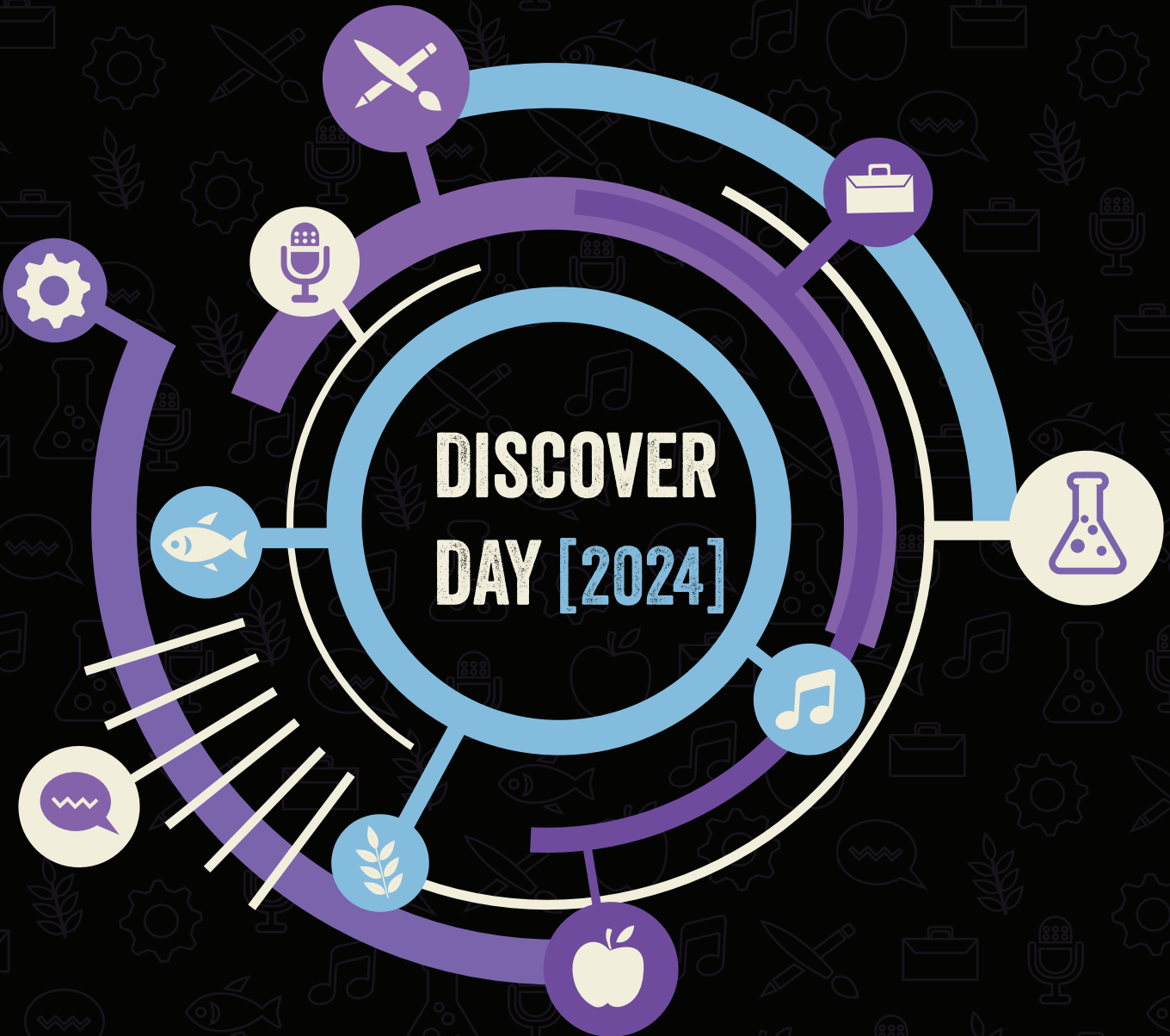


**LSU**

**Discover Undergraduate  
Research Program**



**LSU Undergraduate  
Research & Creativity  
Conference**

**APRIL 19, 2024**

# DISCOVER DAY 2024 TABLE OF CONTENTS

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<b>5-16</b>	Posters & Visual Displays
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<b>22</b>	Panels
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<b>24</b>	Keynote Speaker
<b>25-26</b>	Special Thanks
<b>27</b>	Distinguished Undergraduate Researcher Program

## WELCOME TO LSU DISCOVER DAY 2024!

LSU Discover Day is a university-wide undergraduate and creativity conference that provides a platform for students from all disciplines to share their research and creative projects. Student presentations include readings, posters, visual displays, art exhibitions, and oral presentations.

This event allows the LSU community a chance to publicize and reflect on undergraduate student success in discovery, creativity, and research.

# SCHEDULE OF EVENTS

*All locations in the LSU Student Union*

<u>Time</u>	<u>Event</u>	<u>Location</u>
7:30 a.m. - 6:00 p.m.	<b>Check-In Desk Open</b>	2nd Floor East Lobby (next to Cotillion Ballroom)
8:00 a.m. - 8:30 a.m.	<b>Breakfast and Welcome Remarks</b>	Cotillion Ballroom, Room 250
9:00 a.m. - 12:00 p.m.	<b>Oral Presentations</b> <i>Topics: Social Sciences, Arts, &amp; Humanities</i>	Capital Chamber, Room 329 Castillian, Room 304 International, Room 303 Vieux Carré, Room 325
9:00 a.m. - 11:00 a.m.	<b>Morning Poster Session</b> <i>Topics: Science, Technology, Engineering, &amp; Mathematics</i>	Cotillion Ballroom, Room 250
10:00 a.m. - 11:00 a.m.	<b>Performances</b>	Red River, Room 323
11:30 a.m. - 12:30 p.m.	<b>Presenter Lunch Break</b>	Atchafalaya, Room 339 Magnolia, Room 301
12:00 p.m. - 3:15 p.m.	<b>Oral Presentations</b> <i>Topics: Science, Technology, Engineering, &amp; Mathematics</i>	Capital Chamber, Room 329 Castillian, Room 304 International, Room 303 Red River, Room 323
12:00 p.m. - 3:00 p.m.	<b>Student Panel - The Academic Study of Religion at LSU: A Variety of Approaches</b>	Vieux Carré, Room 325
1:00 p.m. - 3:00 p.m.	<b>Afternoon Poster &amp; Visual Display Session</b> <i>Topics: all</i>	Cotillion Ballroom, Room 250
1:00 p.m. - 3:00 p.m.	<b>Art</b>	Cotillion Ballroom, Room 250
3:30 p.m. - 4:30 p.m.	<b>Panel - Pursuing Careers in Research</b>	Capital Chamber, Room 329
5:00 p.m. - 6:30 p.m.	<b>Keynote Speech &amp; Awards Ceremony</b> <i>Keynote Speaker: Dr. Margaret Reams</i>	Atchafalaya, Room 339

## ABOUT LSU DISCOVER

The LSU Discover Undergraduate Research Program hosts Discover Day and promotes and supports student participation in faculty-mentored research and creative activities. For students looking to become involved in undergraduate research, we offer assistance in finding a mentor, events to learn more about undergraduate research, and opportunities to talk to research students about their experiences in any major. For students who are currently involved in undergraduate research, we offer funding for research and travel, workshops, and the Distinguished Undergraduate Researcher Program.

To learn more about LSU Discover, visit [lsu.edu/discover](http://lsu.edu/discover)

## GUEST WI-FI

Network: LSU Guest Wireless      Username: DD24      Password: 179155

# ROYAL COTILLION BALLROOM MAP POSTER & VISUAL DISPLAY PRESENTATIONS

## STAGE

### FOOD AND BEVERAGE

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### GRADUATE SCHOOLS

UNO	LSU
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112	111	110	109	108	107
113	114	115	116	117	118

106	105	104	103	102	101
95	96	97	98	99	100

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125	126	127	128	129	130

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137	138	139	140	141	142

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71	72	73	74	75	76

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149	150	151	152	153	154

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59	60	61	62	63	64

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161	162	163	164	165	166

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47	48	49	50	51	52

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173	174	175	176	177	178

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35	36	37	38	39	40

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185	186	187	188	189	190

34	33	32	31	30	29
23	24	25	26	27	28

196	195	194	193	192	191
197	198	199	200	201	202

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11	12	13	14	15	16

206	205	204	203		
207		208	209	210	

10	9	8	7	6	
1	2	3	4	5	

211
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EXIT

EXIT

ENTRANCE

# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## KEY

All presenters are Louisiana State University students unless otherwise noted.

**A** | American University

**B** | Baton Rouge Community College

**BM** | Baton Rouge Magnet High School

**BU** | Baylor University

**CS** | California State University - Fresno

**LU** | Longwood University

**L** | Loyola University New Orleans

**MN** | McNeese State University

**N** | Nicholls State University

**R** | Rhodes College

**SMC** | Saint Mary's College

**SM** | Scotlandville Magnet High School

**SH** | Siena Heights University

**SE** | Southeastern Louisiana University

**SU** | Southern University A&M

**TC** | Texas Christian University

**TU** | Trinity University

**UC** | University of Central Florida

**UL** | University of Louisiana - Lafayette

**UNO** | University of New Orleans

**UNT** | University of North Texas

**UT** | University of Texas at Austin

## SCIENCE

#	Student	Title	Mentor
157	Fabiana Aguilera Vaca Diez	The Effect of Different Binder Materials on a Working Electrode for CO <sub>2</sub> Reduction in Water	Noémie Elgrishi
115	Kaitlyn Andre	Digestible Dog Toys	Naohiro Kato
107	Zamira Andrews <b>SU</b>	Testing for Changes in Haplotype Frequencies under Increasing Environmental Hypoxia in <i>Crassostrea virginica</i>	Morgan Kelly
135	Dakota Babin	Volatile Chemical Traits of <i>Phragmites australis</i> – a Key to understanding Resistance to Herbivory and Coastal Marsh Dieback	James Cronin
166	Alexandra Barton	Student's Perception of Learning in a General Chemistry Course	Zakiya Wilson-Kennedy
131	Kaelie Bernard	Investigating the Activity and Conformation of 5-Lipoxygenase in the Presence of Novel Inhibitors	Nathaniel Gilbert
158	Brayden Blackburn	Studies of Secondary Metabolites of the American Beautyberry Fruiting Bodies	Fatima Rivas
132	Avery Bourdonnay	Generating Photo-Convertible Fluorescently Tagged Proteins to Study Lysosomal Dynamics	Alyssa Johnson
180	Za'Kyriaha Brock <b>SM</b>	Got Salt? A Relationship between Oysters and Sediment Diversions	Vanessa van Heerden
140	Jasmine Brown	Accuracy of Digital Anthropometry during Pregnancy: A Longitudinal Study	Steven Heymsfield
117	Madeline Broyles	Virulence Differences Across Multiple Generations of the Fall Armyworm, <i>Spodoptera frugiper</i>	Bret Eldred
133	Jacob Carignan	Effect of Chronic Stress on Microglia in the Entorhinal Cortex	Juhee Haam
145	Lexi Cheramie	Confocal Subcellular Localization Study of Deg Proteases in <i>Chlamydomonas reinhardtii</i>	David Vinyard
124	Syd Clay	Moving Forward toward Microbial Biofuel--Do Diatoms Develop Differently under Various Light Intensities?	Brent Larson
160	Deztiny Clemons	Polymerization-Induced Crystallization-Driven Self-Assembly of Polypeptoid Block Copolymer towards Efficient Synthesis of One, Two, and Three Dimensional Nanostructures	Donghui Zhang
109	Abigail Coldwell	Molecular Adaptations of an Enzyme Regulating DNA Topology in Extremophilic Bacteria	Jeremy Brown
147	Dezarae Coleman	Kinetic Analysis and Small-Molecule Inhibition of <i>Thermoanaerobacter brockii</i> Alcohol Dehydrogenase Using Simple Pyrazole Derivatives	Johnna Roose

# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## SCIENCE

#	Student	Title	Mentor
178	Samaria Cosey <b>SM</b>	Funki Fungi: Growth of Mushrooms on Different Substrates	Vanessa van Heerden
159	Victoria Delacruz	Synthesis of Natural Product Derivatives and Their Interference on Cancer Proliferation	Fatima Rivas
110	Sashoya Dougan	Investigating Evolutionary Patterns of Limb Loss in Squamates: A Comparative Genomics Approach	Brant Faircloth
163	Maya Dunn	Synthesis and Characterization of a Pyrrole Derivative	Sebastian Oloo
161	Carlie Dutile	Synthesis and Characterization of Cobalt-Centered Complexes for Nitrite Reduction in Water	Noémie Elgrishi
127	Ashley Florance	Developing the Ideal Genetic Background for Photosystem II Research in <i>Synechocystis</i> sp. PCC 6803	David Vinyard
156	Julian Flores Meza <b>N</b>	Ab Initio Calculations of the Relative Product Yields for the Dehydration of 2-Methylcyclohexanol	Glenn Lo
113	Sydney Gemeinhardt & Lisa DiMaggio <b>B</b>	Defining the Preferred Substrates of Louisiana Freshwater Sponge Species	Mary Miller
138	Danielle Gipson	Using Age Benchmarks to Predict Characteristics and Severity of Aggressive Breast Cancer	Emmanuelle Ruiz
146	Emma Glasgow	Responses of <i>Tribolium castaneum</i> and <i>Tribolium confusum</i> to <i>Beauveria bassiana</i> Using an Olfactometer	James Cronin
181	Haiden Guillory	Characterizing Reaction Rates of $^{34}\text{Cl} + p$ during Classical Novae By Examining $^{32}\text{S} + ^6\text{Li}$ Fusion Reaction	Catherine Deibel
183	Gianna Hammill	Expanding Knowledge of Nuclear Structure with Quantum Simulations	Kristina Launey
111	Amanda Harvey	Temporal Analysis of the Genetic Health and Trophic Ecology of Coastal Breeding Common Nighthawks	Nicholas Mason
176	Treasure Hawkins <b>SM</b>	How Does Carbon Sequestration Differ between Flooded and Unflooded Environments	Vanessa van Heerden
168	Alison Hecht	Understanding the Impacts of Polymer Molecular Weights on Protein/Polymer Complex Coacervation	Amy Xu
141	Caroline Henry	A Retrospective Study on Species Richness and Diversity in Infections during Secondary Penile Prostheses Surgery	Gerard Henry
148	Hayley Howard & Destiny Marvel <b>B</b>	Can Sediment Analysis Be Used to Further Describe Species Richness of Freshwater Sponges?	Mary Miller
144	Maia Jackson	The Effects of Ethanol Preservation on High-Molecular Weight DNA	Brant Faircloth
184	Beau Johnson, Joyce Oluwaseun	Ultraviolet Spectrum of the Corona vs the Photosphere	Aaron Ryan
136	Harper Juge	Ups and Downs: Underlying Genetic Mechanisms of a Short Sleep Model in <i>Drosophila</i>	Alyssa Johnson
173	Rorisang Kgoadi	Modelling Seiche Waves in Yellowstone Lake towards Understanding Lake Volcanic Interactions	Karen Luttrell
137	Benjamin Klein	A Potential Sexual Dimorphism: The Involvement of Oxytocin Receptor Neurons in the Anteroventral Periventricular Nucleus during Pup Retrieval by Male Mice	Ryoichi Teruyama
169	Katy Knecht	Cobalt and Copper Electrocatalysts for the Aqueous Reduction of Nitrite	Noémie Elgrishi
170	Sydney Lawson	Phytochemical Studies of the American Beautyberry Bush	Fatima Rivas



# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## SCIENCE

#	Student	Title	Mentor
152	Daniel LeLorier	Dinaphthofuran-Based Lithium-Ion Receptors	Semin Lee
121	Anna Leyrer	Impact of Environmentally Persistent Free Radicals on the Airway Epithelial Membrane Integrity	Stephania Cormier
172	Liam Lopez	Optimizing Local Polynomials with Conformal Prediction	Li-Hsiang Lin
139	Marcella Malatras L	Bioinformatics-Guided Mutagenesis of Erythromycin Resistance Methyltransferases Reveals Regions Required for Antibiotic Resistance	Allyn Schoeffler
162	Lily Manzi L	Using Python to Create a Linear Extrapolation Fitting Code to Analyze Experimental Protein Denaturation Data	Allyn Schoeffler
134	Trinity Martin L	The Temperature Dependence of DNA Gyrase Supercoiling Activity	Allyn Schoeffler
153	Madeline McHugh	The Synthesis of a Benzopinacol Derivative	John Pojman
177	Kiyana McKnight SM	New Strategy for Apple Snail Baiting	Vanessa van Heerden
143	Peyton Meares	Alpha Di-Functionalization of Cyclopentanones with Indole	Rendy Kartika
154	Simone Moreau & Carlos Villalobos L	Optimizing Asymmetric Rhodamine Derivatives for Sensor Applications	Clifton Stephenson
122	Yousef Mosleh	Sympathetic Nervous System Innervation in the Adipose Tissue of OSMRFKO Mice and the Role of the OSM/OSMR Crosstalk in Metabolic Homeostasis	Heike Muenzberg
149	Sadie Noble	Investigating Simple Coacervation of Bovine Serum Albumin with PEG Crowding: A Comprehensive Characterization	Amy Xu



# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## SCIENCE

<b>#</b>	<b>Student</b>	<b>Title</b>	<b>Mentor</b>
165	Mitchelle Okoli <b>L</b>	Understanding and Optimizing the Molecular Switch Potential for a Range of Aziridine Derivatives	Clifton Stephenson
129	Ella Otken	Set1 Lysine Methyl Transferase Activity is Required for Extended Heterochromatic Silencing in Yeast <i>rpd3</i> Mutants	David Donze
119	Tamieka Palmer & Rose Dawes <b>B</b>	Examining Changes in Species Richness through a Comparison of Two Ecological Studies	Mary Miller
108	Jorge Parada	A Transcriptomic Analysis with a Proteomic Compliment in a Novel Salt Tolerant Plant	Maheshi Dassanayake
167	Brennan Poole	Formation of Void during Frontal Polymerization in an Epoxy System under the Influence of a Thermally Conductive Material	John Pojman
171	Lillian Powell	Road Traffic Management in Baton Rouge during LSU Sporting Events	James Madden
155	Colette Rainey	Analysis of Proteins Generated from Pesticide Poisoning	Mandi Lopez
164	Abigail Reviel <b>L</b>	Developing Methodology for the Separation and Quantification of Algal Communities within Lake Pontchartrain Basin via LCMS	C.J. Stephenson
128	Lauren Rogers	Kinetic Analysis of Fucoxanthinol Production from Fucoxanthin	Naohiro Kato
123	Ria Salway	Analyzing Population Structure and Color Variation between Populations of <i>Nucella lamellosa</i>	Morgan Kelly
174	Ashlyn Schneida	Evaluating Site Resonance Frequency with Horizontal-to-Vertical Spectral Ratios from Dense Arrays across the Tepehate-Baton Rouge Fault System, US Gulf Coast	Patricia Persaud
112	Jeanne Smith	On Your Mark, Get Set, Escape! Variation in Predator Responses among Populations of the Marsh Snail <i>Littorina littorea</i>	Morgan Kelly
182	Nils Sommerfeld	Statistical Analysis of Stochastically Generated Free Electron Laser Pulses	Francois Mauger
118	Emily Stelling	Differences in Behavior and Stress-Induced Corticosterone between Native and Invasive Anoles	Christine Lattin
125	Emma Stevens & Mina Sheikh	Bacteria-Induced Internal Egg Hatching in <i>Caenorhabditis elegans</i>	Fan Zhang
150	George Tisdale	Characterization of the Chemical Behavior of Main-Group Metal-HMDSs with Lewis Acids and Bases	Clifton Wagner
175	Alexa Tullier	Overlapping Crater and Fault Lithostratigraphy in Elysium Planitia Using Hi-RISE Imagery	Suniti Karunatilake
126	Tyra Washington	Advancing Aging Research: An Analysis of Methodologies Applied in the Study of Pexophagy in <i>Caenorhabditis elegans</i>	Adam Bohnert
116	Sam Webb <b>UT</b>	Characterization of Heavy Metal Tolerance Genes in the Model Organism, <i>Panicum hallii</i>	Aleah Henderson-Carter
114	Mackenzie Weeks	The Investigation of the Mechanism Responsible for Different Signals across Codon Positions in the Phylogenetic Analysis of HIV	Jeremy Brown
130	Lillian Wilder	"From Lab to Life:" Do Wearables Accurately Estimate Physical Activity Levels in Pregnant People with Obesity?	Leanne Redman
120	Dykia Williams	Characterizing Structure-Function Relationships on the Acceptor Side of Photosystem II	David Vinyard
151	Kenneth Williams	Reactions of LiN[SiMe <sub>3</sub> ] Dipp with CuCl & Quinoxaline	Clifton Wagner



# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## KINESIOLOGY

#	Student	Title	Mentor
67	Ethan Abbenante	Adolescents' Perceived Neighborhood Safety: Relationship with Visceral Adipose Tissue and Cholesterol Levels	Amanda Staiano
75	Miranda Chodzko	Impact of Aerobic Exercise Training on Circulating Myokines in Colorectal Cancer Survivors	Guillaume Spielmann
77	Tiernan Dautle & Iresa Lincoln	Upper Extremity Movements during Feeding in Autistic Children	Nicholas Fears
71	Katie Haydel & Rachel Schlosser	Coronary Artery Bypass Grafts in a Human Cadaver	Melissa Thompson
83	Mary LoGiudice & Catherine Sorrels	Impact of Continuous, Low-Dose-Rate Neutron Irradiation during Gestation on Fetal Development	Heather Allaway
69	Rylie Neal	Cadaveric Discovery of an Anomalous Forearm Muscle	Melissa Thompson
81	Mikah Ortiz	A Cross-Cultural Examination of Fitness Levels among College Students in Italy and the United States	Ryan Hulteen
79	Jared Rodrigue	Does a Brief and Simple 100% Oxygen Treatment Improve Sustained Attention Levels?	Marc Dalecki

## AGRICULTURE

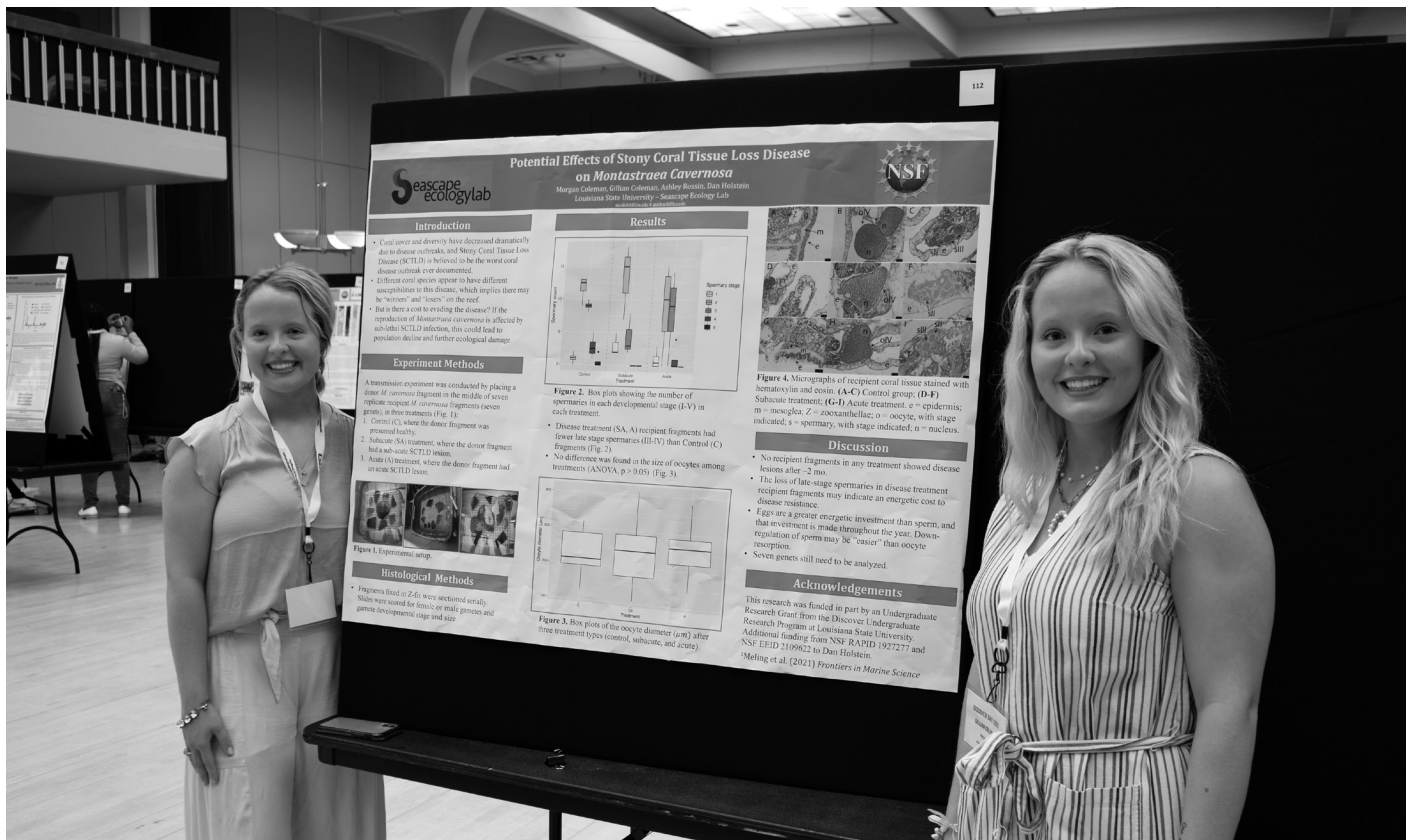
#	Student	Title	Mentor
188	Jadyn Allement <b>SU</b>	A Pilot Review of Veterinary Care Attitudes in the Livestock Industry	Tyra Davis
201	Madisen Babin <b>SU</b>	Effects of Herb Inclusion on Laying Hen Diets for Egg Production and Nutrient Content	Harold Mellieon
186	Ashton Dalton	Sucrose Acetate Isobutyrate for Delivery of a Single Intramuscular Injection of Follicle Stimulating Hormone for Follicular Stimulation in Beef Cattle	Kenneth Bondioli
189	Destinae Davis <b>SU</b>	Animal Health and Production and Animal Products	Harold Mellieon
196	Payton Floyed	Influence of Environmental Conditions on Shelter Tube Construction in the Formosan Subterranean Termite	Qian "Karen" Sun
202	Myriel Green	Effects of Menadione on Food Consumption and Survival of the Formosan Subterranean Termite, <i>Coptotermes formosanus</i>	Qian "Karen" Sun
179	Courtney Guilbeaux <b>SU</b>	Effects of Storage Length, Fermentation Type, and Feed Type on the Nutrient Profile of Fermented Swine Feed	Jodi Morton
193	Allison Jane Hamilton	Functional Characterization of the $\beta$ -1,6-glucan Synthase Gene, KRE11, in <i>Magnaporthe oryzae</i>	Ely Oliveira-Garcia
191	Sophie LeBlanc	Extending Ungulate Embryo Development In Vitro	Constantine Simintiras
195	Kevin Quinet	Understanding the Habitat Preferences of Juvenile Blue Crabs in Louisiana Estuaries When Presented with Food Cues	Theresa Davenport
185	Jack Rogers	Avian Niche Ecology in Rice and Crawfish Agrisystems	Kevin Ringelman
194	Jose Rojas-Iracheta	Exploring the Impact of Rice-Associated <i>Pantoea ananatis</i> on Bacterial Panicle Blight of Rice	Jong Ham
187	Claire Scheufens	The Influence of Fermented Feed on Pig Growth and Wellbeing	Jodi Morton
190	Koi Wedderburn <b>SU</b>	The Effects of 3-Day Fermented Feed on Broiler Growth	Jodi Morton
192	Aris Williams	Quality and Yield Responses of Louisiana Tea to Nitrogen Fertilizer Treatments	Yan Chen

# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## COAST & ENVIRONMENT

#	Student	Title	Mentor
85	James Anderson	Hurricanes and Harmful Algal Blooms: Determining the Primary Phosphorus Source Linking These Events	John White
106	Jai'Dyn Bickham <b>SM</b>	Acting Crabby: A Behavioral Study of Hermit Crabs	Brian Snyder
95	Morgan Coleman & Gillian Coleman	The Influence of Disease Resistance on Reproduction in <i>Montastraea cavernosa</i>	Daniel Holstein
99	Brandon Green <b>SM</b>	Heavy Consequences of Dredging: Bioavailability of Metal Pollutants in LSU Lakes	Brian Snyder
101	Kalaja Johnson <b>SM</b>	Is Taro in the Cards for a Cleaner Future?	Brian Snyder
91	Madison Liotta	Dredging Impact on the Environment inside and outside a Borrow Area for Coastal Restoration	Kehui Xu
93	Abhi Mehrota <b>B</b>	Unveiling Louisiana's Hidden Gems: Exploring Freshwater Sponge Diversity and Monitoring through Passive Sampling	Mary Miller
104	Stephanie Procopio	Manganese-Mediated Nitrogen Transformation in Suboxic Gulf of Mexico Porewaters	Linda Hooper-Bui
87	Dakota Sievers	Regenerating or Ghost Forest? A.E. LeBlanc Woods Natural Area	Linda Hooper-Bui
97	Kimani Shropshire <b>SM</b>	Dredging in LSU Lakes: Turning over a New Leaf and Old Nutrients	Brian Snyder
89	Patricia Thibodeaux	Comparing Arthropod and Plant Communities across Natural and Created Brackish Marshes in Louisiana	Michael Polito
103	Harmony Young <b>SM</b>	What the Flock is Happening at LSU Lakes?	Brian Snyder



# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## ENGINEERING

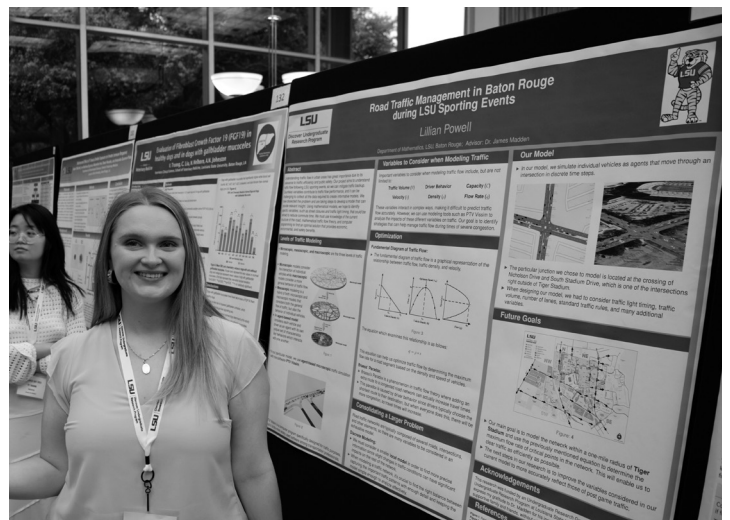
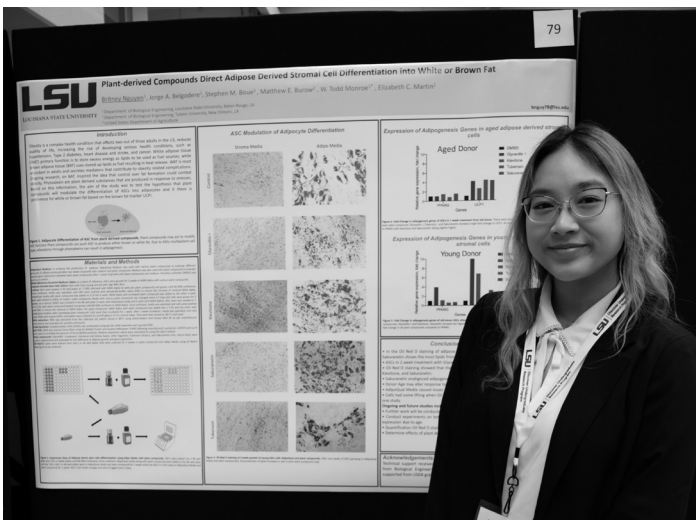
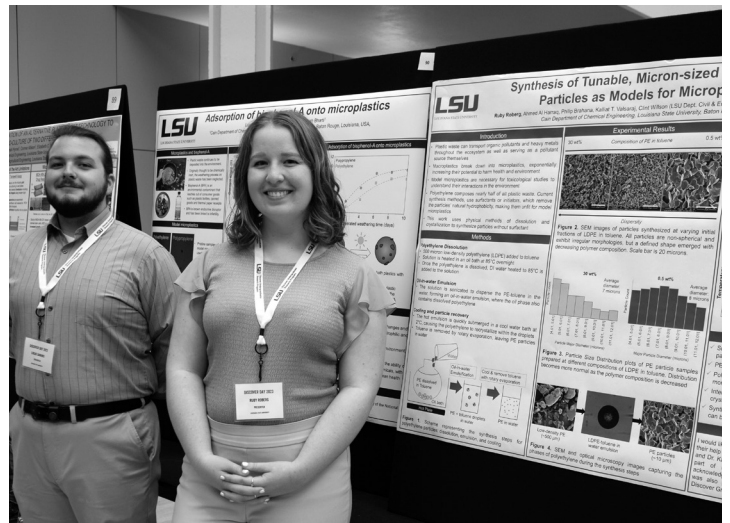
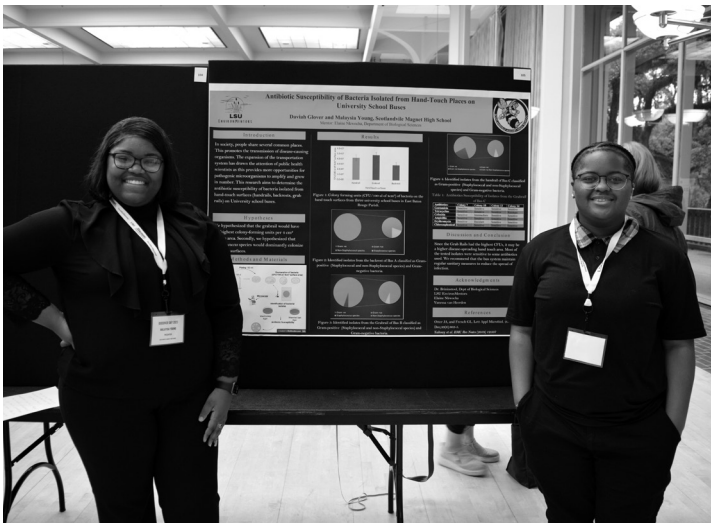
<b>#</b>	<b><u>Student</u></b>	<b><u>Title</u></b>	<b><u>Mentor</u></b>
30	Sharonda Angelle	Depolymerization of Waste Plastics by Induction Seating	Bernard Whajah
41	Erin Barker	Improving the Efficiency of High-Volume Mass Production in a 3-D Print Farm Using Remote Access Server Software	Isabelina Nahmens
17	Emly Bracey, Avery Olinde, Olivia Henderson & Cody Thompson	An Efficient, Low-Cost System for Creating External Ear Prostheses for Patients Undergoing Auriculectomy/Lateral Temporal Bone Resection	Philip Jung
25	Calley Chauvin	3D Co-culture of Adipose Derived Stem Cells with ER+ Breast Cancer Cells Using a Microfluidic Droplet Trapping Array to Study Endocrine Resistance	Michael Benton
35	Eva Counts, Elizabeth Peters, Oliver Dean, Khai Lejeune, Madisson Boutte & Mikayla Powell	Soybean Cutting Device	Kevin Hoffseth
33	Cailynn Gerald, Chloe Marino, Jacob Lincoln, Brady Billiot & Travis Sharpe	Smart PPE for Biometric Monitoring to Prevent Heat Exhaustion	Nick Totaro
13	Talajha Hunter	Water-Soluble, Carbonated Polymers Made by Additive Manufacturing	Fareed Dawan
16	Anna Johnson, Andrew James, Corrine Martin & Nick Demas	Force Sensing Mouthguard for At-Home Measurements to Track Jaw Clenching	Chandra Theegala
23	Chelsea Le, Stefany Crosby, Peyton Piper & Jonathan Escobar	Design of a Hemostatic Seal Strength Measurement System	Marybeth Lima
31	Mingyang Li	Malware Analysis of the "Biscuit" Win32 PE Program with Anti-Debugging Features	Golden Richard
14	Britney Nguyen	Plant-Derived Compounds Direct Adipose-Derived Stromal Cell Differentiation into White or Brown Fat	Todd Monroe
27	Elena Nikolaychuk, Kateland Howard, Nestor Alvarez-Rodriguez & Ansu Andrews	Design of a Cell-Free Protein Synthesis Reaction Chamber	Yongchan Kwon

# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## ENGINEERING

#	Student	Title	Mentor
21	Erinn Roblee, Patrick Haydell, Kirsten Malone, Joseph Randall, Nicholas Bair & Jaime Cordova	Tumor-on-a-chip: A Microfluidic System to Culture and Evaluate Cancer Tissue Scaffolds	Todd Monroe
37	Aditya Srivastava	Optical Vibration Analysis: Exposing Sound Leakage in Transparent Settings	Chen Wang
12	Samantha Staggs	Investigating Cloud Aerosol Production in the Planetary Cloud Aerosols Research Facility through Rayleigh-Bérnard Convection	Patrick Mensah
29	Long Tran & Ethan Nguyen	The Effect of High Wind Loads on Ground-Mounted Solar Panels	Aly Aly
39	Peter Vallet, Brandon Walton, Brandon Turner & Serene Sam	Leveraging Language Models for Insight into Patent Similarity	Roy Haggerty
15	Stephen Wheat	Murine Colonoids and Bone Marrow Derived Macrophages as Models for Macrophage-Mediated Regenerative Response in the Intestinal Epithelium	Stefan Kalies





# POSTERS

Morning Session | 9:00 - 11:00 AM | Royal Cotillion Ballroom, Room 250

## VETERINARY MEDICINE

#	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
57	Kayla Brown	Comparing the Lung Function of Mice Exposed to Dual Usage Cigarettes Plus E-Cigarettes and JUUL Using Plethysmography	Alexandra Noël
43	Camilo Fernandez Bellorin	Investigating the Role of Viral and Cellular Kinases in Dynein-Dependent Herpes Simplex Virus 1 Neuronal Transport	Konstantin Kousoulas
55	Samantha Huszar	Respiratory Effects of Maternal Vaping on Offspring in a Mouse Model	Alexandra Noël
61	Jemiah Maxie	Endothelial Dysfunction Induced by Inhalation of Environmentally Persistent Free Radicals [EPFRs] is Regulated by AhR Activation in AT-2 Cells	Tammy Dugas
59	Do'Monique Noel <b>UC</b>	Preparation of Assembly Sample of TMEM106b C-Terminal	Bo Chen
49	Zaneta Ogunmola	Horseshoe Effects on In Vivo Equine Gait Kinetics during the Walk	Mandi Lopez
47	Isabella Paul	The Effects of Vaping on Cell Tumor Growth	Joseph Francis
65	Kaitlyn Perkins	High-Throughput Screening in Tyrosine Kinase Inhibitor Activity in Glioblastoma Cells	Joseph Francis
51	Courtney Price	Costochondral Bone Graft Replacement for Temporomandibular Joint in a Porcine Model	Mandi Lopez
53	Emma Tsai	Effects of Developmental Exposure to Microplastic Leachates on Development and Behavior of Larval Zebrafish [ <i>Danio rerio</i> ]	Ahmed Abdelmoneim
63	Hang Vu	Effect on pH after Room Temperature Storage of E-Liquids	Alexandra Noël

# POSTERS

Afternoon Session | 1:00 - 3:00 PM | Royal Cotillion Ballroom, Room 250

## ART

#	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
200	Aya Hijazi	Carbon Emissions of the Built Environment	Fabio Capra Ribeiro

## BUSINESS

#	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
20	Caroline Broussard <b>UL</b>	Beauty Brands' Digital Marketing Techniques and Their Connection to Brand Loyalty in Gen Z Consumers: A Literature Review	Lucy Henke
18	Briana Dalton & Jack Urbaneck	Hook, Line, and Security: An Analysis of Phishing Simulation Training in Higher Education	A.J. Burns
22	Ryan Gremillion & Blake Edwards	Kiddie Consumers: Unveiling the Economic Aptitude of Preschoolers in Simulated Market Environments	Nawar Nayeem
24	Morgan Oen	The Consequences of Globalization on Housing Markets in Low-Income Countries	Jamie Kurash

# POSTERS

Afternoon Session | 1:00 - 3:00 PM | Royal Cotillion Ballroom, Room 250

## HUMAN SCIENCES & EDUCATION

<b>#</b>	<b>Student</b>	<b>Title</b>	<b>Mentor</b>
26	Emily Craig <b>SE</b>	Effective Math Teaching Strategies in a 5th-Grade Classroom with Predominantly ELL Students	Lindsey Caillouet
34	Joseph Faccinei	Predictiveness of Community Connectedness and Social Support on Substance Use Behavior Change	Shawndaya Thrasher
32	Nat Sumner	The Digital Divide and Structured Inequality	Michelle Livermore
28	Lilli Xiang <b>UNT</b>	Resident Assistant: Facilitating Growth for First-Year Students in Residence Halls	Nicholas Cornett

## HUMANITIES & SOCIAL SCIENCES

<b>#</b>	<b>Student</b>	<b>Title</b>	<b>Mentor</b>
88	Pratha Amin & Robyn Shaw	Polysyllabic Shortening in Hindi-English Bilingual Speakers	Todd Gibson
74	Olivia Amorando	Sexism and Cannabis-Related Problems among Women: The Role of Negative Affect and Coping Motivated Cannabis Use	Julia Buckner
76	Kori Balaam	African Americans and Environmental Trauma: Impacts of the 2005 Hurricane Katrina and the 2020 Pandemic	Katie Cherry
46	Andrea Bickley	Nature in the Workplace: Exploring Effects on Job Satisfaction, Turnover Intentions, and Workspace Satisfaction	Rebecca Brossoit
44	Jackson Bolner	A Qualitative Examination of Perceived Burdensomeness in Emerging Adults	Ryan Hill
84	Mikayla Buenafe	Assessing Child Language Development in Single and Dual Caregiver Contexts: A Comparative Study	Julie Schneider
68	Kaylee Cannon	Impact of Higher Physical Activity Levels on Attentional Performance in Young Adults	Matthew Calamia
90	Ann Crabtree	Medicine and Popular Consciousness in Nineteenth-Century Britain	Meredith Veldman
66	Will Decker	The Neural Processes of Statistical Learning	Christopher Cox
92	Nathaniel Dela Pena	A Mapping of German Prisoner of War Camps in the Former Soviet Union	Susan Grunewald
60	Gavin Faucheux	Hurricane Ida's Lasting Impact: Post-Traumatic Growth among Younger and Older Adults	Katie Cherry
82	Marcus Forest	Ongoing Racial Bias in the PPVT: Implications for "Word Gap" Researchers	Julie Schneider
102	Henry Hanks	Dental Health and Treatment as an Indicator of Racial Inequality and Socioeconomic Status in Unidentified Persons in Louisiana	Teresa Wilson
36	Gavin Juge, Micah Williams & Symone Walton	Flood Watch	Kevin Smiley
105	Linley Kennedy	Identifying a Minimally Destructive Method for Detecting Enamel Defects in Human Teeth	Teresa Wilson
56	Alena Knieper	Uncovering Memory Differences: Insights from Near-Miss Recall Errors in Autistic and Non-Autistic Adults	Heather Lucas
86	Anais Kobinger-Wessel	Cross-Linguistic Influence in Trilingual Speakers	Todd Gibson



# POSTERS

Afternoon Session | 1:00 - 3:00 PM | Royal Cotillion Ballroom, Room 250

## HUMANITIES & SOCIAL SCIENCES

#	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
58	Lauryn Liddell, Gavin Faucheux, Jayleen Ducelus & Mayce Brown	Memory Fears in Later Life	Katie Cherry
50	Mollie McMichael	Racism and Alcohol-Related Problems among Black Adults: The Role of Negative Emotionality to Experiencing Racism	Julia Buckner
48	Kayla Melerine	Theory Mapping of Autism and Borderline Personality Disorder: How Personal Theories Impact Social Ratings	Matthew Calamia
94	Ella Menard, Nana Ana Agyeman, Eva Carter & Tyhlar Holliway	Behind the Podium: Exploring Gender Dynamics in Political Endorsements	Kenlea Barnes
52	Colette Mouton & Gabrielle Mellor	Are Risk-Takers Happier?	Don Zhang
78	Landry Rase, Anna Grace Franques & Jordyn St. Cyr	Word Final /l/ and /r/ Production in Young Female Adults in Louisiana	Hyunju Chung
54	Alyson Rivers	Suicide Safety Planning Specialization for Sexual and Gender Minority College Students	Ryan Hill
38	Simranjeet Sekhon <b>CS</b>	The Journey of Gender Roles: Experiences within Migration and Marriage of Punjabi Immigrant Women in Fresno County	Katherine Fobear
70	Lilly Small	Memory in the Oldest-Old: When Does Forgetting Bother a Nonagenarian?	Katie Cherry
80	Alexa Smith	The Predictive Validity of Language Screeners for Children	Janna Oetting
42	Alyssa Spears	Motivating a Math Mindset: The Development and Application of Theory-Grounded Measures of Math Motivation in Diverse Student Populations	H. Colleen Sinclair
100	Elise Strain & Khaleel Ouedraogo	Family Matters: How Parenthood Affects the Campaigns of Men and Women	Kenlea Barnes
72	Amelia Todd	Replication of Geospatial Identification of Elevated Suicide Risk	Ryan Hill
40	Gabriele Troxclair	DEI in SEC Schools: An Analysis of University Websites, State Legislation, and Interviews with Current DEI Professionals	Mark Schafer
98	Zoe Whitton	Impacts of the COVID-19 Pandemic on Comedy	Naomi Bennett
96	Lailah Williams & Elizabeth Dukes	Money Talks: How Men and Women Candidates Differ in Their Fundraising Appeals	Kenlea Barnes
64	Kevin Zheng & Khiem Truong	Exploring Personality and Cognitive Skills: Insights into College Achievement	Emily Elliott

## MUSIC & DRAMATIC ARTS

#	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
198	Hali Alex	William Grant Still's Symphony No.2 "Song for a New Race": A Musical Explanation of Double Consciousness	Cecilia Kang
199	Yu Yang	Social Support, Mentorship, and Performance Anxiety: Perspectives of Current LSU Music Performance Undergraduate and Graduate Students	Kamile Geist

# VISUAL DISPLAYS

Afternoon Session | 1:00 - 3:00 PM | Royal Cotillion Ballroom, Room 250

#	Student	Title	Mentor
203	Jose Betancourt, Nicholas Buxton, Ethan Petix & William Underwood <b>MN</b>	Smart Solar Panel Monitoring System for Enhanced Power Optimization	Cunzhi Zhao
197	Ashleigh Brindle & Joanne Kaouk	Enhancing the Strength of QuickCure Clay by Altering Filler and Initiator Concentrations	John Pojman
204	Cole Brumfield	Modification of Robotic Arm for Cryopreservation Quality Control	Yue Liu
7	Anthony Chiasson	Geochemical Analysis of Tetrapod Teeth from a Permian Red Bed near Seymour, TX	Achim Herrmann
1	Tanielma Costa	Impacts of Vision-Based Autonomous Driving Technology on Energy Conservation of Transportation Systems	Xiangyu Meng
205	Victor Gischler	Louisiana: Sounds of the Coast	Brian Nabors
4	Whitney James	Investigating the Genotoxicity and Cytotoxicity of Aromatic Amines to Immortalized Whale Lung Fibroblasts	James Wise
8	Joel Keller	A GUI for Electromagnetics in Layered Media	Stephen Shipman
208	Eryn Kennedy	Limiting Ethanol Crossover by Integrating a Porous Proton Layer in Electrochemical Reduction of CO <sub>2</sub>	John Flake
209	Darrin Lea	Threat Modeling Industrial Control Systems	Golden Richard
6	Huey Ying Loh	Determining the Physiological Function of LCIC	James Moroney
206	Victoria Lopez, Yilin Zheng & Angeline Asa	Beyond Static Solutions: Strategies for Cooling in Climate Zone 2A Utilizing Kinetic PV Panels in Diagrid Formation	Soo Jeong Jo
207	Zarin Musarrat Manita, Sheb Deaton, Ivory Roberts & Cristina Gil <b>MN</b>	Design of Planetary Rovers with a Control Center	Bei Xie
5	Shradha Pokharel <b>N</b>	Synthesis of Ferrocenophanes with Hydrazide Linker for Anion Recognition	Uttam Pokharel
2	Jonathan Russell	Are Increasing Global Sea Temperatures Linked to Changing Tropical Cyclone Induced Tornadoic Distribution along the U.S. Gulf of Mexico Coast	Robert Rohli
10	Bridget Seghers	Alligator, It's What's for Dinner: The Alligator as a Food, Product, and Cultural Icon in Louisiana, Past and Present	Leslie Tuttle
3	Anna Stebbins	Can Freshwater Flooding Be Detected in Eastern Oyster ( <i>Crassostrea virginica</i> ) Shells Using Isotopic and Trace Elemental Signatures as Environmental Proxies?	Kristine DeLong
210	Andrew Whitehead, Alejandro Duncan, Andrew Cagle, Bryan Solano, Han Wang	Innovating FORTIFIED Building Education through 3D Interactive Modeling	Carol Friedland
9	Ruizhuo Zhang	Evaluating the Effectiveness of Quantitative Skeletal Age Estimation Methods Compared to Traditional Qualitative Methods	Krista Bennett

# ART

1:00 - 3:00 p.m. | Royal Cotillion Ballroom, Room 250

#	<u>Student</u>	<u>Title</u>	<u>Media</u>	<u>Mentor</u>
211	Brooke Chouest	Blood in the Water, Water in the Lungs	Digital Photography, Archival Inkjet Prints	Johanna Warwick

# PERFORMANCES

10:00 - 11:00 AM | Red River, Room 323

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
10:00	Ilaani Hill, Genesis Foster	The Effects of Culture on Communication throughout the Wyatt Houston Day Collection of African American Literature	Ethan Hunter
10:15	Adam Richards	Love in All Its Fickle Forms	Robert McKinnon
10:30	Catherine Lindsey	Eudaemonia	Henry Goldkamp
10:45	Leah Hulin	The Little Green Dude	Henry Goldkamp



# ORAL PRESENTATIONS

## VIEUX CARRÉ, ROOM 325

9:00 a.m. - 11:15 a.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
9:00	Celeste Patron	Investigating the Effect of Frontal Aslant Tract Stimulation on Speech and Motor Inhibition: An HD-tACS/EEG Study	Karim Johnson
9:15	Aaren Fernandez <b>SMC</b>	Going Viral: Language Analysis of Psychological Traits as Seen on TikTok	Kaycee Bills
9:30	Madison Moore <b>A</b>	FRACAS: A Game of Chaos and Connection	Edward Helfers
9:45	Madeline Bowen <b>BU</b>	Self-Assessment of Rest among Texas PreK-12 Music Educators	Kelly Hollingsworth
10:00	<b>BREAK</b>		
10:30	Amy Ruckman	"Immortal Longings": Reifying and Remaking Textuality in Shakespeare's Interracial Relationships	Chris Barrett
10:45	Amy Ruckman	"Strutting about in Mans Attire": Disability, Crossdressing, and Queercrip Solidarity in Belinda the Blind	Chris Barrett
11:00	Sydney Whitfield	A Sociolinguistic Analysis of Intensifiers in Spanish	Rafael Orozco
11:15	Miscia Fortna	Motifs and Symbols to Express Ma'rifah in Conference of the Birds	Gregory Stone
11:30	Miscia Fortna	On the Usage of Reasoning in the Empiric School of Medicine	Usha Nathan

## CAPITAL CHAMBER, ROOM 329

9:00 a.m. - 2:45 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
9:00	Brooke Rayburn	Race-Based Trauma Induced Social Dominance Orientation: An Exploratory Study	Jas Sullivan
9:15	DeShanta Jefferson <b>SU</b>	Exploring the Relationship between Ethnic Identity and Attentional Control in the First Person Shooter Task	Jaymes Durriseau
9:30	Darlina Tran	Emerging Asian American College Students: Building Self-Management and Self-Awareness Skills through Cultural Adaptation Intervention	Danbi Choe
9:45	Camryn White & Jacob Averett <b>SE</b>	Exploration of Unconscious Biases Made by College Students Based on Race and Gender through a Vignette Experiment	William Chernoff
10:00	Aishia James <b>SU</b>	Using Natural Language Processing (NLP) to Investigate Racial and Gender Biases in AI-generated Text	Jaymes Durriseau
10:15	<b>BREAK</b>		
10:30	Bailey Shoulders	The Effect of Musical Experience on Lexical Tone Perception Efficiency of Non-tonal Language Speakers	Janet McDonald
10:45	Zachary Roberts <b>SU</b>	The Impact of Attentional Control and Working Memory Capacity on Visual Search	Jaymes Durriseau
11:00	Rachel Cole <b>SU</b>	Exploring the Correlation between Emotion and Music through Natural Language Processing	Jaymes Durriseau
11:15	Gabrielle Mellor	You Work like a Girl: Understanding Evaluations of Masculinity Violations in the Workplace	Vanessa Burke
11:30	Marina Magnant <b>TC</b>	Leveraging Athletic Success to Guide Institutional Strategic Branding Decisions: A Case Study on TCU'S Historic 2022 Season	Lance Bettencourt
11:45	<b>BREAK</b>		

# ORAL PRESENTATIONS

## CAPITAL CHAMBER, ROOM 329

9:00 a.m. - 2:45 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
12:00	Bridget Seghers	Developing Equations to Correct for the Effect of Lipids on Stable Isotope Values in Invasive Silver Carp Tissues	Michael Polito
12:15	Vivian Liu	Summertime Precipitation Anomalies near Industrial Facilities along the Lower Mississippi River Valley	Paul Miller
12:30	Jackson Thelen, Caroline Buendia & Audrey Griffith R	Analysis of Presumptive Chemoautotrophic Caves in Tennessee and Alabama	James Engman
12:45	Abby Roche	Investigating Benthic Communities amongst the Northern Gulf of Mexico's Hypoxia Ridden Dead Zone	Cassandra Glaspie
1:00	<b>BREAK</b>		
1:15	Jameson Woodall	Sedimentary History of the Mississippi River Pass-a-Loutre Outlet from Sediment-Core Analysis and <sup>210</sup> Pb/ <sup>137</sup> Cs Geochronology	Sam Bentley
1:30	Olivia Degreenia	Exploring Environmental Drivers of Morphological Variation in <i>Centropogon</i> Subgenus <i>Centropogon</i>	Laura Lagomarsino
1:45	Jackson Kirn	A Search for Salt Tolerance Genes by Exploring Diverse Plant Genomes	Maheshi Dassanayake
2:00	Hannah Holliday	Root Architecture of <i>Schrenkiella parvula</i> under Exogenous Auxin and NaCl Stress	Maheshi Dassanayake
2:15	Sophia Matylis	Agriculture on Mars: Effects of Perchlorate Stress on Plants	John Larkin
2:30	Samantha Sanders	Secrets below the Surface: Tracing the Origins of Soil Organic Matter in Coastal Louisiana Marshes Using Stable Isotope Analysis	Laura Lagomarsino

## RED RIVER, ROOM 323

12:30 p.m. - 3:15 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
12:30	Tai Hua	Electrons on the Move: A Student's Introduction to Time-Dependent Quantum Mechanics	Kenneth Lopata
12:45	William Smither	Efficacy and Physiochemical Evaluation of Naturally Occurring Peroxides as Potential Chemotherapeutic Agents	Fatima Rivas
1:00	<b>BREAK</b>		
1:15	Angelina Liemkeo, John Holley, Caroline Davis & Abigail Peck	Ultraviolet Spectrum of the Corona vs. the Photosphere	Aaron Ryan
1:30	Stephanie Armond	Quantitative Comparison of TDDFT-Calculated High Harmonic Generation Yields in Ring-Shaped Organic Molecules	Mette Gaarde
1:45	Christian Foti	Nitric Oxide Induced Vasodilation in Networks of Blood Vessels: Feasibility of a Computational Model of the Basic Chemical and Physical Mechanisms	Wayne Newhauser
2:00	<b>BREAK</b>		
2:30	Samuel Elliott	Relationships between Fungal Soil Endophytes and <i>Phragmites australis</i>	Vinson Doyle
2:45	Allison Huddleston	LSU AgCenter 2023 Southern Louisiana Cucumber Variety Trial	Heather Kirk-Ballard
3:00	Lucas Rot	Effects of Patch Size and Avian Community Composition on Amazonian Rainforest Soundscapes	Phil Stouffer

# ORAL PRESENTATIONS

## CASTILLIAN, ROOM 304

9:00 a.m. - 3:00 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
9:00	Gigi Powers	The Clash of Values: Understanding Attitudes toward Due Process Protections in Sexual Assault Cases on College Campuses	James Garand
9:15	Katherine Monroe & Cartie Whitelaw	Life in the Age of the Coronavirus	Frederick Weil
9:30	Myrissa Eisworth	Comparative Analysis of Two Quantitative Methodologies for Calculating Rape Culture	Danielle Thomas
9:45	Mckenzie Hervey	Unveiling the Cycle: Navigating Challenges and Solutions in Period Equity	Sadie Wilks
10:00	Kayla Williams	The Implementation of a Telerehabilitation Program for African Americans with Aphasia: A Feasibility Study	Bijoyaa Mohapatra
10:15	<b>BREAK</b>		
10:45	Tanielma Costa & Neil Tepper	Callin' Baton Rouge: 311 Calls, Flooding, and Environmental Justice	Kevin Smiley
11:00	Amie Cemalovic	Hello, You're Eroding My Self-Efficacy: Emotions in REDSTICK311's Drainage and Flooding Service Requests	Kevin Smiley
11:15	Ryleigh Choplin	Climate Change Influences on Alpine Ice Caves in Tirol, Austria	Jill Trepanier
11:30	Aqsa Khan	An Analysis on Temperature and Precipitation in Southern Louisiana between 2020 and 2023	Jill Trepanier
11:45	Joseph Brooks	There's No Place like LaPlace: A Green Infrastructure Network for St. John the Baptist Parish	Nicholas Serrano
12:00	<b>BREAK</b>		
12:30	Joshua Bergeron & Myra Berthiaume N	Detection of Virulence Genes by PCR in Clinical Isolates of <i>Staphylococcus aureus</i> from a Tertiary Hospital in Southern Louisiana	Rajkumar Nathaniel
12:45	Rachael Coates	Identifying the Role of MAPK15 in Triple-Negative Breast Cancer	Todd Monroe
1:00	Iyana Oliviel	Determining the Cis-Regulatory Landscape Underlying Asymmetric Expression of <i>Lws</i> and <i>rh2.1</i> Opsin Genes in Retina of the Four-Eyed Fish - <i>Anableps anableps</i>	Patricia Schneider
1:15	Mahad Ahmed	Recurrent Ethanol Treatment Does Not Produce a Cumulative Effect on Plasma Leptin Levels in Rats	David McDougal
1:30	Myra Berthiaume & Joshua Bergeron N	Characterization of Virulence Genes by PCR in <i>E.coli</i> Isolated from Urinary Tract Infections at a Tertiary Hospital in Southern Louisiana	Rajkumar Nathaniel
1:45	<b>BREAK</b>		
2:00	Xochitl Gonzalez	I'm Just a Girl in This Copepod World: Sex-Based Differences in <i>Tigriopus californicus</i>	Morgan Kelly
2:15	Elanor Fuller	Phylogeography of <i>Psychotria viridis</i> , a Primary Component of Ayahuasca	Laura Lagomarsino
2:30	Shelby Oliveaux	Evolution of Alkaloids and Cyclotides across Expanded Phylogeny of <i>Palicourea</i>	Laura Lagomarsino
2:45	Kenedi Lynch	Operation Brainstorm: Cerebellar Cytokine Expression in House Sparrows during Acute Malaria Infection	Christine Lattin



# ORAL PRESENTATIONS

## INTERNATIONAL, ROOM 303

9:00 a.m. - 3:15 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	<u>Mentor</u>
9:00	Madison Saucier	Confronting the History of LSU's Land: Arlington Plantation	Alia Kempton
9:15	Nathaniel Dela Pena	Creating a Historical Walking Tour of LSU's Campus	Zach Tompkins
9:30	Rhys Borders	Concrete Scars: Mapping Baton Rouge's Racial Landscape	Sarah Franzen
9:45	Annie Sheehan-Dean	Imprisoned for Self Defense: Criminalized Survivors in Louisiana	Catherine Jacquet
10:00	<b>BREAK</b>		
10:45	Emily Bohmer <b>BU</b>	High School Singers' Self-Assessment of Vocal Health Knowledge and Singing Difficulties	Kelly Hollingsworth
11:00	Ella Millet	Producing Panic: The Melodramatic Conventions of Moral Panics	John Fletcher
11:15	Sofia Alves	NEST: Pop-Up Services for People Experiencing Homelessness	Julie Elliott
11:30	Marvin Scott, Serita Abayilo, Isabelle English & Kauther Zeidan	Our Lady of the Lake Tau Behavioral Health Center Adolescent Unit Design	Julie Elliott
11:45	<b>BREAK</b>		
12:15	Christian Blanks <b>SE</b>	Innovative Tracking Devices for Assessing Crocodile Behavior in Costa Rica	Youngho Shin
12:30	JoAnne Huang	Single-Cell RNA-Seq Reveals Activation of Unique Gene Groups as a Consequence of Stem Cell-Parenchymal Cell Fusion	Philip Jung
12:45	Steven Seiden	Tapping .IPAs: An Automated Analysis of iPhone Applications Using Apple Silicon Macs	Ibrahim Baggili
1:00	Robert Dally	Laminar Film Condensation on a Vertical Plate with Condensation Kinetics	Harris Wong
1:15	Andrew Callender	Decarbonizing Concrete Using Louisiana Clays and Agricultural Waste: A Comparison between Ordinary Portland Cement [OPC], Limestone Calcined Clay [LC3], and Oyster Shell Calcined Clay [OC3]	Yen Fang Su
1:30	James Yu	Flow Field Characterization in a Liquid-Spray Swirl Combustor	Shyam Menon
1:45	<b>BREAK</b>		
2:15	Makenna Meisenbach <b>SH</b>	The Effect of Different Music Genres Affecting Sports Performance and Emotion of Student Athletes within the Astrand Treadmill Test	Nicholas Mortensen
2:30	Rachel Wall	The Effects of 12 Weeks of Aerobic Exercise on Biomarkers of Neutrophil Function in Colorectal Cancer Survivors	Guillaume Spielmann
2:45	Virginia Bordelon	Addressing Disparities of the Food Environment to Combat Childhood Obesity: Preliminary Findings from an Intervention Study at Six Schools	Senlin Chen
3:00	Gracie Chen	Baseline Results and Formative Implementation Outcomes of the ProudMe Intervention	Senlin Chen

# PANELS

## THE ACADEMIC STUDY OF RELIGION AT LSU: A VARIETY OF APPROACHES

12:00 PM - 3:00 PM | Moderated by Dr. Kenny Smith | Vieux Carre, Room 325

<u>Student</u>	<u>Title</u>
James Beatty	The Little Cajun Saint: Veneration and Canonization of Charlene Richard
Emme Clark	Praise for Frodo Baggins and Condemnation for Harry Potter? Who Here Can Solve This Riddle for Us?
Marguerite Schwartz	Everyone Is a Change-Maker! How Charles Eisenstein, Mother Teresa, and Your Inner Self Can Teach Anyone How to Facilitate Positive Social Change
Thomas Hook	Maximal Worries about Minimum Wage at LSU: A Social Change Project to Raise Awareness
Ashton Dalton	Microtraumas and the Cultivation of a Superhuman Gen Z
Nicola Cates	The Metaphysics of Mysticism
Kayce Robinson	The Aesthetic Significance of Paranormal Experience

## PURSUING CAREERS IN RESEARCH

3:30 - 4:30 PM | Moderated by Gabrielle Mellor | Capital Chamber, Room 329

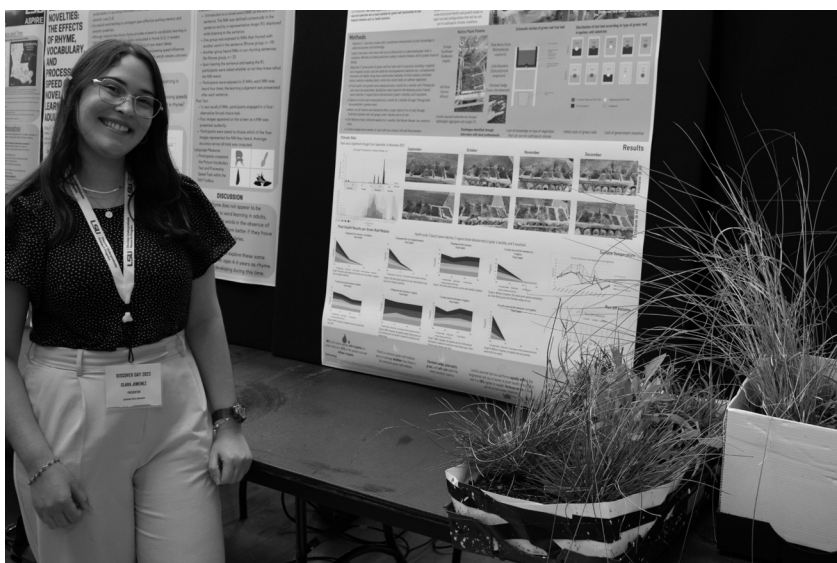
<u>Area</u>	<u>Name</u>	<u>Title</u>	<u>Employer</u>
Academic	Dr. Jesse Allison	Associate Professor of Experimental Music & Digital Media - LSU School of Music Cultural Computing - LSU Center for Computation & Technology Associate Director of the LSU STEM Pathway in Digital Design & Emergent Media - LSU Cain Center	Louisiana State University
Industry	Dr. James Guenther	Chief Science Officer	Mariposa Technology
Industry	Dr. Lisa Kemp	Senior Manager, Global Health Economics and Reimbursement	Edwards Lifesciences
Medicine	Dr. Christopher Schneider	Medical Physicist, Dr. Charles M. Smith Faculty Research Scholar	Mary Bird Perkins Cancer Center
Academic	Dr. Paul Soto	Assistant Professor Department of Psychology	Louisiana State University; Pennington Biomedical Research Center
Government	Mr. Eric White	Engineer 6-DCL, Research & Planning Division	Coastal Protection and Restoration Authority [CPRA] of Louisiana

# RESEARCH AMBASSADORS

LSU Discover would like to thank all our volunteers and especially the Research Ambassadors.

Research Ambassadors are LSU undergraduates who encourage and assist other students in getting involved in undergraduate research opportunities. The ambassadors take part in a variety of activities including, but not limited to: talking to classes/student orgs/freshmen groups, volunteering at research-related events, and mentoring students looking for research opportunities.

Students interested in undergraduate research may contact a Research Ambassador directly with questions. Research Ambassadors are also available to speak to student organizations or classrooms. If you have questions about the program you can contact them at [LSUresearchambassadors@gmail.com](mailto:LSUresearchambassadors@gmail.com)



# KEYNOTE SPEAKER

## Dr. Margaret Reams

*Join us at 5:00 p.m. in the Atchafalaya, Room 339 to hear Dr. Reams' keynote speech*



Dr. Margaret Reams is the Joseph D. Martinez Professor of Environmental Sciences, and Associate Director for Community Engagement of the LSU Institute for Energy Innovation. She also serves as the leader of the Community Engagement Core and is a Co-Principal Investigator of the NIEHS-funded Superfund Research Program at Louisiana State University.

She studies a variety of policy issues related to environmental planning and policy, including community perception and response to environmental and ecological phenomena in Louisiana. with support from NIEHS, NSF, USDA and the Bureau of Ocean Energy Management (BOEM), she and Dr. Nina Lam developed an empirical social-ecological resilience index to

better predict the ability of communities to survive various environmental disturbances. The application of the resilience index to communities within Louisiana's Industrial Corridor allows for spatial and temporal comparisons among communities, and helps researchers identify key factors that may explain variation in both the long-term impacts of cumulative environmental exposures and the reactions of stakeholders. While at LSU, Dr. Reams has designed and implemented graduate courses dealing with environmental conflict resolution, environmental policy analysis, and program evaluation. She received the LSU Foundation Distinguished Faculty Teaching Award for superior graduate-level teaching and mentoring, having supervised over ninety MS theses on various issues of environmental policy and public attitudes. She has published articles in *Risk Analysis*, *Environmental Management*, *Wetlands*, *Coastal Management*, *Marine Policy*, *Environment and Behavior*, *Social Science Quarterly*, *Forum for Applied Research and Public Policy*, *Journal of Environmental Systems*, and *Environmental Research Letters* among others. Dr. Reams received her undergraduate degree from Huntingdon College, her M.A and Ph.D., both in Political Science from the University of Georgia.



# SPECIAL THANKS

LSU Discover thanks all of the individuals and groups who contributed to the success of LSU Discover Day 2024. In particular, we thank our keynote speaker, Dr. Margaret Reams, and our faculty panel moderator, Gabrielle Mellor. Thanks to Carsyn Martel at the Student Union for venue coordination. We are also greatly appreciative of our volunteers, judges, the Research Ambassadors, and the LSU Discover staff for their assistance with the coordination of this event.

## THANK YOU

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Tieasha Lowe, *Student Worker*  
Janae' Narcisse, *Student Worker*

LSU Discover Day is also open to participants from other colleges.  
Thank you to the following colleges & schools for participating:

**American University**  
**Baton Rouge Community College**  
**Baton Rouge Magnet High School**  
**Baylor University**  
**California State University - Fresno**  
**Longwood University**  
**Loyola University New Orleans**  
**McNeese State University**  
**Nicholls State University**  
**Rhodes College**  
**Saint Mary's College**

**Siena Heights University**  
**Scotlandville Magnet High School**  
**Southeastern Louisiana University**  
**Southern University and A&M College**  
**Texas Christian University**  
**Trinity University**  
**The University of Central Florida**  
**The University of Louisiana - Lafayette**  
**The University of New Orleans**  
**The University of North Texas**  
**The University of Texas at Austin**

# MARC PROGRAM

LSU Discover is enormously grateful to the Maximizing Access to Research Careers (MARC) program for their generous financial contribution to Discover Day 2024.

The LSU MARC Program provides high-impact research experiences to a diverse pool of undergraduates and prepares them for entry into graduate programs in the biomedical and behavioral sciences. The LSU MARC Program offers research training, personal and career development, financial support, mentoring, networking opportunities and academic preparation for motivated students. They aim to produce highly skilled, competitive, and productive young scientists who will fill a national need, and enhance LSU student inclusion and diversity, retention and graduation rates, collaborative research, community engagement and outreach activities.

LSU MARC is supported by the National Institute of General Medical Sciences of the National Institutes of Health under award number T34GM136452.

Applications are accepted through late March.

To learn more about MARC, visit [marc.lsu.edu](http://marc.lsu.edu)





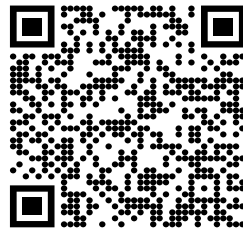
# DISTINGUISHED UNDERGRADUATE RESEARCHER PROGRAM

The LSU Distinguished Undergraduate Researcher designation recognizes the achievements of outstanding LSU undergraduates who participate in a track of educational and research activities leading to a final and public presentation or publication of a faculty-mentored undergraduate scholarly project. An LSU Distinguished Undergraduate Researcher is a student who has demonstrated outstanding ability as an advanced student researcher in their discipline. Distinguished Researchers will be honored at a special medal ceremony in their graduating semester and the designation will be noted on their transcripts.

LSU undergraduates from any major are eligible to enroll in the program before their final semester at LSU.

Before enrolling, interested students must attend a one-hour orientation session.

For more information, scan the QR code below:



# LSU

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**Discover Undergraduate  
Research Program**

[lsu.edu/discover](https://lsu.edu/discover)



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