

LSU | Discover Undergraduate Research Program

# LOUISIANA STATE UNIVERSITY DISCOVER DAY 2023

10<sup>th</sup> Annual

LSU's Undergraduate Research & Creativity Conference

April 21, 2023

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# WELCOME TO LSU DISCOVER DAY 2023!

LSU Discover Day is a university-wide undergraduate 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 and guests a chance to publicize and reflect on undergraduate student success in discovery, creativity, and research.



Wi-Fi Name: **Isuguest** Username: **DD23** Password: **675822** 





### **SCHEDULE OF EVENTS**

All locations in the LSU Student Union

<u>Time</u>	Event	<u>Location</u>
7:00 a.m 6:00 p.m.	Check-In Desk Open	2nd Floor East Lobby (next to Cotillion Ballroom)
8:00 a.m 8:30 a.m.	Breakfast and Welcome Remarks	Cotillion Ballroom, Room 250
9:00 a.m 1:30 p.m.	<b>Oral Presentations</b> Topics: Social Sciences, Arts, & Humanities	Capital Chamber, Room 339 Vieux Carré, Room 325 Red River, Room 323
9:00 a.m 11:00 a.m.	Morning Poster Session Topics: Science, Technology, Engineering, & Mathematics	Cotillion Ballroom, Room 250
10:00 a.m 12:00 p.m.	<b>Student Panel</b> Topic: New Religious Movements in America's Spiritual Marketplace	International, Room 303
11:00 a.m 1:00 p.m.	Presenter Lunch Break	Atchafalaya, Room 339
11:45 a.m 4:00 p.m.	<b>Oral Presentations</b> Topics: Science, Technology, Engineering, & Mathematics	Capital Chamber, Room 329 Vieux Carré, Room 325 Red River, Room 323
1:00 p.m 3:00 p.m.	Afternoon Poster & Visual Display Session	Cotillion Ballroom, Room 250
1:00 p.m 3:15 p.m.	<b>Student Panel</b> Topic: Representations of Literature in Nineteenth-Century Art	Castilian, Room 304
2:00 p.m 4:00 p.m.	<b>Student Panel</b> Topic: Studying the Paranormal in the Halls of Academe?	International, Room 303
4:00 p.m 5:00 p.m.	Faculty Panel Topic: Pursuing Careers in Research	Capital Chamber, Room 329
4:00 p.m 6:00 p.m. 6:00 p.m 7:30 p.m.	Art Show Keynote Speech & Awards Ceremony Keynote Speaker: Dr. Deborah Goldgaber	Magnolia, Room 301 Atchafalaya, Room 339

#### **ABOUT LSU DISCOVER**

The LSU Discover Undergraduate Research Program, which hosts Discover Day, 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

#### **ROYAL COTILLION BALLROOM MAP** POSTER & VISUAL DISPLAY PRESENTATIONS



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

All presenters are Louisiana State University students unless otherwise noted.

#### KEY

- A | American University
- **B** | Baton Rouge Community College **BM** | Baton Rouge Magnet High School
- BU | Baylor University
- **D** | Delgado Community College
- **DU** | Duke University
- **EC** | Early College Program
- **LS** | Louisiana School for Math, Science, & the Arts
- L | Loyola University New OrleansM | Massachusetts Institute of Technology
- **MN** | McNeese State University
- N | Northville High School
- **NW**| Northwestern State University
- **SM** | Scotlandville Magnet High School
- SE | Southeastern Louisiana University
- SU | Southern University A&M

#### **SCIENCE**

TJ | Thomas Jefferson High School for Science & Iechnology
UH | University of Houston - Clear Lake
ULL | University of Louisiana Lafayette
ULM | University of Louisiana Monroe
UM | University of Mississippi
UNO | University of Mew Orleans
USF | University of South Florida
UT | University of Texas at Tyler

<u>#</u>	<u>Student</u>	Title	Mentor
137	Fabiana Aguilera Vaca Diez	The Effect of Electrocatalyst Loading on $\text{CO}_2$ Reduction in Water	Noémie Elgrishi
185	Dylan Anderson <b>ULL</b>	To Skip or Not to Skip - Do Prey Capture Kinematics Differ in Atlantic Mudskippers in Full Light vs Dimmed Light?	Emily Kane
57	Stephanie Armond	Comparison of High Harmonic Generation Yields in Benzene and Cyclohexane	Mette Gaarde
166	Collin Aupied	Modeling Predation and Disease Transmission in the Fall Armyworm, Spodoptera frugiperda - Healthy Herds and Messy Predation	Bret Elderd
177	Chloe Bell <b>D</b> , Mahfuza Mannan D, Tamaira Schexnayder <b>D</b>	Dental Microbes Activate Inflammation and Cellular Signaling Leading to Atherosclerosis	Habib Ansari
167	Kaelie Bernard	Crystallization of a Kinetically Faster Form of Stable 5-Lipoxygenase	Nathaniel Gilbert
183	Bradley Bouton <b>ULL</b>	2D vs. 3D Geometric Morphometrics in Louisiana Inland Fishes	James Albert
153	Gabrielle Boutte	Synthesis of a Fentanyl Derivative for Use as a Template for Molecularly Imprinted Polymers	David Spivak
159	Kassidy Brewer <b>L</b>	Exploring the World of Kratom: Background and Comparative Microcrystalline Testing	Anna Duggar
179	Jenna Brian	The Effect of Particulate Matter on Lung Cells	Avinash Kumar
172	Cade Canepa	Characterization of Leptin Receptor Expressing Neurons in the Cortex and Hippocampus of the Mouse Brain	Charles Lee
178	Jacob Carignan	Characterizing Oxytocin Receptor Expression in the Entorhinal Cortex of Mice	Juhee Haam
152	Julia Carroll	Frontal Polymerization of Epoxies: How Functionality Affects Front Velocity	John Pojman
186	Hailey Carter	The Differences Between the Structures of DNA Polymerases Klenpin, Klentaq, and Klenow, as Predicted by AlphaFold2 and SwissModel	Vincent LiCata
174	Lexi Cheramie	Confocal Subcellular Localization Study of Deg Proteases in Chlamydomonas reinhardtii	David Vinyard
180	Alexandra Clay	Regulation of Hypercholesterolemia Using Proprotein Convertase Subtilisin/Kexin Type 9 Model	Christopher Pattillo
175	Larissa Cortes Morales <b>L</b>	A Bioinformatic Pipeline for the Detection of Local Amino Acid Enrichments in Three Dimensions: A Case Study of DNA Polymerase I	Allyn Schoeffler

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

SCIENCE

<u>#</u>	<u>Student</u>	<u>Title</u>	Mentor
69	Sade Dennis	The Impact of Hurricane Ida on Dredge Pit and Continental Shelf Sedimentation	Carol Wilson
138	Maya Dunn	Synthesis and Characterization of Pyrazine/Pyrrole-fused Fluorescent Dyes [BOPYPYs]	Graca Vicente
140	Madison Ferguson	Cationic Frontal Polymerization of an Epoxy Using Only lodonium Salt	John Pojman
151	Camilo Fernandez	Synthesis and Biological Evaluation of Dehydroabietylamine Derivatives	Fatima Rivas
176	Ashley Florance	Understanding the Role of Chaperone Complexes in Photosystem II Assembly in Cyanobacteria	David Vinyard
134	Harrison Gietz	Non-Parametric Bayesian Machine Learning for Stochastic Differential Equations	Arnab Ganguly
182	Xochitl Gonzalez	Physiological Trade Offs of the Copepod <i>Tigriopus californicus</i> Under Heat Stress	Morgan Kelly
171	Hiba Hasan	Identification of Oxytocin Expressing Cells in the Mouse Retina	Ryoichi Teruyama
157	Tai Hua	Weak and Strong-Field Electron Dynamics in Molecules	Kenneth Lopata
155	Jason Huang	Combating Metabolic Diseases with Prenylated Natural Products	Fatima Rivas
170	Kinan Kasabali	Exploring the Molecular Interaction Between Boundary-Element Associated Factor (BEAF) and Dre4: Implications for Transcriptional Regulation	Craig Hart
67	Rorisang Kgoadi	Analyzing GPS Data From Stations Across South Louisiana to Monitor Subsidence and Estimate Seasonal Elevation Changes	Karen Luttrell
141	Ethan Kurian	A Tin-Porphyrin Shell with a Silver Heart: Synthesis and AFM Characterization of Designed Core-Shell Nanoparticles	Jayne Garno
139	Abigail LeBlanc	Modular Synthesis of Carbon Nanohoops using Alkyne Metathesis	Semin Lee
161	Cailyn Lee	DNA Methylation of PEG3 in Breast and Ovarian Cancer Cells: Exploring the Possible Existence of Direct Correlation Between Methylation Rates and the State of Cancer Development	Joomyeong Kim
158	Amanda Lee	Synthesis and Characterization of a Cobalt[II] Nitrite Reduction Catalyst	Noémie Elgrishi
154	Mary Lee	Nrf2 Confers Host Protection Against Pneumonia Caused by Carbapenem- resistant Klebsiella Pneumoniae	Tirumalai Rangasamy
184	Natalie Lim	Role of IL-10 in SARS-CoV-2 Infection During Pregnancy	Stephania Cormier
156	Cale Locicero	Stereoselective Synthesis of $\alpha$ -Quaternary $\alpha$ '-Hydroxyketones	Rendy Kartika
135	Kate Long <b>LS</b> & Kaitlyn Kirt <b>EC</b>	On Dirac Factorization, Fractional Calculus, and Polynomial Linearization	Zachary Bradshaw
65	Grant Lopez	Storm Effects on Deposition on Block 88 Dredge Pit on Ship Shoal, Louisiana	Carol Wilson
149	Ella Madura	Metal Organic Cages Decorated with Photosensitizers for Energy Transfer Photocatalysis	Victor Garcia-Lopez
173	Trinity Martin <b>L</b>	Bioinformatic Analysis of Extremophilic Gyrase Homologs	Allyn Schoeffler
165	Sophia Matylis	Functional Genomics Tool for Calcium Signaling in Schrenkiella parvula	John I arkin
150	Madeline McHugh	Time-lapse PVA Hydrogels Controlled by pH through Competing Enzyme Reactions	John Pojman
63	Seija Meaux	Characterization of Melt-Rock Interaction in Plagioclase Peridotites from the Gakkel Ridge, Arctic Ocean	Matthew Loocke
144	Sarah Napier	Fine Tuning Catalysts for Alkyne Metathesis	Semin Lee

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

#### SCIENCE

<u>#</u>	<u>Student</u>	Title	Mentor
164	Christy Nguyen	An RNAi-based Screen to Identify Novel Regulators of Tubular Lysosome Induction in <i>C. elegans</i>	Alyssa Johnson
148	Sadie Noble	Characterizing the Role of NOTCH1 EGF27 Glycosylation on Protein Structure and Dynamics Using Nuclear Magnetic Resonance	Megan Macnaughtan
142	Sophie Ntipouna	Removal of PFOA and PFOS from Water Using a Molecular Cage	Noémie Elgrishi
190	Shelby Oliveaux	Resolving the Discrepancies of the Placement of <i>Ailurus styani</i> within Clade Musteloidea	Jeremy Brown
181	Ayushi Patel	Colocalization of D2R and C-Fos in House Sparrow Hippocampus in Response to Novelty	Christine Lattin
143	Zoe Patton	The Synthesis and Investigation of Selenouronium Chloride Salts	Justin Ragains
147	Thomas Polinard	Watching the Microflower Bloom: Investigation of the Self-Assembly of a Polypeptoid Block Copolymer with Atomic Force Microscopy	Jayne Garno
133	Lillian Powell	Road Traffic Management in Baton Rouge During LSU Sporting Events	James Madden
136	Colette Rainey	Analysis of Proteins Generated from Organophosphorus Pesticide Poisoning	Mandi Lopez
189	Robert Schuh L	Antibiotic Treated Hypermutator <i>Pseudeomonas aeruginosa</i> and Implications on Immune Evasion and Adaptation in Cystic Fibrosis	Lisa Morici
61	Sarah Seale	Characterization of Peridotites from the Suishin Megamullion Oceanic Core Complex, Shikoku Basin, Philippine Sea	Matthew Loocke
188	Alec Sheehy	Ten Years Later: An Update on the Status of the Fish Fauna Impacted by the 2010 Deepwater Horizon Oil Spill	Prosanta Chakrabarty
160	Reetu Shrestha	Phenotypic Evolution due to Divergence Adaptions Found in SBW25 and PBR716 <i>Pseudomonas fluorescens</i> Genotypes	Jiaqi Tan
145	William Smither	Vitexin-inspired 4-quinolone Molecular Scaffold Against Cellular Models of Colorectal Cancer	Fatima Rivas
162	Raedan Stephens	Bird DIY: Building an RFID System to Study Behavior in Free-Living Starlings	Christine Lattin
146	Kyron Thomas	Dynamics of Sodium lons in Mixed Glyme Electrolytes	Revati Kumar
163	Zahra Vafaei Naeini	Effects of Different Light Intensities on Growth and Fucoxanthin Concentration of <i>Fistulifera solaris</i>	Ruth Ndathe
169	Elena Voisin <b>L</b>	Bioinformatic analysis of Enzymes in the Synthetic Carbon Capture Cycle CETCH	Allyn Schoeffler
168	Judy Vu	The Role of Entorhinal Cortical Neurons and the Temporammmonic Pathway Neurons in the Formation of Memory Consolidation	Juhee Haam
55	Raenessa Walker	Modeling of Gravitational Microlensing Events to Predict Optimal Ground- Layer Adaptive Optics Targets	Matthew Penny
187	Dykia Williams	Characterizing Structure-Function Relationships on the Acceptor Side of Photosystem II	David Vinyard
59	Leora Wilson	Syn-and Post-Rift Lower Crustal Flow under the Sunda Shelf, southern Vietnam: A Role for Climatically-Modulated Erosion	Peter Clift
105	Malaysia Young <b>sm</b> & Daviah Glover <b>sm</b>	Antibiotic Susceptibility of Bacteria Isolated From Hand-touch Places on University School Buses	Vanessa van Heerden

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

#### **KINESIOLOGY**

<u>#</u>	Student	Title	Mentor
53	Ethan Abbenante	Adolescent Blood Pressure: Relationships with BMI Percentile, Sleep Duration, and Household Chaos	Amanda Staiano
49	Christina Bird	Sitting Posture Affects Object Storage in Infants	Emily Marcinowski
41	Macy Laurent	Sitting Advancement and Object Management Proficiency in Infants	Emily Marcinowski
45	Mary LoGiudice	Impacts of 18 days of Continuous Low-dose rate Neutron Radiation during Pregnancy on Fetal External Morphology	Heather Allaway
37	Jill Meyer	MAPS : Mindfulness Affecting Physical Activity and Stress	Alex Garn
51	Halle Roman	Comparison of Step-based Physical Activity Guidelines for Preschoolers and Agreement with Habitual Physical Activity	Leanne Redman
43	Catherine Sorrels	Impacts of 12 Days of Continuous Neutron Irradiation on Fetal Development	Heather Allaway
47	Emily Sotomayor	Relation between Infant Play Materials and Grasping Behaviors	Emily Marcinowski
39	Tia Watts & Rhys Lormand	Use of Actual and Remembered Visual Feedback for Obstacle Clearance During Walking	Jan Hondzinski

#### AGRICULTURE

<u>#</u>	<u>Student</u>	Title	<u>Mentor</u>
31	Amori Bieller <b>B</b>	Defining the Preferred Substrates of Louisiana Freshwater Sponge Species	Mary Miller
33	Corinne Bosch	Food Sensitive College Students Less Likely to Adhere to Dietary Restrictions Despite High Incidence of GI Issues	Erin McKinley
103	Samaria Cosey <b>SM</b>	Intruder vs Inhabitant: A Study on the Macro-Nutritional Levels Found in Soils of Non-native and Native Plant Species	Vanessa van Heerden
23	Christine Goodermuth	Exploring the Immunomodulatory Effects of Localized Radiation Therapy in Dogs with Nasal Tumors	Sita Withers
18	Keithrick Junius	Health Life through Quilting	Jung-Im Seo
29	Connor Landry	The Role of Lipid Droplet Modifying Chemicals on Cercosporin Production in <i>Cercospora cf. flagellaris</i>	Sara Thomas-Sharma
35	Thomas Murphrey	Scores on the Eating and Food Literacy Behaviors Questionnaire Were Higher in Those Trained in Nutritional Sciences as Compared to Untrained University Students	Georgianna Tuuri
17	Kyra Reeves <b>su</b>	Investigation of Durable Quality for Faux Leather Fabrics	Jung-Im Seo
25	Alondra Torres	Comparing Transfection Efficiency of Different Methods in Two Cells Types Through GFP	Richard Cooper
27	Daja Williams	Feasibility of Gardening in a Permanent Pig Paddock System	Jodi Morton

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

### **COAST & ENVIRONMENT**

<u>#</u>	<u>Student</u>	Title	Mentor
107	Jayden Barton <b>sm</b>	Using Foraminifera Assemblages to Understand Environmental Change in the Gulf of Mexico and The Caribbeans	Vanessa van Heerden
116	Jada Beckwood <b>SM</b>	Feeding the Pollinators: The Use of Nitrogen Fertilizer on Stimulating Wildflower Plant Growth	Vanessa van Heerden
109	Jala Beckwood <b>sm</b>	Climate Change and Agriculture: Soybean Tolerance to Elevated Calcium	Vanessa van Heerden
110	7a'Kyriaha Brock <b>sm</b>	Does Air Pollution Influence Internal Migration in the United States?	Vanessa van Heerden
112	Gillian Coleman & Morgan Coleman	Potential Effects of SCTLD on M. Cavernosa	Daniel Holstein
102	Kyler Connor <b>sm</b>	Using Foraminifera Assemblages to Understand Environmental Change in Louisiana's Coastal Waters	Vanessa van Heerden
104	Amya Dorsey <b>s</b> M	Habitat Suitability Evaluation of Turtles in Waterways on a College Campus	Vanessa van Heerden
125	Ethan Elmer	Do Mangroves Reduce Wave-Induced Marsh Edge Erosion?	Giulio Mariotti
119	Madeline Fryer	Using Drones to Evaluate Anthropogenic Debris Accumulation in an Urban Baton Rouge Watershed	Mark Benfield
118	Tarry Glover <b>B</b> & Elyzabeth Ardoin <b>B</b>	The Louisiana Freshwater Sponge Project - Examining Changes in Species Diversity Through a Comparison of Two Ecological Studies	Mary Miller
101	Treasure Hawkins <b>sm</b>	Carbon Sequestration in Louisiana's Wetlands: Protecting Essential Ecosystems and Combatting Climate Change	Vanessa van Heerden
124	Kameelah Hollis	Biodegradable Constructed Floating Wetland	Brian Snyder
123	Hayley Howard B, Lisa DiMaggio B & Jada Latore B	Can Sediment Analysis Be Used to Further Describe Species Richness of Freshwater Sponges?	Mary Miller
114	Sophia Lingo	Delta Silica Cycling	Robert Twilley
111	Edbony London <b>sm</b>	Phosphorus Nutrient Pollution in Baton Rouge Surface Water	Vanessa van Heerden
113	Christopher Lowrey- Dufour	Assessing Avian Toxicity Resulting From the La Pampilla Refinery Oil Spill in Peru	Jon Doering
117	Kiyana McKnight <b>sm</b>	Worm Worries: Will Earthworms Grow with Different Fertilizers in the Soil?	Vanessa van Heerden
120	Sierra Moran	Determining the Efficacy of Carbon-Sequestering Phytoplankton Species	Sibel Bargu-Ates
122	Matthew Parker	Storm Influence on Soil Properties of a Saltmarsh in Barataria Basin, LA	Songjie He
115	Bridget Seghers	Developing Correction Models for the Effect of Lipid Content on Stable Isotope Ratios in Invasive Carp Fish	Michael Polito
108	Kimani Shropshire <b>SM</b>	Assessing the Impact of Experimentally Induced Heat Stress of Lake Soils	Vanessa van Heerden
121	Marion Vise	Analysis of Relationship Between Buried Organic Matter, Total Carbon Content and Grainsize Within Terrebonne Bay, Louisiana	Kehui Xu
106	JaKyra Whitfield <b>sm</b>	Modeling Coral Structural Protection from Hurricane Induced Winds	Vanessa van Heerden
100	Harmony Young <b>sm</b>	The Use of Biochar in Agricultural Production: A Case Study with Lima Beans	Vanessa van Heerden

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

#### ENGINEERING

<u>#</u>	Student	Title	Mentor
87	Jaeb Byrd & Kacie Francois	Minimizing Contamination in 3D Printed Platform to Co-culture Breast Cancer and Bacteria	Adam Melvin
71	Ashton Dalton	New Methods for Enhancing Detection of Microstructural Features in Cortical Bone	Kevin Hoffseth
85	Liz Diaz	Immobilized Dual-Porous Titania for the Photocatalytic Removal of Heavy Metals from Well Water	Kevin McPeak
93	l aurel Fishburn & Andrew Vu	Optimizing a Hydrogel Loading Protocol for a Microfluidic Device to Study Cell-to-Cell Signaling in the Tumor Microenvironment	Adam Melvin
83	Mohamad Habib	An Analysis on the Role Fluid Shear Stress Plays on Cancer Cell Migration During Extravasation	Adam Melvin
73	Madison Lee	Overexpression of Matrix Proteins Enhances the Secretion of Pro- Inflammatory Signaling in Breast Cancer Cells	Todd Monroe
98	Stephanie Lofton & Juan Martin Velez Diaz	Investigation on the Role of Hemp Extract on the Enzymatic Activity of Members of the Ubiquitin-proteasome System (UPS)	Adam Melvin
94	Corinne Martin	Controlled Fabrication of Solid-State In-Plane Nanopore Sensors for Deployable Sequencing Applications	Sunggook Park
89	Emmaline Miller	Development and Application of an Alternative Plate Insert Technology to Enable the Co-Culture of Two Different Cell Lines	Adam Melvin
75	Andre Mira	Modulation of Adipocyte Differentiation in Adipose-Derived Stem Cells Using Phytoalexin, Pisatin	Todd Monroe
79	Britney Nguyen	Plant-derived Phytoestrogens Direct Adipose-derived Stromal Cell Differentiation into White or Brown Fat	Todd Monroe
77	Kenny Nguyen	Attenuating Fibrotic Responses of Patient-Derived Dermal Fibroblasts by Lignin Composites: Gene Co-expression Network Analysis	Philip Jung
81	Isaac Ponder	Phytoestrogens as a Therapeutic Agent For Breast Cancer	Todd Monroe
91	Ruby Roberg	Synthesis of Tunable, Micron-sized, Polyethylene Particles as Models for Microplastics	Bhuvnesh Bharti
90	Lucas Sabanis	Adsorption of Bisphenol-A by Microplastics	Bhuvnesh Bharti
97	Steven Seiden	I've Got You, Under My Skin: Biohacking Augmentation Implant Forensics	Ibrahim Baggili
95	Karley Waguespack	Prototyping Autonomous Recovery for IoT Devices	Aisha Ali-Gombe
96	Ahan Zaman <b>BM</b>	Designing RNA Gene Circuits with Incoherent Type-1 Feed-forward Loop	Xun Tang

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

### **VETERINARY MEDICINE**

<u>#</u>	<u>Student</u>	Title	<u>Mentor</u>
127	Samantha Huszar	Effects of Maternal Vaping on Pregnancy Outcomes in a Mouse Model	Alexandra Noël
129	Haley Marcotte	Heterogeneity of <i>Salmonella enterica</i> Lipopolysaccharide Determines Macrophage Inflammatory Responses	Basel Abuaita
128	Jemiah Maxie	Endothelium Dysfunction induced by inhalation of Environmentally Persistent Free Radicals (EPFRs) is regulated by AhR activation in AT-2 Cells	Tammy Dugas
1.31	Alaine' Mitchell	Detrimental Effects of Tobacco Smoke Exposure on Innate Immune Response	Antonieta Guerrero- Plata
130	Kaitlyn Perkins	High-Throughput Screening of Tyrosine Kinase Inhibitor Activity in Human and Canine Osteosarcoma Cells	Sita Withers
132	Vy Truong	Evaluation of Fibroblast Growth Factor 19 (FGF19) in Healthy Dogs and in Dogs with Gallbladder Mucoceles	Andrea Johnston
126	Chelbye Turner	2-D Cell Culture Model to Elucidate the Mechanism of Particulate Matter Air Pollution Induced Vascular Dysfunction	Tammy Dugas









Past Discover Day

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

ART

<u>#</u>	<u>Student</u>	<u>Title</u>
88	Samira Awad	Progr

Samira Awad Programming Sustainable Art

92 Amanda Carambat

The Greenest States in the Southeast: A Data Visualization Study

Mentor

Hye Yeon Nam

Fabio Capra-Ribeiro

#### **BUSINESS**

<u>#</u>	<u>Student</u>	Title	Mentor
84	Arnav Barve <b>DU</b>	Variations in Hospital Charges for Childbirth in North Carolina	Osondu Ogbuoji
82	Morgan Bourque	Is What You See, What You Get?: An Exploration on the Impact of True Crime on Perceptions of Individuals with Criminal Records	Monique Domingo
80	Madeleine Coward	Politics in Applicant Attraction and Recruitment: Firm Response to Abortion Legislation and Its Impact on Applicant Interest	Doreen Matthes
86	Paul Labbe	Study of W.I.A.N. (What's in a Name?)	Aaron Gleiberman

#### **HUMANITIES & SOCIAL SCIENCES**

<u>#</u>	<u>Student</u>	Title	Mentor
32	Nathaniel Armour	A Little Hatred: Deconstructing and Coding Trump's January 6th Rally Speech	Colleen Sinclair
78	Lauren Betzer	Effectiveness of Static vs Dynamic Language Assessments	Julie Schneider
68	Kennedi Boatner & Delaney Havrylkoff	The Intersectionality of Race and Gender and Its Relationship to School Belonging and Student Mental Health	Anna Long
54	Allison Brannon	Profiles of Teacher Behavior Management Style: Perceived School Climate, Stress, and Self-Efficacy	Kelly Clark
48	Eathan Breaux	Validating the Voodoo Doll Self-Injury Task: Measurements of Distress in College Students With and Without Histories of Self-Harm	Raymond Tucker
70	Abigail Brien	The Relationship between Parental Language Input and Child Word Learning	Julie Schneider
22	Francisco Cordova- Segura	Hispanic Literary Heritage in Louisiana/ Herencia Literaria Hispana en Luisiana	Carmela Mattza
62	Will Decker, Kennedi George, Alyson Rivers, Ria Ferdaus, Micayla Carter & Bailey Shoulders	Effects of Notetaking Methods on Learning	Janet McDonald
64	Gavin Faucheux & Callie DeRanger	Memory in Later Life: How Nonagenarians Avoid Forgetting What They Want to Remember	Katie Cherry
74	Marcus Forest	The Role of Vocabulary Knowledge in Linguistic Encoding of Motion Events: An ERP Study	Julie Schneider

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

#### **HUMANITIES & SOCIAL SCIENCES**

#	Student	Title	Mentor
<u>#</u> 40	Justin Fortier & Blake	Predictors of Health-Related Quality of Life After the 2016 Flood	Katie Cherry
40	Schubert	Fredictors of Health-Related Quality of Life After the 2010 Flood	Ratie Cherry
44	Tarun Kakarala	Analysis of Infundibulum on Bovid Identification	Juliet Brophy
50	Zachary Kelly	The Role of Visual-Spatial Working Memory in Atypical Scan Patterns	Melissa Beck
46	Lauryn Liddell, Sarah Lehman & Michelle Wong	Memory Self-Efficacy in Very Old Adults	Katie Cherry
66	Russell Marshall	Experimentation in Organizational Psychology: A Systematic Review	Vanessa Burke
36	Jewel Murrill	Humanism in STEM	Zakiya Wilson- Kennedy
76	Celeste Patron & Hope Cryer	The Contribution of Left Supplementary Motor Cortex into Speech and Limb Movement: A Preliminary Report	Karim Johari
24	Lauren Polson <b>ulm</b>	The Rake: How is the Rake Stock Character Portrayed in Austen and Adaptations?	Elizabeth Oldfather
26	Hannah Rodrigue	Religion and Dress Code in the Middle East and North Africa	Asiya Alam
58	Melanie Rubin <b>su</b> & Zachary Roberts <b>su</b>	Cognitive and Social Factors in Decisions to Shoot	Jaymes Durriseau
72	Alyssa Schell	The Impact of Feedback on Children's Test Response Patterns	Eileen Haebig
30	Annie Sheehan- Dean	The Variation in Gendered Strategies Across Levels of Office	Nichole Bauer
56	Mina Sheikh	Cognitive Control in Young Adults: Listening to Cues to Improve Performance	Emily Elliott
34	Elise Strain & Khaleel Oeudraogo	Men's and Women's Beats: How News Articles are Assigned to Men and Women	Nichole Bauer
42	Evan Threeton	Sexual Orientation and Cannabis Outcomes among Black Individuals: The Role of Cannabis Use Motives	Julia Buckner
60	Carley Welborn <b>ut</b>	Investigating the Relationship Between Passion, Student Engagement, and Dropout Intentions	Christopher Thomas
52	Brittany White	The Effects of Clozapine and Olanzapine on Sucrose Preference in Female Mice	Paul Soto
28	Caitlyn White, Nana Ama Agyeman & Dylan White	Sad Feminists	Nichole Bauer
38	Lailah Williams & Iyian Paige	Run Her Her Money: How Women Candidates Raise Money	Nichole Bauer

#### **POETRY READINGS**

#### 10:45 - 11:00 AM | Red River, Room 323

TimeStudent10:45Adam Richards

**Title** 

**Conscious Mess** 

Mentor

Robert McKinnon

### ORAL PRESENTATIONS

### VIEUX CARRÉ, ROOM 325

#### 9:00 a.m. to 4:00 pm

<u>Time</u>	Student	Title	Mentor
9:00	Yasmine Bailey <b>su</b>	The Effects of Cultural Misorientation and African Self-Consciousness on Skin Tone Preference and Skin Bleaching on African American College Students	Reginald Rackley
9:15	JaNaia Brewer <b>su</b>	The Effects of Cultural Misorientation and Need to Belong on Sexual Risky Behaviors Among African American College Students	Reginald Rackley
9:30	Ariel Conner	Music Expertise on Change Detection and Transposed Letter Identification	Melissa Beck
9:45	BREAK		
10:00	Christanee Papillion <b>su</b>	The Effects of Cultural Misorientation and Narcissism on Body Appreciation and Body Self-esteem Among African American Female College Students	Reginald Rackley
10:15	Zachary Robinson	Game Literacy as a Teaching Strategy in Online Learning: Implications for Professional Development	Petra Robinson
10:30	BREAK		
10:45	BREAK		
11:00	David Spicer <b>M</b>	Affirmative Action Goes to School: What Shapes Political Attitudes of Students at Elite Institutions?	Andrea Campbell
11:15	Caroline Janecek	Examining the Effects of Natural Disasters on Health Resource Availability for Households in Baton Rouge	Kevin Smiley
11:30	Grace Keller	Exploring How Gender Shapes Young People's Attitudes Toward Affirmative Consent Policies	Sarah Becker
11:45	BREAK		
12:00	Gregory Patton	The Negative Effects of Conversion Therapy	Sarah Becker
12:15	Sophie Broussard <b>se</b>	2 Fast 4 Campus	William Chernoff
12:30	BREAK		
12:45	BREAK		

### VIEUX CARRÉ, ROOM 325

<u>Time</u>	<u>Student</u>	Title	Mentor
1:00	Rachael Coates	Identifying the Role of MAPK15 in Triple-Negative Breast Cancer	Adam Melvin
1:15	Marie Drozda	Sex-Steroid Receptor Level Variations in the Jaw Muscle Across Reproductive State in the Mouthbrooding Cichlid Fish, <i>Astatotilapia</i> burtoni	Robert Mobley
1:30	Mia Foster	Description of a New Species of Mantophryne from Goodenough Island, Milne Bay Province, Papua New Guinea	Christopher Austin
1:45	Elanor Fuller	A Phylogeography of <i>Psychotria virdis</i> : Literature Review and Research Methodology	Laura Lagomarsino
2:00	Tab Henry	Reproductive State-Dependent Activity of Dopaminergic Cells in the Retina of Female Cichlid Fish, "Astatotilapia burtoni"	Evanna Gleason
2:15	BREAK		
2:30	Kenedi Lynch	Testing the Angiopoietin-1/Angiopoietin-2 Ratio as a Biomarker of Cerebral Malaria in Wild Birds	Christine Lattin
2:45	Riley Noble	Links Between Diversity and Composition of the Avian Gut Microbiome and Resistance to Experimental Malaria Infection in House Sparrows ( <i>Passer domesticus</i> )	Christine Lattin
3:00	Tanisha Patel	Leukocytes Manipulation by Staphylococcus Aureus Superantigen-Like 4	Chen Chen
3:15	Shahid Siddique <b>USF</b> & Sricharan Pusala <b>USF</b>	Characterizing Emergency Department Misuse at the James A. Haley Veterans' Hospital During 2022 Fiscal Year	Fabio Leonelli
3:30	Luke Woodward	Revealing the Mechanisms of papss in Apical ECM Organization and Lumen Expansion During Organ Development	SeYeon Chung
3:45	Celeste Patron	Microglia and $\beta$ -Amyloid Expression in Entorhinal Cortex of Mice Treated with HCN Channel Antagonist ZD7288	Juhee Haam

#### **CAPITAL CHAMBER, ROOM 339**

#### 9:00 a.m. - 3:30 p.m.

<u>Time</u>	<u>Student</u>	Title	Mentor
9:00	lsabel Willems	Artwork as Adornment: The Nonverbal Function of Tattoos Among Young Adults in America	Renee Edwards
9:15	Corey Keller	A Remedy for Tropical Hunger: Glauber Rocha and the Re-Construction of Brazilianness	Gwen Murray
9:30	Faith Hogg L	Ecowomanism: How Black Women Care for the Environment	Dawson McCall
9:45	Marielle "Théo" Lambert-Scott	Abortion and Other Miracles	Leslie Tuttle
10:00	Emma Thigpen	Emancipation Petitions of Baton Rouge Residents in the Antebellum Period	John Bardes

10:15 **BREAK** 

#### **CAPITAL CHAMBER, ROOM 339**

#### 9:00 a.m. - 3:30 p.m.

10:30	Rhys Borders	En Attendant: Digitizing Early 19th Century Advertisements of the Emerging New Orleans Theatre Scene	Jeffery Leichman
10:45	Alyssa Langlois <b>um</b>	« lel Dit Quoi ? » : A Study of the Origins and Evolution of Gender-Neutral Pronouns and Inclusive Language in French and an Analysis of French Versus Canadian Acceptance	Daniel O'Sullivan
11:00	Samuel Smith <b>BM</b>	Subject Pronoun Expression in Cali	Rafael Orozco
11:15	Miscia Fortna	On the Use of Classical Arabic Poetic Motifs in Mystical Poetry	Mark Wagner
11:30	BREAK		
11:45	Daniel Harris	Estimating Household Willingness to Pay for a Community Sewage System to Improve Water Quality in Bayou Lafourche	Jerrod Penn
12:00	Tyler Jackson <b>su</b>	Effects of Supplementing Dried Oregano on Breeding Rabbit Does and Kit Outcomes	Jodi Morton
12:15	Kennede Thomas <b>su</b>	Dried Oregano as a Feed Additive for Caged Rabbit Fryers	Jodi Morton
12:30	Ricky Julien <b>su</b>	The Influence of Tillage and Cover Crops on Infiltration Rate and Runoff	Peters Egbedi
12:45	BREAK		
1:00	Katie Miranda	Nest-Box Mounted PIT Tag Readers Provide New Insights on Breeding Behaviors of Cavity-Nesting Waterfowl in Louisiana	Kevin Ringelman
1:15	Andrew Schwartz	Evaluation of Alternative Colony Hybridization Methods for Pathogenic Vibrios	Crystal Johnson
1:30	Olivia Hurley	<i>Phragmites australis</i> Sexual Reproductive Effort: Potential for Hybridization and Recovery Following Die-back in the Lower Mississippi River Delta	Tracy Quirk
1:45	BREAK		
2:00	BREAK		
2:15	Macallister Davis	Synthesis of Rotaxanes to Modulate the Plasma Membrane	Victor Garcia- Lopez
2:30	Katy Knecht	Cobalt Electrocatalysts for the Aqueous Reduction of Nitrite	Noémie Elgrishi
2:45	Jack Menard	Synthesis of Alkaloid-inspired Small-molecules as Potential Leads Against Central Nervous System Cancers	Fatima Rivas
3:00	Emily Seighman	Insight Into Callicarpa americana Phytochemistry and Biological Activity	Fatima Rivas
3:15	Thy Vu	From the Shampoo in Your Home to the Science of Formulation - Effects of Micellar Structure and Charge on the Phase Behavior of Micelle- Polymer Complexes	Amy Xu

#### **RED RIVER, ROOM 323**

#### 9:30 a.m. - 4:00 p.m.

Time	Student	<u>Title</u>	Mentor
9:30	Amy Ruckman	When Seeing Doesn't Mean Believing: Transformative Depictions of Blindness in Algernon the Blind Guide	Chris Barrett
9:45	Sophia Perkins	Contemporary Environmental Art: A Discussion of the Unique Relationship Between Black Women and Their Landscapes	Allison Young
10:00	Emily Bohmer <b>BU</b>	Collegiate Singers' Self-Assessment of Vocal Health Knowledge and Hydration Practices	Kelly Hollingsworth
10:15	Carsyn Shirk	In Her Eyes: How Extrasensory Perception Impacted Mary Lou Williams's Music	Blake Howe
10:30	Evan Leonhard	The Aesthetic Life as Moral Life: Walter Pater on Beauty as the Basis of Ethics	Michelle Zerba
10:45	Poetry Reading	See Page 14	
11:00	BREAK		
11:15	Eric O'Driscoll A	Media Bias and Political Violence: The Effect of Media Consumption on Attitudes Toward Political Violence	Cynthia Miller- Idriss
11:30	Jacob Lofton	UBER: No Mask. No Ride.	Sadie Wilks
11:45	Emily Clarke	Environmental Terrorism: Resurgence of Ideological Radicalism and Emergence of Climate-Driven Terrorists	Jason Wolfe
12:00	Miles McLendon	The Effect of Congressional Wealth on Responsiveness in the US House of Representatives	Brian Hamel
12:15	BREAK		
12:30	Aimee Turner	Attorneys Who Litigate at the Supreme Court and Their Gender	Elizabeth Lane
12:45	Andrew Meche	Measuring the Disparities in Fresh Fruit and Vegetable Access and Supplemental Nutrition Assistance Program in East Baton Rouge Parish, Louisiana	Belinda Davis
1:00	Daija Grimes	Gabriel Marcel's Perspective on the Broken World	Cecil Eubanks
1:15	Morgan Oen	The Consequences of Globalization on Housing Markets in Low Income Countries	Jamie Kurash
1:30	BREAK		
1:45	Edgar Castillo <b>u</b> H	Biodegradable Study on Biocompatible Stereolithographic Resin	Ariful Bhuiyan
2:00	Roman Sustaita <b>u</b> H	A Biomedical Study on Mechanical Properties of 3D Stereolithography Printed Scaffolds	Ariful Bhuiyan
2:15	Peter Vallet	Structure Informed, Machine Learning-Assisted Directed Evolution	Phillip Jung
2:30	Julie Armand	High-Dilution Modified-Herringbone Micromixer for Assessing Zebrafish Sperm (MAGS)	Todd Monroe

#### **RED RIVER, ROOM 323**

#### 9:30 a.m. - 4:00 p.m.

<u>Time</u>	Student	<u>Title</u>	Mentor
2:45	Elizabeth Reich	Evaluating Microfluidic Chip Surface Modifications to Prevent Cell Adhesion	Todd Monroe
3:00	Rahul Ramaraju	Hydrodynamic Interaction of a Collection of a Periodic Array of Elliptical Particles in Shear Flow With Limited Mobility	Krishnaswamy Nandakumar
3:15	BREAK		
3:30	Ashley Patron	The Effects of Earthquakes on Light Scattering in LIGO's Detector	Gabriela Gonzalez
3:45	Trang Huynh	Measurements of Pion-Argon Inclusive Cross-Section on ProtoDUNE- Single Phase (SP) at CERN	Thomas Kutter



Past Discover Day

### **VISUAL DISPLAYS**

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

<u>#</u>	<u>Student</u>	Title	Mentor
14	Nadia Alzoqari	Louisiana Tornadic Activity	Jill Trepanier
193	Jack Bedell, Sarah Delhaye & Alexis McDowell	Development of a 3D Printed Chamber to Study How Bacteria Alters the 3D Migration of Breast Cancer Cells	Adam Melvin
2	Anna Borne	Integrative Taxonomy of Tit-like Dacnis <i>(Xenodacnis parina)</i> : Quantifying Variation in Morphometrics, Song, and Plumage	Nicholas Mason
198	Jacob Carignan, Gabriel Medina, Meredith Mareno, Carley Bajon & Victoria Fuentes Rodriguez	Design of a Lap Shear Test Machine for Testing Adhesion of Engineered Biomaterials	Jangwook Jung
194	Tyron Corpuz <b>MN</b> , Spencer Stawecki MN, Stephen Alagbe MN & Xiaoyi Sun MN	Collaborative Planetary Surface Exploration Rovers	Seyed Aghili
191	Adeline Fogle <b>ULL</b>	Trapped in a Tidepool: Morphological Disparity and Similarity Across Species of Intertidal and Subtidal Marine Sculpins	Emily Kane
16	Clara Jimenez	Viability of Native Vegetation and Locally Sourced Substrate Mix in Green Roof Modules Under South Louisiana's Subtropical Climate	Traci Birch
195	Nathan Jimney <b>mn</b> & Tyler Johnson <b>mn</b>	loT Based System for Real Time Monitoring and Control	Brent Garner
13	Linley Kennedy	The Root of Enamel Defects: Understanding Dental Trauma in the Children of Amarna	Teresa Wilson
192	Maram Khalaf	Snail Response and Behavior to Climate Change and Heatwaves with Local and Nonlocal Predators	Morgan Kelly
197	Ethan Littlefield	Evaluation of Fluid Shear Stress on Triple Negative Breast Cancer	Adam Melvin
19	Katherine Monroe	Life in the Age of the Coronavirus	Frederick Weil
5	Nick Musso	Evaluation of Sensory Liking, Product-Elicited Emotion, and Purchase Intent of Flavored Catfish Crackling	Witoon Prinyawiwatkul
202	Toby Newell <b>MN</b> , Davis Byrd <b>MN</b> , Prajwal Dhungana <b>MN</b> & Temiloluwa Oluwadare <b>MN</b>	Collaborative Planetary Surface Exploration Rovers	Bei Xie
200	Huy Nguyen	Polymer Nanofluidic Devices for Nanoparticle Detection	Sunggook Park
8	Kaelin Norman	Synthesis of Multifunctional Silver Nanoparticles Coated with Designed Organic Shells: Characterization with Scanning Probe Microscopy and UV-Vis Spectroscopy	Jayne Garno
3	Olivia Payne	Just Keep Spinning: High-Resolution Coral Larval Ethology Informs Biogeography	Daniel Holstein
201	Nekita Pitts	Tendon Routing for a Cable-Stiffened and Cable-Actuated Continuum Robot for Space Applications	Hunter Gilbert
1	Sahithy Prattipati <b>n</b> & Amity Ganguli <b>TJ</b>	Algorithmic Combinatorics - Popular vs Stable Matching	Christine Cho
196	Hamood Qureshi	Synthesis of Multimetallic Nanoparticle Alloys on a UV-Transparent Support	Kevin McPeak

#### **VISUAL DISPLAYS**

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

<u>#</u>	<u>Student</u>	Title	Mentor
21	Katherine Reid <b>NW</b> & Taylor Womack <b>NW</b>	The Third Teacher	Kristen Walker
4	Abby Roche	Investigating the Benthic Communities Amongst the Northern Gulf of Mexico's Hypoxia Ridden Dead Zones	Cassandra Glaspie
10	Jared Rodrigue	Boost Your Brain? Oxygen Concentration Effects on Sustained Attention	Marc Dalecki
6	Ria Salway & Claire Sullivan	Louisiana's Cancer Alley	Linda Bui
7	Aydin Sarki	Establishing Cold Brew Preparation Protocols for US-Grown Tea	Yan Chen
9	Raven Simmons	Body Composition Changes of an NCAA Division 1 American Football Team Over the Course of a Season	Neil Johannsen
199	Austin Thibodeaux MN, Zhulien Monev MN, Tabitha Tyler MN & Abbie DeCoursey MN	Flood Assessment Modeling and Simulation	Ning Zhang
15	Riley White	Learning Novelties: The Effects of Rhyme, Vocabulary, and Processing Speed on Novel Word Learning in Adults	Julie Schneider
20	Brooke Wrzyszczynski	The Impact of the Americans with Disabilities Act on Students at Louisiana State University	Danielle Thomas
12	Yilin Zheng, Angeline Asa & Victoria Lopez	Assessment of the Impact of Folding Climate-responsive Façade System in Energy Performance for the Future Adaptation and Evolution of Houses in Louisiana Climate Zone (Under Extreme Heat Conditions)	Soo Jeong Jo



Past Discover Day

#### **STUDENT PANELS**

#### NEW RELIGIOUS MOVEMENTS IN AMERICA'S Spiritual Marketplace

10:00 AM - 12:00 PM | Moderated by Dr. Kenny Smith | International, Room 303

### **REPRESENTATIONS OF LITERATURE IN NINETEENTH-CENTURY ART**

1:00 - 3:15 PM | Moderated by Dr. Darius Spieth | Castilian, Room 304

<u>Student</u>	Title
Caitlin Desobry	Carlos Schwab and Pseudo-Psychic Influences
Corey Keller	The Revisionist Painter: Gustave Moreau and the Search for Transcendence
Evan Leonhard	Form and Attunement in the Kelmscott Chaucer

#### STUDYING THE PARANORMAL IN THE HALLS OF ACADEME

2:00 - 4:00 PM | Moderated by Dr. Kenny Smith | International, Room 303

<u>Student</u>	Title
Elizabeth Treadway	The Reality of Science Fiction: Government Use of Remote Viewing
Nicola Cates	The Disenchantment Game
Simon Schomberg	Enabling the Power of Faith
Avery Teal & Jenna Richardson	Shifting to Spiritualism
Mason Carrington	Bridging the Scientific Gap of Spirituality, Parapsychology, and the Ego

Student presenters and guests are invited to attend this faculty panel to learn more about pursuing a career in research. Panelists will include LSU faculty members from a variety of disciplines, and will be moderated by LSU's Research Ambassadors.

#### **Faculty Panel: Pursuing Careers in Research**

4:00 - 5:00 PM | Capital Chamber, Room 329

## **RESEARCH AMBASSADORS**

Research Ambassadors are LSU undergraduate researchers 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



Research Ambassadors Fall 2022

### STUDENT ART SHOW

#### 4:00 - 6:00 p.m. | Magnolia, Room 301

<u>Student</u>	Title	<u>Media</u>	Mentor
Brooke Chouest	Lafourche	Digital Photography	Kristine Thompson
Kayla Dearman	Experimental Visual Investigation of Pharma- ceuticals: a Visual Case Study	Digital	Joe Nivens
Astrid Guerrero	Properties and Limitations of Linear Ceramics	Ceramics, Paper Clay	Andy Shaw
Nova Honeycutt <b>ULM</b>	Versatility	Oil Paint	Clifford Tresner
Nova Honeycutt <b>ULM</b>	Artist Self Portrait	Oil	Clifford Tresner
Verity Langan	Digital Stained Glass: Studying the Intersection Between Physical and Digital Arts		Joe Nivens
Sebaika Raza <b>uno</b>	Chaos, Order and Nature	Charcoal, Acrylic Paint, Nature-wood Panel, Felt Paper	Kathy Rodriguez
Christan Rios	The Seed of Envy: The Fallen Beauty in Disguise	Intaglio	Darius Spieth
Christan Rios	The Seed of Envy: Jailbreak	Intaglio	Darius Spieth
Christan Rios	The Seed of Envy: Verum on the Moonlight	Intaglio	Darius Spieth



Past Discover Day

#### **KEYNOTE SPEAKER** Dr. Deborah Goldgaber

Join us at 6:00 p.m. in the Atchafalaya, Room 339 to hear Dr. Goldgaber's keynote speech



Deborah Goldgaber is Associate Professor in Philosophy at Louisiana State University with a joint appointment in Women's and Gender Studies. She's also served, since 2019, as director of LSU's Ethics Institute, piloting initiatives on the ethics of memorialization, Ethical AI and Critical Carceral Studies among others. Recipient of grants from the NSF and the LA Board of Regents, she works with STEM faculty to expand moral literacy across STEM fields through innovative partnerships with the humanities. She received her PhD in Philosophy from Northwestern University, specializing in European philosophy, ethics and epistemology.

Her research is wide-ranging. She's interested in the nature of scientific knowledge and its limits, how inclusive

values in science can expand objectivity, and how exclusion produces ignorance. She has published extensively in areas related to nature of memory, cultural and biological plasticity, the effects of technological prosthesis (including literacy) and, most recently, the shifting meaning of information across disciplinary domains. Her first scholarly monography, *Speculative Grammatology* [Edinburgh, 2021], examines the expansion of the metaphor of writing and code to include the domains of biology and information sciences. She is a co-Pl on the LSU NAS Gulf Scholars Program.

# **LSU DISCOVER STAFF**

Dr. Jacqueline Bach, Interim Director Sarah Ferstel, Associate Director Tori Clement, Office Coordinator Chase Romaro, Graduate Assistant Julia Ardoin, Student Worker Veronica Camenzuli, Student Worker Landry Tucker, Student Worker

# **SPECIAL THANKS**

LSU Discover thanks all of the individuals and groups who contributed to the success of LSU Discover Day 2023. In particular, we thank our keynote speaker, Dr. Deborah Goldgaber, and our faculty panel moderator, Kameelah Hollis. Thanks to Lisa Schuetz 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.



#### LSU Discover Faculty Advisory Board

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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 Delgado Community College Duke University Early College Program Hamilton College Louisiana School for Math, Science, & the Arts Loyola University New Orleans Massachusetts Institute of Technology McNeese State University Northville High School Northwestern State University Scotlandville Magnet High School Southeastern Louisiana University Southern University and A&M College Thomas Jefferson High School for Science & Technology The University of Houston - Clear Lake The University of Louisiana - Lafayette The University of Louisiana - Monroe The University of Louisiana - Monroe The University of Mississippi The University of New Orleans The University of South Florida The University of Texas at Tyler

# MARC PROGRAM

LSU Discover is enormously grateful to the Maximizing Access to Research Careers (MARC) program for their generous financial contribution to Discover Day 2023.

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



# 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 an 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, visit: https://lsu.edu/discover/students/distinguished-undergraduate-research-program.php



Spring 2022 DURP Awardees



### Discover Undergraduate Research Program

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