LOUISIANA UNIVERSITIES MARINE CONSORTIUM

ANNUAL REPORT

FISCAL YEAR 2025

LOUISIANA UNIVERSITIES MARINE CONSORTIUM
LUMCON

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A MESSAGE FROM OUR EXECUTIVE DIRECTOR

Fiscal year 2024–2025 was a year for both looking back into LUMCON's past and ahead into an exciting future. Since her first voyage in 1985, the *R/V Pelican*, depicted on the cover of this report, has served as the flagship of our state's marine research fleet—becoming the most heavily used vessel of her size in the U.S. Academic Research Fleet and earning her reputation as the "Workhorse of the Gulf." Since her christening in February 1985 and first research cruise in June of that year, the *RV Pelican* has been at sea almost 7400 days (over 180 days each year). While we celebrate all of her contributions, we are equally excited that the contract to construct its replacement, the *RV Pelican II*, was awarded to Thomas-Sea Marine Constructors, LLC in May with an anticipated completion in summer 2027. The design for the Marine Operations Center that will be built next to the recently completed boat slip and bulkhead project on the Houma Maritime Campus was completed in FY25, with an estimated bid date for the project of November 2025. This further expansion of our vessel capabilities and the Maritime campus we share with Fletcher Technical Community College in the middle of maritime industrial complex is a reason for excitement about the future.

This fiscal year did test the resilience of our facilities, teams, and our community with the passing of Hurricane Francine in September which brought over 8 feet of water into the parking lot and lower level of the Marine Center in Cocodrie. The storm brought significant challenges, but our staff responded with dedication and efficiency, ensuring continuity of operations and reaffirming our commitment to coastal communities. The continued improvements to the facility have increased our resilience to flooding events.

The past year saw significant growth and progress for LUMCON as we strengthened our research capacity, expanded educational offerings, and deepened our engagement in our community, across the state, and beyond. LUMCON saw its faculty grow with the hiring of Dr. Zhengchen (John) Zang, who began his appointment at the Maritime Campus in February, and Dr. Ken Krauss, who joined us as our new Associate Director of Science at the Marine Center in April. Their expertise supports our growing research enterprise and advances our long-term vision for coastal and marine science excellence which achieved milestone productivity this year as described below. FY25 also saw levels of usage and engagement in research, education and outreach programs, and vessel operations not seen since before the pandemic (if ever before). This usage and engagement will only increase in the future with our ongoing investment in equipment and facilities to support researchers, students, and visiting groups. We also made important strides in expanding our footprint and community connections. We hosted our first Meet the Fleet Open House at the Blue Works facility in Houma, and our E&O team launched several new programs at Blue Works, broadening access to coastal science learning. In March 2025, we held the third annual State of the LUMCON Consortium (SoLC) meeting at Blue Works which continued progress on developing opportunities for collaboration and continued partnerships moving forward.

As we look ahead, LUMCON remains committed to advancing scientific discovery, expanding education and outreach, and strengthening the partnerships that position Louisiana as a leader in coastal and marine science innovation, collaboration and community action. We look forward to building on this year's momentum in the year to come.

DR. BRIAN ROBERTS, PH.D.
EXECUTIVE DIRECTOR AND CHIEF SCIENTIST

CONSORTIUM

LUMCON takes great pride in being a consortium of all of the higher education institutions in Louisiana. Our strategic plan consortium goal is to ensure that Louisiana assumes leadership of coastal and marine science for the nation by leveraging the collective strengths of all of its members and partners to optimize our shared competitiveness at regional, national and global scales. We aim to provide an open and collaborative structure that maximizes opportunities for members to engage with each other and LUMCON's core staff, facilities and services to meet the needs of Louisiana.

One of LUMCON's primary goals throughout FY25 was to continue to engage and strengthen collaborations with and throughout the consortium. In March, we held the third annual State of the LUMCON Consortium (SoLC) in-person meeting at the Blue Works facility on the Houma Maritime Campus. This productive meeting brought together representatives from over 25 consortium member institutions to discuss shared priorities and identify new opportunities for collaborative growth. A highlight of this year's meeting was the introduction of new collaborative request for proposals funded by the Joe W and Dorothy Dorsett Brown Foundation. The RFP was co-developed by LUMCON and the Brown Foundation to address "Louisiana Coastal and Marine Challenges and Solutions for Early Career Faculty at LUMCON institutions". The new opportunity is designed to support pre-tenured faculty across the consortium with a winning award of $150,000 and 3 additional finalist pilot awards of $15,000 after finalist presentations to the Brown Foundation Board and LUMCON staff in fall 2025. Members also advanced plans for an online field station database housed on the new "Consortium" webpages of the LUMCON website—an interactive map highlighting field sites, facilities, and natural study areas statewide—to improve transparency and access to shared resources. Other topics discussed were the composition of a LUMCON Council to help inform LUMCON leadership and prioritize needs across the consortium ahead of meetings and additional opportunities for engagement (e.g. fall virtual SoLC meetings). LUMCON remains committed to supporting these initiatives and strengthening the network of institutions working together to advance coastal and marine science across Louisiana.

496
Scientific usage days by consortium partners

15
Consortium graduate students mentored

1,857
Faculty hours spent mentoring consortium students

2025 State of the LUMCON Consortium (SoLC) Meeting in Houma

LUMCON is committed to working with our consortium members to create and maintain an academic pipeline to meet the maritime workforce needs of Louisiana and the region. We continue to offer accessible, low-cost, high-quality and relevant opportunities in coastal/marine science and other STEM disciplines for Louisiana students of all ages. This pre-K to gray pipeline is fueled through the continued success of our high school residential camps (LUMCON's Estuarine Awareness and Discovery (LEAD) Camp and Field Marine Science (FMS) Camp) and our various teacher professional development workshops at the Marine Center in Cocodrie, all of which had successful programs in FY25. Additionally, we were able to expand our offerings through non-residential programs at the Blue Works facility at the Maritime Campus in Houma in FY25 (see Education and Outreach section below). LUMCON's E&O programs continue to play integral roles in workforce development for several large collaborative projects led by consortium partners. The NAS Gulf Research Program's MissDelta project is co-led by **Louisiana State University** and **Tulane University** and includes collaborations with **Southern University at Baton Rouge**, **Xavier University of New Orleans**, **Grambling State University**, **Dillard University**, **University of Louisiana at Lafayette**, and The Water Institute as well as 5 out-of-state institutions. Dr. Roberts is on the Workforce Development Team for the NSF Engines (Future Use of Energy in Louisiana (FUEL)) project led by **Louisiana State University** (including ~50 partners across the state) which has a goal to support energy transition and decarbonization through technology and talent development across Louisiana.

LUMCON had a very productive year of engagement with undergraduate and graduate students within and outside the consortium through teaching, mentorship, providing research opportunities, and hands-on training. Consortium students worked alongside our faculty and staff through fieldwork, lab training, workshops, and vessel operations, benefiting from direct access to LUMCON's facilities, equipment, and expertise. In the summer of 2025, we hosted our 4th STEM Prep program (https://lumcon.edu/stem-prep/) cohort which consisted of five students (one each from **Loyola University** and **LSU-Shreveport** and three from **Nicholls State University**). Summer 2025 also saw LUMCON host its 15th cohort of our NSF-funded Research Experiences for Undergraduates program which included eight interns from around the country including a student from **Southern University at Baton Rouge** and one from **University of Louisiana at Lafayette** as well as a student that resides in New Orleans. Enrollment in LUMCON semester courses was again high with a total of 46 students enrolled in either Oceans and Society in fall 2024 (16) or Changing Coastal Oceans in spring 2025 (30) with students from **University of Louisiana at Lafayette**, **University of New Orleans** and **Northwestern State University** participating. LUMCON hosted 1294 K-12 students from 22 parishes and almost 200 university students from 13 LA institutions on field trips in FY25 (see Education and Outreach section below).

LUMCON faculty continued to excel at establishing collaborative research programs with many of our consortium members. LUMCON faculty had a total of 16 funded research grants which either continued (13) or began (3) in FY25 that included collaborations with scientists from consortium member institutions (**Baton Rouge Community College**, **Louisiana State University**, **LSU Ag Center**, **University of Louisiana at Lafayette**, **University of New Orleans**, **Nicholls State University**, and/or **Tulane University**--*not including all of the institutions participating in the MissDelta and NSF Engines (FUEL) projects*). LUMCON faculty published a total of 17 peer-reviewed publications in FY25 that included co-authors from consortium member institutions (**University of Louisiana at Lafayette**, **Louisiana State University**, **LSU Ag Center**, **Nicholls State University**, **Tulane University**, and/or **University of New Orleans**). Additionally, LUMCON faculty collaborated on numerous unfunded and/or pilot research projects and on the development of proposals with collaborators from these same institutions as well as other institutions within the consortium.

During FY25, LUMCON Faculty served as primary advisor and/or on the graduate committees for 8 MS and 18 PhD students with 15 of the graduate students at consortium institutions (**Louisiana State University**, **LSU Ag Center**, **LSU-Shreveport**, **University of Louisiana at Lafayette**, **University of New Orleans**, **Nicholls State University**, **Southern University**, and **Tulane University**) Graduate students from **Nicholls State University**, **Tulane University**, **Louisiana State University**, **LSU Ag Center**, **University of New Orleans**, and **University of Louisiana at Lafayette** all conducted research on LUMCON's DeFelice Marine Center grounds and/or used it as a base of operations for conducting their research for a total of 496 person days in FY25.

17	13	3
Publications with consortium co-authors	Continuing research grants with consortium co-PIs	New research grants with consortium co-PIs

INSTITUTION

LUMCON's institutional goal continues to be positioning itself as a hub for coastal and marine science research, education, and community engagement at local, state, regional, and national levels. During FY 2025, LUMCON made strong progress toward this vision by expanding partnerships and strengthening collaborations at all levels. This included continued work with native communities, nonprofits, and local governments on environmental monitoring, resilience planning, and community-focused projects. LUMCON is collaborating with several native communities on a variety of projects including working with the the Pointe-au-Chien Indian Tribe (PACIT), LA Sea Grant and the Gulf Coastal Ocean Observing System (GCOOS) on an expansion of our environmental monitoring program with new stations that benefit the community and serving on the external advisory committee for a NASEM GRP project led by LA Sea Grant to evaluate the potential for living shoreline projects to benefit the community, working withe United Houma Nation in support of their climate resilience grant and providing spaces for meetings, and the Grand Caillou/Dulac band of Biloxi Chitimacha Choctaw on the design of recycled oyster shell reef to be installed at the Marine Center in FY26. LUMCON continues to collaborate with the the Tulane ByWater Institute, Greater New Orleans Foundation, Greater New Orleans Inc, the City of New Orleans Office of Reslience and Sustainability, the University of New Orleans Center for Hazards Assessment, Response & Technology (UNO-CHART), and Waggonner & Ball Architects on urban water policy and planning. Relatedly, LUMCON has been an active participant in the National Academies of Science Gulf Research Programs Adaptive Capacities for Transformation (ACT) Initiative efforts in New Orleans throughout FY25. At the state level, LUMCON continues to collaborate with the Coastal Protection and Restoration Authority (CPRA) on several projects including the designation of the Atchafalaya NERR, participating in CAT and regional working groups for the Coastal Master Plan, participating in the Atchafalaya Master Plan Coastal Engagement Group, participating in the Gulf Coast Carbon working group, and the contribution to numerous research projects. LUMCON continues to partner with the The Water Institute, the Greater Lafourche Port Commission, and others on the Partnership for our Working Coast (POWC) (which held its first RFP in FY25). Finally, LUMCON staff continue to hold numerous advisory panel and board posts at organizations ranging from local, state, national, and international levels.

During FY25, LUMCON relaunched our LUMCON Synthesis Center (https://lumcon.edu/marine-synthesis-center/) for addressing challenges, opportunities, and solutions in coastal and marine science, conservation, management, education and outreach, and community initiatives and to provide opportunities for collaborative initiatives amongst our consortium member institutions. LUMCON hosted a multi-day meeting of the NSF-funded Saltwater Intrusion and Sea-Level Rise (SWISLR) Research Coordination Network (RCN) in May as part of this reboot. The Blue Works facility on the Houma Maritime Campus is central to our role as a collaborative hub, providing space for partners, students, and community groups to gather and engage in coastal science in a location not quite as remote as the Marine Center in Cocodrie. This facility has already become a desired location for meetings and events in the region holding dozens of part-day to multi-day events in FY 25. These efforts continue to expand LUMCON's visibility and capacity to serve as a statewide resource for research, education, workforce development, and public engagement.

The overall usage of LUMCON has continued to increase coinciding with the growth experienced over the past several years. Scientific usage of LUMCON facilities (886 person days) was the highest since we began charting the statistic prior to the pandemic. Similarly, our E&O programs reached over 2900 learners which was the highest numbers in the last 7 years. The total revenue generated by the cafeteria, residential areas, and marine education was the highest (~$240K) we have recorded to date. The science staff published its highest number of peer-reviewed publications (40) in a single year in FY25. Vessel operations saw the highest number of operation days for both the *RV Pelican* and *RV Point Sur* in several years. More details on each of these can be found in later sections of this report.

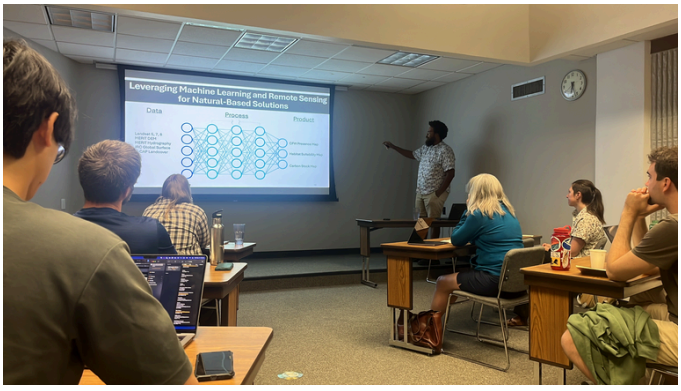
In summary, FY25 saw tremendous gains in meeting LUMCON's Institutional Goals as it continues to grow as a hub for coastal and marine science, research, education and community engagement. Perhaps even more encouraging is the positive trajectory LUMCON is on in all of these areas as we move into FY26 and beyond.

886

Scientific usage person-days

$240K

Cafeteria, residential area, and Marine E&O revenue

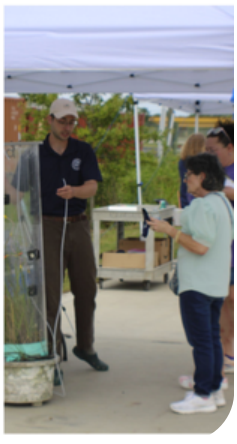


LUMCON'S MEET THE FLEET
AT THE HOUMA MARITIME CAMPUS

On Saturday, May 3, LUMCON hosted its first Meet the Fleet event at the Houma Maritime Campus, welcoming hundreds of community members, students. educators, and partners to explore the vessels, technology, and scientific work that drive Louisiana's coastal and marine research activities.

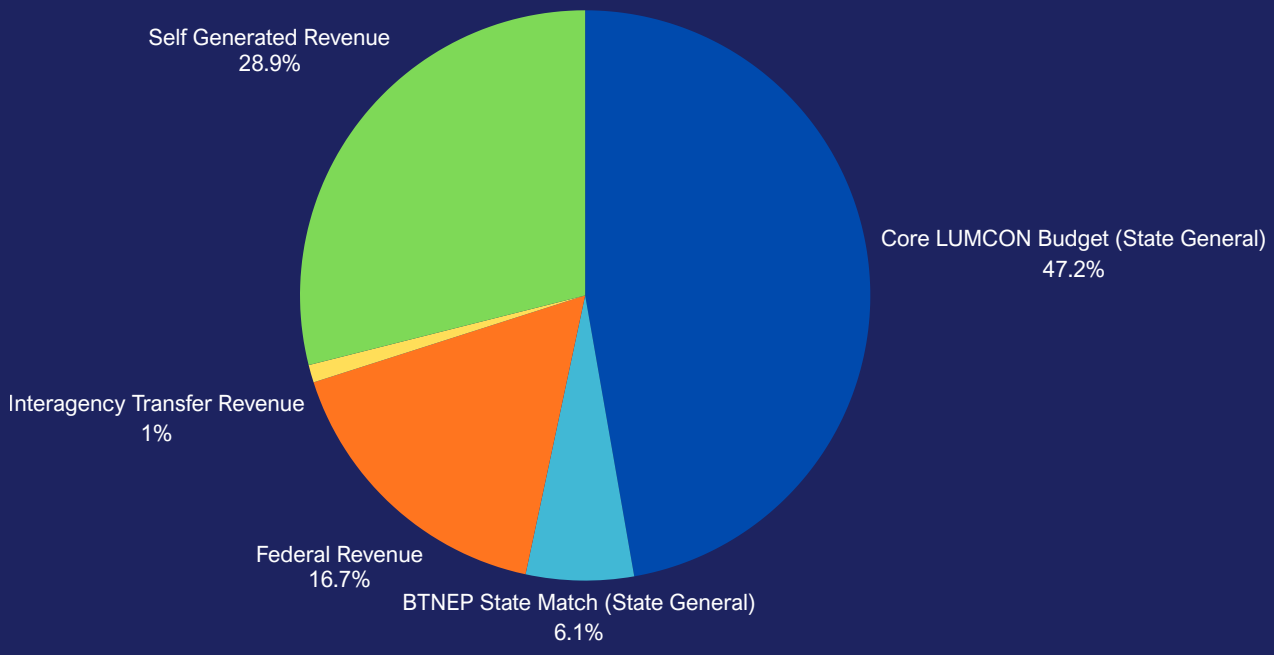
This year's event featured hands-on demonstrations led by LUCMON scientists and staff, including remotely operated vehicle (ROV) displays, interactive oceanography labs, and vessel tours aboard LUMCON's *RV Pelican* and *RV Acadiana.* A highlight for many families was the youth Knowledge Quest, which encouraged kids of all ages to engage directly with booths and learn more about marine science and innovation.

LUMCON was proud to collaborate with consortium members and local partners, including Fletcher Technical Community College, Nicholls State University, Universities of Louisiana Maritime Academy, the Barataria-Terrebonne National Estuary Program (BTNEP), and Bayou STEM to showcase career paths in marine operations, restoration, and coastal stewardship. These efforts reflect LUMCON's continued commitment to education, workforce development, and public engagement aligned with Louisiana's strategic priorities.

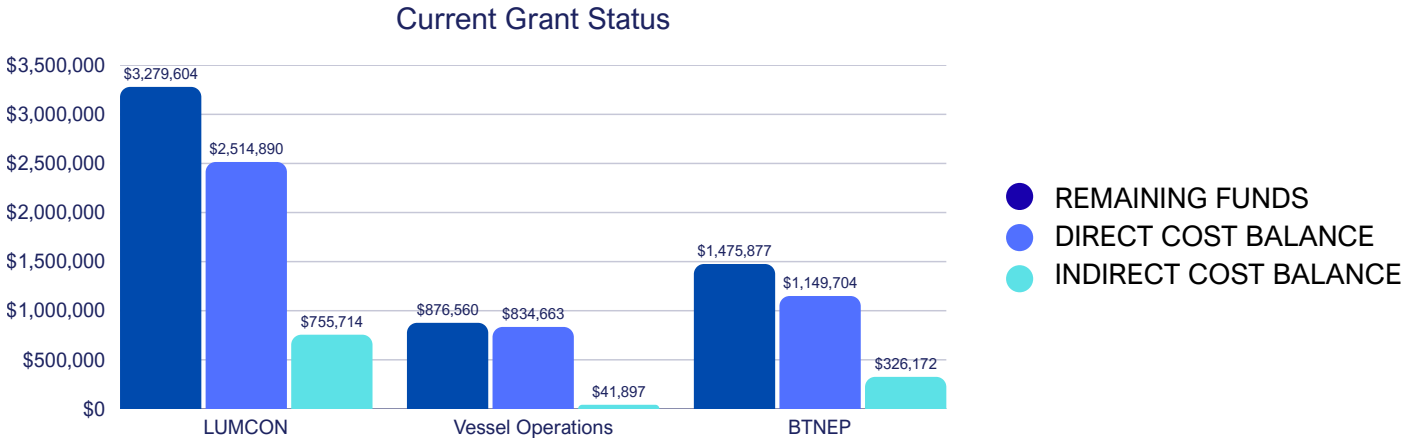


FINANCE AND DEVELOPMENT

LUMCON FY 2025 REVENUE



LUMCON's total revenue in FY25 ($13.9M) was slightly lower than in FY24 ($15.6M). This difference was largely due to one-time funds received during FY24 ($1M) that were not repeated in 2025 and a slight reduction in the core LUMCON budget allocated through state general funds (~$400K). The decrease in federal revenue in FY25 was largely offset by an increase in self-generated revenue. It is anticipated that federal revenue will increase in FY26 as several continuing and new projects are anticipated to reach peak activity of the efforts (see below).



Note: Most of vessel operations revenue is the result of invoicing (self-generated funds) and not grants.

RESEARCH AND SCIENCE

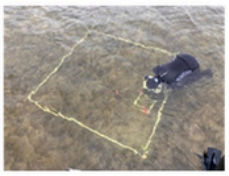
Faculty research, collaboration, and educational commitment reached a pivotal point this year reaching ten faculty-led laboratories for the first time in LUMCON's history, each maintaining a specific focus on coastal and marine ecosystems of Louisiana and the Gulf region. LUMCON faculty participated in 25 continuing and 10 new research grants during FY25 (Appendix A). Research activities resulted in 40 new scientific publications during the fiscal year (Appendix B), equating to a significant increase from previous years as new capabilities were added. The faculty also gave 26 invited seminars / presentations / panels, more than 40 contributed presentations at conferences, organized seven special symposia at national and international scientific meetings, and contributed to the development and teaching of three college courses during the year. LUMCON Faculty served as primary advisor and/or on the graduate committee for 8 MS and 18 PhD students with 15 of the graduate students at consortium institutions (LSU-BR, LSU Ag Center, LSU-Shreveport, UL-Lafayette, University of New Orleans, Nicholls State University, Southern University, and Tulane University). Faculty also provided mentorship to a total of 26 undergraduate students through the REU (15) and STEM Prep programs (11) in FY25 with 14 based at consortium institutions. LUMCON's faculty have been cited over 26,000 times in the scientific literature with the FY25 h-index at 81, emphasizing their continued presence in scientific advancement and understanding of coastal and marine ecosystems.

MEET LUMCON'S RESEARCH LABORATORIES

NEW FACULTY

Dr. Zhengchen (John) Zang joined the LUMCON faculty as an Assistant Professor in February 2025 and established his Coupled Ocean Modeling Laboratory at LUMCON's Blue Works facility on the Maritime Campus in Houma. Dr. Zang earned a BS in earth information sciences and technology and MS in marine geology from Ocean University of China in Qingdao, and a PhD in Oceanography from Louisiana State University. Dr. Zang also served as a post-doctoral research scientist at Woods Hole Oceanographic Institution (2020-2022) and Assistant Professor-Research within LSU's Ocean Modeling Group (2023-2025) before moving to LUMCON.

Dr. Ken Krauss joined the LUMCON faculty in April 2025 as Professor and Associate Director of Science with his laboratory and office located at the DeFelice Marine Center in Cocodrie. Dr. Krauss retired early from the U.S. Geological Survey after 28 years as a supervisory senior scientist with wetland research projects in nine countries, including territories of the US and France. Dr. Krauss serves as the Head-of-Faculty, maintaining a research focus on coastal forested wetlands and scaling physiological processes associated with water and carbon.



BRIEF HIGHLIGHTS OF THE RESEARCH ACTIVITIES OF LUMCON'S SCIENTISTS

Dr. Stephanie Archer published eight journal articles this year, co-taught LUMCON's *Changing Coastal Oceans* course and led a *Caribbean Marine Ecology* course in the Bahamas. Her lab continued its focus on stressors in seagrass beds including a new project starting in Florida Bay, biodiversity on oyster and artificial reefs in Louisiana's estuaries, and the ecology and heavy metal uptake of freshwater sponges.

Dr. Marshall Bowles was promoted to Associate Professor, served as chief scientist on a 10-day Gulf research expedition exploring methane fluxes from the seafloor, was lead instructor for LUMCON's *Changing Coastal Oceans* course, and was awarded funding from both the National Science Foundation and the U.S. Space Force. Dr. Bowles' Lab continued studies of nearshore and marine microbial ecology, chemistry, and methane dynamics.

Dr. Brianne Du Clos published seven journal articles this year on mobilizing biodiversity occurrence data and established the LUMCON Biodiversity Lab, which focuses on managing and mobilizing marine biodiversity occurrence data. The Lab accessioned a large benthic macroinvertebrate collection gathered after the DWH oil spill from the Harte Research Institute.

Dr. Kevin Du Clos received new funding from the National Science Foundation to study trophic dynamics of understudied gelatinous marine predators, such as jellyfish, and from the Brown Foundation to study the factors affecting oyster larval settlement on natural and artificial reefs. Dr. Du Clos also co-taught LUMCON's Changing Coastal Oceans course.

Dr. Alex Kolker published a paper on Neptune Pass, the Mississippi River's newest crevasse which received widespread media attention in Louisiana and resulted in invitation to co-lead a panel discussion at the 2025 State of the Coast Conference. Dr. Kolker was interviewed multiple times this year on coastal science and sustainability issues in Louisiana, reaching people across the Louisiana and beyond. He co-taught LUMCON's *Oceans and Society* course.

Dr. Ken Krauss's focus this FY was to on-board, begin establishing a new laboratory, and transfer project collaborations to LUMCON. Dr. Krauss co-organized two special sessions at the State of the Coast and AGU conferences, and gave several invited and plenary talks at US and Chinese universities and in Abu Dhabi. Dr. Krauss served on a basic science and interdisciplinary frontiers plenary panel at the World Laureates Forum in Shanghai.

Dr. Guillaume Rieucau was promoted to Associate Professor and serves as LUMCON's Maritime Campus Science Lead. Dr. Rieucau's research centered on the behavioral ecology of marine animals in south Louisiana, the Gulf, and Caribbean. Dr. Rieucau conducted pilot hydroacoustic monitoring in a spring in Texas and participated to the Floridian Manatee Health Assessment in Crystal River, Florida. Dr. Rieucau was lead instructor for LUMCON's *Oceans and Society* course.



Dr. Brian Roberts and his lab worked on a variety of projects focused on marsh vegetation and gas flux dynamics, ribbed mussels as a living shoreline augmentation, wetland porewater methane and methane fluxes at local, landscape, and national scale, methane fluxes from marine sediments, denitrification rates, dredging impacts on primary production, *Phragmites* expansion, mangrove-marsh ecotones, and wetland restoration & blue carbon.

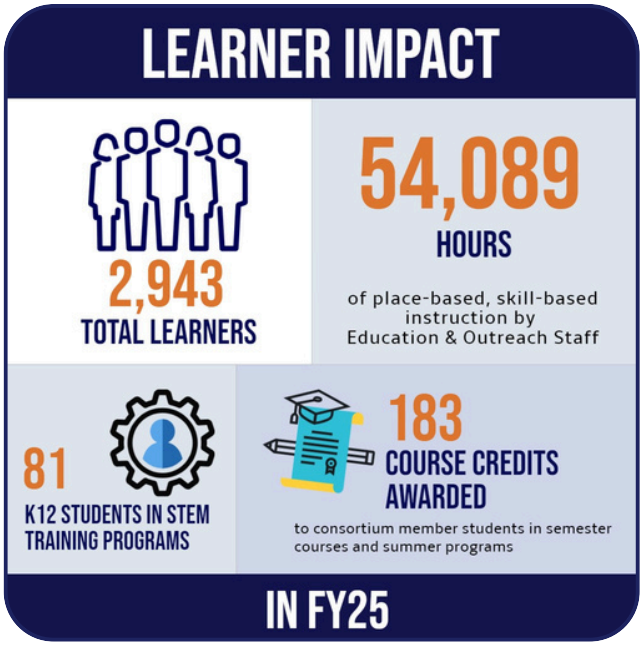
Dr. Havalend Steinmuller was awarded a Brown Foundation grant to study root recalcitrance and soil organic carbon stability at the marsh–mangrove boundary and received finalist funding from the same foundation. She submitted multiple competitive proposals, several of which were collaborative with consortium partners. She also co-authored a large collaborative synthesis paper on "blue nitrogen" stocks and burial rates in mangroves.

Dr. Zhengchen (John) Zang's focus was to establish his research program at LUMCON through grant writing, including leading a Brown Foundation project on coastal Louisiana water quality forecasting system development. Dr. Zang contributed to the Atlantic sea scallop population dynamics assessment and coastal Louisiana wind farm projects as a co-PI.

EDUCATION AND OUTREACH

In FY25, LUMCON advanced a new era of education and outreach by expanding innovative, community-centered programming at Blue Works while continuing to deliver high-impact place-based, skill-based experiential learning at the Marine Center. This year marked significant growth in public engagement through community-focused and non-traditional initiatives, with new workshops, science semesters, and hands-on learning opportunities designed to reach broader and more diverse audiences. These initiatives connected learners of all ages with coastal environments, introduced foundational STEM skills, and provided direct interaction with scientists and coastal professionals that support learner growth and regional workforce needs.

At the Marine Center, LUMCON's E&O team continued to offer strong, place-based programs that prepare students for future coastal and marine science pathways. In FY25, staff reached more than 2,900 participants and delivered over 54,000 contact hours of field-based and laboratory instruction, mentorship, and applied research training. Summer 2025 marked the 15th year of the NSF-funded REU Site program (8 students) and 4th year of the STEM Prep program (5 students). Across both campuses, LUMCON's education efforts emphasized practical skill development aligned with emerging workforce needs, reinforcing our commitment to supporting Louisiana's next generation of coastal learners, professionals, and community leaders.



E&O Program Impact in FY25

Field Trip Learning Experiences

- Number of University Participants: 264 (from 13 LA institutions & 3 out-of-state schools)
  - Instructional Contact Hours: 3,948
- Number of K-12 Participants: 1,294 (from 22 parishes)
  - Instructional Contact Hours: 7,987

Workforce Development / Public Education Programs

- Number of K-12 students in training programs: 92
- Number of undergraduate students in training programs: 17
- Number of Educators attending workshops: 7
- Public members attending events: 469

NEW PROGRAM OFFERINGS IN FY 2025

Community-focused marine science programs help residents understand these issues, build environmental literacy, and develop practical skills through hands-on field and classroom experiences. By connecting science directly to the people and places it affects, these programs foster connection, workforce development, and resilient communities equipped to protect and manage Louisiana's vital coastal ecosystems.

SCIENCE SUMMIT

The event transformed LUMCON's Blue Works facility into a kid-friendly exploration zone where children (aged 5-10) engaged directly with marine scientists, microscopes, specimens, and interactive activities as they rotated through themed stations focused on coastal animals, habitats, ocean technology, and engineering. Each activity emphasized inquiry, creativity, and observation—building early STEM skills in a playful, supportive environment. The 2025 Youth Science Summit showcased LUMCON's commitment to making marine science accessible to all ages, inspiring the next generation of coastal stewards, and supporting learners in Louisiana

FIELD SITE TO LAB BENCH - TEACHER PROFESSIONAL DEVELOPMENT

LUMCON can help to meet shifting classroom expectations and provide support and resources that help teachers incorporate active, place-based, and technology-enhanced science learning for all students. The new Field Site to Lab Bench workshop modelled how teachers can successfully blend relevant Louisiana-focused marine science content and curriculum standards with student-centered inquiry in the classroom.

SCIENCE SEMESTER

LUMCON launched the Marine Science Semester to bring science learning beyond the traditional classroom. This 7-week modular program combines hands-on labs, fieldwork, and locally focused coastal topics to give homeschool students an engaging and practical STEM experience. Offered each spring and fall, the program will continue to expand to include younger learners and additional topics.

ART AND SCIENCE CAMP

LUMCON's one-week Marine Art & Science Camp offered students a hands-on spring break experience that blended coastal exploration with artistic expression. Through activities that linked observation, creativity, and scientific inquiry, students strengthened both their scientific understanding and creative skills in an engaging, immersive environment.

GULF LAGNIAPPE WORKSHOPS

During FY25, LUMCON offered four workshops for adult audiences on a variety of marine and coastal science topics. Gulf Lagniappe Workshops give Louisiana residents a hands-on look at the science happening along the coast and in the Gulf. In a relaxed, interactive setting, participants engage with LUMCON scientists and educators through short presentations, discussions, hands-on activities, and practice in using research methods and equipment.

WHITE BOOT EXPLORERS CLUB

Launched in December 2024, the club has grown rapidly as a digital, self-paced program offering hands-on marine science enrichment. Local students deepen their connection to coastal ecosystems, while participants from farther away gain an engaging introduction to Louisiana's unique marine environments.

FACILITIES AND RESOURCES

DEFELICE MARINE CENTER

The FY24 project to revitalize and upgrade the public spaces of the DeFelice Marine Center was extended to many of the shared spaces during F25. This included a remodeling of the former natural history collection and storage space into a large shared equipment room with movable lab tables, fume hoods, drying ovens, muffle furnaces, autoclave, freeze-drier, climate controlled incubators, and other scientific equipment (see picture of part of the space). This room provides space for LUMCON staff scientists but also consortium member researchers and visiting scientists & educators using the Marine Center.

FY25 saw the completion of the sewer treatment plant project at the Marine Center which replaced a 12-year-old treatment tank that had deteriorated significantly due to extensive rust and corrosion, making a complete rebuild necessary. The project involved the installation of a new 10,000-gallon-per-day sewer treatment plant, ensuring improved reliability, efficiency, and compliance with environmental standards. The project to restore and stabilize the foundation of the Marine Center Wet Lab, which had sustained damage resulting from Hurricane Ida, was completed in fall 2024. Looking forward to FY26, the deferred maintenance project to replace the HVAC system for the Cocodrie campus will be put out for bid and begin construction. This will be a welcome improvement to the climate control of the campus.

These critical repairs safeguarded the building's structural integrity; as a result, the space is now fully operational, providing enhanced functionality for scientific research, educational programs, and marine science initiatives that support LUMCON's mission.

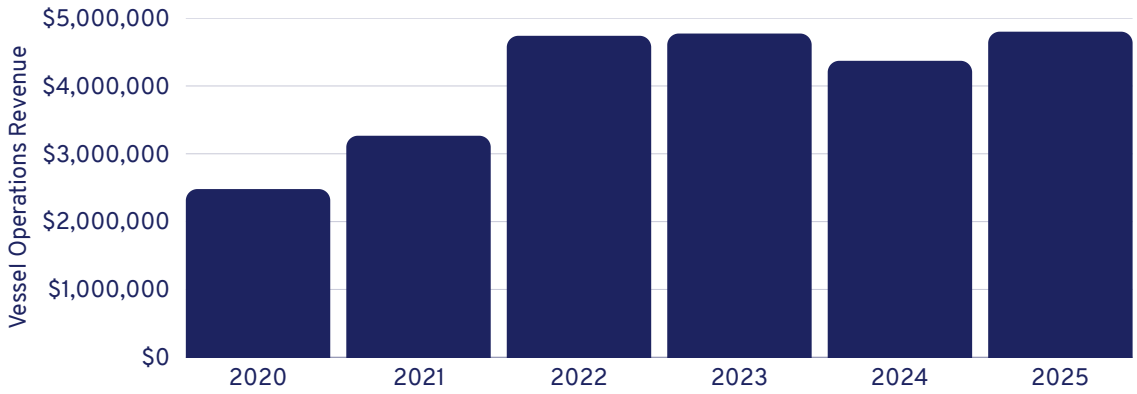
HOUMA MARITIME CAMPUS

The construction of a new bulkhead and boat slip to expand the operational capabilities of the Maritime Campus was completed in FY25 (see photo). This vital infrastructure will provide safe, dependable docking for both the *RCRV Gilbert R. Mason* and the *RV Pelican II*. In addition to supporting next-generation research vessels, the project enhances long-term resilience and strengthens the efficiency of LUMCON's marine operations.

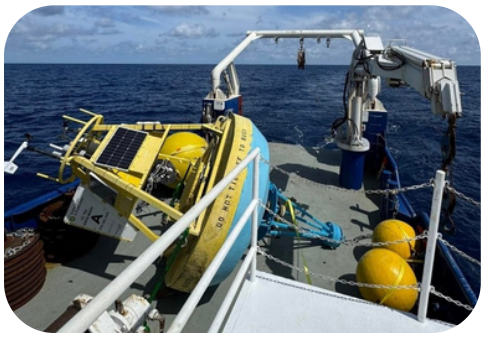
LUMCON's Marine Operations Center (MOC) is in development at the Houma Maritime Campus. The project involves the construction of a new 2-story office/warehouse building that includes 25,000 square feet of space on the first floor and 7000 square feet on the second-floor mezzanine. The project will also include the installation of a small boat launch next to the current slip and a continuation of the bulkhead. The MOC is vital for continuing to keep Louisiana a leader in oceanographic research with the infrastructure that is needed to maintain an active research fleet. The anticipated bid date for this project is November 2025.

VESSELS AND DIVE OPERATIONS

LUMCON's vessels and dive operations continue to serve as essential foundations for coastal and marine science research, education, and workforce development across the Gulf region. Our fleet supported a wide range of activities this year—from university field courses and K–12 STEM programs to multi-institution research cruises—resulting in strong utilization across both educational and research days. The following graph highlights that FY25 marked the highest revenues generated by vessel operations since the onset of the pandemic in 2020. A breakdown of the usage of different vessels follows below.



LUMCON's vessel fleet remained a vital platform for research and education in FY25. The *RV Pelican* completed 185 operational days, supporting 26 Gulf research cruises ranging from acoustic surveys and hypoxia studies to ROV and sampling operations, and successfully passed its eCMID and OVID inspections to maintain offshore readiness. The FY25 operational days were the highest usage of the *RV Pelican* since prior to the pandemic.



The *RV Point Sur* logged 158 operational days across 24 cruises, including ROV missions for NOAA and USGS, deep-water MOCNESS tows, and student-engaged trips with EPA, USM, and Texas A&M.

The *RV Acadiana* added 79 sea days, approximately evenly divided between education and research activities. Together, these vessels advanced LUMCON's mission by providing essential access to coastal and offshore environments.

LUMCON's small vessel fleet continued to serve an important role in aiding researchers and educators in wetland and nearshore coastal activities. Small vessel usage remained high in FY25 with a total of 245 days. This total included 169 research and 76 education days over the year.

FLEET UPDATES

The ***RV Gilbert R. Mason***, the third vessel in NSF's Regional Class Research Vessel fleet, will be jointly operated by LUMCON and the University of Southern Mississippi for the Gulf–Caribbean Oceanographic Consortium. Construction at Bollinger Shipyards in Houma, LA is progressing well, with the hull nearing completion, the aluminum superstructure installed, and major wire-ways and electrical systems now being fitted. Lessons learned from the first two sister ships are being incorporated to enhance performance and reliability. Once completed, the vessel will greatly expand oceanographic research and education capacity in the region. Anticipated delivery is in 2027.

The ***RV Pelican II*** (Hull 169) is officially under construction by Thoma-Sea Constructors as of early June 2025. A kick-off meeting was held on June 10, which gave the shipyard the authority to proceed with construction. Monthly meetings are being held between the shipyard, ship designers (JMS Naval Architects), State of Louisiana project managers at Facilities & Planning, and LUMCON. Ship design and detailed engineering drawing are being validated and completed. Initial focus areas are major mechanical systems, structural arrangements, stability, and tonnage. Plans are for steel to begin being cut during the 4th quarter of 2025.

LUMCON's small boat fleet also grew in FY25 with the addition of a new 24 foot aluminum hull Hanko boat filling an important need for LUMCON and consortium institution researchers.

DIVE OPERATIONS

In FY25, LUMCON's Diving Safety Program supported diverse research and training efforts across the region. Divers from Dr. Archer's and Dr. Glaspie's labs conducted low-visibility work in Terrebonne Bay deploying hydrophones and assessing bottom communities, and completed dives during the 2024 Hypoxia Cruise to identify future near-rig test sites. Under Letters of Reciprocity, divers from Dr. Holstein's LSU lab assisted NOAA and Texas A&M Galveston with coral reef health assessments at the Flower Garden Banks National Marine Sanctuary. The Diving Safety Office provided oversight, delivered emergency response and CPR/First Aid training for vessel crews, assisted with vessel inspections and clearing of fouled gear, and participated in the 2025 AAUS Annual Conference.

BTNEP

BARATARIA-TERREBONNE NATIONAL ESTUARY PROGRAM

In FY25, the BTNEP team made significant advances in its mission of protecting and restoring the Barataria-Terrebonne National Estuary through several core programs and initiatives: improving water quality, combating invasive species, cultivating native plants for use in restoration projects, protecting wildlife and the habitats they rely on, improving community resilience and sustainability through education, outreach, and volunteer efforts, and improving engagement and reach with stakeholders and citizens in more reaches of the estuary than ever before.

This year, BTNEP awarded $1.1 Million dollars for eleven new projects. That brings BTNEP's total to forty-five active projects that are restoring and protecting the natural resources, culture, community, and economy of the sixteen-parish region that makes up the estuary. Program staff expanded its reach to more of the estuary this year launching its Estuary Explorer campaign where we will highlight BTNEP's work in each parish, feature the parish's unique qualities and eco-tourism opportunities, and provide followers with a "call-to-action". Additionally, we hosted our quarterly Management Conference meetings in St. Charles, Jefferson, Iberville, and Lafourche Parishes, and our annual Paddle the Estuary event in West Baton Rouge Parish for the first time.

In November, BTNEP welcomed Michelle Felterman as the program's new deputy director. Michelle joins the team with a Master's degree in Marine and Environmental Biology from Nicholls State University and a Juris Doctor from Tulane Law School. She was a 2018 Knauss Fellow with the Office of the Assistant Secretary of the Navy. She has valuable experience in coastal and environmental project and program management, law and policy, and ecology with the Naval Facilities Engineering Command and the Louisiana Coastal Protection and Restoration Authority.

MICHELLE FELTERMAN
DEPUTY DIRECTOR

BTNEP FY25
IMPACT HIGHLIGHTS
Protecting, Restoring, & Exploring the Barataria-Terrebonne Estuary

MONITORING AND BANDING

54 Purple Martin Gourds
2 Wren Nest Boxes
2 Prothonotary Warbler Nest Boxes
2 Chickadee Nest Boxes

2 Red Knots
2 Purple Martins
2 Carolina Wrens

KEY RESEARCH PROJECTS

Louisiana Red Knots Project

Tracking the movements and survival of the threatened Red Knot to inform conservation action

19 Red Knots Banded
2 Red Knot Recaptures

Urban Native Greens Project

Studying how native urban plantings benefit habitat and breeding success for Purple Martins, Prothonotary Warblers, Carolina Wrens, and Chickadees.

COMMUNITY OUTREACH

Increased engagement by more than **170%** on all platforms combined

Gained more than **500** followers across all platforms

Increased overall posting by **40%**

FY25 PROJECTS FUNDED

$1.2 Million
Awarded in FY2025

17 Projects
Funded throughout the Estuary

HABITAT RESTORATION

337
Iris nelsonii grown to restore population

22+
Tons of trash collected along Bayou Lafourche and Elmer's Island

APPENDIX A. LUMCON GRANTS IN FY25

CONTINUING GRANTS

SK Archer - *The role of ecological memory in nearshore seagrass beds affected by multiple stressors*, co-PI with E.W. Stoner (Bentley University) and E.R. Whitman (Florida International University). National Science Foundation, Biological Oceanography, 10/2021-09/2024. Total award: $676,239; LUMCON portion: $140,726

SK Archer - *Continuous measurement of valve movements to monitor grow-out conditions of farmed oysters*, co-PI with R. Lavaud (Louisiana State University), B. Callum (Louisiana SeaGrant), and J. La Peyre (Louisiana State University). Louisiana Sea Grant's Aquaculture Program, 10/2022-09/2024. Total award: $117,789; LUMCON portion: $5,986

SK Archer - *Sponges as passive samplers for heavy metals in freshwater and brackish systems*, co-PIs: M. Miller (Baton Rouge Community College) and P. Zito (University of New Orleans). Louisiana Sea Grant-Omnibus Funding, 2024-2026. Total award: $193,409; LUMCON portion: $50,993

SK Archer - *Assessing which, when, and why fishes use artificial reefs through passive acoustics and capture based methods.* Louisiana Sea Grant Artificial Reef Research Assistantship Program, 01/2023-12/2025. LUMCON portion: $106,668

SK Archer - *Louisiana deltaic estuaries MBON: sea level rise sentinels*, co-PI with C. Glaspie (LSU), M. Dance (LSU), E. D'Sa (LSU), S. Giordano (National Oceanographic and Atmospheric Administration), F. Gayanilo (Texas A&M, GCOOS), and K. Klieber (Image Water Works). NOAA's Marine Biodiversity Observatory Network, 01/2023-01/2028. Total award: $1,749,971; LUMCON portion: $425,152

SK Archer - *Sponges as passive samplers for heavy metals in freshwater and brackish systems*, co-PIs: M. Miller (Baton Rouge Community College) and P. Zito (University of New Orleans). Barataria-Terrebonne National Estuary Program, 2024-2026. Total award: $107,342; LUMCON portion: $34,000

MW Bowles, BJ Roberts - *Methane efflux from river influenced coastal marine sediments*, co-PIs: C.D. Meile (University of Georgia) and K. Maiti (LSU). National Science Foundation, Division of Ocean Sciences, Chemical Oceanography, 2022-2025. Total award: $1,298,171; LUMCON portion: $1,038,171

KT Du Clos, SK Archer - *Tracking oyster larval abundance and settlement to enhance oyster restoration in coastal Louisiana.* Louisiana Sea Grant - UROP Funding, 05/2024-12/2024. Total award: $3,500; LUMCON portion: $0

AS Kolker - *Neptune Pass/Quarantine Bay sediment mass and volume balance to evaluate sub-delta development*, co-PI with H.D. Weathers (Delta Geo-Marine and University of New Orleans, C. Swann (RCOAST, University of New Orleans), and T. Cloutier (RCOAST). Louisiana Coastal Protection and Restoration Authority/National Wildlife Federation, 2022-2025. Total award: $103,048; LUMCON portion: $25,000

KW Krauss - *Tidal freshwater forested wetlands as sentinel ecosystems for impacts from sea-level rise and watershed changes: measurement, mapping, modeling, and synthesis*, co-PI with G.B. Noe (U.S. Geological Survey – Delaware). USGS Land Change Science R&D Program, 2024-2029. Total award: $3,160,000; LUMCON portion: $0 (in-kind since departing USGS)

KW Krauss - *Carbon stock assessment, restoration planning, and monitoring of terrestrial, intertidal, and sub-tidal ecosystems for U.S. Naval Base Guam*, co-PI with K.M. Thorne (U.S. Geological Survey, California), M. La Peyre (LSU), and K.J. Buffington (U.S. Geological Survey, Colorado). U.S. Department of the Navy, 2023-2028. Total award: $1,820,336; LUMCON portion: $0 (in-kind since departing USGS)

KW Krauss - *Transforming coastal lowland systems threatened by sea-level rise into prosperous communities*, co-PI with A.S. Swales (Earth Sciences New Zealand), C.E. Lovelock (University of Queensland), K.M. Thorne (U.S. Geological Survey, California), and G.R. Guntenspergen (U.S. Geological Survey, Minnesota). ENDEAVOUR Fund, Earth Sciences New Zealand (formerly NIWA), 2022-2027. Total award: $7,850,000; LUMCON portion: $0 (reimbursable travel only)

JD Malbrough, BJ Roberts - *R/V Pelican Ship Operations CY 18 – 25*. National Science Foundation OCE-1827654, 2018-2025. LUMCON portion: $5,011,266

G Rieucau - *Monitoring the recovery of ecological functions of restored living shorelines in a South Louisiana salt marsh using imaging sonar*. U.S. Environmental Protection Agency, Barataria-Terrebonne National Estuary Program Clean Water Act Section 320, 2024-2026. LUMCON portion (through 2025): $37,723

G Rieucau - *The past, present and future of Lower Mississippi River restoration: adaptive management for floodplain restoration: improving aquatic connectivity and reforesting the River*, co-PI with A Rodgers (U.S. Fish and Wildlife Service) and S. David (University of Minnesota). National Fish and Wildlife Foundation – Lower MS Alluvial Valley Restoration Fund 2023, 2024-2027. Total award: $433,090; LUMCON portion: $54,323

BJ Roberts – *SRS-RN: Hybrid water infrastructure and regional sustainability - planning a convergence science approach in Greater New Orleans*, co-PI with J. Lewis (ByWater Institute, Tulane University), M.T. Ferris (University of New Orleans), E. Meselhe (Tulane University, River-Coastal Science and Engineering), and S. van Bael (Tulane University, Ecology and Evolutionary Biology). National Science Foundation, Sustainable Regional Systems Research Networks Program Track 2 Planning Grant, 2022-2026. Total award: $149,343; LUMCON portion: $0

BJ Roberts - *NSF Engines: Louisiana energy transition engine: Future Use of Energy in Louisiana (FUEL)*, co-PI with A. Maas (LSU), with team of 50 partners including Roberts's role on Work Force Development Working Group. National Science Foundation, 2024-2033. Total award: $160,000,000; LUMCON portion: $125,000

BJ Roberts - *Water quality and harmful algal bloom monitoring at LUMCON's DeFelice Marine Center*, BTNEP EPA 320 Funding, 2025–2026. LUMCON portion: $40,000

BJ Roberts - *Building a network of nutrient sensing in the northern Gulf of Mexico*, co-PI with B. Stauffer (University of Louisiana at Lafayette). Gulf Coast Ocean Observing System, 2022-2026. LUMCON portion: $125,000

BJ Roberts, MW Bowles - *Methane dynamics across microbe-to-landscape scales in coastal wetlands*, co-PIs with A.S. Engel (University of Tennessee), C.A. Schutte (Rowan), H. Huang (LSU), D. Justic (LSU), G. Mariotii (LSU), K. Yeager (Old Dominion University), National Science Foundation, Frontier Research in Earth Sciences, 2022-2027. Total award: $2,949,601; LUMCON portion: $994,902

BJ Roberts BJ, JP Conover - *REU site: interdisciplinary research experiences in Louisiana's changing coastal environments*. National Science Foundation OCE, 2022-2026. LUMCON portion: $529,225

BJ Roberts, M Conover - *The Mississippi River Delta Transition Initiative (MissDelta)*, co-PI with S. Bentley (LSU), M. Allison (Tulane), and 47 other investigators at 16 total institutions. National Academies of Science, Gulf Research Program, 2023-2028. Total award: $22,000,000; LUMCON portion: $779,833

Roberts BJ, J Malbrough - *Collaborative proposal: proposal for the operation of regional class research vessel #3 in the Gulf of Mexico, Caribbean Sea, and Southwestern Atlantic Ocean*. National Science Foundation, 2019-2025. LUMCON portion: $3,173,061

BJ Roberts, G Rieucau - *Ecological function and recovery of biological communities within sand shoal habitats within the Louisiana Gulf region*, co-PIs are J. Nelson (University of Georgia), K. Xu (LSU), and D. Johnson (Virginia Institute of Marine Science). U.S. Department of the Interior, Bureau of Ocean Energy Management, 2023-2026. Total award: $1,798,596; LUMCON portion: $702,922

Z Zang - *Disentangling recruitment and growth dynamics of the Atlantic sea scallop, Placopecten magellanicus*, co-PI with K. Meyer-Kaiser (Woods Hole Oceanographic Institute) and R. Ji (Woods Hole Oceanographic Institute). National Oceanic and Atmospheric Administration, 07/01/2024-06/31/2026. Total award: $448,756; LUMCON portion: $143,022.

NEW GRANTS

KT Du Clos - *Tentaculate ambush predators in 3D: trophic effects of tentacle arrangement and morphology in an understudied group*, co-PI with K. Sutherland (University of Oregon). NSF Biological Oceanography Program. Total award: $732,584, LUMCON portion: $330,189

KT Du Clos - *Tracking larval abundance and recruitment to enhance oyster restoration in southern Louisiana*. Joe W. and Dorothy Dorsett Brown Foundation. LUMCON portion: $15,000

KW Krauss – *Quantifying large unaccounted coastal wetland carbon pools on DoD installations*, co-PI with A.S. Rovai (Smithsonian Environmental Research Center, Maryland), D.A. Friess (Tulane University), I. Santos (University of Gothenburg, Sweden), and G. Sneddon (U.S. Geological Survey, Louisiana). U.S. Department of Defense, Strategic Environmental Research and Development Program (SERDP), 2025-2027. Total Award: $1,539,072; LUMCON portion: $0 (in-kind since departing USGS)

G Rieucau - *The Barton Springs' landscape of fear: assessing predation pressure on the Barton Springs Salamander (Eurycea sosorum) using innovative sonar technology*. City of Austin - Watershed Protection. LUMCON portion: $140,391

BJ Roberts, A Fontenot - *Environmental monitoring network: providing critical data to the Gulf Coast community*, Gulf of Mexico Coastal Ocean Observing System (GCOOS), 2024-2029. LUMCON portion: $499,966

BJ Roberts - *LUMCON Environmental Monitoring Network: providing critical data to the Pointe-au-Chien Indian Tribe (PACIT) community*, Gulf of Mexico Coastal Ocean Observing System (GCOOS), 2024-2029. LUMCON portion: $587,950

HS Steinmuller - *Characterizing the role of root recalcitrance in soil organic carbon stability within the marsh-to-mangrove encroachment zone*. Joe W. and Dorothy Dorsett Brown Foundation, 01/2025-12/2026. LUMCON portion: $149,922

HS Steinmuller - *Characterizing the role of root recalcitrance in soil organic carbon stability within the marsh-to-mangrove encroachment zone*. Joe W. and Dorothy Dorsett Brown Foundation, Finalist Award, 01/2025-12/2026. LUMCON portion: $15,000

Z Zang - *Developing a model-based coastal Louisiana water quality forecasting system*. Joe W. and Dorothy Dorsett Brown Foundation. LUMCON portion: $15,000

Z Zang - *Geological and physical studies to optimize wind farm site selections in the state waters of Cameron Parish of Louisiana*, co-PI with Z. George Xue (LSU) and Kehui Xu (LSU). LSU Institute for Energy and Innovation. Total award: $249,858; LUMCON portion: $56,530

APPENDIX B. LUMCON PUBLICATIONS IN FY25

Brooks CN. 2025. Using spectrophotometry to measure nutrient concentrations in the field. *Nature Reviews Earth & Environment*. 6(3):161. doi:10.1038/s43017-025-00648-z

Brooks CN, Field EK. 2024. Microbial community response to hydrocarbon exposure in iron oxide mats: an environmental study. *Frontiers in Microbiology*. 15:1388973. doi:10.3389/fmicb.2024.1388973

Brooks CN, Brooks S, Beasley J, Valley J, Opata M, Karatan E, Bleich RM. 2025. The influence of environmental factors on the detection and quantification of SARS-CoV-2 variants in dormitory wastewater at a primarily undergraduate institution. *Microbiology Spectrum*. 13(2):e02003-24. doi:10.1128/spectrum.02003-24

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Campanino FM, Archer SK, Tupitza JC, Glaspie CN, La Peyre MK. 2025. Comparison of two benthic assemblage sampling gears for use on intertidal oyster reefs in Louisiana. *PeerJ*. 13:e19346. doi:10.7717/peerj.19346

Carruthers TJB, Jones B, Terrel, MK, Black VA, Player BJ, Scheibly JF, Biber PD, Connolly RM, Cowan J, Curole JP, Darnell KM, Dausman AM, DeJong AL, Doyle SM, Duarte CM, Friess DA, Fourqurean, Hemmerling SA, Hillmann, ER, Holm GO, Kiskaddon E, Heorfiou IY, Grimsditch GD, Jung H, Jupiter SD, Kendrick GA, **Krauss KW**, Liu B, Lovelock CE, Mack SK, Macreadie PI, McGlathery KJ, Megonigal JP, Miner M, Pittman GC, **Roberts BJ**, Settelmyer S, Sevick T, Simpson S, Staver LW, Stevens HJ, Sutton-Grier AE, Villa JA, White JR, Lavery PS, He S, Espisito CR, Waycott M. 2024. Identifying and filling critical knowledge gaps can optimize financial viability of blue carbon projects in tidal wetlands. *Frontiers in Environmental Science*. 12:1421850. doi:10.3389/fenvs.2024.1421850

Cecchetto MM, Smith CR, **Nunnally CC**, Sweetman AK. 2024. High benthic community respiration and ecosystem response to phytodetrital input in a subpolar fjord on the West Antarctic Peninsula. *Limnology and Oceanography*. 69(11):2610-2623. doi:10.1002/lno.12688

Chapman ST, LeBlanc C, Nelson JA, **Roberts BJ**, Polito MJ. 2025. Vegetation and habitat classification of created and natural brackish marshes via Unoccupied Aerial Systems (UAS): a case study of the Lake Hermitage marsh creation project. *Estuaries and Coasts*. 48(3):82. doi:10.1007/s12237-025-01516-1

Chen L, Schoolmaster DR, **Krauss KW**, Stagg CL, Cormier N, Moss RF, Xiong Y, Weston NB. 2025. Elevated CO_2 enables brackish marsh transgression into freshwater forested wetlands while stimulating CH_4 emissions. *Estuarine, Coastal and Shelf Science*. 323:109385. doi:10.1016/j.ecss.2025.109385

Clower PO, Maiti K, **Bowles MW**. 2024. Contrasting organic carbon respiration pathways in coastal wetlands undergoing accelerated sea level changes. *Science of the Total Environment*. 949:174898. doi:10.1016/j.scitotenv.2024.174898

Damian-Serrano A, Walton KA, Bishop-Perdue A, Bagoye A, **Du Clos KT**, Gemmell BJ, Colin SP, Costello JH, Sutherland KR. 2025. Colonial architecture modulates the speed and efficiency of multi-jet swimming in salp colonies. *Journal of Experimental Biology*. 228(6):jeb249465. doi:10.1242/jeb.249465 2/19/2025

Darras, KFA, Rountree RA, Van Wilgenburg SL, Cord AF, Pitz F, Chen Y, Dong L, Rocquencourt A,Desjonquéres C, Diaz PM, et al. (including **Archer SA**). 2025. Worldwide soundscapes: a synthesis of passive acoustic monitoring across realms. *Global Ecology and Biogeography*. 34(5):e70021. doi:10.1111/geb.70021

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Jones SF, Arias-Ortiz A, Baldocchi D, Eagle M, Friess DA, Gore C, Noe G, Nolte S, Oikawa P, Paytan A, Raw JL, **Roberts BJ**, Rogers K, Schutte C, Stagg C, Thorne KM, Ward E, Windham L, Yando ES. 2024. When and where can coastal wetland restoration increase carbon sequestration as a natural climate solution? Cambridge Prisms: *Coastal Futures*. 2:e13. doi:10.1017/cft.2024.14

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Milton M, **Cosper K**, **Du Clos K**. 2025. The shell seeker: oyster larvae sampling with the PlanktoScope V.4. *Protocols.io.* Feb. 01, 2025. doi:10.17504/protocols.io.14egn6jzpl5d/v4

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