REPORT TO THE LOUISIANA BOARD OF REGENTS

ENHANCEMENT COMPONENT OF THE BOARD OF REGENTS SUPPORT FUND

DEPARTMENTAL ENHANCEMENT SUBPROGRAM COMPREHENSIVE AND TARGETED

FY 2023-24 COMPETITION

March 2024



REPORT OF THE FINAL PANEL

BOARD OF REGENTS SUPPORT FUND DEPARTMENTAL ENHANCEMENT PROGRAM FY 2023-24

BACKGROUND INFORMATION

One hundred one (101) proposals requesting a total of \$15,858,025 in first-year funds were submitted for funding consideration in fiscal year (FY) 2023-24 to the Departmental Enhancement Program of the Board of Regents Support Fund (BoRSF). Nine disciplines were eligible, including Agricultural Sciences, Astronomy, Biological Sciences, Health and Medical Sciences, Humanities, Engineering B, Physics, Social Sciences, and Targeted Workforce.

As described in the 2023-24 Departmental Enhancement Request for Proposals (RFP), academic units at eligible institutions could submit two types of proposals: Comprehensive Enhancement proposals, which could request up to \$1,000,000 over five years; and Targeted Enhancement proposals, which could request up to \$250,000 for one year. Individual academic units could submit only one (1) Comprehensive Enhancement proposal, though there were no restrictions on the number of Targeted Enhancement proposals submitted. An institutional screening committee consisting of, at minimum, an administrative representative from the academic unit, an institutional academic officer, and a representative from the campus's sponsored programs office, was required to approve the selection of Comprehensive Enhancement submissions for each academic unit, as well as approve and rank Targeted Enhancement submissions in order of priority to the submitting academic unit. Overall, twenty-five (25) Comprehensive Enhancement proposals and seventy-six (76) Targeted Enhancement proposals were submitted. The RFP noted that only one to three Comprehensive Enhancement proposals could be selected for funding due to limited monies available and the high long-term commitment of dollars required.

THE REVIEW PROCESS

Submitted proposals were reviewed by discipline-based panels. The chairs of each review panel represented their respective discipline on the final panel and submitted written reports with a priority ranking of highly recommended proposals to the final panel chair, Dr. Joseph Quansah from the Department of Agricultural and Environmental Sciences at Tuskegee University.

After careful consideration of all panel reports during March of 2024, the final panel chair highly recommended for funding three (3) Comprehensive Enhancement proposals for a total of \$787,082 in first-year funds, and twenty-one (21) Targeted Enhancement proposals for a total of \$2,515,993 in first-year funds, based on monies projected to be available. Overall, twenty-four (24) Departmental Enhancement proposals are recommended for total support of \$3,303,075 in first-

year funds. For the three (3) Comprehensive Enhancement proposals highly recommended for funding, a total of \$2,353,608 was recommended over five years.

Table I of this report contains the rank-order list of all proposals highly recommended for funding. Table II lists the final panel chair and contributing consultants of the seven (7) discipline-based review panels; no proposals were submitted in Targeted Workforce, so no panel was convened. These are followed by a compilation of written comments submitted by the discipline-based review panels for each of the highly recommended proposals. Appendix A contains a list of all Departmental Enhancement proposals submitted, and Appendix B contains the rating form used by all consultants to evaluate proposals.

All proposals not recommended for funding (i.e., any proposal not listed in Table I) will receive debriefing material summarizing reviewer assessments of the project in July 2024, to assist applicants in development of future submissions to Departmental Enhancement and other grant programs. These materials will be distributed via the PI LOGAN account used to submit the original proposal.

Table I
FY 2023-24 Departmental Enhancement
Proposals Highly Recommended for Funding

| Rank | Dwanagal # | Institution | Dissiplins | Tymo | 1st Year | 1st Year |
|------|------------|-------------|---------------------------|---------------|-------------|----------------|
| Kank | Proposal # | Institution | Discipline | Туре | Request | Recommendation |
| 1 | 041ENH-24 | LSU-AG | Agricultural Sciences | Targeted | \$58,160 | \$58,160 |
| 1 | 023ENH-24 | UNO | Biological Sciences | Comprehensive | \$213,509 | \$213,509 |
| 1 | 021ENH-24 | ULL | Engineering B | Comprehensive | \$296,077 | \$296,077 |
| 1 | 007ENH-24 | LSUHSCNO | Health & Medical Sciences | Comprehensive | \$277,496 | \$277,496 |
| 1 | 078ENH-24 | SU A&M | Humanities | Targeted | \$124,765 | \$124,765 |
| 1 | 051ENH-24 | LA Tech | Physics | Targeted | \$67,357 | \$67,357 |
| 1 | 064ENH-24 | McNeese | Health & Medical Sciences | Targeted | \$194,900 | \$144,500 |
| 8 | 039ENH-24 | LSU-AG | Agricultural Sciences | Targeted | \$50,000 | \$50,000 |
| 8 | 056ENH-24 | LA Tech | Astronomy | Targeted | \$56,857 | \$56,857 |
| 8 | 077ENH-24 | SU A&M | Biological Sciences | Targeted | \$119,516 | \$119,516 |
| 8 | 058ENH-24 | LA Tech | Health & Medical Sciences | Targeted | \$122,632 | \$122,632 |
| 8 | 071ENH-24 | SLU | Health & Medical Sciences | Targeted | \$200,000 | \$200,000 |
| 8 | 073ENH-24 | SLU | Humanities | Targeted | \$86,929 | \$86,929 |
| 8 | 074ENH-24 | SLU | Social Sciences | Targeted | \$114,919 | \$114,919 |
| 15 | 043ENH-24 | LSU-AG | Agricultural Sciences | Targeted | \$197,440 | \$197,440 |
| 15 | 059ENH-24 | Loyola | Biological Sciences | Targeted | \$199,907 | \$199,907 |
| 15 | 070ENH-24 | SLU | Engineering B | Targeted | \$141,775 | \$141,775 |
| 15 | 048ENH-24 | LSU A&M | Health & Medical Sciences | Targeted | \$199,798 | \$199,798 |
| 15 | 099ENH-24 | UNO | Social Sciences | Targeted | \$191,358 | \$147,183 |
| 20 | 067ENH-24 | Nicholls | Biological Sciences | Targeted | \$30,816 | \$30,816 |
| 20 | 062ENH-24 | McNeese | Engineering B | Targeted | \$195,915 | \$195,915 |
| 20 | 095ENH-24 | ULM | Health & Medical Sciences | Targeted | \$156,488 | \$156,488 |
| 20 | 089ENH-24 | ULL | Social Sciences | Targeted | \$106,925 | \$70,086 |
| 24 | 097ENH-24 | ULM | Social Sciences | Targeted | \$30,950 | \$30,950 |
| | | | | | \$3,434,489 | \$3,303,075 |

Table II

| FY 2023-24 Departmental Enhancement Panels | | | | |
|--|---|---------------------------|--|--|
| Name | Institution | Discipline | | |
| | Final Panel Chair | | | |
| Joseph Quansah | Tuskegee University | Agricultural Engineering | | |
| | Ag Sciences | | | |
| Joseph Quansah, chair | Tuskegee University | Agricultural Engineering | | |
| Harold Trick | Kansas State University | Plant Pathology | | |
| | Humanities | | | |
| Dawn Bratsch-Prince, chair | Iowa State University | Foreign Languages | | |
| Samantha Cantrell | Vanderbilt University | Literature/Grants officer | | |
| | Health & Medical | | | |
| Gerry Sonnenfeld, chair | University of Rhode Island | Toxicology | | |
| Elizabeth Gazza | University of North Carolina-Wilmington | Nursing | | |
| Richard Pollard | University of California-Davis | Infectious Diseases | | |
| | Biological Sciences | | | |
| Paras Mishra, chair | University of Nebraska-Medical Center | Physiology | | |
| William Holland | University of Utah | Biochemistry | | |
| Manoj Mishra | Alabama State University | Biology/Oncology | | |
| | Social Sciences | | | |
| Wendy Troop-Gordon, chair | Auburn University | Psychology | | |
| Anna Lee | North Carolina A&T University | Psychology | | |
| Young-A Lee | Auburn University | Apparel Design | | |
| Sunidhi Mehta | West Virginia University | Apparel Design | | |
| Aashish Kumar | Hofstra University | TV Production | | |
| Douglas Ferguson | College of Charleston | TV Production | | |
| | Engineering B | | | |
| Prahalada Rao, chair | Virginia Tech University | Industrial/Materials | | |
| Caroline Hayes | Iowa State University | Mechanical | | |
| Pradeep Menezes | University of Nevada-Reno | Mechanical/Materials | | |
| Physics & Astronomy | | | | |
| Pradip K. Bandyopadhyay, | | | | |
| chair | Penn State University-Berks | Condensed Matter | | |
| Maxim Sukharev | Arizona State University | Light Physics | | |
| Kyle Dawson | University of Utah | Astronomy | | |
| Stephen Tegler | Northern Arizona University | Observatory Director | | |

FY 2023-24 Departmental Enhancement Proposals Highly Recommended for Funding

| Rank | 1 |
|-------------|--|
| Proposal # | 041ENH-24 (Agricultural Sciences) |
| Institution | Louisiana State University Agricultural Center |
| Title | Updating DSC Instrumentation for Teaching, Research and Outreach |
| Requested | \$58,160 |
| Recommended | \$58,160 |

LSU AgCenter seeks to obtain a Differential Scanning Calorimeter (DSC) to replace an older version, which is obsolete. This unit will provide researchers with state-of-the-art analysis equipment as well as hands-on student training in essential high-tech analysis techniques, which will improve job preparation. The stated goals are related to the mission of the institution. The timeline for installation and implementation into courses and graduate research projects is clearly laid out. The impact of the equipment on research, research capacity, education, faculty development and economic development is well presented. The evaluation plan provided includes metrics for students taught, grant applications, and manuscripts presented. The case for sustainability is strong and supported by the School of Nutrition and Food Sciences' preservation of the previous unit for over 20 years before it became outdated. A maintenance plan is clearly presented and includes a commitment to software updates. The PI is highly capable and qualified to implement the work plan. The budget justification is clear. Full funding is recommended.

| Rank | 1 |
|-------------|--|
| Proposal # | 23ENH-24 (Biological Sciences) |
| Institution | University of New Orleans |
| Title | DCC-UNO Partnership to Enhance Transfer Student Success in Biology |
| Requested | Year 1: \$213,509; Y2: \$186,051; Y3: \$57,792; Y4: \$44,628; Y5: \$51,386 |
| Recommended | Year 1: \$213,509; Y2: \$186,051; Y3: \$57,792; Y4: \$44,628; Y5: \$51,386 |

The applicants seek to establish a partnership with Delgado Community College to create a pathway for students in Biology to transfer and then succeed in a four-year program at the University of New Orleans. This is an outstanding proposal that presents a clear and strategic plan aligned with both institutions' missions. The objectives are not only clearly defined but are also pragmatic and resonate with the department's commitment to providing comprehensive education in biology and conducting meaningful research. The plan is both innovative and necessary, targeting a pivotal aspect of academic transition. The detailed work plan, which includes the development of student-focused, program-specific pathways, shows promise to mitigate the loss of credits during the transfer process. The proposed long-term goal to expand these practices university-wide is ambitious and reflects strategic, institution-wide and multi-institutional perspectives.

The work plan outlines clear roles and responsibilities among the PI, Co-PI, and partners. The collaborative approach, drawing on diverse stakeholder engagement, is a strong aspect of the

proposal. The project's foundation on successful precedents from Virginia, New Jersey, and the locally implemented HHMI-funded STEM scholars camp is a sensible approach. The institutional support is evident through letters from senior administrators, which augurs well for the project's successful implementation. The proposal's projected impact is noteworthy. The anticipated benefits extend well beyond Biology programs, suggesting that the practices developed could serve as a template for other majors and transfer programs. The focus on enhancing resources and skills for DCC and UNO students is particularly laudable. The targeted inclusion of first-generation college students and individuals from disadvantaged backgrounds aligns with national directives and the critical need for diversity across the STEM workforce. The potential impacts of this project are thus both immediate and far-reaching. The robust evaluation plan will be entrusted to a reputable firm and will ensure objectivity and reliability. Full funding is recommended.

| Rank | 1 |
|-------------|---|
| Proposal # | 021ENH-24 (Engineering B) |
| Institution | University of Louisiana at Lafayette |
| Title | Enhancement of Materials Multiscale Mechanical Testing Capacity of |
| | College of Engineering |
| Requested | Year 1: \$296,077; Y2: \$185,682; Y3: \$171,221; Y4: \$180,530; Y5: \$166,444 |
| Recommended | Year 1: \$296,077; Y2: \$185,682; Y3: \$171,221; Y4: \$180,530; Y5: \$166,444 |

This proposal aims to enhance multiscale mechanical testing capabilities to support research and educational activities at the University of Louisiana at Lafayette through the acquisition of the state-of-the-art nano- to micro-scale materials testing systems. The equipment now on hand is either lacking or outdated, with no customer support available. The project promotes collaboration with other research and academic units across ULL. The unique instrumental facility will also enhance research collaborations with other universities, national research laboratories, institutes, and private industry. This is a well-written proposal. The objectives are clearly stated and bold. The impact of the proposal is very consequential in the research arena, and the equipment to be purchased will be utilized across an extensive array of courses. The investigators may want to consider starting the process of integration into the curriculum in earlier years, incrementally, as each piece of equipment is installed. A sustainability plan is in place and the evaluation plan is well described. The research team has an excellent funding record over the past five years. There is a substantial institutional as well as industry matching, which speaks to the strategic importance of these acquisitions. Full funding is recommended.

| Rank | 1 |
|-------------|---|
| Proposal # | 007ENH-24 (Health & Medical Sciences) |
| Institution | Louisiana State University Health Sciences Center-New Orleans |
| Title | A Healthier Louisiana Population with a Workforce Addressing the Structural |
| | and Emergent Issues Affecting Public Health |
| Requested | Year 1: \$277,496; Y2: \$156,948; Y3: \$121,948; Y4: \$121,948; Y5: \$121,948 |
| Recommended | Year 1: \$277,496; Y2: \$156,948; Y3: \$121,948; Y4: \$121,948; Y5: \$121,948 |

This project will help the Louisiana State University Health Sciences Center – New Orleans significantly enhance educational capacity in its School of Public Health (SPH). The project is clearly linked to the mission of the SPH. The operational goal is to give students practical skills in population health, environmental monitoring, and data analysis to increase their marketability and impact as public health professionals. The project is designed to increase resources available to students, including new courses, additional laboratory and analytical equipment and software, and supplies for one shared-space training lab and the Public Health Analytic Center. This project could have far-reaching public health impacts for Louisiana by graduating more skilled professionals in the field, addressing population health, and improving responses to both natural and anthropogenic disasters. It also aims to develop a workforce of public health researchers who are focused on serving marginalized communities, which are more vulnerable to adverse impacts from disasters and hazards. The stated objectives are measurable and closely related to project goals. The project will have significant impact on the SPH faculty, students, infrastructure, curriculum, and recruitment. The budget is appropriate and clearly linked to the goals, objectives, and work plan. Full funding is recommended.

| Rank | 1 |
|-------------|--|
| Proposal # | 078ENH-24 (Humanities) |
| Institution | Southern University and A&M College |
| Title | Humanities for the 21st Century: Creating a Writing Makerspace and Library |
| | in the English and Philosophy Department at Southern University |
| Requested | \$124,765 |
| Recommended | \$124,765 |

The applicants propose to enhance curricula, student experiences, and workforce preparedness through the creation of a Writer's Makerspace and Library by retrofitting an existing classroom space to provide students with hands-on experience using multiple technologies in producing creative pieces of writing/communication. These goals are clearly stated and align neatly with the mission and goals of the department. The makerspace concept is innovative and provides today's students with both a physical place and technology tools to create and express themselves. This technology is typically seen in institutions' STEM departments/units, so the humanities focus of this proposal is unique and exciting. The requested funds will be used to refurbish the selected space and purchase technology, library resources, and furniture. The well-written work plan specifies which team member is responsible for each activity and includes a compelling timeline for each project step. The timeline is logical, and the goals are achievable. The proposed space will

be a modern and attractive site that will draw students from across disciplines. Increased student engagement may lead to more interest in humanities curricula and higher enrollments. The impact is likely to be significant, providing an innovative student-centric resource at an under-resourced institution. The proposal includes a detailed evaluation plan and metrics for assessing the impact of project activities. The team members are highly qualified and capable of carrying out the proposed activities. The budget is clearly justified and aligns with the work plan. Full funding is recommended.

| Rank | 1 |
|-------------|---|
| Proposal # | 051ENH-24 (Physics) |
| Institution | Louisiana Tech University |
| Title | Enhancing Research Infrastructure at the Center for Applied Physics Studies |
| | [CAPS]: Acquisition of Equipment for Quantifying Light Yields and |
| | Fluorescence Lifetimes |
| Requested | \$67,357 |
| Recommended | \$67,357 |

The applicants seek to enhance research infrastructure at the Center for Applied Physics Studies (CAPS) at Louisiana Tech through the acquisition of equipment for quantifying light yields and fluorescence lifetimes. The proposal is of excellent quality in all areas of assessment. Acquisition of the requested equipment will significantly improve the CAPS research infrastructure currently in place. The goals and objectives resonate strongly with the Unit Mission Statement. The clarity with which these goals are articulated, coupled with their practical feasibility, highlights the project's strategic approach. Each aspect of the evaluation plan is not only precisely defined but is also accompanied by measurable outcomes that allow for the objective assessment of the project's impact. The PI and the team members are extremely competent to implement the work plan. The work plan and budget are clearly linked with project and the objectives and the funds requested are fully justified. The impact on research infrastructure has been outlined effectively, with measurable outcomes. Full funding is recommended.

| Rank | 1 |
|-------------|--|
| Proposal # | 064ENH-24 (Health & Medical Sciences) |
| Institution | McNeese State University |
| Title | Interdisciplinary Enhancement in Behavioral Health Education: Advanced |
| | Technology in Counseling and Applied Behavior Analysis |
| Requested | \$194,900 |
| Recommended | \$144,500 |

This project seeks funding for virtual reality software and supporting hardware to be used in the training of students across McNeese's Psychology, Counseling and Nursing programs. The applicants have provided a clear rationale for the proposed project. The goals are highly achievable and have observable outputs that can be used to evaluate whether goals have been reached. This project will positively impact faculty, students, and clinical programs. The technology can be adopted readily into a large number of courses. The availability of the software will increase the

units' likelihood of further accreditation and successful recruitment of students and faculty. The target beneficiaries are future health professionals who will be trained to serve an area of Louisiana identified as having a shortage of health professionals. An extensive evaluation plan that builds upon existing assessment procedures is presented. Concrete criteria are provided to determine the impact and efficacy of the technology. It is anticipated that the project will be sustained by absorbing costs into clinical budgets. The applicants are well suited for implementing the project. In the budget justification, the need for graduate assistants and undergraduate workers is specified despite being a large item in the request. Some budgeted items appear to be outside the scope of this project. Funding is not recommended for the unbound DSM-5 or the scheduling software. The project overall will have an important impact, and partial funding of \$144,500 is recommended.

| Rank | 8 |
|-------------|--|
| Proposal # | 039ENH-24 (Agricultural Sciences) |
| Institution | Louisiana State University Agricultural Center |
| Title | Enhancing the Central Analytical Laboratory and Audubon Laboratory |
| | Services to Serve the Louisiana Sugar Industry |
| Requested | \$50,000 |
| Recommended | \$50,000 |

The applicants seek to acquire a new polarimetry and refractometric instrument to enhance the Audubon Central Laboratory and ASI services to improve research capacity for faculty, students, and industry. There is currently only one 20-year-old, failing polarimeter available to undertake all analyses and training. The new equipment will allow the LSU AgCenter to maintain and expand current work, which is vital to student training, faculty development, and the Louisiana economy. The goals and objectives are achievable and in line with the institutional mission. The work plan is clearly defined. Key personnel to be trained in operation and maintenance of the instrument have been identified. The impact will be broad and the evaluation plan is appropriate. The research team is well qualified and fully capable of implementing the work plan. Full funding is recommended.

| Rank | 8 | | |
|-------------|---|--|--|
| Proposal # | 056ENH-24 (Astronomy) | | |
| Institution | Louisiana Tech University | | |
| Title | Enhancement Proposal for the Louisiana Tech University Astronomical | | |
| | Observatory | | |
| Requested | \$56,857 | | |
| Recommended | \$56,857 | | |

The applicants propose to upgrade Louisiana Tech's Astronomical Observatory main telescope's optical system and replace the CCD camera system to improve education and research opportunities for undergraduates. The goals are reasonable and achievable in a one-year timeframe. These upgrades, combined with recent facility repairs, will allow the relaunch of the undergraduate research program, which ceased operation due to damage from multiple storms, along with the pandemic. The new equipment will expand the current capacity for student engagement. The proposal clearly links the project with the department's mission statement. The work plan clearly delineates tasks among faculty participants. The PIs have a sustainability plan,

as well as the experience and ability to complete the work plan. The budget is very reasonable. Full funding is recommended.

| Rank | 8 |
|-------------|--|
| Proposal # | 077ENH-24 (Biological Sciences) |
| Institution | Southern University and A&M College |
| Title | Technology Enhancement for Human Anatomy and Physiology Course |
| | Instruction at Southern University and A&M College [SUBR] |
| Requested | \$119,516 |
| Recommended | \$119,516 |

The applicants aim to significantly enhance SUBR's Department of Biology and Chemistry by integrating 16 iWorx physiology data recording units into its programs. Overall, this is an excellent proposal. The initiative directly supports institutional and departmental priorities. The activities are clearly laid out with appropriate timelines. The new units will enable students to gain hands-on experiences, including conducting data analysis and participating in outreach activities with high school students. The number of students impacted is large. The curriculum enhancement will improve workforce training in a high-need area, while outreach efforts will increase recruitment. A detailed evaluation plan is in place. The investigators form a strong team, bringing appropriate and varied expertise. The budget is well justified, with institutional matching funds to ensure the project's sustainability and impact beyond the life of the grant. The project stands to significantly contribute to educational and research capabilities, as well as workforce needs in the state. Full funding is recommended.

| Rank | 8 |
|-------------|---|
| Proposal # | 058ENH-24 (Health & Medical Sciences) |
| Institution | Louisiana Tech University |
| Title | Enhancing Biomedical Research and Education with an Ultracentrifugation |
| | System |
| Requested | \$122,632 |
| Recommended | \$122,632 |

The applicants seek to acquire an ultracentrifugation system to support and enhance biomedical engineering research and training. No similar system is available at the institution or in neighboring areas. This equipment will greatly enhance education, research, and training opportunities in North Louisiana, where there are currently deficits of healthcare professionals, technology, and services. Project goals and objectives are clearly stated, reasonable, measurable, and linked. The proposed work plan is straightforward and addresses all tasks needed to complete the project. The evaluation plan provides sufficient forms of quantifiable assessment to measure the full impact of the project. The PIs are very capable. The budget is well crafted to maximize the project's impact and supports its goals and work plan. Full funding is recommended.

| Rank | 8 |
|-------------|--|
| Proposal # | 071ENH-24 (Health & Medical Sciences) |
| Institution | Southeastern Louisiana University |
| Title | Virtual and ICU Nursing Careers through Advanced Learning Simulation |
| | [VITALS] |
| Requested | \$200,000 |
| Recommended | \$200,000 |

The applicants propose to increase the capacity and quality of nursing education at Southeastern Louisiana University by creating a simulation environment and including related simulation education in coursework to train students in virtual and ICU nursing. While labs at both campuses have spaces that could be converted to offer ICU or virtual nursing simulations, none has the equipment to provide these experiential learning opportunities. Project objectives are clear, specific, measurable, and achievable. The proposed project aligns well with the School of Nursing's mission. Five undergraduate courses will be positively impacted, providing virtual and ICU nursing simulation training to 330 students per year. The project will also enable opportunities for faculty research. Faculty and lab personnel will participate in "train the trainer" model activities for scenario development, better preparing the workforce, addressing the nursing shortage, enhancing existing simulation lab physical facilities, and allowing student interaction between campuses. The budget includes cash and in-kind matches from the institution and a private entity, which support the strategic importance of this project. Full funding is recommended.

| Rank | 8 |
|-------------|--|
| Proposal # | 073ENH-24 (Humanities) |
| Institution | Southeastern Louisiana University |
| Title | Laptops for Student Use in the Southeastern Writing Center |
| Requested | \$86,929 |
| Recommended | \$86,929 |

The applicants seek to raise the capacity and profile of the SLU Writing Center by updating technology. The project will allow the Center to increase support for student writing development through consultations, enrichment, and training. The acquisition of laptops and software promises to increase student use of the Center and its services, including tutoring, which translates into benefits for student success and retention, in line with institutional goals. Sponsorship of a Writer's Conference for dual-enrollment students (i.e., high school students taking classes at the university) is a novel effort to ensure that this population of students feels recognized and valued, and will likely contribute to increased recruitment. The enhanced use of technology and writing software in the learning experience is responsive to demand for students with skills transferrable to the workplace. The budget is very reasonable and capitalizes on matching funds committed by the institution to ensure success and sustainability of the project. Full funding is recommended.

| Rank | 8 |
|-------------|---|
| Proposal # | 074ENH-24 (Social Sciences) |
| Institution | Southeastern Louisiana University |
| Title | The Advancement of a Medical and Therapeutic Play Simulation Laboratory |
| | to Enhance Students' Therapeutic Communication Skills |
| Requested | \$114,919 |
| Recommended | \$114,919 |

This project seeks funds for the creation of a lab to support the training of Child Life specialists who aid children and families going through difficult medical treatments. The space created will allow students in Child Life to practice skills, including developmental and therapeutic medical play, elements from art and bibliotherapy, and the use of innovative technologies such as therapeutic virtual reality systems and robots during healthcare experiences, necessary in the profession and to help the people of Louisiana. Faculty and staff will benefit from the ability to engage in real-life and simulated situations. A very reasonable work plan is presented. The space to be created has the potential to benefit units across campus. A well-justified budget and plan for sustainability are presented. Full funding is recommended.

| Rank | 15 |
|-------------|---|
| Proposal # | 043ENH-24 (Agricultural Sciences) |
| Institution | Louisiana State University Agricultural Center |
| Title | Critical Infrastructure for Agricultural Science: Acquisition of Plant Growth |
| | and Dew Chambers for Improved Plant Pathology Research and Education |
| Requested | \$197,440 |
| Recommended | \$197,440 |

This proposal seeks funds to purchase three growth chambers and a dew chamber to grow plants in the precise environmental conditions necessary for specific experiments. This equipment will greatly expand capacity for education and research. Project goals are straightforward; objectives are clearly linked and align with the mission of the LSU AgCenter. The work plan is well defined. The equipment acquisition will allow researchers to conduct work necessary for current grants and obtain critical preliminary data for future competitive grants at state and federal levels, as well as assist in classroom laboratories. Past reviews of the department cited the lack of chambers, so this will be an important addition. The evaluation plan is straightforward, assessing productivity based on use of the units in research and education as well as the number of publications, grant proposals, and collaborative activities initiated. User fees will be implemented to pay for maintenance. The panel recommends setting a daily, weekly, or monthly fee, as experiments with plants typically take place over the longer term. It would also be beneficial to charge enough to help with cost replacement. Investigators have the experience to implement the work plan. The budget is well justified. Full funding is recommended.

| Rank | 15 |
|-------------|--|
| Proposal # | 059ENH-24 (Biological Sciences) |
| Institution | Loyola University New Orleans |
| Title | Incucyte S3-a Kinetic, High Throughput, Live Cell Imaging and Analysis |
| | System for Enhancing Laboratory Research Experiences over Six Courses |
| | and Collaborative Research Projects for Undergraduates |
| Requested | \$199,907 |
| Recommended | \$199,907 |

The proposal seeks the acquisition of a semi-automated, live cell imaging and analysis system (Incucyte S3) to enhance research, education, workforce development, and recruiting at Loyola. Overall, this is an excellent proposal. The goals are well defined, achievable, and aligned with the institution's mission. The project's integration of high-content imaging analysis will significantly enhance 2D and 3D cell culture experiments, addressing existing microscopy limitations and augmenting experimental outcomes. The benefits of the equipment, including ease of use and capacity to allow simultaneous, multiplex experiments, are well articulated. The detailed work plan, organized around three key objectives with specific timelines, showcases a strategic approach to leveraging the equipment's potential across training, research, and academic courses. This plan is poised to enrich the curriculum, facilitate interdisciplinary research, and prepare students for advanced studies or careers in the life sciences, promising a transformative impact on undergraduate research quality and the institution's academic reputation. Sustainability and budget efficiency are thoughtfully addressed, with a clear strategy for the system's maintenance and integration into teaching and research beyond the grant's lifespan. Financial support mechanisms are earmarked for ongoing maintenance, ensuring long-term viability. The budget, meticulously crafted with detailed justifications and quotes, underscores the proposal's strategic financial planning, aimed at maximizing the project's impact and with a clear link to its objectives and anticipated outcomes. Full funding is recommended.

| Rank | 15 |
|-------------|---|
| Proposal # | 070ENH-24 (Engineering B) |
| Institution | Southeastern Louisiana University |
| Title | Enhancing the Prototyping, Manufacturing, and Testing Infrastructure at |
| | Southeastern |
| Requested | \$141,775 |
| Recommended | \$141,775 |

This proposal seeks equipment to create the new Prototyping, Manufacturing, and Testing Lab to support Southeastern's Industrial Technology and Engineering Technology programs. The acquisitions will increase students' hands-on exposure to advanced manufacturing in their education and will provide better-prepared graduates for the advanced manufacturing workforce, which is a growing need in the southeastern Louisiana economy. It will also help the program to recruit excellent students and will place faculty in a more competitive position to win advanced manufacturing research funding. Project objectives are clearly stated. A detailed work plan is presented, including a timeline with milestones and delegated responsibilities. The evaluation plan

includes a wide variety of detailed metrics. The equipment will impact 13 courses and facilitate development for ten faculty members. Maintenance will be supported by the department. The PIs are qualified and experienced. Full funding is recommended.

| Rank | 15 |
|-------------|---|
| Proposal # | 048ENH-24 (Health & Medical Sciences) |
| Institution | Louisiana State University and A&M College |
| Title | Enhancing Tools for Bioenergetic Analyses for Research and Teaching |
| Requested | \$199,798 |
| Recommended | \$199,798 |

LSU A&M's project will establish a state-of-the-art Immuno-Bioenergetics Core Facility, which can provide comprehensive Immuno-Bioenergetics phenotyping along with fertile training opportunities and workforce development for undergraduate and graduate students, as well as postdoctoral fellows. Impairments in Immuno-Bioenergetics contribute to the development of many chronic pathologies that affect Louisianians' health and wellbeing. Addressing these issues will be accomplished by the purchase of the latest technology and allow expansion of research capacity along with undergraduate and graduate programs. Project goals are clearly stated, reasonable and achievable. They are closely related to the mission statement of the academic unit and university. Objectives are well defined and linked to the goals. The project will very positively affect the School of Kinesiology's faculty, students, infrastructure, curriculum, research capability, retention (in both the unit and across the university), the community, and the state. The plan for sustainability involves development of recharge systems to allow fees to be assessed for equipment use and training. These fees will be used to support ongoing maintenance and replenish supplies. The budget is appropriate for maximization of the proposed project's impact. The budget justification clearly shows the relationship of each requested item to the proposed project's impact, goals, and work plan. Full funding is recommended.

| Rank | 15 |
|-------------|--|
| Proposal # | 099ENH-24 (Social Sciences) |
| Institution | University of New Orleans |
| Title | The UNO Heritage Management and Preservation Hub |
| Requested | \$191,358 |
| Recommended | \$147,183 |

The applicants seek support for the creation of the UNO Heritage Management and Preservation Hub, which will allow curation and display of archaeological finds and training of students in archaeology and sociology, as well as history and urban studies, related to artifact preservation. The department already does much of this work, but outsources storage to other facilities, which reduces educational and public access and benefit. The Hub will help rectify this, positively impacting students, faculty, and the public, and providing materials to be utilized in existing courses. The goals are clearly articulated. The work plan is reasonable. This project will impact large numbers of faculty and students across multiple departments. Interdisciplinary projects will be fostered, and students will receive valuable workforce preparation. The potential for

collaboration with community partners and the public is another strength of this proposal. The impact statement comprehensively addresses the research, teaching, and service missions of the unit and specific metrics provided for evaluating success. The sustainability plan is strong, in particular the approach of using curation fees and the applicant's grant funding. The PI has the requisite expertise, background, and opportunities to implement the plan. More justification is needed to support the amount and nature of the equipment and other supplies being requested. It is unclear why curation consultation is necessary given the applicant's expertise. Partial funding of \$147,183 is recommended.

| Rank | 20 |
|-------------|---|
| Proposal # | 067ENH-24 (Biological Sciences) |
| Institution | Nicholls State University |
| Title | Enhancement of Teaching and Research through Microscopy |
| Requested | \$30,816 |
| Recommended | \$30,816 |

This project aims to modernize teaching labs by replacing outdated microscopes with advanced digital imaging equipment, aligning with the department mission. The upgrades will be critical for enhancing educational quality and research capabilities and promise significant benefits for both undergraduate and graduate students by improving image quality and supporting diverse learning outcomes. The goals are realistic and clearly tied to the objectives. The work plan is appropriate and presents a reasonable timeframe. A good sustainability plan is presented. A large number of students will be impacted across a number of classes. Retention will be impacted, as well as workforce development. The project benefits from the extensive teaching experience of the PI and Co-PI, who are primarily responsible for courses that will use the new equipment. An evaluation plan is in place. The budget is pragmatically planned, maximizing existing resources to enhance the teaching setup without unnecessary expense. Overall, the proposal stands out for its potential to significantly impact student learning, teaching effectiveness, and research quality. Full funding is recommended.

| Rank | 20 |
|-------------|---|
| Proposal # | 062ENH-24 (Engineering B) |
| Institution | McNeese State University |
| Title | Enhancing Materials Science Education: Integrating Hands-On Tensile |
| | Testing into the Stress-Strain Curve Curriculum |
| Requested | \$195,915 |
| Recommended | \$195,915 |

This proposal seeks to acquire three tensile test machines to enhance McNeese's Strength of Materials Lab. The equipment is important to tendering effective education and will have significant impacts on pedagogy. The project is clearly in line with departmental and institutional missions. The requested equipment is standard and should be present in every Mechanical Engineering program; adding the three machines will have an outsized impact on the program's ability to provide students with up-to-date, meaningful, hands-on educational experiences that will

serve them in professional life after graduation. The goals are clear and the case for need is compelling. The work plan is straightforward and clearly outlined. A variety of mechanisms for maintenance are described. Several criteria for evaluation are presented for each objective. The budget justification is detailed and persuasive. Full funding is recommended.

| Rank | 20 |
|-------------|--|
| Proposal # | 095ENH-24 (Health & Medical Sciences) |
| Institution | University of Louisiana at Monroe |
| Title | Enhancing Interactive Learning and Practical Application of Clinical |
| | Anatomy in the Occupational Therapy Curriculum |
| Requested | \$156,488 |
| Recommended | \$156,488 |

The applicants plan to acquire several advanced pieces of training equipment, including an Anatomage Table Clinical and a SynDaver, G3 Silicone Anatomy Model. Acquiring this equipment will improve training for graduate students in Occupational Therapy. The goals are very clearly stated and related to the mission statement of the university and program. The objectives are measurable and closely related to the goals. The work plan details tasks, timelines, and responsible parties. The tasks align with the objectives. Training of faculty to use the new equipment is not addressed; it would be helpful to know who will provide this training and their qualifications. The proposed project should positively impact program faculty, students, infrastructure, curriculum, recruitment, and retention. The university, community, and state will benefit from the proposed project and a reasonable sustainability plan is provided. The budget maximizes the impact of the funds and the budget justification explains the relationship of each requested item to the project's impact, goals, and work plan. An institutional cost share is provided, showing the strategic importance of the project. Full funding is recommended.

| Rank | 20 |
|-------------|--|
| Proposal # | 089ENH-24 (Social Sciences) |
| Institution | University of Louisiana at Lafayette |
| Title | Enhancement to Support Multidisciplinary Research on Emotion and Virtual |
| | Reality |
| Requested | \$106,925 |
| Recommended | \$70,086 |

This project will establish a virtual reality (VR) lab necessary for training clinicians in ULL's Department of Psychology. It will also be utilized by the computing and education departments. The lab will serve training, educational, and research purposes, allowing the department to keep pace with best practices in clinical training. Project goals are clearly organized and linked to concrete outcomes. The objectives align with the department's mission to empower students to think critically and scientifically about behavior. This application has the potential to improve both research and educational in the Department of Psychology and broader institutional community. The equipment will provide faculty and students the opportunity to gain exposure to VR to better understand psychology concepts and conduct research, building skills in using this type of

technology that they can leverage in their future work. Specific metrics for determining project success are identified. The data to be collected for evaluation appear adequate and align with the goals of the project. The applicants are well suited to carry out the tasks outlined in the project. The budget and work plan are not fully aligned. Two units are requested, but the number is not fully justified. In addition, outreach was not discussed as an aim of this project and budget items related to mobile equipment did not seem necessary for the goals outlined. Partial funding of \$70.086 is recommended.

| Rank | 24 |
|-------------|---|
| Proposal # | 097ENH-24 (Social Sciences) |
| Institution | University of Louisiana at Monroe |
| Title | Forget-Me-Not: An Apprenticeship and Mentoring Program in Dementia- |
| | Care |
| Requested | \$30,950 |
| Recommended | \$30,950 |

This proposal seeks support for a pilot program with the primary goal of providing workforce training to a new generation of undergraduate students in dementia care through paid apprenticeships and a mentoring program. With a rise in the age of the general population, training undergraduates in dementia care is a critical task. As a pilot program, this initiative has the potential to create and grow meaningful university-community partnerships and opportunities for students. It is easy to see the program becoming a core part of the student experience. The goals strong and achievable, and the project is well designed. The program is directly relevant to the mission of the academic unit, the ULM Gerontology Program. The work plan is very clearly stated, with a specific, reasonable and appropriate timeline. The PI is the only listed team member, but the budget includes support for a graduate assistant who will presumably assist the PI in developing and implementing workshops and conducting assessments. The proposal does an excellent job tying specific activities to the broader goals of the project. The impact of the experience on the student cohort is potentially quite profound, as it will provide valuable professional development and hands-on experience. It will help them to form networks of professional connections within the field of geriatrics and will directly prepare them for employment post-graduation. The assessment plan is clear and well designed to evaluate the degree to which project goals have been met. Sustainability of the project depends on the PI's ability to solicit support from industry partners based on the outcomes of a successful pilot program. Given the relatively low cost of the apprenticeship opportunities, this seems highly plausible. The PI is extremely well qualified to carry out this work, with a history of successful research, grant activity, and administrative experience. The budget is reasonable and efficient. Full funding is recommended.

Appendix A

Proposal Lists

| D 1// | DIN | N. V. Ludinius Buring Tide | | Primary | | Amount Requested | | | | |
|------------|-----------------------------|---|---|-----------|-----------|------------------|-----------|-----------|-----------|-------------|
| Proposal # | PI Name | Institution | Project Title | Category | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
| 001ENH-24 | Dr. Mohammed Hussain | Dillard University | Finance and Economics Computer Lab | Education | \$56,978 | \$0 | \$0 | \$0 | \$0 | \$1,979,813 |
| 002ENH-24 | Dr. Kayanush Aryana | Louisiana State University Agricultural Center | Enhancing research and teaching on healthier, safer and novel foods in Louisiana. | Research | \$230,250 | \$224,835 | \$237,835 | \$237,855 | \$69,167 | \$2,203,310 |
| 003ENH-24 | Prof. Morgan Kelly | Louisiana State University and A & M College | A Comprehensive Enhancement to Ensure the Continued Success of the LSU Genomics Facility | Research | \$299,422 | \$148,114 | \$198,000 | \$121,279 | \$156,078 | \$2,031,187 |
| 004ENH-24 | Prof. J Leichman | Louisiana State University and A & M College | Digital Humanities for Twenty-First Century French Studies | Research | \$80,689 | \$106,001 | \$93,785 | \$0 | \$0 | \$1,773,913 |
| 005ENH-24 | Prof. Michelle Osborn | Louisiana State University and A & M College | Comparative and Functional Morphological Sciences Program | Education | \$249,155 | \$177,732 | \$151,932 | \$124,500 | \$124,500 | \$2,293,726 |
| 006ENH-24 | Dr. Dandina Rao | Louisiana State University and A & M College | Experimental Research Capability Enhancement at LSU's Engineering and Geology Departments | Research | \$296,200 | \$191,250 | \$178,169 | \$0 | \$0 | \$2,407,957 |
| 007ENH-24 | | Louisiana State University Health Sciences Center - New Orleans | A healthier Louisiana population with a workforce addressing the structural and emergent issues affecting public health | Education | \$277,496 | \$156,948 | \$121,948 | \$121,948 | \$121,948 | \$2,434,874 |
| 008ENH-24 | | Louisiana State University Health Sciences Center - New Orleans | BayouBones: Enhancing Medical Education for Louisiana | Research | \$287,010 | \$199,010 | \$172,010 | \$164,510 | \$119,510 | \$2,634,586 |
| 009ENH-24 | Prof. Arden Moore | Louisiana Tech University | Comprehensive Enhancement of Mechanical Engineering Research at Louisiana Tech University | Research | \$179,760 | \$182,863 | \$169,688 | \$160,225 | \$0 | \$1,901,276 |
| 010ENH-24 | Dr. Laurie Earls | Loyola University New Orleans | Improving microscopy resources at Loyola University New Orleans to create high-impact training opportunities for disadvantaged undergraduate students | Education | \$294,000 | \$194,000 | \$194,000 | \$142,000 | \$176,000 | \$1,617,918 |
| 011ENH-24 | Dr. Qi Guo | McNeese State University | Empowering Engineering Education: A Computer-Equipped Classroom for Digital Learning Transformation | Education | \$208,740 | \$0 | \$0 | \$0 | \$0 | \$1,617,918 |
| 012ENH-24 | Mr. James Cox | Northwestern State University | Comprehensive Enhancement of Northwester State Universities Remote Systems Science and Technology Program | Education | \$298,978 | \$110,200 | \$0 | \$0 | \$0 | \$1,617,918 |
| 013ENH-24 | Dr. Tara Tietjen-Smith | Northwestern State University | Creating a Pipeline to Success in Health Sciences Education & Research: Engagement and Empowerment Initiative [EEI] | Education | \$171,064 | \$172,286 | \$180,243 | \$159,956 | \$173,982 | \$1,617,918 |
| 014ENH-24 | Dr. Justin Anderson | Southeastern Louisiana University | Revitalizing Southeastern's Microbiology and Plant Science Capabilities | Education | \$260,300 | \$142,000 | \$0 | \$0 | \$0 | \$1,617,918 |
| 015ENH-24 | Dr. Yolanda Campbell | Southern University and A&M College - Baton Rouge | Meeting the Moment: Revitalizing Curriculum, Facilities, and Instruction for Southern Universitys Department of Mass Communication | Education | \$308,410 | \$302,864 | \$302,864 | \$0 | \$0 | \$1,617,918 |
| 016ENH-24 | Dr. Lisa Mims-Devezin | Southern University at New Orleans | ENHANCEMENT OF COMPUTER LABORATORY FACILITY FOR INTERDISCIPLINARY INSTRUCTION AT SOUTHERN UNIVERSITY AT NEW ORLEANS [SUNO] | Education | \$199,999 | \$0 | \$0 | \$0 | \$0 | \$1,617,918 |
| 017ENH-24 | Prof. Casey Beck | Tulane University | Enhancing Community-Engaged Media Production in the Tulane University Digital Media Practices Program | Education | \$299,821 | \$198,720 | \$199,900 | \$148,785 | \$123,750 | \$1,617,918 |
| 018ENH-24 | Prof. Stryder Meadows | Tulane University | Fundamental Enhancement of the Tulane Transgenic Core Facility | Research | \$295,302 | \$72,738 | \$0 | \$0 | \$0 | \$1,617,918 |
| 019ENH-24 | Prof. Charles Stoecker | Tulane University Health Sciences Center | Big Data Healthcare Analytics Infrastructure | Research | \$274,000 | \$181,000 | \$30,000 | \$0 | \$0 | \$1,617,918 |
| 020ENH-24 | Dr. Alan Barhorst | University of Louisiana at Lafayette | Louisiana Center for Research and Education in Advanced Manufacturing | Education | \$300,000 | \$200,000 | \$200,000 | \$100,000 | \$200,000 | \$1,617,918 |
| 021ENH-24 | Dr. Mohammad Khattak | University of Louisiana at Lafayette | Enhancement of Materials Multiscale Mechanical Testing Capacity of College of Engineering | Research | \$296,077 | \$185,682 | \$171,221 | \$180,530 | \$166,444 | \$1,617,918 |
| 022ENH-24 | Prof. Geoffrey Marschall | University of Louisiana at Lafayette | Developing Virtual Media Production at the University of Louisiana at Lafayette | Education | \$299,996 | \$199,980 | \$200,000 | \$199,983 | \$99,978 | \$1,617,918 |
| 023ENH-24 | Dr. John Horne | University of New Orleans | DCC-UNO Partnership to Enhance Transfer Student Success in Biology | Education | \$213,509 | \$186,051 | \$57,792 | \$44,628 | \$51,386 | \$1,617,918 |
| 024ENH-24 | Dr. Paul Schilling | University of New Orleans | 3D Studio: Interdisciplinary Design Education at UNO | Education | \$295,790 | \$197,742 | \$196,248 | \$199,494 | \$0 | \$1,617,918 |
| 025ENH-24 | Dr. Elizabeth Rousselle | Xavier University of Louisiana | Immersive and Authentic Materials for Student Cultural Awareness and Proficiency in Chinese, French, and Spanish at Xavier University of Louisiana | Education | \$287,745 | \$183,745 | \$183,745 | \$162,045 | \$140,345 | \$1,617,918 |

| Total Number of Proposals Submitted | 25 |
|---------------------------------------|--------------|
| Total Funds Requested for First Year | \$6,260,691 |
| Total Funds Requested for Second Year | \$3,913,761 |
| Total Funds Requested for Third Year | \$3,239,380 |
| Total Funds Requested for Fourth Year | \$2,267,738 |
| Total Funds Requested for Fifth Year | \$1,723,088 |
| Total Funds Requested | \$17.404.658 |

| Proposal Number | PI Name | Institution | Project Title | Primary Category | Amount Requested |
|--------------------|-----------------------------|---|--|---------------------|---------------------|
| 026ENH-24 | Dr. Shaniece Bickham | Dillard University | Broadcast Studio Upgrades that Prepare Diverse Students for Competitive Opportunities | Education | \$85,410 |
| 027ENH-24 | Dr. Ruby Broadway | Dillard University | Enhancement of the Biology Curriculum: Integration of Climate Change, Global Warming, the Greenhouse Effect and Saltwater Intrusion into the biology curriculum. | Education | \$46,164 |
| 028ENH-24 | Dr. Steve Buddington | Dillard University | Enhancement of Undergraduate Access to Technology, Teaching, and Research in the School of Social Sciences | Education | \$42,638 |
| 029ENH-24 | Mrs. Aimee Howard | Franciscan Missionaries of Our Lady University | Enhancing Education of Entry Level Physical Therapists Using Musculoskeletal Ultrasound | Education | \$143,800 |
| 030ENH-24 | Prof. Daphne Moore | Franciscan Missionaries of Our Lady University | Enhancing Learning Opportunities in the Biology Program at Franciscan Missionaries of Our Lady University through the Addition of Laboratory Equipment | Education | \$103,466 |
| 031ENH-24 | Dr. Hector Douglas | Grambling State University | Analytical Instrumentation for Biological Sciences | Research | \$191,227 |
| 032ENH-24 | Prof. Haeyeon Yang | Grambling State University | Nanoscale imaging for STEM research and careers | Research | \$148,496 |
| 033ENH-24 | Dr. Elizabeth Christian | Louisiana Christian University | Digital Enhancement of Media Platforms for High-Level College instruction | Education | \$200,000 |
| 034ENH-24 | Dr. Shaina Goudeau | Louisiana Christian University | Enhancement of the Physical Therapist Assistant Program Through Implementation of Updated Classroom and Laboratories | Education | \$178,685 |
| 035ENH-24 | Dr. Tomekia Luckett | Louisiana Christian University | Increasing the CENLA workforce through improved technology | Workforce | \$200,000 |
| 036ENH-24 | Dr. Juanita Moorman | Louisiana Christian University | Social Work Research Center | Research | \$47,137 |
| 037ENH-24 | Dr. Wade Warren | Louisiana Christian University | The Anatomage Table | Education | \$100,700 |
| 038ENH-24 | Dr. Yan Chen | Louisiana State University Agricultural Center | Enhancing Undergraduate and Graduate Student Learning in Plant Sciences with Upgraded Analytical Instrumentation | Education | \$199,400 |
| 039ENH-24 | Prof. Gillian Eggleston | Louisiana State University Agricultural Center | Enhancing the Central Analytical Laboratory and Audubon Laboratory Services to Serve the Louisiana Sugar Industry | Research | \$50,000 |
| 040ENH-24 | Prof. Roberto Fritsche Neto | Louisiana State University Agricultural Center | Developing image-based prediction models for a more profitable and sustainable rice disease management in Louisiana | Research | \$198,795 |
| 041ENH-24 | Dr. Joan King | Louisiana State University Agricultural Center | Updating DSC instrumentation for teaching, research and outreach | Research | \$58,160 |
| 042ENH-24 | Prof. Ely Oliveira Garcia | Louisiana State University Agricultural Center | Acquisition of a Keyence BZ-X800E Microscope used in Research and Teaching at Louisiana State University Agricultural Center | Education | \$191,349 |
| 043ENH-24 | Dr. Jonathan Richards | Louisiana State University Agricultural Center | Critical infrastructure for agricultural science: acquisition of plant growth and dew chambers for improved plant pathology research and education | Research | \$197,440 |

| Proposal Number | PI Name Institution Project little | | Project Title | Primary Category | Amount Requested |
|--------------------|------------------------------------|---|---|---------------------|---------------------|
| 044ENH-24 | Dr. Constantine Simintiras | Louisiana State University Agricultural Center | Confocal microscope procurement for high-resolution live-cell imaging | Research | \$200,000 |
| 045ENH-24 | Dr. James Wise | Louisiana State University Agricultural Center | Environmental Pollutants Disrupts the Glycolyotic and Mitochondiral Functions of Mammalian Lung Cells | Research | \$199,989 |
| 046ENH-24 | Dr. Corina Barbalata | Louisiana State University and A & M College | A reconfigurable cyber-physical eco-system for the T-shape education framework | Education | \$124,951 |
| 047ENH-24 | Dr. Melissa Beck | Louisiana State University and A & M College | Virtual Reality for Education, Workforce, and Citizen Scientists | Research | \$47,900 |
| 048ENH-24 | Dr. Brian Irving | Louisiana State University and A & M College | Enhancing Tools for Bioenergetic Analyses for Research and Teaching | Research | \$199,798 |
| 049ENH-24 | Dr. Sibei Xia | Louisiana State University and A & M College | Enhance Research and Small Business Entrepreneurship in Wearable Technology with the Support of a Thermal and Sweating Manikin | Education | \$200,000 |
| 050ENH-24 | Mrs. Jessica Thacker | Louisiana State University at Alexandria | LSUA Content Creation Lab | Education | \$110,610 |
| 051ENH-24 | Dr. Rakitha Beminiwattha | Louisiana Tech University | Enhancing Research Infrastructure at the Center for Applied Physics Studies [CAPS]: Acquisition of Equipment for Quantifying Light Yields and Fluorescence Lifetimes | Research | \$67,357 |
| 052ENH-24 | Dr. Simone Camel | Louisiana Tech University | Nutrition Measurement Laboratory Enhancement | Research | \$47,760 |
| 053ENH-24 | Dr. Kelly Crittenden | Louisiana Tech University | Advancing Research in Additive Fabrication through Material and Equipment Investments | Education | \$170,000 |
| 054ENH-24 | Ms. Meredith Nichols | Louisiana Tech University | Creating a StudentFocused Go media Presentation Studio | Education | \$72,197 |
| 055ENH-24 | Dr. Alison Reichter | Louisiana Tech University | Enhancing Student Experiences and Skill Development through the Establishment of a Clinical Health Teaching Laboratory in the Department of Kinesiology | Education | \$198,244 |
| 056ENH-24 | Dr. John Shaw | Louisiana Tech University | Enhancement Proposal for the Louisiana Tech University Astronomical Observatory | Education | \$56,857 |
| 057ENH-24 | Dr. Lingxiao Wang | Louisiana Tech University | A Modernization Initiative on Automatic Control Laboratory at Louisiana Tech University | Education | \$56,978 |
| 058ENH-24 | Prof. Shengnian Wang | Louisiana Tech University | Enhancing Biomedical Research and Education with an Ultracentrifugation System | Research | \$122,632 |
| 059ENH-24 | Dr. Amrita Datta | Loyola University New Orleans | Incucyte S3-a kinetic, high throughput, live cell imaging and analysis system for enhancing laboratory research experiences over six courses and collaborative research projects for undergraduates | Research | \$199,907 |
| 060ENH-24 | Ms. Tara Duck | McNeese State University | Enhancement of the Human Anatomy and Physiology Laboratories to Encourage Collaborative Learning | Education | \$73,553 |
| 061ENH-24 | Dr. Qi Guo | McNeese State University | Elevating Hands-On Learning in Engineering Education: Empowering Students with Refrigeration Cycle Trainers | Education | \$179,052 |

| Proposal Number | PI Name | Institution | Project Title | Primary Category | Amount Requested |
|--------------------|-------------------------|---|--|---------------------|---------------------|
| 062ENH-24 | Dr. Qi Guo | McNeese State University | Enhancing Materials Science Education: Integrating Hands-On Tensile Testing into the Stress-Strain Curve Curriculum | Education | \$195,915 |
| 063ENH-24 | Dr. Sonya Hidalgo | McNeese State University | Development of a Comprehensive Simulation Lab to Enhance Medical Laboratory Science Education at McNeese State University | Education | \$59,742 |
| 064ENH-24 | Dr. Joanna Thompson | McNeese State University | Interdisciplinary Enhancement in Behavioral Health Education: Advanced Technology in Counseling and Applied Behavior Analysis | Education | \$194,900 |
| 065ENH-24 | Dr. Alaina Daigle | Nicholls State University | Telehealth and the Future of Healthcare Using Simulation Technology | Education | \$29,000 |
| 066ENH-24 | Dr. Ali Reza Edrisi | Nicholls State University | Industrial Fluid Process Automation Laboratory | Education | \$50,531 |
| 067ENH-24 | Dr. S Robichaux | Nicholls State University | Enhancement of Teaching and Research Through Microscopy | Education | \$30,816 |
| 068ENH-24 | Dr. Md Shahriar Hossain | Northwestern State University | Enhancing Industrial Robotics Education in Engineering Technology Degree Programs | Education | \$38,600 |
| 069ENH-24 | Dr. Nabin Sapkota | Northwestern State University | Integrating CAD and CAM Technologies to Enhance | | \$52,890 |
| 070ENH-24 | Dr. Mohammad Ahmed | Southeastern Louisiana University | Enhancing the Prototyping, Manufacturing, and Testing Infrastructure at Southeastern | Education | \$141,775 |
| 071ENH-24 | Dr. Ann Carruth | Southeastern Louisiana University | Virtual and ICU Nursing Careers Through Advanced Learning Simulation [VITALS] | Education | \$200,000 |
| 072ENH-24 | Dr. Deatrice Green | Southeastern Louisiana University | Revolutionizing Graduate Counseling: A Simulation Clinic and Technology-Enhanced Program for Workforce Development | Education | \$88,124 |
| 073ENH-24 | Dr. David Hanson | Southeastern Louisiana University | Laptops for Student Use in the Southeastern Writing Center | Education | \$86,929 |
| 074ENH-24 | Dr. Holly Kihm | Southeastern Louisiana University | The Advancement of a Medical and Therapeutic Play Simulation Laboratory to Enhance Students Therapeutic Communication Skills | Education | \$114,919 |
| 075ENH-24 | Dr. Jerry Parker | Southeastern Louisiana University Advancing and Innovating World Language Study at Southeastern to Meet 21st Century Needs in the Job Market | | Education | \$82,607 |
| 076ENH-24 | Dr. Bovorn Sirikul | Southeastern Louisiana University | Equipment and technology upgrades to enhance student career preparation in health and kinesiology-related fields | Education | \$109,012 |
| 077ENH-24 | Dr. kebede beshera | Southern University and A&M College - Baton Rouge | Technology Enhancement for Human Anatomy and Physiology Course Instruction at Southern University and A&M College [SUBR] | Education | \$119,516 |
| 078ENH-24 | Dr. Mary Clinkenbeard | Southern University and A&M College - Baton Rouge | Humanities for the 21st Century: Creating a Writing Makerspace and Library in the English and Philosophy Department at Southern University | Education | \$124,765 |

| Proposal Number | PI Name | Institution | Project Title | Primary Category | Amount Requested |
|--------------------|--------------------------|--|---|---------------------|---------------------|
| 079ENH-24 | Dr. jarrett landor-ngemi | Southern University and A&M College - Baton Rouge | Acquisition of High-Performance Computers and Large Storage Instruments to Enhance Research and Education in Big Data Science and Artificial Intelligence: The Nelson Mandela College of Government and Social Sciences SMART Technology Lab | Research | \$102,225 |
| 080ENH-24 | Dr. Harold Mellieon, Jr. | Southern University and A&M College - Baton Rouge | jAG?s of the Future: Enhancing student learning and engagement beyond the classroom | Education | \$182,500 |
| 081ENH-24 | Dr. Jung-Im Seo | Southern University and A&M College - Baton Rouge | Enhancement of Learning Quality and Students' Design Hands-on Experiences through Computer Technological Support in Fashion Merchandising Design and Textiles | Education | \$173,475 |
| 082ENH-24 | Dr. Craig Flanagan | Tulane University | Integration of Advanced Human Movement Analysis Equipment for Innovative Multidisciplinary Education | Education | \$196,668 |
| 083ENH-24 | Prof. Scott Grayson | Tulane University | Improving the gel permeation chromatography suite with triple detection | Research | \$143,947 |
| 084ENH-24 | Prof. Jun-yuan Ji | Tulane University Health Sciences Center | Context-specific functions of CDK8 | Research | \$73,099 |
| 085ENH-24 | Dr. Alan Barhorst | University of Louisiana at Lafayette | CNC Mill for UL Lafayette Mechanical Engineering and Engineering Technology Depts. | Education | \$200,000 |
| 086ENH-24 | Dr. Tanvir Faisal | University of Louisiana at Lafayette | Advancing mechanical testing and materials characterization in bioengineering/biomedical research and education | Research | \$165,550 |
| 087ENH-24 | Dr. Seonhee Jang | University of Louisiana at Lafayette | Acquisition of nanoindentation to enhance engineering research and education | Research | \$164,500 |
| 088ENH-24 | Dr. Mohammad Khattak | University of Louisiana at Lafayette | Advanced Rheometer System to Support Materials Education and Research | Education | \$79,825 |
| 089ENH-24 | Prof. Hung-Chu Lin | University of Louisiana at Lafayette | Enhancement to Support Multidisciplinary Research on Emotion and Virtual Reality | Research | \$106,925 |
| 090ENH-24 | Prof. Sen Liu | University of Louisiana at Lafayette | Robotic Laser Directed Energy Deposition System at the University of Louisiana at Lafayette | Research | \$195,281 |
| 091ENH-24 | Dr. Kelly Robinson | University of Louisiana at Lafayette | Modernization of the UL Lafayette seawater system | Research | \$61,434 |
| 092ENH-24 | Dr. Scott Sittig | University of Louisiana at Lafayette | Development of a Digital Health Innovation and Learning Lab [DHILL] | Education | \$36,650 |
| 093ENH-24 | Prof. Karen Smith | University of Louisiana at Lafayette | Enhancement of Physiology Courses with Cellular Respiration Equipment | Education | \$68,550 |
| 094ENH-24 | Dr. Ashley Barbo | University of Louisiana at Monroe | Simulation Enhancement for Health Professions Education at The University of Louisiana at Monroe | Education | \$137,835 |
| 095ENH-24 | Dr. Patti Calk | University of Louisiana at Monroe | Enhancing Interactive Learning and Practical Application of | Education | \$156,488 |
| 096ENH-24 | Dr. Rebecca Hamm | University of Louisiana at Monroe | Equipment to Enhance Student Learning in Radiologic | Education | \$162,400 |
| 097ENH-24 | Dr. Anita Sharma | University of Louisiana at Monroe | Forget-Me-Not: An Apprenticeship and Mentoring Program in Dementia-Care | Education | \$30,950 |

| Proposal Number | PI Name | Institution | Project Title | Primary Category | Amount Requested |
|--------------------|---------------------|---------------------------|--|---------------------|---------------------|
| 098ENH-24 | Dr. Marc Bonis | University of New Orleans | iversity of New Orleans Enhanced Health Science Laboratory | | \$158,083 |
| 099ENH-24 | Dr. D. Gray | University of New Orleans | The UNO Heritage Management and Preservation Hub | Education | \$191,358 |
| 100ENH-24 | Dr. Randy Kearns | University of New Orleans | Healthcare Management Departmental Enhancement Project | Education | \$181,385 |
| 101ENH-24 | Dr. Shearon Roberts | Xavier University | Advancing Education in Health and Science Communication to Address Disparities | Education | \$197,513 |

| Total Proposals Submitted | 76 |
|---------------------------|-------------|
| Total Funds Requested | \$9,597,334 |

Appendix B

Departmental Enhancement Rating Form

Departmental Enhancement Rating Form

| Number: | Discipline: |
|--|--|
| Type: | |
| PI: | Institution: |
| Title: | |
| First-Year Request: | |
| | ted, reasonable, achievable, and related to the mission degree are the objectives measurable and related to the |
| delineation of which team member is res | lish a compelling timeline for grant activities with a clear sponsible for each task? To what degree does the work plan achieving the project goals and objectives? |
| capacity, recruitment, retention, etc. (as | ic unit's faculty, students, infrastructure, curriculum, research well as related academic units, the institution overall, the local To what degree is this impact related to the unit's near- and long-atement? |
| Evaluation (10 Points) | evaluating the impact of the project with criteria based on |

| Sustainability (10 Points) -To what degree are the go grant? To what degree are supplies, as well as funds d | als, impact, maintenance | e or sustainab | ility plans establishe | |
|--|--------------------------|----------------|------------------------|---|
| Investigators (10 Points) -To what degree do the tear | m members | appear capab | ole of implementing t | he work plan? |
| Budget 10 Points -To what degree is the budget justification clear impact, goals, and work plants. | arly explain | | | s's impact? To what degree does all request to the proposal's |
| Total Score (out of 100) _ | | - | | |
| | OVE | RALL RATI | NG OF PROPOSA | L |
| POOR | FAIR | GOOD | VERY GOOD | EXCELLENT |
| Total Funding Recommend | led: | | | |
| Year 1: Year 2: Year 3: | | | | |
| Funding Stipulations (if an | y): | | | |