

Excellence in Undergraduate Research, Creativity, & Scholarship

March 14, 2024



The Quality Enhancement Program of UL Lafayette

# The Leaf Awards

The Leaf Award celebrates students who have achieved excellence while completing a Student Research Experience (SRE) or disseminating information about a SRE they have worked on. The Advance Student Research Experience (ASRE) Program at UL Lafayette defines a SRE as a sustained effort by a student to apply subject knowledge, skills, and abilities to a project that is valued by the discipline. The Student Center for Research, Creativity, and Scholarship (SCRCS) houses the ASRE program, which supports the increase of undergraduate students' productivity and success through engagement in research, innovative projects, and creative endeavors.

Folklore at UL Lafayette begins at new student convocation when students are given an acorn lapel pin for good luck as they begin their academic endeavors and University engagement. There is speculation that good luck comes from rubbing the acorn in the hand of the Edwin Stephens statue, UL Lafayette's first president. In 1901 he planted the first of the famous century oaks on our campus. While attending UL Lafayette, students can participate in many co-curricular activities including scientific research, engineering competitions, honors thesis, artistic or scholarly presentations, or performances. Excellence in student engagement is recognized in many ways across campus. Students or student organizations can be awarded through Ragin Recognition; they are awarded an Oakie. The mighty oak is a symbol of elegant strength that endures over time and provides shade and rest for those who sit under it. Furthermore, it is the leaves that provide the shade. It is the leaves that feed the tree allowing it to grow. It is hundreds of leaves that make the mighty oak, mighty, like the hundreds of students who make UL Lafayette the elegant, and strong R1 Research institution that it is.

The academic endeavors of the students who receive the Leaf Award challenge and inspire the faculty and illuminate the possibilities for the future to the staff and administration. They grow and develop into amazing professionals, and they participate in the continuous building of a strong, elegant institution, that is UL Lafayette. Opening Remarks President Joseph Savoie

Presentation of Awards Ør. Sherry Krayesky-Self & Jodd Henry

Presentation of Provost Awards Ør. Jaimie Hebert

Musical Performance by School of Music Students Logan Turner Evan Smith Jimothy James Smith, Jr.

> Special Thanks to SCRCS Staff Sherry Krayesky-Self Todd Henry Jessie White Jessica Thibodeaux Mollee Helmick Katelynn Benge Sarika Mangalpally Micaiah Alfred Jacques Laughlin

Special Thanks to <u>Selection Committee</u> Christine Briggs Ciara Crochet Michael Eble Farzad Ferdowsi Clancy Ratliff William Schmidt Robin Schneider-Broussard Tricia Templet

Thomas Cline & Students for the design and production of the Leaf Award plaques.

Faculty Mentors

Advance Ambassadors

# Awards in Humanities

This category covers research methods in the Humanities (in both traditional and digital forms). Disciplines represented include such fields as Organizational Communication, Public Relations, English, History, and Modern Languages.

Savannah Blanco-Trumps College of Liberal Arts; Department of Communication Nominated and mentored by Lauren Auverset van Gerwen Project title: Tuning into Tomorrow: Unveiling Community Insights for KRVS

Carson Savoie College of Liberal Arts; Department of History Nominated and mentored by Marissa Petrou and Theodore Foster Project title: Map to Black Studies

### Awards in Education

This category covers research methods in Art or Music Education, Early Childhood Education, Elementary Education, Middle School Education, Secondary Education, Curriculum design, Teaching, and Kinesiology.

Mya Landry College of Education & Human Development; Department of Curriculum and Instruction Nominated and mentored by Roxanne M. Bourque Project title: Interactive Water Adventure: Working with the Water-Cycle

Marisa Hooker College of Education & Human Development; Department of Curriculum and Instruction Nominated and mentored by Ronald J. Dore' Project title: Social Media Issues in Education Research

# Awards in Social Sciences

This category covers research methods in the Social Sciences. Disciplines represented include such fields as Anthropology, Human Development and Family Science, Communicative Disorders, Criminal Justice, Political Science, Psychology, Sociology.

Emily DeGruise College of Liberal Arts; Department of Psychology Nominated by Andrea Eggenberger Mentored by Valanne L. MacGyvers Project title: Two Studies in Psychology: Corporal Punishment and Self-Diagnosis

Abbey Poirier College of Education & Human Development; Department of Curriculum and Instruction Nominated and mentored by Ronald J. Dore' Project title: School to Prison Pipeline

### Awards in Business

This category covers research methods in Business, Accounting, Economics, Finance, Hospitality Management, Insurance and Risk Management, Management, Management Information Systems, Marketing, Professional Land and Resource Management.

Chloe Hardin

B.I. Moody III College of Business Administration; Department of Economics and Finance

Nominated by Sarah Skinner

Mentored by Denis Boudreaux

Project title: The Integration of Artificial Intelligence in Accounting and Finance

Sydnee Johnson B.I. Moody III College of Business Administration; Louisiana Entrepreneurship and Economic Development Center

Nominated and mentored by Josh Bendickson

Project title: Leading and Managing Inclusive Entrepreneurship Ecosystems

### Awards in Life Sciences

This category covers research methods in life science. Disciplines represented include such fields as Biology, Microbiology, Environmental Science, Botany or Agricultural Science.

Moiz Fazal Ur Rehman Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Ritwij Kulkarni Project title: Understanding the Effects of Glycosuria on Klebsiella pneumoniae Physiology

Jessica Fiser Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Karen Smith Project title: Loss of Fgfr1 Signaling in the Central Nervous System Results in Impaired Maternal Behavior Phenotypes

#### Awards in Physical Sciences

This category covers research methods in physical science or related projects. Disciplines represented include such fields as Geology, Physics, and Chemistry. This category may also be appropriate for Math or Engineering.

Shelby Meche Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Wu Xu Project title: Comparison of the Protein Structures of Mammalian Caspases

Ramudhi Kariyawasam Ray P. Authement College of Sciences; Department of Chemistry Nominated and mentored by Febee Louka

### Awards in Computer & Informational Sciences

This category covers research including disciplines of Computer Science and Informatics. This category may also be appropriate for Health Information Management, or Engineering.

Summer Crawford Ray P. Authement College of Sciences; School of Computing and Informatics Nominated and mentored by Nian-Feng Tzeng Project title: Climate Change-aware Crop Yield Prediction via Multi-Modal Spatial-Temporal Vision Transformer

Jonas Schmidt Ray P. Authement College of Sciences; Department of Computer Science/Mathematics Nominated by M. Hassan Najafi Mentored by Sercan Aygün Project title: Emerging Underwater Image Processing

# Awards in Health

This category covers research methods in health sciences. Disciplines represented include Nursing, Health Information Management, Exercise Science, Kinesiology, Health Services Administration, and Pre-Dental Hygiene.

Linh Tran College of Nursing and Health Sciences; LHC Group Myers School of Nursing Nominated by Tricia Templet Mentored by Hung-Chu Lin Project title: Examining the Perceptions Among Undergraduate Nursing Students Using Virtual Reality in a Community Course: A Mixed-Methods Explanatory Study

Bailey Nguyen College of Education & Human Development; School of Kinesiology Nominated and mentored by Shuichi Sato Project title: Altered P38 Activation in Female Cancer Mice

# Awards in Engineering & Jechnology

This category covers research methods in Engineering, Technology. Disciplines represented include Chemical Engineering, Civil Engineering, Electrical and Computer Engineering, Engineering Technology, Mechanical Engineering, Petroleum Engineering and Computer Science.

Olivia Taylor College of Engineering; Department of Engineering Technology Nominated and mentored by Sharon LaHood Project title: A Seat at the Table: The Effects of PPE Fit and Availability on Women in the Workforce

Chloe Williamson College of Engineering; Department of Electrical & Computer Engineering Nominated and mentored by Farzad Ferdowsi Project title: Design, Programming, and Testing of DC Converters for Power Sharing in Microgrids

Griffin Usie College of Engineering; Department Chemical Engineering Nominated and mentored by Ling Fei Project title: Precision Microstructure Control of Polymer Films Through Electrospray Deposition

## Award in Creative Work and Media Production

This category covers research which culminates in a Creative or Multimedia Work in areas such as Architecture & Design, Performing Arts, Visual Arts, Broadcasting, and Moving Image Arts.

Abigail Miller College of the Arts; Department of Visual Arts Nominated and mentored by Brian Kelly Project title: Printmaking Research Through Artist/Student Collaborations and Publications at Marais Press

## Awards in Performing Arts

This category covers research which culminates original or extraordinary performances in Music, Theater, Dance, Performing Arts or Moving Image Arts.

Rafael Herenandez College of Liberal Art; Department of Communication Nominated and mentored by Masey Hammons Project title: Puerto Rico's Bootstrap Paradox

Joel Iler College of the Arts; School of Music and Performing Arts Nominated and mentored by William F. Plummer Project title: UL Lafayette Choirs Undergraduate Student Conductors Concert

## Awards in Diversity and Social Justice

Applicants in any of the other categories have the option of also submitting their project for consideration in the Diversity and Social Justice category. These submissions could utilize humanities or scientific methodologies, involve creative work or literature reviews, but should relate in some way to the overall theme of Diversity and Social Justice.

Trina Lewis College of the Arts; School of Architecture and Design Nominated and mentored by Liane Hancock Project title: Building Bridges Portland; Synergy Hill

Haneen Muthana College of Nursing & Health Sciences; Department of Health Sciences Nominated and mentored by Tierney Beebe Project title: Evaluating Interprofessional Education and IPE Readiness with Nursing and Health Information Management Students at the University of Louisiana at Lafayette

## Awards for Exceptional Performance in Dissemination

This category awards exceptional performance in dissemination of student research experiences (SREs), written or oral communications as well as performances and presentations were considered.

Alexandra Chistoserdov Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Karen Smith Project title: Effects of Fibroblast Growth Factor Receptor signaling and dietary treatments on hypothalamic tanycyte development

Haleigh Courville College of Liberal Arts; Department of Psychology Nominated and mentored by Erika Caramillo-Hatch Project title: Scopolamine has a dose dependent effect on memory in the zebrafish

Veronica Colmenarez College of Liberal Arts; Department of Communication Nominated and mentored by Lauren Auverset van Gerwen Project title: Scrolling to Success: Public Universities in Louisiana's TikTok PR Playbook

# Awards for Community Impact

This award is given to students who are completing original work that benefits Louisiana, The University of Louisiana at Lafayette or the Local community surrounding UL Lafayette.

Jessica Smith College of Engineering; Department of Electrical & Computer Engineering Nominated and mentored by Farzad Ferdowsi Project title: Smartening Microgrid Operation and Planning

Zachary Primeaux

College of Engineering; Department of Electrical & Computer Engineering Nominated and mentored by Farzad Ferdowsi Project title: Mobile Microgrid for Disaster Relief

Savion Siner

College of Engineering; Department of Electrical & Computer Engineering Nominated and mentored by Farzad Ferdowsi Project title: Enhanced Resilience in Battery Charging through Co-Simulation with Reinforcement Learning

# Awards for International Impact

This award is for excellence in work that impacts countries outside the United States. It is also given to work that increases collaboration between countries or people from varying counties.

Karius Joseph College of Engineering; Department of Chemical Engineering Nominated by Cameron Romero Mentored by Ling Fei Project title: FeS2 deposited on 3D-printed carbon microlattices as free-standing electrodes for lithium-ion batteries

Jessica Fiser Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Karen Smith Project title: Loss of Fgfr1 Signaling in the Central Nervous System Results in Impaired Maternal Behavior Phenotypes

### The Provost Awards

This award is for work that is interdisciplinary or work that displays excellence across other award categories. This award also honors students who have completed exceptional research or creative/scholarly works despite challenging circumstances.

Carson Savoie College of Liberal Arts; Department of History Nominated and mentored by Marissa Petrou and Theodore Foster Project title: Map to Black Studies

Jessica Fiser Ray P. Authement College of Sciences; Department of Biology Nominated and mentored by Karen Smith Project title: Loss of Fgfr1 Signaling in the Central Nervous System Results in Impaired Maternal Behavior Phenotypes

Karius Joseph College of Engineering; Department of Chemical Engineering Nominated by Cameron Romero Mentored by Ling Fei Project title: FeS2 deposited on 3D-printed carbon microlattices as free-standing electrodes for lithium-ion batteries

Emily DeGruise College of Liberal Arts; Department of Psychology Nominated by Andrea Eggenberger Mentored by Valanne L. MacGyvers Project title: Two Studies in Psychology: Corporal Punishment and Self-Diagnosis