

DISCOVER DAY 2025 TABLE OF CONTENTS

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WELCOME TO LSU DISCOVER DAY 2025!

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

Time	Event	<u>Location</u>
7:30 a.m 6:00 p.m.	Check-In Desk Open	2nd Floor East Lobby (next to Cotillion Ballroom)
8:15 a.m 8:45 a.m.	Breakfast and Welcome Remarks	Cotillion Ballroom, Room 250
9:00 a.m 12:00 p.m.	Oral Presentations Topics: Social Sciences, Arts, & Humanities	Capital Chamber, Room 329 Castillian, Room 304 Red River, Room 323 Vieux Carré, Room 325
9:00 a.m 11:00 a.m.	Morning Poster Session Topics: Science, Technology, Engineering, & Mathematics	Cotillion Ballroom, Room 250
9:00 a.m 9:45 a.m.	Performances	Red River, Room 323
11:30 a.m 12:30 p.m.	Presenter Lunch Break	[see presenter packet for location]
12:00 p.m 3:15 p.m.	Oral Presentations Topics: Science, Technology, Engineering, & Mathematics	Capital Chamber, Room 329 Castillian, Room 304 International, Room 303 Red River, Room 323 Vieux Carré, Room 325
9:00 a.m 11:45 a.m.	Student Panel - The Ogden Honors College & Religious Studies Program Spring 2025 Student Symposium	International, Room 303
1:00 p.m 3:00 p.m.	Afternoon Poster & Visual Display Session Topics: all	Cotillion Ballroom, Room 250
1:00 p.m 3:00 p.m.	Art	Cotillion Ballroom, Room 250
3:30 p.m 4:30 p.m.	Panel - Pursuing Careers in Research	Capital Chamber, Room 329
5:00 p.m 6:30 p.m.	Keynote Speech & Awards Ceremony Keynote Speaker: Dr. Kevin Smiley	Atchafalaya, Room 339

All presenters are Louisiana State University students unless otherwise noted.

KEY

A Adlai E. Stevenson High School AR Arkansas School for Mathematics,	LM Liberty Magnet High School L Loyola University New Orleans
Science, and Arts	M McKinley High School
B Baton Rouge Community College	MN McNeese State University
BM Baton Rouge Magnet High School	MS Mississippi State University
C Colorado State University	N Nicholls State University
D Delgado Community College	PT Park Tudor
DH Dutchtown High School	P Plainfield North High School
LT LeTorneau University	SP St. Paul's School
	GUEST WI-FI

- SM | Scotlandville Magnet High School
 SE | Southeastern Louisiana University
 SU | Southern University A&M
 TJ | Thomas Jerfferson High School for
 Science and Technology
 UHS | University High School
 UA | University of Alabama
 UL | University of Louisiana at Lafayette
- **UM** | University of Mississippi

Network: LSU Guest Wireless

Username: DD25



ROYAL COTILLION BALLROOM MAP MORNING POSTER PRESENTATIONS

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187	188	189	190	191	192		1	2	3	4	5	6	

ENTRANCE

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

<u>#</u>	<u>Student</u>	Title	Mentor
11	Rayan Aissi	Unraveling the Evolutionary History of <i>Amyema</i> : Plastid Genome Assembly and Phylogenetic Insights into Loranthaceae	Sarah Mathews
45	Catherine Arms	Are Cavefish Genomes Smaller than Those of Their Sighted Relatives?	Prosanta Chakrabarty
3	Margaret Bagot	Are There Biases in Phylogenetic Trees?	Prosanta Chakrabarty
25	Kaedyn Baker	The Cysteine Residues of BifR Play a Role in its Super-Repressor Phenotype in <i>Burkholderia thailandensis</i>	Anne Grove
16	Lillie Ballanco	The Purification and Crystallization of Rice Lipoxygenase-1	Nathaniel Gilbert
19	Laura Beaubrun & Samantha Lao	The Effect of Different Light Intensities on the Production of Biomass and Fucoxanthin in <i>Phaeodactylum tricornutum</i>	Mindy McCallum
6	Safia Bellouz, Nurix Alvarez, Darriana Daniels, Jasmine Bonner & Courtney Powell D	Periodontal Microbes, the Possible Association with Cardiovascular Diseases	Habib Ansari
13	Nicole Bisente	Comparing the Response to Prolonged Salinity in <i>Arabidopsis thaliana</i> and Extremophyte Model <i>Schrenkiella paruvla</i>	Maheshi Dassanayake
184	Brayden Blackburn	Analysis of Secondary Metabolites from the American Beautyberry and Persian Silk Tree	Fatima Rivas
24	Lauryn Blanchard	Validating IgA-Knockout Mouse Model for Studying Respiratory Syncytial Virus Immunopathology	Ashley Ferrier Esposito
28	Jordan Brooks	Investigating the Molecular Mechanisms of Drosophila Embryos Lacking Nucleoli	Patrick DiMario
49	Claire Burton, Quyen Duong & Zoe Mixon	Does Mitochondrial DNA Recombine or Can Limitations in DNA Analysis Explain Gene Tree Discordance?	Jeremy Brown
20	Jennifer Cagnolatti	Exploring Enzymatic Degradation of New Plastic Materials for Digestible Pet Toys	Naohiro Kato
172	Julia Carroll	The Synthesis and Design of a Phenyl Ester Mechanophore	David Spivak
176	Kiara Charles	The Attempt to Create Self-Oscillating Polymer Gels	John Pojman
185	Anthony Chiasson	280-Million-Year-Old Fillings: A Geochemical Analysis of Tetrapod Teeth from a Permian Red Bed near Seymour, TX	Achim Herrmann
4	Sydney Clay, Trinity Robichaux & Charlie Nguyen	The Influence of Temperature on Spirodela polyrhiza	Jada Daniels
55	Juliana Coletti & Christopher Hill B	The Louisiana Freshwater Sponge Project: Examining Changes in Species Richness through a Comparison of two Ecological Studies	Mary G. Miller
186	Junior Colonna & Thomas Magsino	Recent History of the West Bay Subdelta within the Mississippi River Delta Revealed through Geological Analysis of Sediment Cores	Samuel Bentley
191	Christian Corsten	Charge Migration in 1D Conjugated Systems	Francois Mauger
22	Lauren Eckert	The Influence of Competitor and Pathogen Density on Emigration Behavior in Congeneric Tribolium Beetles	James Cronin
10	Richard Elfert	Effects of Climate Change on Disease Exposure and Infection Probability	Bret Elderd
50	Benjamin Erdozain	Effects of Climate on the Coevolution between an Insect Host, an Agricultural Pest, and Its Lethal Pathogen	Bret Elderd

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

<u>#</u>	<u>Student</u>	Title	Mentor
37	Fajr Fayed se	The Role of Polyhydroxyalkaonates (PHAs) in Resistance against the Last Resort Antibiotic, Colistin	Pradip Panta
46	Ashley Florance	Developing the Ideal Genetic Background for Photosystem II Research in Cyanobacteria (Continued)	David Vinyard
100	Amiti Ganguly TJ	The Parity of Nodal Domains of Laplacian Eigenfunctions on the Flat Torus	Andrew Hugh Lyons
26	Kailey Gilliam	Method Development for the Specialized Metabolites of <i>Botrytis cinerea</i> Isolates	Jordan Dowell
36	Julia Gremillion & Hayley Howard B	Investigating the Antimicrobial Properties of Freshwater Sponge Spicules on Biofilms	Mary Miller
178	Katelyn Hall	Characterizing Critical Micelle Concentrations of Binary Mixtures of Ionic Sequence-Defined Peptoid Block Copolymers: Insights into Composition Effect on the Micellar Thermodynamics	Donghui Zhang
101	Matthew Harmon SP	Using Game Theory To Study Optimizations in Buckshot Roulette Strategy	Zequn Zheng
190	Dillon Harris	Simulating Photon Radiation Transport of a Computational Cell Model for Evaluation of Non-nuclear Targets	Nousha Afshari
44	Caroline Henry	Impacts of Captivity on the Cloacal Microbiome Composition of Native Green and Invasive Brown Anoles	Christine Lattin
32	Darryl Higgins	Using Artificial Intelligence (AI) to Help Elucidate Functional Properties and Potential Regulatory Mechanisms of Tomato LOXA Activity	Nathan Gilbert
31	Harley Hoffpauir	Purification and Characterization of Drosophila Alcohol Dehydrogenase	Johnna Roose
174	Senora Howard & Erin Fugler se	Bound State Methods for Unbound Anions	Thomas Sommerfeld
15	Mary Hutson	RNA Interference in <i>Caenorhabditis elegans</i> and Investigating the Presence of a Systemic Defense Signal	Rui Lu
188	Tristan Ilgenfritz	Reconstruction of Mio-Pliocene Fire History off the Coast of Portugal: Results from Classic Palynological Analyses and Al-generated Microcharcoal Analyses	Sophie Warny
98	Aadi Jain A	Critical Angles of Laplacian Eigenfunctions	Andrew Lyons
27	Kara James	Using Histological and Molecular Techniques to Identify Sex-Specific Genes in the Caribbean Sea Fan <i>Eunicea flexuosa</i>	Michael Hellberg
18	Tori Johnson, Lyliean Gilbert, Nicholas Bergman & Nicholas Ingles L	Investigating Amino Acids Responsible for Protein Stability in Cold Dwelling Organisms: Test Case Pol 1	Allyn Schoeffler
189	Samuel Juneau	Characterization of the Crazy Sphinx Skarn Deposit, Boulder Batholith, Helena, MT	Matthew Loocke
51	Brett Kincade	Comparative Phylogeography of High-Andean Geospizopsis Finches	Nicholas Mason
34	Emma Klenke	Testing the Plant-Stress Hypothesis: Comparing Drought and Herbivore Effects on Growth of <i>Phragmites australis</i>	James Cronin
182	Sydney Lawson	Biological Evaluation of Novel Abietane Analogues as Selective Therapeutic Agents against Triple Negative Breast Cancer	Fatima Rivas
12	Quyen Hannah Le	Student Perceptions of Incorporating Mathematics and Computer Programming into Undergraduate Biology Education	Gaurav Kandlikar
171	Daniel Le Lorier	Dinapthofuran-Based Lithium-Ion Receptors	Semin Lee

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

<u>#</u>	<u>Student</u>	Title	Mentor
54	Cailyn Lee	Investigating Ptx-1 Function in <i>Drosophila melanogaster</i> Midgut Morphogenesis	SeYeon Chung
47	Christian Mack	Molecular and Behavioral Responses of <i>Littoraria irrorata</i> to Heat Stress: Implications for Climate Resilience in Salt Marsh Ecosystems	Morgan Kelly
48	Destiny Marvel, Marquis McQuirter & Hayley Howard B	Can Sediment Analysis be Used to Further Describe Species Richness of Freshwater Sponges?	Mary Miller
43	Danna Masri	Beak Wiping Stereotypies are Correlated with Neophobia and Lack of Enrichment in Captive House Sparrows (<i>Passer domesticus</i>)	Christine Lattin
173	Claire Matherne	A Zirconium-Based Metal-Organic Cage for the Absorption of Bromocresol Green	Noémie Elgrishi
8	Karla Mendez	Identifying Homozygous Mutants with Fluorescent Ca ²⁺ Sensors to Investigate Calcium Signaling in Salt Stress Response in <i>Arabidopsis thaliana</i>	John Larkin
177	Miranda Miller- Soileau	Development of AI Platform to Study Steroidal Therapeutics	Fatima Rivas
39	Gabriel Monahan	Latitudinal Patterns of Gene Flow in a Montane Avian Community across the Southern Atlantic Forest	Greg Thom
97	Gabriel Morales UHS	Nodal Count of Laplacian Eigenfunctions with Neumann Boundary Conditions	Andrew Lyons
38	Jenna Moseley	A Smarter Way to Fight Mold: Resistance of <i>B. cinerea</i> to Different Methods of Specialized Metabolites	Melanie Madrigal
52	Anh-Tu Nguyen	The Effects of Temperature and Time on the Degradation of Fucoxanthinol	Naohiro Kato
53	Ananya Pathak	Assessing Bacterial Effects and the Role of Temperature on the Growth of <i>Lemna minor</i>	Jiaqi Tan
2	Xariyah Pierre	Functional Responses of an Entomopathogenic Fungus Attacking Tribolium Beetles – Implications for Biocontrol	James Cronin



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

<u>#</u>	<u>Student</u>	Title	Mentor
179	Kelsey Robillard	Synthesis and Fluorescence Characterization of a Photoswitchable Molecular Probe for Visualization and Quantification of Bacterial Membrane Potential	Víctor García-Lopez
23	Lauren Rogers	The Symbiotic Nature of Plant Microbiomes for Plastic Degradation	Naohiro Kato
14	Melissa Salazar	Assessing Heavy Metal Contamination in Rails from Coastal Louisiana Using Non-Destructive Techniques in Natural History Collections	Nicholas Mason
7	Rowan Sawyer & Raquel Anguiano Cruz L	Investigation of Supercoiling Activity by a Mesophilic Gyrase Variant with a Psychrophilic Modification	Allyn Schoeffler
187	Ashlyn Schneida	Analyzing Critical Metal and Fluid Interactions of a Historic Subsurface Volcanic Core Drilled from Door Point, LA, US Gulf Coast	Matthew Loocke
40	Emily Shapiro	Dispersal and Settlement Preferences of the Invasive Scale Nipponaclerda biwakoensis on Phragmites australis	James Cronin
42	Aeryn Sindiong, Jasmine Anderson & Whitney James	Comparative Analysis of Alcohol Dehydrogenase in Drosophila melanogaster, Thermoanaerobium brockii, and Saccharomyces cerevisiae	Johnna Roose
175	Amya Snowden L	Protein Purification of Extremophilic DNA Topoisomerase	Allyn Schoeffler
57	Megan Stempkovski L	Effects of Tea on Brainwave Activity and Attention	Kate Yurgil
56	Adam Tarleton	Host Influence on Metacommunity Assembly under Predator-Prey Interactions and Microbiome Dispersal	Jiaqi Tan
35	Grace Thompson UM	The Effect of Phytoestrogen, Estradiol, and Aromatase on Post-Lesion Cerebellar Neuroprotection in Male Zebra Finches	Lainy Day
180	George Tisdale	Molecular Windows: Investigating Organic Electrode Materials and Single-Molecule Magnets with Polyaromatic Heterocycles	Clifton Wagner
181	Landry Tucker	Advances toward the Synthesis of Cobalt-based Molecular-Cages for the Sequestration of PFAS	Noemie Elgrishi
9	Milayna Ulloa	How the Past Shapes the Future: Influence of Maternal Effects on <i>Brassica rapa</i> Functional Traits under Drought Stress	Gaurav Kandlikar
33	Elizabeth Vidrine	Investigating Long-Distance Communication between <i>Drosophila</i> <i>chromatin</i> Domain Insulator-binding Protein BEAF and Histone Chaperone FACT	Craig Hart
21	Lauren Vogel	Using Fatty Acids and Stable Isotopes to Identify Trophic Niche Partitioning Between Crawfish and Invasive Apple Snails in Crawfish Ponds of Louisiana	Sydney Moyo
183	Ayesha Weerakoon	Synthesis, Characterization, and Solution Phase Behavior of Peptoid- based Polyampholytes	Donghui Zhang
1	Dykia Williams	Characterizing Structure-Function Relationships on the Acceptor Side of Photosystem II	David Vinyard
99	Santoshi Yadagiri P	Nodal Count of Laplacian Eigenfunctions on the Flat Torus	Andrew Lyons
30	Ella Yerger, Hector Mujica, Camila Lamy & Juan Otero L	Mutagenesis of Erythromycin Resistance Methyltransferase E to Determine Erythromycin Resistance	Allyn Schoeffler

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

KINESIOLOGY

<u>#</u>	<u>Student</u>	Title	Mentor
159	Audrey Abadie	Toe Clearance when Navigating Objects Relies on Visual Feedback Regardless of Obstacle Removal	Jan Hondzinski
162	Virginia Bordelon & Rachel Hunter	Improving the Food Environment at Schools to Combat Childhood Obesity in Louisiana	Senlin Chen
168	Miranda Chodzko	Age Does Not Change Reinforcement-Based Locomotor Learning	Chris Hill
169	Kaylie Grimm	Movement Readiness Potentials Changed in People with Anxiety Disorders but Not Reaction Time	Chris Hill
163	Johnny Ha & Gracie Chen	The Shrunken Brain: Post-Mortem Insights into Cirrhosis and Cerebral Atrophy	Oluwagbemiga DadeMatthews
166	Hailee Hernandez	Sport Employees and Organizational Functioning: An Examination of Change with NCAA Conference Realignment	Claire Zvosec
160	Christina Lovecchio	Perceptions of Coaching Abilities- A Cross-Sectional Survey Study	Ryan Hulteen
165	Mika Ndikumana	Metatarsal Stress Fractures in an Adolescent Cross-Country Runner: A Clinical Case Study	Hyun Kim
161	Alexia Nguyen	Running Biomechanics in Runners With and Without Asymptomatic Tibial Sesamoid Bone Marrow Edema – A Case Series	Hyun Kim
164	Olivia Perry	Theta Oscillatory Power Changes in People with Anxiety Disorders	Chris Hill
167	Hannah Rigdon	Near Infrared Spectroscopy System (NIRS)	Neil Johannsen
157	Catherine Sorrels	Impact of Continuous, Low-Dose-Rate Neutron Irradiation during Gestation on Fetal Development	Heather Allaway
170	Nane Tshorokhyan	A Cadaveric Finding of an Aortic Arch with an Unusual Branch Pattern	Melissa Thompson
158	Emma Vu	The Influence of Body-Object Interaction Rating on Semantic Processing in Autistic and Non-autistic Adults	Nicholas Fears



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

AGRICULTURE

<u>#</u>	Student	Title	Mentor
59	J'Me Bryant SU	Paws and Effect: Examining College Students' Reactions to Animals and Perspectives on Pet Therapy	Tyra Davis
72	Karrie Cheng	Solid Waste Water for Aquaculture Processors: Analysis of Wastewater Effluent and Solid Waste for Louisiana Processors	Michael Hayes
60	Ashton Dalton	The Comparison of Electroporation and Microinjection Delivery of CRISPR Gene Edits in Bovine Zygotes	Kenneth Bondioli
62	Aidan Douglas	N-Acetyltransferase 2 Phenotype Impacts Hexavalent Chromium Toxicity in Human Lung Cells	James Wise
69	Madeleine Gess	Species-Specific Incubation Strategies in Cavity-Nesting Waterfowl: A Comparative Study of Hooded Mergansers and Wood Ducks	Kevin Ringelman
64	Carly Greig	Analysis of Hormonal Birth Control Side Effects and Mental Health Status Among College-Age Females	Erin McKinley
73	Roan Guidry	The Origins of Coastal Wetland Conservation Efforts in Louisiana	John Nyman
70	Jennifer Haase	Investigating Co-occurrences between Freshwater Mussels and Host Fish Species	Garrett Hopper
58	Symira Horton SU	Fermented Feed for Pigs: Enhancing Nutrition, Health, and Cost Efficiency	Jodi Morton
61	Tia Miller, Omaree Peltier, & Dexter Walker UL	A Review of the Current State of the Evidence on Food, Nutrition, Literacy, Health, and Education: Implications for Nursing	Jeanne Cartier
65	Daniel Ordeneaux	Bell Pepper Strips as a Healthy Snack: Development and Evaluation of Physicochemical Properties, Consumer Acceptance, and Purchase Intent	Witoon Prinyawiwatkul
66	Martha Rigney	Issey's America: The 1980s Japanese Fashion Movement Explored through the Wardrobe of Lori Labbé	Michael Mamp
63	Aleen Rodriguez	Plant-Based High-Protein Cupcakes Made with Mung Bean: Development, Characterization of Physicochemical Properties, and Consumer Perception	Witoon Prinyawiwatkul
67	Emily Steen	Understanding the Abiotic and Biotic Factors that Drive Water Hyacinth Moth (<i>Niphograpta albiguttalis</i>) Establishment across the Southeastern United States	Flaminia Mariani
71	Jessica Valerio L	Heat-Induced Degradation of Pollen: Expanding Forensic Applications of Palynology	Anna Duggar
68	Danylo Zaitsev	Evaluation of the Physicochemical and Biological Characteristics of Tree Holes that Support the Development of Immature Biting Midges (<i>Culicoides</i> species) which, as Adult Females, are Known Vectors of Orbiviruses in Louisiana	Lane Foil

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

COAST & ENVIRONMENT

<u>#</u>	<u>Student</u>	Title	Mentor
79	Katherine Aranda	Mangrove Invasion into Coastal Louisiana Wetlands: Impacts on Important Ecosystem Services	John White
91	Jemarya Butler SM	Floral Destiny	Vanessa van Heerden
81	Alicia Durfee	The Analysis of the Photodegradation of UV filter 2,4-Dihydroxybenzophenone	Kevin Armbrust
83	Emerson Eccles	Integrating Biophysical and Socio-ecological Threats Facing Global Food Sustainability	Brian Snyder
82	lan Frick	Projected Relative Food Insecurity Risk in the Mid-21st Century Considering Socio-Ecological and Biophysical Factors	Brian Snyder
88	Brandon Green SM	The Relationship Between Air Quality and Human Health in Baton Rouge, LA	Vanessa van Heerden
74	Morgan Guidry	Environmental Conditions Impacting Tropical Cyclone Activity in the Gulf of Mexico	Paul Miller
76	Taylor Horton	Documenting the Extent of Nurdle Pollution Around Capitol Lake	Mark Benfield
84	Hayley Howard, Candace Hill, Jesse Mehaffey & Mallory Rhymer B	Heavy Metal induced Spicule Malformations in Ephydatia fluviatilis	Mary Miller
75	Riley Jenkins	Comparing Denitrification Rates in Dredge Material Created Wetlands	John White
89	Siena McKnight M	Potential Release of Toxic Metals from Dredged Sediments under Anoxic Conditions in LSU Lakes	Vanessa van Heerden
90	Geremiah Perkins, Sarah Darst & Chris Hill B	Understanding Preferred Substrates of Louisiana Freshwater Sponges	Mary Miller
92	Jayla Quincy SM	The Little Voices of Baton Rouge: Understanding the Effects of University Lakes Restoration Project on Water Quality and Plant Health	Vanessa van Heerden
86	Kaleigh Reed M	Evaluating the Toxicity of Alternative Low Sulfur Fuels on Brine Shrimp [<i>Artemia spp.</i>]	Vanessa van Heerden
77	Zoe Rehagen	Respiration Rates of White Shrimp at Varying Temperatures: Implications on Hypoxia in the Gulf of Mexico	Cassandra Glaspie
95	Daniel Shropshire SM	Motor Versus Electric: Air Quality	Vanessa van Heerden
96	Kimani Shropshire SM	Pond-dering the Results: Soil and Water Nutrients vs Road Run-off	Vanessa van Heerden
87	Kamea Stewart SM	Assessing Awareness, Attitudes, and Misinformation and Educating on Snakes	Vanessa van Heerden
94	Dyani Taylor SM	Polluted Paths, Imperiled Turtles	Vanessa van Heerden
78	Nicholas Teegarden, Sydney Gemeinhardt & Lisa DiMaggio B	Revisiting Freshwater Sponge History: A Review of the Michael Poirrier Collection	Mary Miller
80	Kaitlyn Thomas	The Usage of Outdoor Recreational Areas in Louisiana: Evaluating the Role of Natural vs. Built Features	Rebeca de Jesus Crespo
85	Je'Miracle Williams M	Playing Games to Learn: How Interactive Lessons can Promote Policy Literacy on Endangered Species	Vanessa van Heerden
93	Harmony Young SM	Plants, Plankton, and Pollution: Exploring Zooplankton Richness in Baton Rouge's Urban Lakes	Vanessa van Heerden

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

ENGINEERING

<u>#</u>	<u>Student</u>	Title	Mentor
127	Daniel Alday, Sobhan Syed, Matthew Hoag, Anna Smith & Nolan Rountree	Stage-Top Incubator for Live Cell Imaging	Qi Cai
106	Hunter Allen	A Two-stage Combustion Approach for Ammonia Use in Gas Turbine Engines	Shyam Menon
113	Ted Atera	Development of Embedded Sensors for Real-Time Monitoring of Concrete Properties in 3D Printing	Yen-Fang Su
129	Maximilien Caffery & Victoria Sartin	Mechanical Testing System for Small Blood Vessels	Bruno Rego
138	Giselle Cole, Blake Brooks, Chelsey Craig, Atula Danivas & Paul Menasco	Bone Hydration Nation Design: Modular Fluid Bath Milling System (MFBMS)	Kevin Hoffseth
105	Reagan Courville	Enhancing FABIA: Mechanical Modifications and Device Implementation	Shyam Menon
102	Christopher Cuntz & Addison Holcomb	Development and Testing of a Hybrid Rocket Engine Test Stand	Shyam Menon
107	Halle Davis	Voltage-Independent Analysis of Ion Diffusion in Polymer Nanochannels	Sunggook Park
133	Lauren Ejiaga	Potential Links between Failing On-site Sewer Systems and Mosquito Proliferation in Coastal Louisiana Mediated by Ditch Water Quality	Aaron Bivins
121	Mary Granier, Hunter Stewart, Rayana Brooks, Caleb Delacruz & Jacqueline Hubbard	HistoPro: A Benchtop Tissue Processor	Benjamin Dubansky
103	Madeline Heymann & Tavius Turner	Life-Cycle Benefit-Cost Analysis (LCBCA) of Wind- and Flood-Resilient FORTIFIED® Elevated Manufactured Home	Laura Ikuma
116	Tulona Hossain	Bovine Cortical Bone Sample Preparation for Mechanical Testing	Kevin Hoffseth
132	JoAnne Huang, Tiara Britten, Amerika Embers, Camryn Tims & Marise Wilson	Design of a Disposable Circumcision Clamp in Clinical Setting	Marybeth Lima
104	Joshua Kruger	Multiphase Flow and Heat Transfer for an Impulsively Accelerated Solid Particle	Shyam Menon
117	Shea Lee	Production and Deimination of Filaggrin Using the Cell-Free System	Yongchan Kwon
126	Enson Li & Daniel Alday	Eyedrop Delivery System for Retinoblastoma Treatment	Qi Cai
114	Lauren Madden, Mallory Colletta, Margaret Sides, Thomas Rhymes & Charlotte Richardson	Biometric Smart PPE Monitor	Nicholas Totaro
115	Hobbs McAllister, Raymond Martin & Catherine Whitehead	Electrical Stimulation Testing in Isolated Murine Muscle (ESTIMM)	Bruno Rego

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

ENGINEERING

<u>#</u>	<u>Student</u>	Title	Mentor
119	Anthony Nguyen	Assessing the Structural Integrity of Buildings with Roof-Mounted Solar Panels Under Wind Conditions	Aly Mousaad Aly
124	Britney Nguyen	Plant-derived Compounds Modulate Adipogenesis and Osteogenesis of Adipose-derived Stromal Cell Differentiation	Todd Monroe
130	Kayden Price	Deceleration Index Comparison for Female Collegiate Soccer Players with and without Past ACL Injuries	Nicholas Totaro
108	Gabe Reed	Understanding Dynamics and Evaporation of Fuel Droplets in Supercritical Environments	Shyam Menon
118	Joseph Romanos	Removal Of Microplastics Using 12-Hydroxystearic Acid Foam	Bhuvnesh Bharti
111	Thomas Roussel	Characterizing Multiphase Reacting Flows in a Model Hybrid Rocket Combustor	Shyam Menon
123	Olivia Springer	The Effect of Lignin on the Properties of Electrospun Polycaprolactone Films	Cristina Sabliov
110	Sarah Stenhouse	Impact of Surface Roughness on Zeta Potential of Cyclic Olefin Polymer (COP) Substrates	Sunggook Park
125	Ariel Sully	Incorporating Bayesian Optimization to Mimic the ECM Microenvironment of Cardiac Fibrosis	Philip Jung
134	Rayanne Thaljeh & Hanna DeVillier	The Role of Basement Membrane Laminin on Glioblastoma Migration	Qi Cai
120	Long Tran	Collecting Data to Prepare for Statewide Road Diet Screening	Rebecca Bian
109	Neel Verma	Shock Induced Breakup of Liquid Droplets	Shyam Menon
136	Mary Werther, Ngoc- Thanh Kellie Dinh, Shea Lee, Fabio Carines & Khoa Doan	Design of an Advanced Cell-Free Protein Synthesis Reaction Chamber Version 2.0	Yongchan Kwon

112 Kevin Yanez Orellana Nanosilica Incorporation in Concrete for Enhanced Performance

Hassan Noorvand





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

PENNINGTON BIOMEDICAL RESEARCH CENTER

<u>#</u>	<u>Student</u>	Title	<u>Mentor</u>
152	JaChé Bell	Linking GAINS: The Effect of Providing Genetic Risk Information on Lifestyle Behaviors in African Americans	Jennifer Caldwell
156	Abbie Bui	GI Exposure Is Required for the Leptin Lowering Effect of Ethanol Treatment	David McDougal
148	Calley Chauvin	The Role of Mitochondrial Efficiency in Breast Cancer-Associated Cachexia	John Kirwan
147	Anan Cole	Impact of Mitochondrial Uncoupling on MASLD-Driven Hepatocellular Carcinoma	John Kirwan
150	Franklin Epps & Christian Corsten	Sustained Optimal Serum HDL Concentration (≥60 mg/dL) throughout Thirties to Early Forties is Associated with Less White Matter Hyperintensity Burden on MRI at Mid-fifties: Bogalusa Heart Study	Owen Carmichael
153	Layla DePrimo	Exposure to a 72-h Fast Leads to Impairment of the Counterregulatory Response to Hypoglycemia	David McDougal
151	Megan Dousay	Optimization and Validation of a Synthetic Coenzyme Q Analogue for Assay of Complex III Oxidative Phosphorylation and Electron Transfer Capacity	Christopher Axelrod
155	Sydney Junot	Effects of Leptin Replacement on Metabolic Adaptations to Starvation in Sprague Dawley Rats	David McDougal
149	Camille Meaux	Establishment of Routine Monitoring of the Estrus Cycle in Female Rats Prior to Exposure to Hypoglycemia	David McDougal
154	Lillian Wilder	An Assessment of the Effects of Chronic Pelvic Pain on Quality of Life in Females with Endometriosis	Leanne Redman

VETERINARY MEDICINE

<u>#</u>	<u>Student</u>	Title	Mentor
141	Camilo Fernandez	Combining Oncolytic HSV-1 VC2 Expressing GM-CSF with Paclitaxel for Enhanced Triple-Negative Breast Cancer Therapy	Konstantin Kousoulas
140	Danielle Gipson	Fisetin as a Potential Drug Therapy for 4T1 Triple Negative Breast Cancer Cells	Leila Rahimian
145	Andrew Guidry	USP5 Knockdown in the Nucleus Accumbens Enhances Heroin Seeking Behavior in an Opioid Use Disorder Model	Ethan Anderson
143	Nya Lumar	Manipulation of the Brain's Motivation Circuitry Increases Heroin Seeking in Rats	Ethan Anderson
144	Kaitlyn Perkins	Harnessing Prostate Cancer Cell Dormancy to Delay the Lethal Metastases	Shang Su
139	Victoria Pugh & Nya Lumar	Guinea Pig Herpes-Like Virus Effects on Antiviral Responses	Brent Stanfield
142	Caitlin Randall	Discovering the Drivers of Phylogenetic Diversification of West Nile Virus throughout North America	Jeremy Brown
146	Emma Tsai	Assessment of Developmental and Behavioral Changes in Larval Zebrafish [<i>Danio rerio</i>] Exposed to Microplastic Leachates	Ahmed Abdelmoneim

ROYAL COTILLION BALLROOM MAP AFTERNOON POSTER & VISUAL DISPLAY PRESENTATIONS

STAGE													
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AFTERNOON POSTERS

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

ART

<u>#</u>	<u>Student</u>	Title	Mentor		
239	Kylie Rangeley- Allement	Evaluating AI's Impact on Architectural Design: A Controlled Study of AI-Integrated Architectural Design Processes	Kristopher Palagi		
238	Haleigh Shelton	The Application of Event-Based Architecture (EBA) Principles on Louisiana State University Campus	Soo Jo		
BUSINESS					

<u>#</u>	<u>Student</u>	Title	Mentor
242	Audrey Freeman	Briefs and Beyond: Exploring How Law Firm Founders and Owners Develop and Leverage Business Plans	Monique Domingo
240	Carsen Griffon ${\bf L}$	Exploring the Relationship between Demographic and Socioeconomic Factors on Homeownership Rates in Louisiana Parishes	Nuwan Indika
241	Reya Machen	Generational Perceptions of Vintage Clothing and Willingness to Pay	Kristina Lindsey Hall
243	Kenneth Nguyen & Jeremiah Huynh	Confidential No More: An Investigation into Healthcare Data Breaches	AJ Burns

HUMANITIES & SOCIAL SCIENCES

<u>#</u>	<u>Student</u>	Title	Mentor
264	Nicolas Avant	New Orleans Neighborhood Portraits: Culture and Resilience	Frederick Weil
213	Courtney Barrett	Does Retrieval Practice Promote Word Learning within a Story Reading Experience?	Eileen Haebig
247	Thomas Becnel	Interaction between Autism Spectrum Disorder and Sexual Gender Minority Membership on Community Interaction and Building: A Narrative Review	Elia Soto
262	Yelan Belladonna	The Influence of Gender on 311 Calls	Kevin Smiley
211	Mikayla Buenafe	Understanding How Differences in Caregiver Language Reinforcement during Play Relate to Child Vocabulary	Julie Schneider
232	Rachel Cole su	Exploring the Relationship between Emotion and Music Using Natural Language Processing	Jaymes Durriseau
250	Emma Coleman	Racism and Cannabis-Related Problems among Hispanic/Latine Adults: The Role of Negative Emotions in Responses to Experiencing Racism	Julia Buckner
216	Cam Crooks	Investigating El Niño Effects on Donax obesulus shell δ 180	Kristine DeLong
258	Isabel Crumley	A Qualitative Examination of What it Means to "Contribute to Others"	Ryan Hill
217	Tyler Drake	Assessing Lake Fausse Pointe Water Isotopes for Archaeological Purposes	Kristine DeLong
254	Avery Ellis	Conversational Synchrony: Preparation of Data for a Statistical Analysis	Aubree Corporandy
229	Meghan Garcelon	The Effect of Cognitive Load and Task Experience on Study-Phase Eye Movements	Heather Lucas
228	Moriah Gardner	Do Symptoms of ADHD Change Over Time?	Elia Soto
256	Suzanna Ginn & Brookelyn Pasipanki	Coding Incel Chatter: Applying a Theory-grounded Analysis of Dangerous Speech to Assess the Online Posts of Incels	Colleen Sinclair

AFTERNOON POSTERS

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

HUMANITIES & SOCIAL SCIENCES

<u>#</u>	<u>Student</u>	Title	Mentor
210	Ashley Hart, Zoey Gautreau, Victoria Walker & Emma Briggs	The Role of Implicit and Explicit Memory in Sentence Comprehension: Clinical Implications from an Age-Continuous Sample	Willem van Boxtel
257	Hannah Hauck	Don't Tap and Drive: Dual-Tasking Effects on Driving Performance	Owen Carmichael
231	Nicolas Hodson	Living Single: How Do Friends and Family Affect Life as a Single Person?	Colleen Sinclair
246	Lee Hugh	Memory Loss in the Oldest-Old: A Fearful Prospect or Nothing to Worry About?	Katie Cherry
267	Kendrick Hunt & Wynn Williams su	The Relationship Between Ethnic Identity and Perceived Attractiveness Among African-American College Students	Jaymes Durriseau
235	Tyler Klitenic	Younger and Older Adults' Memory for Everyday Chores: Do Illustrations Help?	Katie Cherry
227	Amelia Knox	Imposter Syndrome and College Students' Drinking Behaviors: The Roles of Negative Affect and Coping Motivated Alcohol Use	Julia Buckner
244	Lauryn Liddell	Hurricane Katrina and Covid- 19: Lasting Impacts on African Americans from New Orleans	Katie Cherry
245	Margarett Livaccari	Reordering the Mind: How Working Memory Capacity Relates to Size Judgment Errors	Janet McDonald
248	Makenna Luba	Dynamics of Protein Restriction on Protein Preference in C57BL/6 Mice	Paul Soto
259	Jennifer Luviano	Effects of and Preference for Good Behavior Game versus Synchronous Reinforcement in Elementary Classes	Jeanne Donaldson
212	Celeste Mackin	Size Judgment Task Performance in TD vs DLD Students	Janet McDonald
224	Anna Mathews	Testing the Relationship between Child Disruptive Behaviors and Parental Feelings	Amy Mikolajewski
221	Ally Miller, Allie Folse & Callie Cody	Predictive Processing in Aphasia: Treatment Implications from Online Eye-Tracking and Memory Interference	Willem van Boxtel
226	Abigail Miserendino L	Individual Differences in Mental Imagery and Sensory Processing	Kate Yurgil





AFTERNOON POSTERS

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

HUMANITIES & SOCIAL SCIENCES

<u>#</u>	<u>Student</u>	Title	Mentor
249	Melody Moon	Do Word Meanings React to Music?	Christopher Cox
251	Ezra Moore	Exploring the Relationship between Executive Function and Characteristics of Autism in Children and Adolescents	Matthew Calamia
215	William Morales	A Sociolinguistic Study of Intensification in the Spanish of Louisianian Puerto Ricans	Rafael Orozco
230	Reilly Mulcahy	Is There a Lack of Research Showing How Gender Affects Presenting Symptoms in People with ADHD or Autism?: A Narrative Review	Elia Soto
265	Reina Quinn	Curly or Straight: How Does Hairstyle Affect the Likelihood of Hiring a Black Woman?	Heather O'Connell
220	Natalie Reinauer	Does Politics Trump Attraction: Explaining Variation in College Students' Willingness to Date Trump Supporters?	James Garand
223	Amelia Rigdon	Peer Influence and Autism: Investigating Social Discounting in Interactions	Shawn Gilroy
233	Senora Rodgers	Smart Girls, Safe Choices: The Influence of Sociocultural Factors on Reproductive Decisions	Teairra Evans
255	Ryan Roper, Alana Jackson, Eleanor Pottle & Austin Cavalier	The Effects of Perceptual Grouping in Visual Working Memory: An EEG Study	Hanane Ramzaoui
253	Delaney Sawicki- Lake	Race-Based Microaggressions and Alcohol Outcomes by Sex among Black College Students: A Daily Diary Study	Julia Buckner
225	Amanda Selman	Within-Subject Changes in Protein Preference with Changes in Dietary Protein Intake	Paul Soto
214	Tymir Smith-Hartzog	Digital Lives: Exploring the Link Between Social Media and Mental Health in Brazil and Chile	Carmela Mattza
236	Talyn Thomas	Simple Words, Stronger Trust? Exploring the Link Between Vocabulary and Credibility	Teairra Evans
261	Ky Trahan	The Potential Role of Perceived Contribution: Internal Reliability of the Perceived Contribution Scale (PCS)	Ryan Hill
222	Darlina Tran & Francisco Guajardo	The Relationship between Parenting and Disruptive Behaviors, and the Role of Callous-Unemotional Traits	Amy Mikolajewski
260	Laurel Walther	The Effects of Inter-Item Similarity on Study-Phase Viewing Behaviors and Memory for Spatial Locations	Heather Lucas
263	Avi Weill	How to Activate an Activist	Isaac Carson
237	Treasure Wells	Teacher Stories: Exploring Early Childhood Education in Louisiana through Oral History	Jennifer Baumgartner
218	Zoe Whitton	The Resilience of the Black Masking Indian Tradition after the COVID-19 Pandemic	Joyce Jackson
219	Lailah Williams	Gendered City Budgeting: How Much Do Women and Men Mayors Spend on Housing Initiatives?	Nichole Bauer
234	Thais Wise	Identifying Life-Threating Risk Indicators on Social Media: Examining the Relationship between Self-Reported Mood and Identification Accuracy	Ryan Hill
252	Caleb Yaccarino	A Comparison of Three Suicide Safety Planning Methods: Assessing Quality and Satisfaction through the Coding Process	Ryan Hill
266	Rei Zimmerman	Flowers and Femininity: Sex, Women, and the Botanical Sciences	Benjamin Kahan

AFTERNOON VISUAL DISPLAYS

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

<u>#</u>	<u>Student</u>	Title	Mentor
196	Urwah Abbas	Can Gymnasts Bounce Back? Assessing Vertical Jump Recovery after Achilles Tendon Injury	Nicholas Totaro
201	Madison Adams	Developing an Amphibian Life Cycle and Research Concept Map for Community-Level Protection of Genetic Resources	Nicholas Coxe
270	Bennett Blank	Effects of Sodium Bicarbonate on <i>Staphylococcus aureus</i> Small Colony Variants (SCVs)	William Beavers
208	Cameron Bonds	Development of an Open-hardware Artificial Insemination Rack (AISR)	Jack Koch
205	Jay Bonilla Hernandez	Callin' Baton Rouge: 311 Calls, Flooding, and Environmental Justice	Kevin Smiley
282	Joseph Brooks	SONIC ICONS: Visualizing and Mapping Louisiana's Soundscapes	Brendan Harmon
269	Bailey Florent & Kylee Vautrot	Sex-Specific Effects of Stress on Alcohol Consumption on Mice	Ethan Anderson
206	Karissa Garrett	The Association between Caregiver Linguistic Diversity and Child Vocabulary Development in Louisiana	Julie Schneider
198	Alexander Goldberg, Donovan Musser, Mikey Smith, Rebecca Dominguez & Dalton Arcement	Transnasal Endoscopic Surgical Site Evacuator (TESSE)	Philip Jung
272	Sydney Grafals	Art in Action: Accessibility and Sustainability in Curating Edward Millman's WWII and WPA Works	Marianna Luquette
280	Marie Howe	The Healing Power of CBD: Fish Gelatin Films for Enhanced Tissue Repair	Cristina Sabliov
278	Olivia Hupperich, Caroline Badeaux, Gabriella Mikhail, Carlie Dutile & Edwin Lowery	Pressure Sensing Mouthguard for At-Home Stress Measurements to Alert Jaw Clenching	Chandra Theegala
197	Madison Lee, Julianne Heath, Emily LeBlanc, Claire Bougere & Britney Nguyen	A Reusable Interconnect for Electrical Sensing in Organ-on-a-Chip Devices	Todd Monroe
281	Gerard Lorio	Low-Cost Titanium Dioxide Surface Coating to Improve Optical Profilometry of Transparent 3D Printed Microdevices	Todd Monroe
207	Cadence Lowery	Delsartemania: The Evolution of the François Delsarte Collection	Cynthia Sampson
276	Hayden McKay	Impacts of Variation in Experimental Parameters on Zebrafish Behavior: Enhanced Rigor and Reproducibility in Neurobehavioral Research	Ahmed Abdelmoneim
279	Micah Mekhitarian, Audrey Dickman, Stephanie Blakely & Cameron Covington	Self-Automated Unilateral Hip Spica (SAUL)	Nicholas Totaro
193	Angelina Nguyen	Integrating Non-Human Habitats into Architectural Design: The Case of Bird Nest Facades in Louisiana	Fabio Capra-Ribeiro
204	Victoria Nguyen	Comparative Population Genomics of Gulf Coast Birds: Black Skimmers, Laughing Gulls, and Tricolored Herons	Nicholas Mason

AFTERNOON VISUAL DISPLAYS

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

<u>#</u>	<u>Student</u>	Title	Mentor
275	Damilola Osoba, Ngoc Bui, Yvonne Ariri, Precious Adeniyi & Lisa Patel MN	Development of LaACES Balloon Payload for Light Intensity Study	Bei Xie
273	Sadman Sobhan Raabith	Demystifying Loud Glitches for a Better View of the Universe	Gabriela González
200	Hannah Rothman & Matthew Weirich	Trash Detection to Track Waste Pathways into Accumulation	Matthew Brand
202	Franchesca Ruiz	Freshwater Mussels of Louisiana: A Field Guide	Garrett Hopper
199	Staicy Triminio	Relation of Deceleration Index from a 1080 Sprint Device to Markerless Motion Captured Hamstring Force in Collegiate Soccer Players during Acceleration and Deceleration Transitions	Nicholas Totaro
277	Abby Turner & Thomas Bradford	Accumbal Knockdown of KCNK1 Leads to a Decrease in Stress-induced Alcohol Drinking in Mice	Ethan Anderson
194	Skylar Vollmer	ArchiCrochet: Bridging Architecture and Crocheting through a Fabricated Tension Structure	Farzaneh Oghazian
209	Nicholas Wagner	Developing Energy Optimization Methods at Agriculture Water Systems using Water Quality Sensing	Michael Hayes
203	Shalanda Warr	Freshwater Mussels of Louisiana Poster	Garrett Hopper
195	Jennifer White	Enhancing Earth Bricks with Hemp: Sustainable Construction for Coastal Louisiana	Robert Holton
274	Katherine Winchester	Autonomous Underwater Vehicle for Gulf South Region Ecosystem Monitoring	Xiangyu Meng

ART

<u>Medium</u>

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

<u># Student Title</u>

- 283 Abigail Mahe Subliminal Sublimity
- 284 Stephen Rice

Frankenstein's Monster: Quaerere Animae

Watercolor and Ink

Pencil, pen, markers, colored pencil, digital media

<u>Mentor</u> Meghan Hodges

Meghan Hodges

PERFORMANCES

9:00 - 9:45 AM | Red River, Room 323

Time Student

9:00

<u>Title</u>

9:15 Anne Louise Phillips **MS**9:30 Anne Louise Phillips **MS**

Vincent Soldano **D**

Boy with a Broken Heart Pinkfairy Witchcraft Homestead

<u>Mentor</u>

Sean Munro Ciera Higgenbotham Ciera Higgenbotham



VIEUX CARRÉ, ROOM 325

9:00	a.m 3:15 p.m.		
Time	<u>Student</u>	Title	Mentor
9:00	Ariana Evans & Kirsten Derr LT	Autism Spectrum Disorder, Anxiety, and Sensory-Gating in College Students	Vicki Sheafer
9:15	Eva McDonald	Anxiety Sensitivity and Alcohol Use in Sexual Minority College Students	Dan Capron
9:30	Gabrielle Mellor	To Conform or Not to Conform: An Evaluation of the Situational and Dispositional Factors that Influence Group Conformity and Employee Voice Behavior	Vanessa Burke
9:45	Caroline Donahue	<i>Criminal Minds</i> and Those That Judge Them: The Gendered Treatment of Suspects in the Criminal Justice System and Their Representation in the Media	Danielle Thomas
10:00	Noelle Rountree, Sy'rai Adams, Camille Garrett & Cate Emma Warren	The Impacts of Cell Phone Usage on Mental Health: Chile and American Perspectives	Carmela Mattza
10:15	BREAK		
10:30	Cobi Wright	Evaluating the Efficacy of Culturally Adapted Social-Emotional Learning for Black/African American Youth: A Comparison between In-Person and Online Approaches	Danbi Choe
10:45	Ezra Moore	Exploring Vocabulary Development in Autistic Children: The Role of Imageability and Vocabulary Acquisition	Eileen Haebig
11:00	Sophia Foto SE	Uncovering an Understanding: A Student's Journey into Complex Labels	Monica Johnson
11:15	Henri Noel	Effects of Neurostimulation over Left Frontal Aslant Tract on Speech and Limb Movement in Older Adults	Karim Johari
11:30	Gabrielle Carter & Jacqueline Jones	Smarter Salud: How AI is Revolutionizing Healthcare for Spanish-Speaking and Latin American Communities in the United States	Carmela Mattza
11:45	BREAK		
12:15	Christian Foti	Advancing Dosimetry for Radiopharmaceutical Therapy with a Novel Ionizing Quantum Imaging Detector	Lydia Wilson
12:30	Arys Morman	Studies of Bakuchiol against Triple Negative Breast Cancer Models	Fatima Rivas
12:45	Parker Collett	Differentiation of Meat Samples Using IR Spectroscopy and Data Driven Models	Daniel Kuroda
1:00	Lauren Wright	The Influence of Excess Ligand on the Air Stability of a Cationic Cobalt (II) Hydroformylation Precatalyst	Matthew Chambers
1:15	Owen Traylor L	Modeling Hysteretic Conductance and Extrapolating Shaker Potassium Ion Channel Gating Behavior	Armin Kargol
1:30	BREAK		
1:45	Riley Yucius	Investigating the Roles of PAI-1 and SorLA in Idiopathic Pulmonary Fibrosis	Daniel Lawrence
2:00	Hollie Devoltz 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
2:15	Samantha Ferrer	Determining the Effects of Tubular Lysosomes on the Health-Lifespan Disparity in Aging Organisms	Alyssa Johnson
2:30	Aimee Martin L	The Role of FAT Cadherins in Breast Cancer	Amrita Datta
2:45	Heather Green	Aminooxazole Inhibitors of Biotin Carboxylase: Kinetic and Antibacterial Properties	Grover Waldrop
3:00	Marie Vilcin	Evaluation of E-Textile Accuracy to Measure Body Temperature in Tactical Athletes	Neil Johannsen

CAPITAL CHAMBER, ROOM 329

9:00 a.m 3:00 p.m.				
<u>Time</u>	Student <u>Title</u>		<u>Mentor</u>	
9:00	James Kelly	The Bayou State Trail: A Historical Geography of Outdoor Recreation in N Louisiana		
9:15	Henry Hanks	The Black Family v. United States: Reproductive Apartheid and Welfare	Helena Fietz	
9:30	Ann Crabtree	Experimental Ethics: Twentieth-Century British Chemical and Biological Meredith Warfare Trials		
9:45	Mia Oliveras	Documenting Violence, Daily Life, and Rehabilitation in the U.S. Prisons through Incarcerated Voices	Catherine Jacquet	
10:00	Abigail Williams	Pushed Beyond the Limit: An Examination on the Causes and Affects of Scott Madere Academic Stress on Students in South Korea		
10:15	BREAK			
10:45	Michael Silvestri L	Who Helps Grow the Domestic Economy the Most?: A Macroeconomic Analysis of the Impact of Various Classifications of Immigration on Real GDP by State	Nuwan Indika	
11:00	Caden Lund & Will Abel			
11:15	Luke Gilmore	ilmore An Anecdotal Exploration of the Marketing Power of Twitch		
11:30	Alexander Parkhurst	arkhurst Do Cybersecurity Laws and Regulations Work? Evidence from FBI Ali Ahme Cybercrime Data		
11:45	BREAK			
12:30	Gergely Szarvas UA	Numerical Estimations of Partial Derivatives Using Python	Roger Sidje	
12:45	Kaitlyn Park PT	A Journey Through Cantor's Infinity to Erdős Coloring	Saayan Mukherjee	
1:00	Adhrit Maiti BM & Diving Deep with Catalan Numbers Zeque Z Sarah Pham AR		Zequn Zheng	
1:15	Nathan Henderson, Matthew Harmon & Adam Farhat DH	Using Game Theory to Study Optimizations in Buckshot Roulette Strategy	Zequn Zheng	
1:30	BREAK			
2:00	MuhammedIncreasing Equity and Public Access to Breakthrough Equations Found inSteHabibovicMedical Research Through User Friendly Interfaces		Steven Heymsfield	
2:15	Ibrahim Alam, Bibhushita Baral & Jacob Nguyen	MikeGPT: Enhancing LSU with AI	James Ghawaly	
2:30	Brandon Walton & Willow Snow LM	Family-First Summarization and Local LLMs for Semantic Analysis and Categorization of Android Malware	Aisha Ali-Gombe	
2:45	Catherine Rodriquez	Neuromorphic Computing for Seismic Event Detection	James Ghawaly	

CASTILLIAN, ROOM 304

9:00 a.m 3:00 p.m.			
<u>Time</u>	Student	Title	Mentor
9:00	Bryce Edwards	20 Years in the Middle East: The Veteran's Experience through Oral Jenr History	
9:15	Charlotte Balart	Archives as a Teaching Tool: Facilitating Learning with Historical Kelly Lars Manuscript Collections	
9:30	Catherine Mansfield	You Paint Like a Girl: A Case Study of Gender Bias in Art History Carla V	
9:45	Lauren Lozoya	Radical Feminism and the Struggle for Identity: Challenging Patriarchy in Go Set a Watchman and La Bataille d'Alger	Meghan Hodges
10:00	BREAK		
10:15	Shelby Varga	Christian Campaigning: Understanding Trump's Utilization of Religion in the 2025 Election	Kyle Stanley
10:45	Alexis White	The Effect of Far Right Nationalism on Liberal Democracy	Joseph Clare
11:00	Morgan LeBlanc	Comprehensive Sanctions versus Smart Sanctions: The Effect of the Scope of Sanctions on Policy and Welfare	Daniel Tirone
11:15	lsabel Gómez	Policy Analysis of Louisiana English Second Language Policy	Danielle Thomas
11:30	BREAK		
12:45	Ellie Bollich c	The Taming of the Sumatran Shrews: Uncovering the Diversity of <i>Crocidura</i> in Sumatra	Jake Esselstyn
1:00	Leilani Corleto	Uncovering Diversification Dynamics Using Speciation Modeling for Tropical Andean Bellflowers	Laura Lagomarsino
1:15	Elena Liebl	Color Me Bold?: Variation in Color and Behavior in Native and Invasive Anoles	Christine Lattin
1:30	Edmarie Rivera- Sánchez	Learning from the Past: The Role of Soil Microbial Legacies in the Responses of Brassica rapa to Drought Stress	Gaurav Kandlikar
1:45	BREAK		
2:00	Jackson Kirn	The Diversity of Salt-Tolerant Plants in the World	Maheshi Dassanayake
2:15	Kirsten Adams	Investigating Genome-Environment Associations for Eastern Oysters (<i>Crassostrea virginica</i>) in the Northern Gulf of Mexico	Morgan Kelly
2:30	Alyssa Daspit	Tracing Modified or Novel Retinorecipient Regions in the Anableps Brain	Patricia Schneider
2:45	Ariana Tashakkori	Environmental Heavy Metal Exposure and Haemosporidian Parasites in Louisiana Barred Owls (<i>Strix varia</i>): Implications for Wildlife Conservation and OneHealth	Mark Mitchell

INTERNATIONAL, ROOM 303

1:00 p.m. - 3:00 p.m.

<u>Time</u>	<u>Student</u>	<u>Title</u>	Mentor
1:00	Laraimie Reid	Investigation of Interfacial Bonding Behavior Between Ultra-high Performance Concrete and Existing Concrete Structure	Yen-Fang Su
1:15	Jacqueline Schlamp	Cryoprotectant Screening for Different Growth Rates of Microalgae for Freezing	Maria Teresa Guiterrez-Wing
1:30	Moises Osorio	Water Remediation and Hydrogen Production with Cobalt-Doped TiO2 Photoanodes	Samuel Snow
1:45	Hamood Qureshi	Generating Hydrogen through Synthesis of Nanoparticles with Ultrafast Laser Pulses	Kevin McPeak
2:00	BREAK		
2:15	James Yu	Flow Field Characterization in a Liquid-Spray Swirl Combustor near Blowout Conditions	Shyam Menon
2:30	Emma McCarthy & Angelina Jorgenson	Design, Synthesis, and Characterization of Complex Concentrated Alloys for MELD Manufacturing	Christopher Marvel
2:45	Marc Hebert	Planetary Tele-Robotic Construction	Ali Kazemian

RED RIVER, ROOM 323

Note: Performances held in this room from 9:00 - 9:45 a.m. See page 21 for details.

9:45 p.m. - 3:00 p.m.

Time	<u>Student</u>	Title	Mentor
9:45	Malina Ouyang	Frankenstein: Unethical Codes for Non-Human Innovation	Meghan Hodges
10:00	Sebastian Crandall	The Rise of Mascot Horror in Contemporary Media	June Pulliam
10:15	BREAK		
12:45	Camille Beeding	Wetland Days	Danielle Dilullo
1:00	Emma Miranda	New Waste Pickup Regulations and Their Impact on Illegal Dumping in Baton Rouge	Mark Benfield
1:15	Nasrine Ningbinnin N	Lactate Dehydrogenase in Fiddler Crab <i>Minuca longisignalis</i> as a Biomarker of Environmental Health in Southeastern Louisiana	Abby Adams
1:30	Stephanie Procopio	Weather Event Impacts on Soil Characteristics of a Salt Marsh in the Barataria Basin, Louisiana	Linda Hooper-Bui
1:45	Ryleigh Choplin	The Impacts of Saharan Dust on Tropical Cyclogenesis and Intensification in the Atlantic Basin	Paul Miller
2:00	BREAK		
2:15	Daniel DeButts	Assessing the Influence of Different Soil Types and Drought on the Growth and Volatile Production of Loblolly Pine (<i>Pinus taeda</i> L.) and Longleaf Pine (<i>Pinus palustris</i> Mill.), Two Hosts of Southern Pine Beetle (<i>Dendroctonus frontalis</i> Zimmermann)	Todd Johnson
2:30	Luke Guidry	Changes of Schrenkiella parvula Roots in Response to High Salinity	Maheshi Dassanayake
2:45	Aris Williams	Optimizing Nitrogen Fertilization Programs for Establishing <i>Camellia</i> sinensis in a Mississippi River Alluvial Soil	Yan Chen

PANELS

THE OGDEN HONORS COLLEGE & RELIGIOUS STUDIES PROGRAM Spring 2025 Student Symposium

Panel #1

9:00 AM - 10:15 AM | Moderated by Dr. Kenny Smith | International, Room 303

<u>Student</u>	Title
Evan Tassin	Bring Out Your Dead: Paranormality in The Church of Jesus Christ of Latter-Day Saints
Bridget Ott	The Doctor Will See You Now: Shamanism as Medicine in Modern West Africa
Chase "Cassie" Lormand	On the Extension of the Mystical and Otherworldly into Contemporary Times
Julia Pfeifer	Otherworldly Journeys and the Shamanic Hypothesis of I.P. Couliano Explored through <i>The Simpsons</i>
Savannah Boynes	The Emptiness is Bearable: An Analysis of Other Worlds and Shamanism in Sci-Fi Film

Panel #2

10:45 AM - 11:45 AM | Moderated by Dr. Kenny Smith | International, Room 303

<u>Student</u>	Title
Sarah Miller	Religious Tolerance as an Indicator of Conflict in Society
Margaret Liner	Change Happens in Your Backyard Or Parade Ground
Evelyn Lecky	Socks for the Homeless
Anosha Rana & Noor Akram	The Journey of Unheard Stories

PURSUING CAREERS IN RESEARCH

3:30 - 4:30 PM | Capital Chamber, Room 329

Dr. Owen Carmichael	Professor and Director of Biomedical Imaging	Pennington Biomedical Research Center
Dr. Judith Rhodes	Director	Louisiana State University Social Research & Evaluation Center
Dr. Willem van Boxtel	Assistant Professor, Communication Disorders	Louisiana State University
Dr. Matthew Vincent	Geologist	Coastal Protection & Restoration Authority
Dr. Darius Spieth	Professor, Art History	Louisiana State University

RESEARCH AMBASSADORS

The Office of Undergraduate Research 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.





KEYNOTE SPEAKER Dr. Kevin Smiley

Join us at 5:00 p.m. in the Atchafalaya, Room 339 for Dr. Smiley's keynote speech



Kevin T. Smiley is Associate Professor and Director of Undergraduate Studies in the Department of Sociology at LSU.

His research investigates social inequalities and environmental change, especially as it relates to disasters, place making, health, immigration, race, and social capital.

His research has been covered in media outlets such the New York Times, the Washington Post, the Houston Chronicle, and he has appeared on the Weather Channel. It has attracted grant funding and recognition through an NSF CAREER grant, as a Fellow in the Early-Career Innovators Program at the NSF National Center for Atmospheric Research, through NSF's Human, Disasters, and Built Environment (HDBE) Enabling the Next Generation of Hazards and Disasters Researchers program, and with an Early-Career Research Fellowship through the Gulf Research Program of the

National Academies of Sciences, Engineering, and Medicine.

His research is in three primary areas.

First, Dr, Smith researches disaster vulnerability particularly how environmental changes like climate change link to inequalities in disaster impacts. His latest work on this topic analyzes climate change attribution of disaster impacts using an environmental justice lens.

Second, his co-authored book, titled *Market Cities, People Cities* (NYU Press, 2018), assesses vast variability in urban trajectories in Copenhagen and Houston, and what the implications are for our urban future.

Third, he researches health risks from industrial air pollution in the United States by examining the extent of disparities across metropolitan areas, and how those disparities have emerged.

SPECIAL THANKS

The Office of Undergraduate Research thanks all of the individuals and groups who contributed to the success of LSU Discover Day 2025. In particular, we thank our keynote speaker,
 Dr. Kevin Smiley, Carsyn Martel at the Student Union for venue coordination and we are greatly appreciative of our volunteers, judges, the Research Ambassadors, and the LSU Office of Undergraduate Research staff for their assistance with the coordination of this event. We are especially thankful to the colleges and faculty who financially contributed to this event.

THANK YOU

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

Adlai E. Stevenson High School Arkansas School for Mathematics, Science, and Arts Baton Rouge Community College Baton Rouge Magnet High School Colorado State University Delgado Community College Dutchtown High School LeTorneau University Liberty Magnet High School Loyola University New Orleans McKinley High School McNeese State University Mississippi State University

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MARC PROGRAM

The Office of Undergraduate Research is enormously grateful to the Maximizing Access to Research Careers (MARC) program for their generous financial contribution to Discover Day 2025.

The LSU MARC Program provides high-impact research experiences to a 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 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.



To learn more about MARC, visit marc.lsu.edu

CAMPUS FEDERAL CREDIT UNION

Thank you to Campus Federal Credit Union for providing the refreshments in the Royal Cotillion Ballroom.



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:





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