PCA with Python a programming language that allows us to analyze and visualize the data that we have gathered with relative ease. By using PCA and Python we aim to reduce the number of features that we observe and single out the features that contribute to its anticancer activity.

Racial Differences in Rate of Infection and Morbidity by COVID-19 in Louisiana

Room & Time: Room C, 7:00 p.m. to 7:10 p.m.

Presenter: Haley Joncas

Area of Study: Biology

Advisor/Co-Author: Dr. Margaret E. Cochran

School: Northwestern State University of Louisiana

Abstract: Minorities and low-income populations are at higher risk for SARS-CoV-2 infection and COVID-19 mortality due in part to their higher employment in essential businesses and crowded housing, which increase the likelihood of exposure and possibility of infection. Using summary data from the Louisiana Department of Health, distributions of COVID-19 infection and mortality among Black, White, and Other populations were compared for seven parishes across Louisiana and for the state as a whole. Six parishes and the state data had uneven distributions in mortalities between the racial groups. In all parishes and the state, the rate of infection was much higher in the Other population than in the Black and White populations. Such differences suggest the need for more targeted prevention and treatment and are troubling because not only can COVID-19 infection be fatal, it has been linked to serious long-term damage to the heart, lungs, and brain.

Copper (II) Complexes with Piperazine Appended Symmetrical Pyridyl Arms: DNA Cleavage and Cytotoxicity

Room & Time: Room C, 7:35 p.m. to 7:45 p.m.

Presenter: Julia Le Grande

Area of Study: Biology/ Cancer Biology

Advisor/Co-Author: Dr. Salah Massoud , Febee R. Louka, Sebastian D. Kettenmann, Yvonne Nossol, Franz A. Mautner, Nora Kulak

School: University of Louisiana at Lafayette

Abstract: Five-coordinate Cu(II) complexes, $[\text{Cu}(\text{Ln})\text{X}]\text{ClO}_4/\text{PF}_6$, where Ln = piperazine ligands bearing two pyridyl arms and X = ClO_4^- for Ln = L1 (1- ClO_4), L2 (2- ClO_4), L3 (3- ClO_4), L6 (6- ClO_4) as well as $[\text{Cu}(\text{L1})\text{Cl}]\text{PF}_6$ (1-Cl), (4-Cl) and (5-Cl) have been synthesized and characterized by spectroscopic techniques. The molecular structures of the last two complexes were determined by X-ray crystallography. In aqueous acetonitrile solutions, molar conductivity measurements and UV-Vis. spectrophotometric titrations of the complexes revealed the hydrolysis of the complexes to $[\text{Cu}(\text{Ln})(\text{H}_2\text{O})]^{2+}$ species. The biological activity of the Cu(II) complexes with respect to DNA cleavage and cytotoxicity was investigated. At micromolar concentration within 2 h and pH 7.4, DNA cleavage rate decreased in the order: 1-Cl \approx 1- ClO_4 > 3- ClO_4 \geq 2- ClO_4 with cleavage enhancements of up to 23 million. Complexes 4-Cl, 5-Cl and 6- ClO_4 were inactive. In order to elucidate the cleavage mechanism, the cleavage of bis(4-nitrophenyl)phosphate and ROS quenching studies were conducted. The mechanistic pathway of DNA cleavage depends on the ligand's skeleton: while an oxidative pathway was preferable for 1-Cl/1- ClO_4 , DNA cleavage by 2- ClO_4 and 3- ClO_4 predominantly proceeds via a hydrolytic mechanism. Complexes 1- ClO_4 , 3- ClO_4 and 5-Cl were found to be cytotoxic against A2780 (IC₅₀ 30-40 μM). In fibroblasts, the IC₅₀ values were much higher; for 3- ClO_4 with no toxic effect suggesting a cancer-cell selective cytotoxicity.

Biomass Gasification: Catalytic Tar Removal Using Nickel Ceramic Filter**Room & Time:** Room C, 7:50 p.m. to 8:00 p.m.**Presenter:** Payne Tochet**Area of Study:** Chemical Engineering**Advisor/Co-Author:** Dr. Prashanth Buchireddy, Devin Peck**School:** University of Louisiana at Lafayette

Abstract: Biomass gasification is a technique that reacts oxygen or steam with biomass at high temperatures to produce hydrogen and carbon monoxide (syngas). This process involves the partial oxidation of biomass as opposed to combustion, which mainly produces carbon dioxide and water which are not the desired products of gasification. This syngas can be used to produce electricity, transportation fuels, heat and power through combustion, and other specialty chemicals. Along with syngas, there are byproducts that are produced such as tars and particulates. If these tars are not removed, they can condense and cause clogging and damage in downstream equipment. Leaving the tars unconverted also lowers the efficiency of the process as they can also be converted into syngas. The objective of this study is to not only remove tars and particulates in a single step, but also to convert tar into more syngas creating a more efficient and cost-effective method of biomass gasification. A nickel impregnated ceramic filter is used to separate particulates via filtration while also producing more syngas by having the tar react with the nickel on the filter. At this point in the study, the main focus is on tar conversion. The tar is represented by a simulant molecule, naphthalene, because it is commonly found in syngas produced from gasification as well as being one of the most stable compounds found in tar, therefore being one of the most difficult to convert. The experiments have used 2, 5, 8, 15, and 40 weight percent nickel and has seen as much as 80% reduction of naphthalene. The high surface area of the ceramic filter makes it ideal for catalyst support. The filter is also highly porous which leads to minimal mass transfer limitations and a low pressure drop.

End of Room C

Oral Presentations
Tuesday, November 10th, 2020 6:00 pm to 9:00 pm
 Listed in order of Schedule

The Importance of False Beliefs on Drinking Alcohol and Academic Experiences

Room & Time: Room A, 6:00 p.m. to 6:15 p.m.

Presenter: Kyreil Felton

Area of Study: Criminal Justice

Advisor/Co-Author: Dr. William Chernoff, Claire Leblanc, Micah Brown, Landon Benoit, Lynzeryus Railey

School: Southeastern Louisiana University

Abstract: Alcohol companies target young adults and college students, fabricating a need to drink in their minds long before they are even legally allowed to consume alcoholic beverages. Young adults high school graduate and attend college and they bring with them erroneous belief that alcohol is the right way to belong to a group and express their freedom from family control “Young college students are especially vulnerable to alcohol and this wide availability favors abusive use (Friend and Koushki 1984).” And despite all the risks, young people are not protected by laws against the alcohol industry and its dangerous propaganda. The present study examines how consuming alcoholic beverages impacts the academic performance of college students. We expect that college students will develop drinking habits that are unhealthy in order to fit in with peers and cope with the pressures of college, friends and family. Additionally, we expect these negative outcomes to be heightened among students with stronger beliefs about the (false) benefits of consuming alcohol.

Is "Fake News" Just a New Name for Propaganda?

Room & Time: Room A, 6:20 p.m. to 6:35 p.m.

Presenter: Natalie Duphinet

Area of Study: Psychology

Advisor/Co-Author: Dr. Brooke Breaux, Robert B. Michael, and Kennedy Stelly

School: University of Louisiana at Lafayette

Abstract: According to a Merriam-Webster blog post, the term “fake news” has been around for approximately 125 years; however, there is still debate about what exactly the term “fake news” means. Recent research by Tandoc et al. (2017) found evidence to suggest that the term “fake news” can encompass the phenomenon of propaganda. This conclusion was based on an analysis of

contemporary operational definitions used by researchers studying fake news. We wondered, then, whether everyday people think of the term “fake news” in the same way and approached this issue empirically. Within the context of a larger study we asked a total of 203 Amazon Mechanical Turk workers living in the United States to consider the terms “fake news” and “propaganda.” We asked our participants to provide their own definitions of these terms while considering their similarities and differences. We analyzed these definitions in three ways. When we categorized the definitions, we found that participants were more likely to explicitly state that the two terms are similar, $F(1, 202) = 26.68, p < .0001$, and to provide separate definitions for the two terms, $F(1, 202) = 88.26, p < .0001$. When we analyzed the differences in words used to define each term, we found that words unique to “fake news” were related to negation and other names for news while words unique to “propaganda” were related to perspectives and purpose. When we used LIWC2015 to analyze the definitions, the analyses revealed a similarity in the use of authentic word but differences in the use of words associated with logic, $F(1, 173) = 25.30, p < .0001$, authority, $F(1, 173) = 12.77, p = .0005$, and emotional tone, $F(1, 173) = 16.51, p < .0001$. Based on these results, we conclude that “fake news” is not just a new name for “propaganda.”

"Into the Beyond: This Way for the Gas, Ladies and Gentlemen"

Room & Time: Room A, 6:40 p.m. to 6:55 p.m.

Presenter: Eden Sliman

Area of Study: English

School: Louisiana College

Abstract: “Into the Beyond: This Way for the Gas, Ladies and Gentlemen” is a research paper which discusses the Holocaust account of Tadeusz Borowski’s *This Way for the Gas, Ladies and Gentlemen* through both a historical and literary lens. By discussing the historical background of the piece in its unique Polish and non-Jewish context and discussing the literary style in its shocking and unusual perspective, the value of Borowski’s work becomes more pronounced and respected. Researching both in historical accounts and primary texts as well as other pieces of Holocaust literature and criticisms allows this discussion to be thorough and expresses the need for interdisciplinary focus in scholarly studies. The presentation will include a reading of the entire paper (11 pages of content) and an explanation of the importance of interdisciplinary points of view when researching and exploring topics.

Attitudes Impacting Accessing Mental Healthcare in African American Room &**Time:** Room A, 7:00 p.m. to 7:15 p.m.**Presenter:** Louise Wells**Area of Study:** Psychology**Advisor/Co-Author:** Dr. Theresa Wozencraft, Erin Cassidy**School:** University of Louisiana Lafayette

Abstract: African Americans experience disparities in healthcare, in part because of issues related to accessing services. An example is that while African Americans are reported to have the highest depression rates (Brody et. Al, 2018) they are less likely to seek treatment than many other groups. To address this issue, more research is being done to determine whether attitudes and behavior related to healthcare disparities are measured in a manner that is culturally sensitive to concerns unique to African American culture. The measure used in this study was the Inventory of Attitudes toward Seeking Mental Health Services scale, which was normed on a Caucasian sample. Three subscales comprise the main scale; namely psychological openness, help seeking propensity and indifference to stigma. Participants included 116 African Americans in the general community and at the University of Louisiana at Lafayette. African Americans scored a lower average score on psychological openness and indifference to stigma compared to a Caucasian sample (Mackenzie et al., 2004) and yet a much higher help seeking propensity score (Ward et al., 2013). The scores compared to other African American samples were similar in psychological openness and indifference to stigma, yet the current study found much higher scores in help seeking propensity. Past research has found that help seeking propensity is a good predictor of stated intention to seek help (Hyland et al., 2015). Given the finding in this study, both cultural and SES differences must be considered as explanatory factors. Further comparisons of this study's results with results from studies utilizing primarily African American or Caucasian participants with similar demographic characteristics will allow these researchers to further explore whether different norms for these types of scales may exist across racial groups due to cultural difference

Overcoming Barriers to Teacher Certification: Perspectives of Preservice Teachers at an HBCU**Room & Time:** Room A, 7:35 p.m. to 7:50 p.m.**Presenter:** Deja June & Madison Cobb**Area of Study:** Education / Teacher Preparation**Advisor/Co-Author:** Dr. Erin Scott-Stewart, Dr. Emily Jackson-Osagie**School:** Southern University and A&M College at Baton Rouge

Abstract: In the U.S., 15% of K-12 students are African American, but only 7% of teachers are black (NCES, 2019). Those percentages are 43% and 22% respectively, in Louisiana (Jones, 2018). One barrier to teacher certification is Praxis licensure exams, which black preservice teachers pass at significantly lower rates than their white counterparts. This single case study seeks to better understand black preservice teachers' perceptions of their K-12 learning experiences and how those experiences impact their teacher certification effects. The researchers seek to utilize the findings to improve outcomes for preservice teachers in at an HBCU in Louisiana. Focus group transcripts were analyzed using a general qualitative "data analysis spiral" (Creswell, 2013, p. 182). Findings point to K-12 learning gaps, general test anxiety, and disjointed advising processes. The researchers discuss ideas for improvement, including tutoring; practices tests; Praxis workshops; and earlier advising.

Designing a clinical tool for the phonological assessment of Louisiana French.

Room & Time: Room A, 7:55 p.m. to 8:10 p.m.

Presenter: Bailey Davis, Bailee Deville, Nathalie Fortier, Camille Harrington, & Noel Johnson

Area of Study: Phonology/Phonetics, Speech Pathology & Audiology

Advisor/Co-Author: Dr. Elena Babatsouli

School: University of Louisiana at Lafayette

Abstract: The present paper shifts the focus of academic research on Louisiana French (LF) from general and historical linguistics to the assessment and diagnosis of adult speech sound disorders (SSDs). Negligible research exists on the SSDs of adult speakers of LF (Ball, 2015; Müller & Mok, 2012), though considerable work represents child dialectal speech in Louisiana (e.g., Oetting et al., 2008). Similarly, despite an abundance of phonological assessments of standard French in developing child speech (e.g. Bérubé et al., 2015; Paul & Rvachew, 2008), no clinical tool currently exists for the phonological assessment of the LF variety in our community, thus enhancing the importance of the undertaken project for speech language pathology (SLP) practice in Louisiana. This paper addresses the gap by advancing a clinical tool that is archetypical of the local idiom and its variations. The clinical tool proposed is based on and guided by the theoretical framework of constraint-based non-linear phonology (e.g. Babatsouli, 2019; Bernhardt et al., 2019; Bernhardt & Stemberger, 2017). The battery is fed by the Dictionary of Louisiana French (Valdman et al., 2009), consisting of a Screener and Extended list that target and comprehensively investigate LF in common, imageable, and culturally relevant words; the list was authenticated anonymously by native speakers. The proposed battery is representative of LF phonotactics, phone frequency distributions, predominant phonetic variation, and in cumulative

depiction from screener to full test. The paper we are presenting outlines the methodology utilized, as well as the qualitative tenets and quantitative tallies that validate the proposed clinical tool. Ultimate goals of the project include i) documenting current LF inventories in adult speakers as a control group against which the nature and manifestation of SSDs in speakers of LF can be identified and ii) making the test freely available for clinical practice and research focusing on LF.

End of Room A

Poster Presentations
Tuesday, November 10th, 2020 6:00 pm to 9:00 pm
Listed in order of Schedule

Shaping our minds and muscles

Room & Time: Room B, 6:00 p.m. to 6:10 p.m.

Presenter: Emily Andries

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: The purpose of this action research project was to see the impact incorporating brain breaks and physical activity within mathematics lessons had on student engagement and behavior. There was an overall lack of student engagement and focus during these mathematics lessons, so incorporating these brain break activities the students' engagement was selected to make improvement. Two individuals participated in this study. These individuals were selected because their level of engagement and behaviors are on two opposite ends of the spectrum. One student is disengaged due to being overly active and distracted by everything around them. The other student is disengaged due to being spaced out and not paying attention to instruction. The results of this study helped to determine if brain breaks were successful in improving engagement in a variety of different circumstances. This research project involved comparing students' behaviors in terms of engagement, focus, and attention, before and after brain breaks and physical activities are incorporated within mathematics lessons. The brain breaks consisted of Go Noodle videos, Fitness fluency activities, and/or teacher-led stretches. These interventions were incorporated, and the behaviors were recorded daily for three consecutive weeks. The data was recorded using an observation checklist including a variety of ideal student behaviors, such as proper posture, not talking out of turn, being attentive during instruction, etc. The overall purpose of this action research project was to improve student behavior and engagement during mathematics lessons.

Throwing Out Out Bursts

Room & Time: Room B, 6:15 p.m. to 6:25 p.m.

Presenter: Jules Blevins

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: The purpose of the study conducted is to examine the effect behavior charts have on the amount of out-bursts within the classroom. The research is to be conducted on 15 kindergarten students, 4 female and 11 male. The students were selected because of their attendance within a specific kindergarten classroom. At the beginning of the study, a behavior chart will be displayed within the classroom. Each time a student raises their hand instead of blurting out, the student will receive a sticker by his/her name. In accordance, observation charts will be used by the researcher to track student behavior and the number of outbursts of each individual child throughout each week. Students who choose not to participate will not have an observation chart completed throughout the week. At the end of the study, the observation checklists will be examined to determine if the number of out-bursts decreased throughout the study. A decrease in out-bursts in each student is most desirable, but the ultimate goal of the study is to determine the effectiveness of positive reinforcement on the number of out-bursts within the classroom.

Keeping Our Classmates Close ... From a Distance

Room & Time: Room B, 6:30 p.m. to 6:40 p.m.

Presenter: Jean-Marie Boullion

Area of Study: Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This year, things just look different. Everywhere you go, there are people wearing masks. There are people keeping their distance from others. There are family members missing other family members because they are scared of either getting sick or getting someone else sick. I think that we can all agree that things just are not the same this year. With that being said, I conducted my study, "Keeping Our Classmates Close... From a Distance" given the current times, specifically in the schools. What children are experiencing right now in schools is something that has never happened before and so that is why I wanted to research the effects that social distancing has on a kindergarten class. The participants in this study have been recruited solely because they are in my class, the intern/researcher. I chose to recruit all students, with the help of my mentor, because, realistically, the whole class participates in transitions on a daily basis. With the use of observation checklists as well as graphic organizers, I will first and foremost observe the already set in place social distancing techniques during transitions. I will then implement social distancing techniques of my own, such as: the child walking with an arm extended outwards in front of them to create space, standing on the child's designated piece of tape in the hallways, as well as holding onto the child's designated dive ring (which is attached to multiple jump ropes)

while transitioning. The end goals/outcomes desired for the study would be for the students to demonstrate each of these techniques without being told to do so, or, taking it even further, reinforcing these techniques amongst their peers. All in all, social distancing may be something to stick around for a while. So, why not make it fun for the students?

Positive Reinforcement in the Classroom

Room & Time: Room B, 6:45 p.m. to 6:55 p.m.

Presenter: Briana Campbell

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: If you are a teacher or know a teacher personally, you know that there are lots of problems faced in the classroom. One of the big problems is student misbehavior and disengagement. During residency II, the researcher noticed there were a handful of students who constantly behaved undesirably and were disengaged. These students created a distraction and took away from instructional time. To address this issue a positive reinforcement intervention was implemented in the classroom. Four kindergarteners were chosen to participate in this study. Two were males and two were females, all of which were 5 years old. The students were chosen to participate in this study, because they were either giving problems in class, or were noticeably motivated by positive reinforcement. The intervention used was ClassDojo. ClassDojo is an educational technology tool, that allows the teacher to give and take away students' points based on their behavior. For this intervention, ClassDojo was only used to give students green points for their good behavior. An observation checklist was completed three times a day to track student behavior frequencies in response to the intervention. The checklist was used to determine if the students were emotionally engaged, behaviorally engaged, and cognitively engaged. It was completed during teacher directed instruction, group and center activities, and during independent work time. The goal of this study was to discover how positive reinforcement impacts student behavior in the classroom.

Implementing Movement/Exercise and Class Games to Increase Student Participation

Room & Time: Room B, 7:00 p.m. to 7:10 p.m.

Presenter: Emily Delahoussay

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to examine what kind of impact and/or how much impact implementing movement, exercise and playing class games would have on student participation. The catalyst for this study came from class observations when it was noticed that some students were not participating. The question of why this was happening emerged. Was it because students were tired or did not want to participate? The researcher has chosen nineteen, second grade students to participate in this study. These students were chosen because the researcher believed the implemented interventions could possibly benefit all students. The researcher implemented having students stand up and using mirror movements for certain topic memorizations for a few minutes of movement and exercise each day during lessons as well as occasionally playing educational, whole class games to study the impact on student participation. An observation checklist that includes the expected behaviors from students was used to monitor student participation during the above-mentioned interventions. The end goal desired for this study was to increase student participation in the classroom.

Kindness is Key

Room & Time: Room B, 7:35 p.m. to 7:45 p.m.

Presenter: Alyssa Hebert

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: Early on in the school year, the researcher noticed some students showing an extreme lack of motivation to participate in activities and assignments in the classroom and their behavior was suffering. This study was conducted to see if using positive reinforcement and kind talking would improve student's behavior and motivation for learning. Students' behavior and motivation for learn was lacking significantly after being out of a school setting for almost 6 months due to the pandemic. Two students were selected for this study, "Student A" and "Student B". Both students are 2nd grade male students at the age of 7. These students were selected because early on that they showed an obvious lack in motivation in the classroom and their behavior needed improvement. The intervention for this study was Class Dojo where students can receive positive and/or negative points throughout the day for things they do such as participating or not following directions. The whole class used Class Dojo, but this study focused on "Student A" and "Student B". Data tools used were an observation checklist and the student's weekly conduct grades. The checklist included a list of positive reinforcements or kind conversations that the researcher used to promote the kind talking. Both data tool were used document any noticeable frequencies in desired behavior or changes during the three-week study. The end goal for the study is for both student to show

more motivation to learn and improved classroom behavior in response to kind talking and positive reinforcements.

Blurt No More!

Room & Time: Room B, 7:50 p.m. to 8:00 p.m.

Presenter: Hannah Laporte

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to study the topic of limiting classroom blurting and calling-out behaviors as it relates to a visual reminder. The object of this study was to determine whether or not the use of a visual reminder and self-correct strategy decreased the amount of classroom blurting behaviors and increased the use of appropriate hand-raising. Classroom blurting interferes with learning and takes opportunities away from other students to participate in discussion. The participants in this study were three first grade, male students who were chosen because they often forget to raise their hand and blurt out answers or off task comments. The intervention used in this project was a visual reminder shown to participants at the beginning of instruction and as needed through the duration of instruction when blurting or calling-out would occur. The visual reminder was a small picture of a hand pasted on a red, circular background. In addition to the visual reminder, the students participated in daily conferences with the researcher to discuss these behaviors and to be shown a self-correct strategy that would help them limit their blurting behaviors. This self-correct strategy involved the student being mindful when they began to blurt out, put their finger over their lips and raise their hand. This would show the researcher that they remembered the self-correct strategy and were growing toward more successful hand-raising behavior. The method of data collection used was an observational checklist to track three behaviors: self-corrects, hand-raise with simultaneous blurt, and successful hand-raise. The desired outcome of this study is that there would be an increase in frequency of participants successfully raising their hand and waiting to be called on.

Points for Positivity

Room & Time: Room B, 8:05 p.m. to 8:15 p.m.

Presenter: Natalie Leger

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to examine the topic of promoting positive behavior and student engagement for students with ADHD in the classroom. The object of the study was to determine whether or not Class Dojo was successful in students staying engaged in class and demonstrating positive classroom behavior. The approach used for the project was Class Dojo and using it as a tool in the classroom to promote student engagement and positive behavior. The participant for this study was a third-grade female. This participant was chosen for this study because she is not fully engaged in her learning and struggles with showing positive behavior in the classroom. She has trouble focusing on her work and staying on task. The data gathering method used for this study was an observation checklist, along with teacher note taking throughout the study. The desired classroom behaviors were shared with the student prior to the study start. These behaviors included attentiveness to class assignments and lessons, student engagement, and positive behavior. Data documented what behaviors were shown throughout the study and what behaviors were most frequent and least frequent. Data analysis was conducted to determine if there was an increase or decrease in desired/undesired behaviors. The outcome desired for this study is for the student to show more engagement in the classroom, encourage them to participate more, and show positive behavior in the classroom.

Transitions Made Easy

Room & Time: Room B, 8:20 p.m. to 8:30 p.m.

Presenter: Rikki Love

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This study was conducted to help students in Pre-K to become better during transitions in and outside of the classroom. There were two participants selected for this study, both male and one is an ESL (English as a Second Language) student. The ESL student was chosen because he had issues with transitions in and outside of the classroom. He needed help with listening and taking directions. The other participant was chosen because he needed help with taking directions. This participant struggled during the morning routine. Two strategies were used during this three-week period. The first strategy was used during inside transitions. The strategy included setting an alert five or so minutes before the official alert sounds for the students to end center time, small group, or to signal that it is time to transition outside of the classroom. This strategy was used to help the participants gain an understanding of the routines. The second strategy was implemented during outside transitions. The strategy included playing games such as: Simon Says, I Spy, or Are you smarter than a kindergartner? We

played these games while waiting outside at the bathroom or waiting in the cafeteria to go back to class. This strategy was used to help the students stay in the straight line, to keep quiet, and to keep their hands to themselves. To compare data, observation checklists were used. The observation checklist used was the same for the pre and post observation and were compared to identify any change. The end goal for this study is to find what works and does not work with children in Pre-K to help with transitioning.

Restroom Breaks: Helpful or Hurtful?

Room & Time: Room B, 8:35 p.m. to 8:45 p.m.

Presenter: Brooke Savoy

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: The relationship between restroom use and classroom disruptions were examined in this project. The research is to be conducted on 16 students in 1st grade. There are 8 males and 7 females all ages 6-7. Students were selected based on their attendance within a specific 1st grade classroom. Throughout many studies, it was found that young children from all around the world are forced to sit in classes for long periods of time without breaks. Students have two options whenever it comes to using the restroom. They will either use their recess time to handle business or they will interrupt instructional time to go. Children need to spend their recess times playing instead of waiting in lines to use the restroom. With the guidance of the researcher, students will be given scheduled restroom breaks and will be observed to see if the amount of classroom disruptions, related to restroom use, would decrease. The first week is used to determine the amount of times students ask to use the restroom without scheduled breaks. During weeks 2 and 3, scheduled breaks will be implemented to determine if there is a decrease in the amount of times students ask to use the restroom during class time. A decrease in all classroom disruptions that are associated with restroom use is the most desired outcome, but any type of decrease is the ultimate goal.

End of Room B

Ready Readers Rise at Home**Room & Time:** Room C, 6:00 p.m. to 6:10 p.m.**Presenter:** Emma Terpening Falgout**Area of Study:** Early Childhood Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: Early education curriculums suggest that certain early interventions in reading can improve a child's reading behaviors in the classroom. The Ready Readers Rise at Home study was designed to examine the effects of providing literacy resources and word work activities to parents/guardians on the young students' reading behaviors. The study was conducted with six randomly selected Kindergarteners who are on or below their reading level along with their parents/guardians in the southern region of the United States. The participants chosen were members of the researcher's internship class and were observed first-hand on a daily basis. Packets of educational literacy resources provided participant parents/guardians with an explicit guide to their child's literacy. The resources included a list of online libraries with full stories at all reading levels. A collection of apps also contained in the packet offered educational apps divided into academic categories. Additionally, participants could find a list of activities for practicing sight words with the child. "Ten Word Games" were included for practicing different domains of reading, like comprehension. The Packet provided an informational handout to assist in asking the right questions while reading at home and a handout on parts of a text. To examine the effects of the intervention on the students' reading behaviors, the researcher utilized observation checklists to monitor reading behavior while the child is being read to or reading independently. Parent interviews were conducted to evaluate general involvement in reading work at home, what domains parents had difficulty, and which of the given resources were most helpful and/or easiest to implement. The intervention goal was to gain a positive effect on students' reading behavior by offering parents/guardians with feasible ways in which they can engage in their child's learning experiences.

Play Hard, Work Hard**Room & Time:** Room C, 6:15 p.m. to 6:25 p.m.**Presenter:** Cailin Thrahan**Area of Study:** Early Childhood Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This project was constructed to see if there is a correlation between physical activity breaks and student behavior. Physical activity during the day, such as jumping jacks or running in place, help students to take a small break from their work. They are able to release some of their energy, and, in turn, help them to improve their behavior by being more attentive, due to this release of energy. Four first grade students, two male, two females, specifically, have trouble focusing during English Language Arts. These students appear to have more stored-up energy than their peers, therefore, are distracted easily. Physical activity breaks were selected to provide these students time to let out their energy and give them a quick break from their classwork. These breaks were taken once every day during English Language Arts for three weeks. Before moving to the next activity in English Language Arts, the students participated in a physical activity, such as, running in place, jumping jacks, or a Go Noodle activity. Go Noodle is a classroom-friendly exercise program that allows students to release energy while standing at their desk. The researcher maintained two observation checklists per student. One checklist was completed before the intervention, and the second checklist was completed after the intervention. The checklist documented how frequently these students demonstrated the desirable behaviors, such as eyes on the speaker, appropriate posture, and following directions in a timely manner. The goal for this study was to help these four students improve their focus and behavior after the physical activity breaks occurred.

Implementing Physical Activity Brain Breaks to Increase Student Focus Time

Room & Time: Room C, 6:30 p.m. to 6:40 p.m.

Presenter: Lydia Tramonte

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: Students are often found gazing off into space and not participating in class after sitting in a desk for hours at a time. Research has shown that brain breaks can help break patterns that cause students to get tired and frustrated easily by refreshing their minds (Morin 2012). So, how effective are physical activity brain breaks used throughout class to help with student focus? This study was conducted with “Student A”, a 9-year-old male who attends an elementary school in the southern U.S. Student A was selected through observing his behaviors throughout a period of time. His behaviors included fidgeting with things on his desk, zoning out, and not participating in class discussion. The intervention for this study was Go Noodle, a website intended for grades K-5 that helps kids get motivated by using short interactive videos, to determine if using brain breaks would increase Student A’s focus time. The whole class participated, but only

Student A's actions were documented for the study. An observation checklist was used to collect data. This checklist will include desired and undesired behaviors Student A might demonstrate during class time. The desired outcome for this study was to see if physical activity brain breaks had a positive effect on student's focus time.

1, 2, 3, Look at Me!

Room & Time: Room C, 6:45 p.m. to 6:55 p.m.

Presenter: Danielle Vercher

Area of Study: Early Childhood Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to examine and experiment with different methods to increase student engagement and participation in a mathematics setting. The different methods included music and student interests, as well as the more prominent use of technology resources. The objective of this project was to determine if the afore mentioned methods increased the engagement of three students. The students include two male and one female student. Student A is a white female in second grade. She was chosen because she gets distracted and daydreams often during this part of the day. This results in incomplete work and loss of knowledge. Student B is a white male in second grade. Student C is an African American male in second grade. Student B and C were chosen because they are easily distracted and become behind the class' pace. Although, both students retain most of the material learned. The researcher presented traditional lessons but incorporated music such as songs to remember strategies and used interactive technology to engage the students more completely. Some of the interactive technology included game show review games, adjustable base ten blocks, and videos that required answers throughout the video, such as Zearn. Observational checklists were used each day to monitor the students' behaviors during the lessons. Desirable behaviors were checked off on the checklist every thirty minutes; undesirable behaviors were documented in an observation journal. Some of the desired behaviors included looking at the teacher while teaching, not playing with materials, and staying on pace with the rest of the class. At the end of each week, the researcher collected and reviewed the checklists and observation journal to determine if these methods helped the students stay engaged during the lessons.

Motivate to Accelerate**Room & Time:** Room C, 7:00 p.m. to 7:10 p.m.**Presenter:** Erin Paulk**Area of Study:** Elementary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This study is titled *Motivate to Accelerate* and it is all about implementing more motivation in the classroom. Many students have zero motivation when it comes to participating, doing their classwork, staying focused, or simply trying their best while they are at school. There can be many factors that play into this such as lack of family involvement, lack of teacher involvement, or lack of personal motivation. The researcher is trying to focus on a mix between teacher motivation and their own personal motivation. The researcher believes that if more motivation strategies are implemented in the classroom, then the students' behavior will overall improve. This will lead to better conduct grades for the students and less times that they will be corrected during class. The researcher will record the students' conduct grades at the end of each day and compare them to see if they improve over time. If the study is correct, then they should improve. The researcher will also be tracking how many times each student is corrected or redirected each day. This number should decrease if the strategies work like they should. Two of the strategies will offer an award as an incentive for good behavior and the third one will be a form of affirmation. With the help of each of these strategies, it should motivate the students to improve their behavior overall. Data will be collected by using observation charts and checklists. The data will be compared at the end of each day, each week, and at the end of the entire study. These charts will show every conduct grade for the students each day of the study, and it will also show how many times each student is corrected. The researcher is hoping to observe positive changes throughout the entire study.

Engagement and Participation**Room & Time:** Room C, 7:35 p.m. to 7:45 p.m.**Presenter:** Natalie St. Martin**Area of Study:** Elementary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: Student engagement and participation is a key element in all classrooms, especially in an elementary classroom. When students engage and participate in class they are more likely to have high math scores. Students gain knowledge by doing and not just by listening. The subject students in the 1st grade have the most trouble with is mathematics. First graders get really frustrated and confused and

give up easily. This study was conducted with five 1st grade students who show a lack of engagement and participation and have low math scores. The approach used for this study was to use real-life word problems that the students can relate to. The methods used for this study were observation and an interview before and after the intervention. An observation checklist was used to document where a student was functioning. The observation checklist was used three times a week the interviews asked students two open-ended questions about math. Part of the intervention required the students to talk about how they related to the word problems. The end goal of this study was to learn if students who score low in math and do not participate became more engaged and begin to participate when connections to the real world is made.

Bright Lights, Bright Minds

Room & Time: Room C, 7:50 p.m. to 8:00 p.m.

Presenter: Daphne Trahan

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to study the lighting in a classroom and how it impacts student behavior. The study examined how different lighting in the classroom influenced classroom behavior of students. The students that were selected for the study all displayed negative behaviors previously. There are 19 students in the class with 9 girls and 10 boys. The researcher wanted to find a way to create more positive environment to support behaviors through changes in the classroom lighting. The researcher performed various actions in the study including, adding string lights around the class, changing any existing lamp lights to LED bulbs, and adding light filters to the ceiling lights. The data tool used was observation of students' behaviors and taking notes every day. Some behaviors observed throughout the study were using lower voices, staying focused and on task during a lesson, raising their hand instead of talking out of turn, and more classroom participation. The goal of this research was for the students to display more positive behaviors due to the change in lighting.

The Desk Standoff

Room & Time: Room C, 8:05 p.m. to 8:15 p.m.

Presenter: Louby Trahan

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: The purpose of this experiment was to encourage social distancing within the classroom. The method used to improve social distancing was team competition between classes. The two classes competed to see which class could keep their desks in their designated spots in the classroom, and the team with the most desks in their correct spots by the end of the data collection period won a cookie cake party. Students were also involved in daily discussion about teamwork as well as the importance of maintaining distance from their peers. The participants were fourth grade students; 16 boys and 17 girls. Data was collected by using an observational checklist. I recorded how many students were present each day and the number of desks that remained in their correct positions. For data analysis I subtracted the total number of desks in the correct position from the total amount of students present each day. I noticed a positive outcome immediately on the first day of data collection, and the students maintained this high level of awareness in the classroom throughout the entirety of the data collection period. These findings indicate that positive reinforcement may increase student willingness to social distance within the classroom and keep their desks in the designated location.

End of Room C

Prioritize Plan Stressless**Room & Time:** Room D, 6:00 p.m. to 6:10 p.m.**Presenter:** Blair Bergeron**Area of Study:** Middle School Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This study looks at how to help middle school students to plan their day so that they can be more successful during virtual schooling. Students now try to accomplish and go through a new way of learning for students and teachers. This project examined how are students approached their virtual schooling and the emotional stress that this type of schooling has created for them. There are 15 participants for this project that are between the ages of 11 and 13. There are 8 females and 7 males in this study. Based on the student's responses, assistance was provided to help them to prioritize their work. They planned their days by the hour including how and when should they were to complete schoolwork using time management calendars. At the beginning of the project I used an attitude survey and choose four students, two who had the most negative attitudes and two who had the most positive attitudes, to conduct my interview with. At the end of the project I will interview the same students to see how their attitudes change. With this information it helped me to understand what students were struggling with based on their attitude about virtual learning. The calendars were check every week at the beginning of the week and students were graded on a point system based on how much effort they put into their calendars. One beginning they did not complete or put effort to five meaning that they filled out their calendars and used it in each class to complete their home learning assignments. Analysis of the calendars and the students' progress for each class was performed to determine if the calendars had an impact. The goal of this project was to help better manage their time.

Advanced Readers Engagement and Interest**Room & Time:** Room D, 6:15 p.m. to 6:25 p.m.**Presenter:** Leslie Briggs**Area of Study:** Elementary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This study was conducted to see if advanced readers in first grade could benefit from participating in re-reading and think-aloud activities. The purpose was to have these students become more engaged and interested in reading. The goal was to help students who are higher level readers to not become bored in class whenever the readings are easier for them. This experiment was to see if students

learned to look more deeply into stories. The participants in this study are one male and one female and they're both in first grade. The reason these two students were chosen is because they are both advanced and above grade level for reading. The researcher listened to all of the advanced readers in the class and chose the participants that best fit for the experiment. This included students who were advanced in reading and able to read above grade-level stories. In this experiment, students read a story each week over the course of three weeks with the researcher. There was a checklist used when asking the participants questions about the story. Then, throughout the course of the week, the researcher guided the students in rereading and think-aloud activities and then, a post test was taken to see if the students improved. The data was gathered from students answers on the checklist questions. Even though they are able to read all the words, students participated in the rereading and think-aloud activities which improved their interest in the stories. The end goal is for the participants to become more engaged in reading so that they do not get bored during on-level reading in class. The re-reading and think-aloud activities were chosen to teach advanced students to look for more whenever they are reading, to keep them engaged and interested.

Mac and Cheese, Focus Please!

Room & Time: Room D, 6:30 p.m. to 6:40 p.m.

Presenter: Madeline Comeaux

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to study the topic of increasing student focus with the use of verbal and visual reinforcers. This study was conducted to see if verbal and visual reinforcers have a positive effect on student behavior and grades. For this research project, participants consisted of 8-year-old males in 3rd grade. These students were selected by my mentor teacher and I as some of these students have ADD/ADHD, or just have to be reminded to focus and stay on task throughout the day. The interventions done throughout the study included the verbal reinforcer, where the researcher/intern says "Mac and Cheese" and the class will respond with "Focus Please". The verbal reinforcer was used when more than 3 students were not on task. This allowed the class to have a reminder of what is going on around them and allow them to reassess what they were doing during that moment. The other intervention was a visual reinforcer. This consisted of a small, hand-held sign that says "Mac and Cheese, Focus Please". This will be held by the researcher/intern and was used to show those students who are not on task. This allowed the students to be reminded that they needed to reassess their situation and get back on task. The data tools used during

the study were an observation checklist. This was completed at the end of each day for the participants. The checklist provided information as to whether or not the students followed directions, received less than 2 conduct marks per day, is respectful, uses good decision-making skills, displays a positive attitude, etc. The end goals that are desired for the study include seeing a decrease in conduct marks, an increase in completed assignments, proper use of materials, and staying on task after a visual or verbal reinforcer is used.

Effectively Engaging Students in Learning Centers during RTI (Response to Intervention)

Room & Time: Room D, 6:45 p.m. to 6:55 p.m.

Presenter: Allison Conroy

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This interactive project allowed the researcher to study the engagement of students through a variety of learning centers. The study was done to find a successful way to help students who need more help in certain subject areas in a small group setting. The researcher worked with students who need RTI (Response to Intervention) time with the teacher in a small group setting. The participants that were selected because they were in the researcher's first grade class and have been identified as not needing intervention at this time. This is unclear as you shared earlier that students needed more help in certain subjects and now you are saying they don't need intervention. Please revise so the reader can know what, why and with whom the study is taking place. The researcher preplanned learning centers of varying types of activities such as, but not limited to, hands on centers, writing activities, math interactive settings, paired reading, etc. Students were observed for their varying levels of engagement on a checklist to determine which types of centers most successful for engagement and learning success. The research hypothesis was if the students were highly engaged in the hands-on activity centers, then there would be an opportunity for the researcher to successfully pull the students needing help in RTI small groups with little disruption.

Class Dojo and Motivation

Room & Time: Room D, 7:00 p.m. to 7:10 p.m.

Presenter: Sophia Cramer

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This project allowed the researcher to study the topic of increasing student motivation in the classroom by using Class Dojo and a reward system. Class Dojo is a system that is put in place in the classroom that keeps track of points for students based on behavior, homework, etc. The reward system the researched used is keeping track of the Dojo points and if the student(s) received 20 Dojo points by the end of the week, they would get a special reward from the researcher. The object of the study was to infer whether or not the use of the reward system along with Class Dojo had any impact on the students' motivation, focus, and participation in the classroom. The participants of this study were three first grade students who have the most trouble staying motivated and on task in the classroom. The data collection method used throughout the study was an observation checklist to determine how the students reacted to receiving or losing Dojo reward points. The researcher documented the changes in the behavior of the students. The components the researcher observed on the checklist included participation, either forced or voluntary, and being on task when a Dojo was received or taken away. The goal was to identify if the reward system along with the Dojo's were successful in improving student motivation.

Thinking About Your Thinking

Room & Time: Room D, 7:35 p.m. to 7:45 p.m.

Presenter: Emily Gallet

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This study was conducted on the problem with engagement of students. The object of this research was to see if mindfulness practices would increase the focus of students. The overall focus and attention of third-grade students only lasted for the first half of the day. Once this realization occurred, there was collaboration with other teachers about what could best increase the students' focus and engagement after their recess period. After some research on different strategies, the best practice for engagement and focus was mindfulness practices. Sixteen third graders participated in this study. The intervention consisted of one video each day on different mindfulness practices. Some of the practices are breathing techniques, simple yoga movements, imagining scenarios, etc. The videos were projected every day when the students return from recess, before language begins. An observation checklist was used to keep track of the students' behaviors without a mindfulness video support and with mindfulness video support. Some of the desired behaviors were being prepared for class and participating in class discussions and instruction from the teacher. The goal was to

find a positive way to integrate mindfulness strategies into the classroom procedures as a way to keep the students motivated and focused.

Students Learn by Teaching

Room & Time: Room D, 7:50 p.m. to 8:00 p.m.

Presenter: Ryan Hanks

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: In this study, the researcher examined the lack of interest and motivation of students during lessons causing undesirable behavior in the classroom. The researcher chose five students who showed lack of interest and/or confidence during the lessons. The goal of the intervention implemented in this study was for students to develop behavior beneficial to the class, home, and themselves. The role parents played in a student's study habits and its effects on a student's behavior in the classroom was also examined. Through engaging academic task assignments performed at home with parents, students were expected to improve overall behavior by participating and focusing more and developing higher self-confidence. The researcher assigned individualized and engaging academic tasks to each student based on their interests. For example, one student expressed an interest in becoming a ventriloquist. An engaging task was for the student to explain to their parents the assigned math homework using a puppet. Weekly conferences with the parents were conducted about how the parent participated in their child's explanation of their learning and how they showed interest and excitement in their child's presentation. It was foreseen that only through positive communication parents would participate in the intervention. These positive connections were established early on. At the beginning of the research, data collected included behaviors regarding energy, focus, participation, and number of warnings. At the end of each week, the researcher reviewed each student's behavior while conferencing with parents regarding several objectives: (1) level of students' excitement for doing the task, and (2) level of students' explanation, i.e., correct information or incorrect information. The task was then altered to be more engaging for the student. The desired outcome of the research was to spark positive behavior, motivation, and confidence in students during classroom instruction and home learning (homework).

Go Nuts for Go Noodle**Room & Time:** Room D, 8:05 p.m. to 8:15 p.m.**Presenter:** Taylor Lanclos**Area of Study:** Elementary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This study was conducted to determine the effectiveness of conducting Go Noodle Brain Breaks during lessons in relation to improved behavior. Students tend to show undesired behaviors in the classroom during long, strenuous lessons. The researcher intended to see if behaviors improved after conducting the Go Noodle brain break versus the behaviors seen before conducting the Go Noodle brain break. Undesired behaviors before the brain break include talking, squirming in chairs, playing with objects on the desks, not working on assigned task, tapping on desk, etc. The desired behaviors after the brain break are students are quiet, students can sit still in their desk, playing with objects on the desk ceases, the student begins working on assigned task, and tapping on the desk quits. The participants in the study were 5 male students at an elementary school in a southern state. The students were selected to participate in the study based on informal observations during the first few weeks of school. These students showed tendencies to fidget, get off task, and not focus on schoolwork. These students were believed to benefit from this research study. In this research study, students performed brain breaks using the website Go Noodle. Go Noodle leads students in songs and dances. Students were allowed to stand behind their desk and perform the Go Noodle brain break. The researcher used an observational checklist to look for pre-brain break behaviors and compare them to post-brain break behaviors. The observational checklist included whether or not the student chose to participate in the brain break. The outcome of this study was to tell the researcher whether or not Go Noodle is an effective way to give students a break during lessons. The researcher was looking to see what behaviors improved, if any, by doing the Go Noodle brain break.

Cue More Participation**Room & Time:** Room D, 8:20 p.m. to 8:30 p.m.**Presenter:** Heather Legnon**Area of Study:** Early Childhood Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: Classroom participation is often intimidating for many students, which in turn makes facilitating productive classroom discussions focused primarily on the classroom teacher. This project allowed the researcher to study the topic of

increasing students' participation during classroom discussions through the implementation of antecedent cue regulation. The participants selected for the study are fifth-grade students with low participation. These participants consist of diverse learning abilities with one high and one low academic student for a more accurate analysis of the intervention implemented. The intervention was implemented through a categorized participation laminated visual cue chart on the participants' desks. The laminated chart allowed the student to use a dry erase marker to tally the type and frequency of their own participation during the classroom lessons in the correlating portion of the chart. The tally chart consists of three icons displaying three types of participation that are expected during the participants' English Language Arts guidebook lesson. Participation icons included hand gestures, table talk, and whole-class discussion. The researcher used the chart as a teacher-directed strategy to signify to the student the type of participation desired during classroom discussions by pointing to the appropriate icon. The data was collected through observation checklists by observing the students' daily participation behaviors throughout the study. The checklist consists of the type of participation contribution to the lesson and the number of times the student chooses to use the participation during each English Language Arts class period. The researcher also noted any additional observed behaviors on the students' participation throughout the process of implementing the intervention. The researcher's end goal for the study was to have an increase in participation during classroom discussions and for the students to independently use antecedent cue regulation in order to increase the number of productive contributions during classroom discussion participation.

Proactive Learning

Room & Time: Room D, 8:35 p.m. to 8:45 p.m.

Presenter: Emily Lohman

Area of Study: Elementary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This study was conducted in order to see in frontloading special education students in math, via Zearn, aids in academic improvement. Frontloading can be explained as pre-teaching students material before they experience the lesson in the classroom. The purpose of this study is to see if academic improvement and engagement can be made through using Zearn, specifically with special education students, or students who are under review for special education. The participants of this study are two males and two females, all of which are in the fifth grade. These four students were chosen for this study because two of these students are in special education and two of these students are currently being

evaluated for special education. Through observations, the researcher determined that these students were the best fit for this research study. These students can benefit from seeing the math material before the lesson is taught in class. The student will be able to see the lesson multiple times, in different formats. In addition to this, there is a need for improvement among the special education population at the school they attend. For this research project, the students will complete math lessons on Zearn during remediation time in the classroom. The researcher will complete checklists to determine whether or not frontloading via Zearn aids in student academic improvement. This checklist will be completed after the student has completed the Zearn lesson. This will keep track of whether or not the lessons have been completed on Zearn, how the student reacts to the material in class, and the student level of engagement and understanding of the material. The goal for this research project is to see an academic improvement in math through frontloading students with math lessons on Zearn. The information gathered will represent whether or not an academic improvement has occurred. The data collected will be able to answer the question “does frontloading special education students in math, via Zearn, aid in academic improvement?”

End of Room D

Tech-y Teachers**Room & Time:** Room E, 6:00 p.m. to 6:10 p.m.**Presenter:** Caroline Fields**Area of Study:** Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: The world today is extremely based on technology. There is no-where you can go where every single person is not using some form of modern technology. Every moment of a person's life revolves around the use of a cell phone, or a computer, especially in the era of Covid-19, where teachers had to go into a fully virtual environment at a moment's notice. Most teachers and students' lives revolve around technology today, even without the Covid-19 pandemic. However, there are still some teachers who are extremely reluctant to move forward in a technological sense. Tech-y Teachers study focused on receiving a group of teacher's opinions on technology and then provided them with a few recourses along with assistance from an individual who was more willing to incorporate technology into their everyday lives. In this project, a group of 4th grade teachers were surveyed on their thoughts on technology and how they want to use it. The survey also asked if they had any ideas on what could help them incorporate more technology into their school lives. The survey was given once again after a three-week period to the same teachers. Providing teachers with resources they need is an important part of incorporating new things into their lesson plans. The resources given to the teachers included multiple ways to plan to involve technology in both math and reading. These resources provided an anchor for these teachers and allowed them to see how technology can be useful in the classroom.

Extrinsic Motivation in the High School Classroom**Room & Time:** Room E, 6:15 p.m. to 6:25 p.m.**Presenter:** Jill Johnson**Area of Study:** Secondary English Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: The goal of this action research project was to use extrinsic motivation to increase student participation. Prior to this study, students were passively learning in class. They would not volunteer to answer the teacher's questions. Increasing student verbal response creates an environment where the students feel comfortable and can take control of their learning. The success of using extrinsic motivators was measured through by two things. First, students who verbally participate in class earned a ram buck at the end of class. A ram buck is a school-

wide reward system that can be traded in for things such as food or an I.D. pass. To support this process, the researcher increased wait time to about thirty seconds when she asked a question. She informed the students of this, and suggested they write down their answers to the question in their binders. This allowed them to have notes to go off of, making them more confident to volunteer their answers. The second motivator was checking each student's homework assignment every day. The researcher counted the number of students who completed their homework per class, and that number was recorded for each respective class. The class earning the most homework completions was rewarded at the end of the research project with cookies. The participants in this study were freshmen taking English I Honors. They were selected because they did not verbally participate in class and did not always complete their homework. The data gathering tool used was an observation checklist. The researcher checked for hand-raising, higher-order thinking responses, and homework completion. The goals of this study were to have students participate more in class and complete their homework daily.

Accelerated comprehension: An approach to decrease student Inattentiveness in adolescents

Room & Time: Room E, 6:30 p.m. to 6:40 p.m.

Presenter: Kristen Arnaud Latiolas

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: With the challenges of social distancing, virtual/hybrid learning, and scripted curriculum, students are distracted even more than normal. For this project, I was able to work alongside three male adolescents in their Senior year of high school, who are of African American descent. Students were selected based on opportunities to improve their attention span while only attending two to three times a week with the hybrid learning schedule. As we moved through the beginning units of Springboard, students partook in various learning strategies geared toward technology enhancement, and comprehension while they also completed anonymous surveys to track the effectiveness of each. At the end of each week, students could have earned points through the researcher's observational checklist. This checklist was compared to the student's Survey Monkey questionnaire, where students tracked their progress and gave themselves a range for the week. As we moved through the strategies, we monitored the numbers and whether we saw improvement in correlation with each. With the observational checklist and questionnaire, the data was compared to note any progress seen by the teacher and noted by the student. Through allowing students to critique their own attentiveness, they gained a sense of control of their learning

and their progress. The goal of this project was to see if awarding points helped students stay focused for longer periods of time, demonstrate enthusiasm to learn, be willing to support their peers in volunteering answers and giving feedback.

Well I Guess Everyone Else Is Doing It: A Study on the Effects of Group Competition on Student Participation

Room & Time: Room E, 6:45 p.m. to 6:55 p.m.

Presenter: Wesley Lejeune

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: Hybrid schedules enacted in response to COVID-19 have necessitated additional measures be taken to engage students in their education. With students only spending half of the regular school week in the classroom and additional time being given to complete assignments, students have more reason than ever to slack in their studies. This study examined four groups of 10th grade students in the Intensive English classes. They are lower performing students who failed a key state diagnostic test in the eighth grade. Many have learning disabilities or struggle to learn because of ADHD diagnoses. The curriculum delivered to these students was designed as preparatory learning to prepare them for regular English 1, and the students were in their second year taking the class. All of these factors combine to severely reduce student participation, even in a typical class environment. With these students studying from home two to three days a week, and extended time for assignment completion, many of these students had little to no reason to complete classwork on time or participate positively during lessons. This study attempted to improve student engagement through group competition. Groups competed against each other to earn points in five categories—punctuality, class participation, electronic device use, completion of class work, adherence to classroom and school behavior standards—identified as either critical to student success or particularly problematic. Observational checklists were used to record data on individual student participation in the classroom environment. At the end of the study the researcher examined overall participation, areas in which students struggled most, and particular students who struggled most. The goal was to help individuals who had no intrinsic motivation to participate in the classroom by influencing them to work for the betterment of the group

Brain Breaks in the Secondary Classroom**Room & Time:** Room E, 7:00 p.m. to 7:10 p.m.**Presenter:** Emily Miller**Area of Study:** Secondary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: COVID-19 brought about many changes in the school setting. The students are required to stay in static groups all day. The students eat breakfast and lunch in the classroom. This makes it difficult for teachers as students become tired of being with the same students all day. Brain breaks can help students to reset for the day and increase student engagement in the lessons. Participants for this study are all 8th graders taking Louisiana History class in the late afternoon. By the time they come to the history class, they are tired and do not want to participate anymore. This group was selected because they are later in the day and could benefit from a “break” to help them focus. Research indicated the implementation of brain breaks helps students to refocus and increase student engagement throughout a lesson. The students in this study watched short videos explaining an activity to complete, such as blinking their right eye and snapping their left fingers. They did this task for two to four minutes. Observations were conducted to see if student engagement increased as result of these brain breaks. The behaviors that were being observed are students are participating in the lesson by answering questions, students are asking questions, students are participating in group/collaborative work, students are raising their hand to speak, and comments are on task, students are taking notes or writing down their responses to the questions, and students stay on topic when discussing with their partners/collaborative work. The desired outcome was for the brain breaks to help to increase student engagement particularly at the end of the school day.

Integrating Meditation in the Classroom**Room & Time:** Room E, 7:35 p.m. to 7:45 p.m.**Presenter:** Chloe Moreau**Area of Study:** Secondary Education**Advisor/Co-Author:** Dr. Christine Briggs**School:** University of Louisiana at Lafayette

Abstract: This research study focuses on the effects of daily guided meditation on student attention and focus. Meditation is often used to lengthen and train attention spans and is known to bring the meditator a better sense of their thoughts and how to control them. Studies show that there are many benefits of meditation. These benefits include increased attention, improved immune systems, less stress, decreased anxiety and depression, and improved social skills. Because of these

benefits, meditation was selected to be used in the classroom for this study. The participants in this study were middle school students of all genders from a school in southern United States. These participants were chosen because they showed signs of low engagement and focus. The researcher informed the students on why many people use meditation and the positive mental effects it has. Before beginning meditation, the students were given a pre-test asking a series of questions about their emotions and attentiveness while in class. Each day for three weeks, the whole class listened to an audio recording of a guided meditation session and followed along with it. During this time, students were focusing on their breathing, thoughts, and emotions quietly. After the three weeks, students were given a post-test with the same questions from the pre-test they took before beginning meditation. The researcher reviewed the pre and post-tests results to determine if any students felt like their emotions and attentiveness in the classroom was improved after taking part in meditation. The researcher also observed the positive behaviors that students exhibited during the three weeks of meditation. The researcher observed and noted when students showed positive behaviors like raising their hand, listening attentively, taking part in discussion, taking part in group work, and showing interest in learning. The desired outcome of the study is improved attention/focus in students and overall increased classroom engagement.

Uniformity Calls for Uniforms

Room & Time: Room E, 7:50 p.m. to 8:00 p.m.

Presenter: Marquis Spearman

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This research project was started to see if school uniforms have an effect on academic performance. Using a few students from sophomore English classes, research was done using a mixture of surveys and data observation to observe the academic performance in an environment where the subjects have to wear a uniform and complete their work versus completing their school work at their residence where the subject are free to dress as they please. The research is being done to determine if one of the reasons a wide majority of schools are enforcing uniform wearing for students in the academic environment is to promote improved academic performance by making the uniforms synonymous with aspects desired in classrooms such as focus, critical thinking, and participation.

After the presurvey are complete, the student subjects will continue doing their work as usual and will complete a weekly survey to detail how they believe their performance was effected by their uniforms in class and how they believe their performance was conducted at their homes. The survey will ask students how they

felt about their performance in regard to their uniform and why they believe that affected them. While the week is conducted, the student subjects' grades will be monitored for increases and/or decreases in academic performance. This will be separated by work done in-class and work done on the students' virtual day. After a week is done the students' grades will be consolidated and averaged. The averages will be compared to their corresponding student's survey and noted for the week. From the data and surveys gathered, conclusions were made to determine if school uniforms do indeed have an effect on academic performance. Once the conclusions are made and results understood, this information was presented in a conference with its findings.

Classroom Discourse: How Does Communication Affect High Order Thinking Skills

Room & Time: Room E, 8:05 p.m. to 8:15 p.m.

Presenter: Ethan Venable

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: The purpose of this research was to observe if students were able to gradually access their higher order thinking through increased classroom discourse with their peers. Through multiple, small group sessions, students involved in this research worked with each other to answer various question stems and asked to converse. Assessment of students took place to determine their ability to think beyond the scope of a normal U.S. History class through predictions and questioning how history would look if certain events did not happen. Through an observational checklist, student behaviors were observed, and the researcher provided additional guiding questions for support as students engaged in these discussions. At the very end of the research, the students completed a post-discussion reflection to address any of their concerns they had during the discussions. With the observations and the student reflections, the researcher compared any negative views students held toward classroom discourse with the effective use of accessing student's higher order thinking.

Dealing with the Awkward Silence: How to Increase Student Participation by using Interactive Formative Assessment Strategies.

Room & Time: Room E, 8:20 p.m. to 8:30 p.m.

Presenter: Micaela Washington

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Christine Briggs

School: University of Louisiana at Lafayette

Abstract: This study was conducted in order to examine the effects of interactive technology on student participation. After observing little to no participation from students in a classroom, six students in a 7th grade math class were selected as participants for this study. The researcher implemented the use of Kahoot! quizzes and interactive games as formative assessments during instruction as the approach to increase student participation. In order to determine the impact of this implementation, the researcher collected data through observing and taking notes of student participation using a checklist. Each time a student participated in class, it was recorded by the researcher. Students were also given a pre and post intervention survey that was used to determine student attitude towards participation. The goal of this study was to determine if there was a significant increase in student participation after implementing the Kahoot! quizzes and interactive games as formative assessments during instruction.

End of Room E

An Endogenous Solution for the Pension Fund Crisis

Room & Time: Room F, 6:00 p.m. to 6:10 p.m.

Presenter: Caroline Crawford

Area of Study: Economics

Advisor/Co-Author: Dr. Kurtay Ogunc

School: Louisiana State University

Abstract: Pension funds in the United States are chronically underfunded. These institutions, on which millions of retirees depend, can only provide for their beneficiaries when generating a steady return. Because bond yields have been low and equity performance has been volatile in recent years, pension fund managers have had to pursue other avenues to produce excess return, or alpha. These strategies, however, are often carried out with too much emphasis on yield and too little consideration for risk. Additionally, many internal fund managers are ill-equipped in skill or experience to manage their funds' assets, and external managers selected with the help of outside hiring consultants often underperform. This study intends to develop an endogenous solution to the pension fund crisis by exploring pension fund governance structures, behaviors of fund managers, asset allocation and risk budgeting within funds, and the hiring environment within these trust institutions. After surveying the body of research conducted on this unique landscape, four potential solutions have presented themselves. To combat imprudent investing strategies induced by mounting liabilities, pension funds should consider instituting a long-term view among investment staff, delegating risk and asset allocation functions within this group, and creating Chief Flexibility Officer (CFLO) and Chief Behavioral Officer (CBO) positions. Research on an internal solution to the pension fund crisis is ongoing, and the consequences of pension fund managers' actions and strategies deserve further exploration.

Stress shapes the associations of attachment anxiety with depression, anxiety, and somatic symptoms.

Room & Time: Room F, 6:15 p.m. to 6:25 p.m.

Presenter: Wade Johnson

Area of Study: Secondary Education

Advisor/Co-Author: Dr. Hung-Chu Lin, Professor Whitney Storey, Dr. Michelle Jeanis, Madeline Jones, and Maddison Knott

School: University of Louisiana at Lafayette

Abstract: This study aimed to understand how attachment anxiety and stress jointly related to mental and physical symptoms; specifically, depression, anxiety, and somatic symptoms. A sample of 624 participants responded to an online survey examining attachment insecurity and psychological mood and somatic

symptoms. Attachment anxiety and stress were positively correlated with depression, anxiety, and physical symptoms. Regression analyses showed a significant effect of interaction between attachment anxiety and stress on depression, anxiety, and somatic symptoms, respectively. These results showed the moderating effect of stress on the associations of attachment anxiety with depression, anxiety, and somatic symptoms; with higher levels of stress associated with increased negative effects of anxious attachment on mental and physical symptoms. The findings provided insights for therapeutic targets of stress among those with anxious attachment in treating adult mental and physical distress symptoms.

Presence of Apis and Native Pollinators in Agricultural Rosaceae

Room & Time: Room F, 6:30 p.m. to 6:40 p.m.

Presenter: Sierra Laing

Area of Study: Ecology

Advisor/Co-Author: Dr. Margaret E. Cochran

School: Northwestern State University of Louisiana

Abstract: Pollinators are vitally important in commercial agriculture. The most common commercial pollinator is *Apis mellifera*, the European honeybee. Due to colony collapse disorder and disease, a reliance on honeybees as the primary pollinator of most insect pollinated crops may no longer be feasible. To determine the commercial value of native pollinators, a total of 233 pollinator visits were observed in 1m x 1m vertical sections of 3 species of Rosacea (peaches, plums, and blackberries) on two commercial farms. Visitors included *Apis* (141), *Bombus* (8), *Xylocopa* (5), *Polistes* (5), and Diptera (69). *Apis* made significantly more visits than native bees (61%, $p = 0.002$). For further analysis, *Polistes* were excluded due to low numbers and *Bombus* and *Xylocopa* were combined due to similar body type and pollination behavior. The underlying distribution of insect visitors differed significantly between target species of plants ($\chi^2 = 16.1$, $p = .003$). While native pollinators were relatively abundant, their populations may not be large enough to replace *A. mellifera* in the study area. Native pollinator numbers would need to increase 150% to replace *Apis* as a pollinator.

Intergenerational Continuity of Adverse Childhood Experiences across Generations

Room & Time: Room F, 6:45 p.m. to 6:55 p.m.

Presenter: Olivia Deroun, Callie Pitre, & Kathie Li

Area of Study: Psychology

Advisor/Co-Author: Dr. Hung-Chu Lin

School: University of Louisiana at Lafayette

Abstract: Adverse childhood experiences (ACEs) between generations has been examined often in the literature. Previous research has found that there is a continuity effect of ACEs between generations. This study examined the ACEs intergenerational continuity specifically between a college student and their primary caregiver. Out of the entire sample, 152 college students from the University of Louisiana at Lafayette recruited their primary caregivers to respond to the survey. Participants responded to a survey including the Adverse Childhood Experience scale which is a 10-item scale that assesses an individual's recall of all adverse experiences that occurred prior to his/her eighteenth birthday. The results indicated that college students overall reported higher ACEs. However, when the scores were matched with their primary caregivers, the ACEs score mirrored their caregivers. This supports the findings of past research that identified the continuity effect. Understanding this effect can help to implement intervention programs that can break the cycle of ACEs.

Why Don't People Die? An Exploration of Factors that Might Influence the Production of Death-Related Language

Room & Time: Room F, 7:00 p.m. to 7:10 p.m.

Presenter: Krystal Dean & Tayla Weary

Area of Study: Psychology

Advisor/Co-Author: Dr. Brooke O. Breaux, Marissa C. Pitt, Peyton Corwin, Riley A. Circello, Brionne Wright, Shelbi Smith

School: University of Louisiana at Lafayette

Abstract: The purpose of this research project is to explore factors, such as previous experiences with death, tendency to fear death, religious affiliation, degree of spirituality, belief in an afterlife, that might have an influence on the types of language that people use in situations where it is difficult to avoid talking about death. This presentation will focus on one phase of a larger project. Participants in this phase ($n = 89$) were students enrolled in at least one psychology course at UL Lafayette. We used a control group design in which participants were asked to construct an email informing a female friend either about the death of their friend's mother in a car accident (i.e., death prompt) or about the infidelity of their friend's mother that was resulting in a divorce (i.e., divorce prompt). Our results revealed that the death prompt increased the likelihood that participants would include words related to how the death occurred (e.g., "accident"), the death itself (e.g., "passed"), and the emotions involved in the scenario (e.g., "terrible"). A subsequent analysis confirmed that words related to death were used more by participants who had received the death prompt (0.46%) than by those who had received the divorce prompt (0.03%), $F(1, 85) = 15.06$, $p = .0002$; however, out of

the 41 participants who received the death prompt, only 15 of them (37%) actually produced a word directly related to death (e.g., “bury,” “coffin,” “kill”). We also observed that many factors we were interested in did not appear to have a significant impact on participant’s choice of words. Based on these findings, we argue that future research is necessary to identify factors that can predict the type of language that people will produce when they are put into situations where talking about death cannot be avoided.

Differences in Adverse Childhood Experiences, Attachment Insecurity, and Their Association between Two Generations

Room & Time: Room F, 7:35 p.m. to 7:45 p.m.

Presenter: Madison Knott & Aidan Guidry

Area of Study: Psychology

Advisor/Co-Author: Dr. Hung-Chu Lin

School: University of Louisiana at Lafayette

Abstract: Prior research has identified the relations between adverse childhood experiences (ACEs) and attachment insecurity. However, the literature is limited regarding the intergenerational continuity of the relation between ACEs and attachment. Learning more about how childhood trauma transmits across generations is important to begin developing intervention methods to break the cycle of these experiences. This study sought to examine the individual differences in ACEs and attachment insecurity and their associations between two generations. A sample of 463 college students participated in an online survey, who were then prompted to decide whether to help recruit their primary caregiver. The online survey included items from the (1) Adverse Childhood Experiences Scale, assessing traumatic events that occurred before the age of 18 and the (2) Experience in Close Relationships scale, examining adult internal working models with items representing two subscales: attachment avoidance and attachment anxiety. The results showed a continuity of ACEs between generations in that students’ and caregivers’ scores did not differ, but students scored significantly higher in attachment insecurity than their caregivers. ACEs were also only related to attachment anxiety in college students. These findings suggest a developmental difference between college students’ perception of their ACEs than that of their caregivers.

Bystander Intervention: Greek and Non-Greek Members’ Attitudes and Opportunities to Intervene

Room & Time: Room F, 7:50 p.m. to 8:00 p.m.

Presenter: Haley Dunagain & Kade Theriot

Area of Study: Psychology

Advisor/Co-Author: Dr. Amy Brown

School: University of Louisiana at Lafayette

Abstract: The current study aimed to examine the relationships between Greek affiliation and bystander intervention attitudes and opportunities to intervene. We predicted that Greek members (fraternity/sorority members) would have more opportunities to intervene and lower attitudes toward bystander intervention than non-Greek members. Participants: Participants include 437 undergraduate students (Mage = 19.68; 69% Female) enlisted from a southern university through the university's SONA participant subject pool during the spring and fall semesters of 2020. Of participants, 40 (11.62%) reported being a Greek member while 304 (88.37%) identified as a non-Greek member. Methods: Data were collected using The Daily Drinking Questionnaire (Collins et al., 1985) to assess drinking behaviors and a modified version of the Sexual Assault Bystander Questionnaire (Hoxmeier, et al., 2017) to assess the participants' attitudes, subjective norms, perceived behavioral control, self-efficacy, intention, opportunities, and engagement in bystander behavior. Results: Results indicated that Greek membership did not influence reported bystander attitudes and opportunities to intervene. Conclusion: Due to COVID-19 guidelines and restrictions, the reported opportunities to intervene could have been negatively skewed, and the social distancing guidelines could have potentially caused a disconnect between other sorority/fraternity members, therefore possibly leading to the unobserved differences in attitudes. Despite the null effect reported here, given the current circumstances of COVID-19, researchers should use caution when interpreting the results. Future researchers should continue to examine how greek affiliation may or may not influence bystander perceptions and behavior.

The Association of Adverse Childhood Experiences with Anxiety Symptoms Varies with Perceived Level of Stress

Room & Time: Room F, 8:05 p.m. to 8:15 p.m.

Presenter: Prynceston Fant, Madeline Jones, & Hunter Harrington

Area of Study: Psychology

Advisor/Co-Author: Dr. Hung-Chu Lin, Professor Whitney Storey, Dr. Michelle Jeanis,

School: University of Louisiana at Lafayette

Abstract: Prior research has demonstrated that both adverse childhood experiences (ACEs) and stress predict adult anxiety symptoms. Adverse childhood experiences are traumatizing events that occur by the age 18 and include trauma, neglect, abuse, and family dysfunction. While some research has demonstrated stress playing a role as a mediator in the relation between ACEs and anxiety, more

research remains to be done to understand whether stress may serve as a moderator in this relation. Therefore, the purpose of this study was to investigate whether ACEs predicted anxiety symptoms and whether stress moderated this relation. A sample of 624 participants responded to an online survey examining Adverse Childhood Experiences (ACEs), which assessed childhood trauma occurrences prior to one's eighteenth birthday, and current symptoms of depression, anxiety, and stress, which were examined through the Depression Anxiety Stress Scales (DASS). Regression analysis showed that ACEs, stress, and anxiety were mutually correlated. Moderation analysis indicated that stress moderated the relation between ACEs and anxiety. The findings highlight the therapeutic benefits of targeting stress among those who have anxiety associated with ACEs.

Childhood Adversity and Well-being: Differences between College Students and Their Primary Caregivers

Room & Time: Room F, 8:20 p.m. to 8:30 p.m.

Presenter: Bonnie Lahman, Olivia Frey, & Mikaila Kinsland

Area of Study: Psychology

Advisor/Co-Author: Dr. Hung-Chu Lin

School: University of Louisiana at Lafayette

Abstract: Research has shown that events experienced in childhood can create an impact on overall wellbeing; however, cross generational effects of this impact have remained unclear. Understanding the relation between adverse childhood experiences (ACEs) and wellbeing within and across generations is an important to improving mental and physical health outcomes. A sample of 463 college students and primary caregivers of 152 students of the sample took part in an online survey that included: (1) the Adverse Childhood Experiences scale, examining adverse events that occurred prior to the individual's eighteenth birthday, (2) The Depression Anxiety Stress Scales, evaluating current levels of depressive symptoms, stress, and anxiety, and (3) Somatization Scale of the Symptom Checklist, assessing somatic symptoms. The results of the study revealed that college students reported higher levels of depression, anxiety, stress, and somatic symptoms compared to their respective caregivers. However, the ACEs scores did not show a significant difference. Moreover, ACEs reported by college students were significantly correlated with depression, anxiety, stress, and somatic symptoms while the scores for their caregivers did not. The findings carry implications for generation-specific approach for addressing the impacts of ACEs on well-being.

End of Room F