LOUISIANA BOARD OF REGENTS
BOARD OF REGENTS SUPPORT FUND

REVIEW OF COMPETITIVE PROPOSALS SUBMITTED FOR FUNDING CONSIDERATION IN THE DEPARTMENTAL ENHANCEMENT PROGRAM

FY 2019-20 COMPETITION

March 2020

REPORT OF THE FINAL PANEL
BOARD OF REGENTS SUPPORT FUND
DEPARTMENTAL ENHANCEMENT PROGRAM
FY 2019-20

BACKGROUND INFORMATION

One hundred seventy-three (173) proposals requesting a total of $22,613,830 in first-year funds were submitted for funding consideration in fiscal year (FY) 2019-20 to the Departmental Enhancement Program of the Board of Regents Support Fund (BoRSF). Nine disciplines were eligible, including Agricultural Sciences, Astronomy, Biological Sciences, Health & Medical Sciences, Humanities, Engineering B, Physics, Social Sciences, and Targeted Workforce.

As described in the 2019-20 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. Each individual academic unit could submit only one (1) Comprehensive Enhancement proposal; there were no restrictions on the number of Targeted Enhancement proposals a unit could submit. 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 or its equivalent, was required to approve the selection of Comprehensive Enhancement submissions for academic units, as well as approve and rank in order of priority Targeted Enhancement submissions from the submitting academic unit. Overall, twenty-six (26) Comprehensive Enhancement proposals and one hundred forty-seven (147) Targeted Enhancement proposals were submitted. The 2019-20 RFP noted that only one to three Comprehensive Enhancement proposals could be selected for funding due to limited monies available and significant long-term commitment of dollars required.

THE REVIEW PROCESS

The one hundred seventy-three (173) proposals submitted were reviewed by discipline-based panels. The chairs of discipline-based review panels represented their discipline on the final panel and submitted written reports, including a priority ranking of highly recommended proposals, to the final panel chair, Dr. Jeffrey Dean, Head of the Department of Biochemistry, Molecular Biology, Entomology & Plant Pathology at Mississippi State University.

After careful consideration of all panel reports during March 2020, the final panel chair highly recommended three (3) Comprehensive Enhancement proposals for a total of $304,317 in first-year funds, and twenty-one (21) Targeted Enhancement proposals for a total of $2,155,791 in

first-year funds, based on monies projected to be available. Overall, twenty-four (24) Departmental Enhancement proposals are recommended for total support of $2,460,108 in first-year funds. For the three (3) Comprehensive Enhancement proposals highly recommended for funding, a total of $1,407,461was recommended over five years.

Three (3) Targeted Enhancement proposals were ranked Priority II and recommended for funding if additional dollars become available.

Table I of this report contains the rank-order list of Comprehensive Enhancement proposals highly recommended for funding. Table II contains the rank-order list of Targeted Enhancement proposals highly recommended for funding. Table III contains the rank-order list of Targeted Enhancement proposals recommended for funding if additional dollars become available. Table IV lists the final panel chair and contributing consultants of the nine (9) discipline-based review panels. These are followed by assessments of each of the recommended proposals, presented in rank order. Recommended Comprehensive Enhancement proposals appear first, followed by recommended Priority I and II Targeted Enhancement proposals. Appendix A contains a list of all Departmental Enhancement proposals submitted; Appendix B presents the rating form used by all consultants to evaluate proposals.

Table I

Comprehensive Enhancement: Highly Recommended for Funding

Rank	Proposal #	Institution	Discipline	1st-Yr. Request	1st-Yr. Recommendation	Total Request	Total Recommendation
1	017ENH-20	Tulane HSC	Health & Medical	$51,347	$51,347	$235,159	$235,159
2	012ENH-20	LSU Alexandria	Biological Sciences	$136,450	$100,000	$443,648	$432,033
3	001ENH-20	Delgado CC	Humanities	$152,970	$152,970	$740,269	$740,269
Total				$340,767	$304,317	$1,419,076	$1,407,461

Table II
Targeted Enhancement: Highly Recommended for Funding

Rank	Proposal #	Institution	Discipline	1st-Yr. Request	1st-Yr. Recommendation
1	063ENH-20	LSUHSC-NO	Health & Medical	$130,006	$130,006
2	157ENH-20	ULL	Biological Sciences	$85,554	$85,554
3	158ENH-20	ULL	Physics	$191,035	$191,035
4	048ENH-20	LSU Ag Center	Agricultural Sciences	$76,495	$76,495
5	083ENH-20	Louisiana Tech	Physics	$59,105	$59,105
6	124ENH-20	Southern A&M	Agricultural Sciences	$139,500	$139,500
7	164ENH-20	ULM	Health & Medical	$94,769	$94,769
8	170ENH-20	UNO	Engineering B	$141,843	$141,843
9	109ENH-20	Northwestern State	Biological Sciences	$68,578	$68,578
10	045ENH-20	LSU Ag Center	Agricultural Sciences	$200,000	$200,000
11	143ENH-20	Tulane	Social Sciences	$117,865	$117,865
12	138ENH-20	SUSLA	Humanities	$92,778	$92,778
13	028ENH-20	BRCC	Targeted Workforce	$146,108	$146,108
14	032ENH-20	Centenary	Physics	$14,443	$14,443
15	152ENH-20	ULL	Engineering B	$85,303	$85,303
16	116ENH-20	SLU	Social Sciences	$75,460	$75,460
17	137ENH-20	SUSLA	Targeted Workforce	$112,778	$98,394
18	041ENH-20	Louisiana College	Humanities	$87,330	$87,330
19	079ENH-20	Louisiana Tech	Engineering B	$52,730	$52,730
20	145ENH-20	Tulane	Social Sciences	$149,383	$149,383
21	067ENH-20	LSU Shreveport	Biological Sciences	$49,112	$49,112
Total				$2,170,175	$2,155,791

Table III

Targeted Enhancement: Recommended for Funding if Funding Becomes Available

Rank	Proposal #	Institution	Discipline	1st-Yr. Request	1st-Yr. Recommendation
22	151ENH-20	Tulane HSC	Health & Medical	$200,000	$200,000
23	040ENH-20	Louisiana College	Health & Medical	$17,107	$17,107
24	057ENH-20	LSU A&M	Biological Sciences	$162,088	$162,088
Total				$379,195	$379,195

Table IV
FY 2019-20 Departmental Enhancement Review Panelists

Name	Institution	Specialty
Final Panel Chair		
Jeffrey Dean	Mississippi State University	Biochemistry
Agricultural Sciences		
Joseph Quansah, Chair	Tuskegee University	Agricultural Engineering
Tracy Dougher	Montana State University	Crop Management
Biological Sciences		
Anna Allen, Chair	Howard University	Molecular/Genetics
Lenore Martin	University of Rhode Island	Biochemistry
Eain Murphy	Upstate Medical University	Microbiology/Immunology
Engineering B		
Anne Spence, Chair	Baylor University	Mechanical Engineering
Guiping Hu	Iowa State University	Industrial Engineering
Chaoying Ni	University of Delaware	Materials Engineering
Health & Medical Sciences		
Gerry Sonnenfeld, Chair	University of Rhode Island	Toxicology
Doris Benbrook	University of Oklahoma Health Sciences Center	Obstetrics
Bronwynne Evans	Arizona State University	Nursing
Elizabeth Gazza	University of North Carolina Wilmington	Nursing
Humanities		
Dawn Bratsch-Prince, Chair	Iowa State University	Foreign Languages
Samantha Cantrell	Middle Tennessee State University	Language Arts
Physics		
Solomon Bililign, Chair	North Carolina A&T University	Experimental/Theoretical Atomic
Pradip Bandyopadhyay	Penn State Berks	Experimental Physics
Social Sciences		
Cheryl Armstead, Chair	University of South Carolina	Psychology
Yolanda Bogan	Florida A&M University	Psychology
Douglas Ferguson	University of Charleston	Mass Communications
Thomas Mascaro	Bowling Green University	Mass Communications
Young-A Lee	Auburn University	Apparel Design
Maureen MacGillivray	Central Michigan University	Apparel Design
Michael Glascock	University of Missouri	Archaeology
Kevin Nolan	Ball State University	Archaeology
Targeted Workforce		
Larry Warford, Chair	League for Innovation in the Community College	Workforce Development
Russell Hamm	Individual Consultant	Workforce Development

FY 2019-20 Departmental Enhancement
Comprehensive Enhancement Proposals Highly Recommended for Funding

Ranking: #1 in Comprehensive Enhancement
Proposal #: 017ENH-20
Institution: Tulane University Health Sciences Center
Discipline: Health & Medical Sciences
Title: Broadening Experiences in Scientific Training for STEM Graduate Students
Total Requested: $235,159 (Y1: $51,347; Y2: $46,772; Y3: $44,400; Y4: $45,600; Y5: $47,040)
Total Recommended: $235,159 (Y1: $51,347; Y2: $46,772; Y3: $44,400; Y4: $45,600; Y5: $47,040)

The proposed project will develop a comprehensive program to enhance training opportunities for more than 300 MS and PhD students in the Biomedical Sciences graduate program, preparing students for multiple career types. The program includes the integration of employment issues into the curriculum, the creation of a career development program, and transfer of successful project components to other Tulane graduate programs. This proposed program is closely aligned to the institutional mission statement, and specifically targets the top priorities of the Biomedical Sciences graduate program. The proposal is well written, well researched and closely aligned with the goals of the Departmental Enhancement program.

The goals are clearly stated, reasonable and achievable. The objectives are measurable. Every detail of planning and execution is addressed. Each goal has a corresponding execution and evaluation plan with feedback loops. University-wide and statewide connections and resources are accessed, fostered and strengthened. Team member roles are clearly described. Existing departmental resources are well utilized. The work plan and timeline are detailed and logically sequenced, with flexibility for adaptation as the project is implemented. The impact on students is broad relative to graduate student numbers. Resources to maximize sustainability are demonstrated. The team members have the experience and preparation necessary to execute the project. Extensive funds are allotted for measurement tools, which are essential to the study.

If published, the results of this project could be applied to graduate programs across Louisiana, and even nationally. The proposed budget is limited in size and will make excellent use of BoRSF resources; full funding is recommended. The panel further recommends that TUHSC provide an assurance that the principal investigator will be given sufficient time, including release from current duties, to carry out the proposed project as planned.

Ranking: **#2 in Comprehensive Enhancement**
Proposal #: **012ENH-20**
Institution: **Louisiana State University at Alexandria**
Discipline: **Biological Sciences**
Title: **Enhancing the Biology Curriculum at LSUA through Undergraduate Research**
Total Requested: **$443,648 (Y1: $136,450; Y2: $28,668; Y3: $174,530; Y4: $52,000; Y5: $52,000)**
Total Recommended: **$432,033 (Y1: $100,000; Y2: $65,118; Y3: $162,915; Y4: $52,000; Y5: $52,000)**

This proposal seeks to enhance the undergraduate research program at LSUA through curriculum modification, infrastructure changes to make cellular-molecular biology research feasible, and creation of a Summer Undergraduate Research Experience (SURE). It directly supports the departmental and institutional missions to provide quality instruction, experiential learning, and innovative teaching to LSUA students, to ensure student success and to provide a robust academic environment. Funding of this grant will be a transformative event at LSUA and will have a significant impact on the institution. Twenty-two courses will be impacted by project activities and the procurement of the requested equipment. Additionally, the equipment will allow the faculty to increase their research productivity and greatly expand the breadth of student research at LSUA.

The work plan is detailed, well written, and includes all the required elements. The evaluation plan is detailed, reasonable and well thought out, including data collection for each of the proposed three goals over the five-year project. Following the grant period, the equipment will be serviced and maintained through departmental restricted funds generated by lab fees. The curriculum improvements and research are capable of being sustained by the department's current faculty. The project's SURE component will serve as a pilot program, and the PIs propose to utilize data accumulated through this five-year project period to submit applications for additional external grants and solicit private donors to support the program in the future.

The project team is comprised of an experienced and diverse faculty, including a PI with extensive administrative and assessment experience. The budget includes funds for equipment purchases, infrastructure changes, summer faculty stipends, SURE coordinator stipend, SURE student summer stipends, architectural services, research grants, and student travel grants. There is an institutional match from LSUA in the form of teaching releases, indirect costs, installation of cabinets/tables, and fringe benefits. The panel does not see the relevance of the architectural services in relation to the proposed activities and recommends partial funding in Year 3 to remove that cost. If the work is necessary, the institution should provide the funds. The budget is also adjusted to spread the cost of equipment purchases over two years, rather than concentrating these large expenditures in Year 1. The proposal is highly recommended for funding.

Ranking: **#3 in Comprehensive Enhancement**
Proposal #: **001ENH-20**
Institution: **Delgado Community College**
Discipline: **Humanities**
Title: **Supporting Transformation: Developmental Reading & Writing Reform at Delgado Community College**
Total Requested: **$740,269 (Y1: $152,970; Y2: $129,685; Y3: $154,210; Y4: $149,929; Y5: $153,475)**
Total Recommended: **$740,269 (Y1: $152,970; Y2: $129,685; Y3: $154,210; Y4: $149,929; Y5: $153,475)**

This comprehensive, multi-year project reshapes the developmental reading and writing curriculum at Delgado, with the potential to impact 2,900 students annually. The project goals relate directly to 1) Delgado's institutional mission; 2) its 2017-2021 strategic goals of creating a culture of completion and embracing excellence in teaching; and 3) the recommendations of a statewide taskforce advocating the use of data to make informed curricular decisions that increase student retention.

The impact of the project will be far-reaching. Students' ability to understand and use language is fundamental to their success in all future endeavors. The project's impact on facilities and retention is most pronounced and aligns well with the missions of the academic units represented on the project team. The argument for a major economic benefit to the institution is compelling.

Reflecting the monumental undertaking of this fundamental transformation, the work plan is carefully laid out over five years of gradual implementation. The metrics for evaluating the project are specific and well planned. The addition of a staff position in the Office of Research and Planning shows the project team's commitment to data-driven improvements to curricula.

The proposal does not, however, address how any challenges to transformation might be overcome in terms of faculty buy-in and the budget for professional development of faculty is not as clearly explained as other costs. The potential issues around faculty support and adoption should be carefully considered as the project is implemented.

The budget request, overall, is well structured and justified for a transformational project of this depth and scope. The institution has committed a notable cost share, which is a powerful indication of co-ownership of the project and commitment to its success. Full funding is recommended.

FY 2019-20 Departmental Enhancement
Targeted Enhancement Proposals Highly Recommended for Funding

Ranking: **#1 in Targeted Enhancement**
Proposal #: **063ENH-20**
Institution: **Louisiana State University Health Sciences Center – New Orleans**
Discipline: **Health & Medical Sciences**
Title: **Enhancement of Maternity Nursing Education Through the Use of High-Fidelity Simulation to Impact Maternal Mortality and Morbidity in Louisiana**
Total Requested: **$130,006** **Total Recommended:** **$130,006**

This project is designed to provide innovative simulation learning experiences for developing maternity nursing competence. This will be accomplished through acquisition of training equipment. The proposal makes a compelling argument for need, presenting the project as a response to Louisiana's increasing rate of maternal morbidity and mortality.

The project is closely aligned with the mission statement of LSUHSC-NO, as well as with the goals of the department. The goals are clear and measurable. The work plan is well designed to parallel both project objectives and the budget justification. The impact on students/nurse preparation is clearly identified and linked to workforce development. There are excellent opportunities for additional research, faculty development, and collaborations with community partners. A well-designed educational research project is included, which could lead to broad dissemination of results. An excellent case is made for sustainability. A detailed plan for evaluation is presented that utilizes three instruments and is aligned with objectives. Since this is a proposal for a one-year project, it will probably take longer than the funding period to evaluate fully the effectiveness of the work.

The proposal is well written overall and responsive to Departmental Enhancement program goals and objectives. It also proposes to fill a great need within Louisiana. The work plan is well designed for efficiency and success. The applicants are well qualified. The goals and objectives are appropriate for dealing with the issue, and the impact of project activities is broad. Full funding is recommended.

Ranking: **#2 in Targeted Enhancement**
Proposal #: **157ENH-20**
Institution: **University of Louisiana at Lafayette**
Discipline: **Biological Sciences**
Title: **Enhancement of Biology Research and Teaching through Personal Flow Cytometry**
Total Requested: **$85,554** **Total Recommended:** **$85,554**

This proposal seeks to obtain a flow cytometer that will enhance research and education within UL Lafayette's Department of Biology. There is a current need for this equipment and the acquisition will impact at least 19 current faculty members and a large group of graduate students. A comprehensive description of the existing research programs to be impacted by the cytometer is included in the proposal. The requested equipment also will be integrated into at least seven courses taught to undergraduates and graduate students.

The request is clearly in line with the institutional mission and priorities. The objectives listed are measurable and directly related to the goals of the proposal. The project has high departmental impact, affecting both research capabilities and educational opportunities. Currently, ongoing research is hampered by the lack of a portable, low-volume cytometer and students are unable to be trained in state-of-the-art flow cytometry technology. The proposal includes a comprehensive work plan and a straightforward evaluation plan. Evaluation of integration of the new instrument will be accomplished through: 1) the number of participating faculty in instrument demonstrations; 2) tracking of the use of the cytometer in the online shared equipment management system; and 3) a questionnaire for faculty on the equipment's use in research and courses, as well as the inclusion of flow cytometry in research proposals.

Concerning sustainability, the team members have procured a commitment from the College to support additional maintenance contracts, and the infrastructure currently exists to house and maintain the cytometer. The proposal team is well qualified, comprised of numerous investigators who are established researchers with experience in grant management and, importantly, skilled in the use of the requested equipment. The budget is reasonable and clearly described. Full funding is recommended.

Ranking: **#3 in Targeted Enhancement**
Proposal #: **158ENH-20**
Institution: **University of Louisiana at Lafayette**
Discipline: **Physics**
Title: **Ultra-High BRILLIANCE Multi-Cusp Ion Source for Research Users at the Louisiana Accelerator Center [BRILLIANT@ LAC]**
Total Requested: **$191,035** **Total Recommended:** **$191,035**

The proposal requests funds to upgrade the ion source that generates ultra-high brightness to significantly improve resolution of images. It clearly articulates the need for higher resolution images among several research groups using the Louisiana Accelerator Center (LAC), which requires a more brilliant ion source for H-ions. The proposal is consistent with the stated mission of the facility, which is to enable international-level research on the effects and use of ion-matter interactions for modification and analysis through collaborations between universities and industry.

This excellent project enhances a multi-user facility that connects faculty with industry, offers opportunities for advanced workforce development, and improves the State's economic competitiveness. With the proposed enhancement to the resolution of the MeV ion micro probe, LAC will significantly broaden its service in meeting diverse research needs across multiple departments, which are clearly identified.

Project goals are well connected to the timeline and directly measurable. The impact of the project on graduate student recruitment and retention, and graduate-level education, will be significant. The project will also be highly beneficial to undergraduate research, especially in the Biological Sciences and in Engineering disciplines. The institutional research capacity will be dramatically improved, boosting research capabilities across several departments and units. The requested budget is reasonable and the need clear. The evaluation plan should allow assessment of impact across the whole project, though metrics for gauging the impact on individual units and workforce development are not as clear. Full funding is recommended.

Ranking: **#4 in Targeted Enhancement**
Proposal #: **048ENH-20**
Institution: **Louisiana State University Agricultural Center**
Discipline: **Agricultural Sciences**
Title: **Acquisition of a Field Spectroradiometer for Rapid Assessment of Plant Traits and Performance**
Total Requested: **$76,495** **Total Recommended:** **$76,495**

This proposal seeks to acquire a field spectroradiometer for LSU Ag Center's School of Renewable Natural Resources in order to increase the capacity of faculty and students to monitor forest and wetland status. The goals are clearly stated and the objectives are reasonable, simple and measurable. Acquisition of the equipment will increase research productivity, establish collaborations, support requests for additional funding, and bring a new tool into course activities. A strong work plan with a realistic timeline for project implementation is presented.

The proposal provides a detailed description of the impact of this equipment on existing resources, curriculum and instruction, research capacity, workforce and faculty development, the State's economy and service to students. The evaluation plan is limited, but that is primarily due the one-year nature of the project. Very good maintenance and sustainability plans are presented to keep the equipment calibrated and in proper working condition. The PIs appear fully capable of implementing the work plan and have extensive experience in utilizing and sharing this kind of equipment.

As a match in the budget, faculty time is leveraged to provide training on the equipment. The budget justification is adequate and clearly explains the relationship and impact of each budget item. Full funding is recommended.

Ranking: **#5 in Targeted Enhancement**
Proposal #: **083ENH-20**
Institution: **Louisiana Tech University**
Discipline: **Physics**
Title: **Targeted Enhancement: Acquisition of an X-Ray Diffractometer for Enhancing Research, Education, and Training in Physics, Chemistry and Materials Sciences**
Total Requested: **$59,105** **Total Recommended:** **$59,105**

The goal of this project is to enhance the research and educational infrastructure for Physics and Chemistry at Louisiana Tech through acquisition of an x-ray diffractometer (XRD) to replace a currently non-functional older system. Several active projects at Louisiana Tech require the XRD and the instrument will enhance research capability and interdisciplinary collaborations.

The acquisition of the XRD as state-of-the art research equipment is consistent with the departmental mission. The goals are clearly presented. The project will significantly impact research productivity and student training and, in turn, will enhance the development of a highly skilled workforce. The XRD is a versatile instrument that can serve a multidisciplinary group. The cost is reasonable.

With the current strategic hires across departments, Louisiana Tech will strongly and efficiently link through the purchase of the XRD the research projects pursued by faculty in Chemistry, Physics, and Engineering under an exciting interdisciplinary umbrella. The rationale for procurement is strong, since the old equipment is currently non-functional. The work plan is detailed and clearly connected to project goals and objectives.

The sustainability plan could be explained with more details and objectivity. What is the capability of the campus-wide maintenance unit? Are they qualified to service the kind of specialized research instruments proposed here? The campus should consider these questions and develop a plan for keeping the equipment in good working order for presentation in the contract work plan. Full funding is recommended.

Ranking: **#6 in Targeted Enhancement**
Proposal #: **124ENH-20**
Institution: **Southern University and A&M College**
Discipline: **Agricultural Sciences**
Title: **Journeys in Agricultural Science Developing Educational Networks [JAG'S DEN]**
Total Requested: **$139,500** **Total Recommended:** **$139,500**

This project seeks to convert an existing computer lab into the JAG'S DEN Learning Center in the Department of Agricultural Sciences at SUBR, to enhance the global competitiveness of students and graduates. The proposal argues that the enhanced lab will promote collaborative partnership, enable STEM faculty development, enhance existing courses, seed course redesign efforts, expand experimental learning opportunities, and increase student recruitment.

The faculty participants seem versed in their anticipated areas of implementation. The budget is the proposal's clearest explanation of the reach and impact of the project: that undergraduate and graduate students will be involved in research in student learning. The timeline is tight and ambitious. Faculty development will take place in two major areas: virtual reality and problem-based learning. Faculty training must be completed in the summer, before faculty can build a syllabus. The proposal is forward-thinking in the possibilities for instruction in a medium that is new and relatively untested. The technology envisioned, however, is still anchored to a classroom in this proposal, similar to project-based learning (PBL).

The connection between project objectives and their measurement is muddled across the multiple aspects of this project. The proposal mentions monitoring exposure to virtual reality, but falls short in discussing how learning will be assessed and how the goal to "prepare graduates for admission to graduate and/or professional school and the workforce" will be measured. An evaluation tool for measuring student preparation for graduate school or the workforce is missing. However, the overall evaluation of the project's impact on student learning is bold and comprehensive. The project team should consider expanding this work into a five-year proposal to fund graduate students in SMED to build on this beginning by studying student learning using VR and development of VR/AR environments suitable for agriculture environments.

The sustainability plan is sufficient relative to the expected life of the equipment, with plans for tablet and camera maintenance. The extent and repeatability of the workshops is not mentioned.

The budget is reasonable, supplementing several courses that have the opportunity to utilize virtual reality for learning. Funding for staff, faculty, and graduate students are intended as a pilot project, and should yield competitiveness for external research grants. Full funding is recommended.

Ranking: **#7 in Targeted Enhancement**
Proposal #: **164ENH-20**
Institution: **University of Louisiana at Monroe**
Discipline: **Health & Medical Sciences**
Title: **Obstetrical, Neonatal, and Gynecological Human Patient Simulators: Furthering Skills and Knowledge of Undergraduate and Nurse Practitioner Students, Northeast Louisiana First Responders, SANE and Neonatal Nurses**
Total Requested: **$94,769** **Total Recommended:** **$94,769**

This proposed project is designed to enhance nursing training through the acquisition of two human patient simulators, one for obstetric/neonatal simulation and the other for pelvic simulation. The project is closely aligned with ULM's institutional mission and is also supportive of the goals of the College.

Project objectives are measurable and clearly connected to the goals. The work plan is strong and well aligned. The project will have a significant impact on curriculum, student training, recruitment, retention, and workforce development. A large number of students will be impacted. The specific training allowed through the new equipment, along with the additional clinical hours made available on existing equipment through the added capacity, will improve student outcomes and results on certification exams. A detailed evaluation with specific metrics is provided. Since this is a proposal for a one-year project, it will probably take longer than the project term to evaluate fully the effectiveness of the work. The sustainability plan is excellent and will enable the maximum lifespan for the proposed equipment. The budget is efficient and clearly connected to the goals, objectives and work plan. The equipment choices are appropriate. Significant cost-share is provided.

This project is well designed to deal with a serious statewide issue. It provides an advanced form of support in an area that is lacking this type of training at the present time and the team is well prepared to successfully implement the project. The proposal is responsive to the Departmental Enhancement program goals. Full funding is recommended.

Ranking: **#8 in Targeted Enhancement**
Proposal #: **170ENH-20**
Institution: **University of New Orleans**
Discipline: **Engineering B**
Title: **Additive Manufacturing Laboratory Enhancement**
Total Requested: **$141,843** **Total Recommended:** **$141,843**

UNO's Department of Mechanical Engineering proposes to acquire additive manufacturing (AM) equipment that will expose students to an integrated approach to design that includes computer-aided design, analysis, and AM using multiple technologies. The goals and objectives for the proposed AM laboratory enhancement are clearly stated and achievable. They are also highly related to the departmental mission statement. The objectives appear measurable and linked to the goals. The work plan and timeline for grant activities are clearly delineated, with the responsibilities of each member of the investigators well defined. The proposed activities give confidence that the team will have a high degree of success in achieving the project goals.

The proposed acquisitions are to be integrated into an existing AM laboratory to enhance the curricula for student learning and provide hands-on experiences, in addition to supporting faculty and graduate-level research activities. The enhancement will have a strong impact on student recruitment and the competitiveness of graduates in the workforce. The evaluation plan identifies measurable metrics for evaluating project success. A sustainability plan beyond the award period is based on the support of UNO, the College of Engineering and the Department of Mechanical Engineering, including funds from student and laboratory fees. The project team is highly qualified and experienced in the area of the proposed project.

The budget for a Markforged Metal X 3D printer is reasonable. This acquisition constitutes the central piece of this project and is well justified in terms of the proposed goals, objectives and work plan. Full funding is recommended.

Ranking: **#9 in Targeted Enhancement**
Proposal #: **109ENH-20**
Institution: **Northwestern State University**
Discipline: **Biological Sciences**
Title: **Enhancement of Analytical Instrumentation for Capstone Laboratories and Research-Related Activities**
Total Requested: **$68,578** **Total Recommended:** **$68,578**

This proposal seeks to acquire a gas chromatography mass spectrometer (GC/MS), which NSU currently lacks. Acquisition of the equipment will significantly impact the educational experience of a substantial number of students across Biology, Microbiology, and Chemistry. The instrument will be used or demonstrated in at least sixteen classes and will impact approximately 131 students per year (i.e. 22% of the total students enrolled in the School of Biological and Physical Sciences). The proposal is strongly aligned with the mission statements of NSU and the department, which emphasize experiential learning. Curriculum plans initiated in Fall 2019 require that every freshman student has a research experience. This proposal makes accomplishment of this requirement possible by strengthening and modernizing experiential learning.

The evaluation metrics are appropriate, namely student assessments of teaching, the number of students performing research, and numbers of research proposals submitted and papers published. The requested equipment will be maintained post-award using funds from two sources: internal technology fee grants and allocated laboratory fees.

The proposal team is highly qualified, consisting of faculty members who are experienced in the use of the requested equipment, and well suited to implement this project. The budget is reasonable and clearly described. The requested pieces of equipment are robust, entry-level models which should hold up well under heavy use and are quoted at discounted or state contract prices. Full funding is recommended.

Ranking: **#10 in Targeted Enhancement**
Proposal #: **045ENH-20**
Institution: **Louisiana State University Agricultural Center**
Discipline: **Agricultural Sciences**
Title: **Capacity Building of the LSU AgCenter Sugarcane Research Station's Sucrose Laboratory through the Acquisition of a State-of-the-Art NIR Equipment**
Total Requested: **$200,000** **Total Recommended:** **$200,000**

LSU Ag Center's Sugar Research Station seeks near-infrared spectroscopy (NIR) equipment to enhance multidisciplinary research in support of the development of improved sugarcane varieties, crop management practices, and novel products for the Louisiana sugar industry. The goals of this proposal directly support the mission of the academic unit. The measurement of sucrose and fiber with the NIR is clearly necessary to determine the quality of the sugarcane bred by the research program. The objectives are straightforward and measurable, tracking the number of samples processed and the number of personnel, including students (graduate and undergraduate), who are able to utilize the equipment.

A compelling case is made for the replacement of the current, 13-year-old equipment. The goal of the project is to obtain and deploy the new technology and methodology to provide accurate, precise sucrose and fiber trait data. The work plan is succinct and clearly stated. A reasonable timeline is established for acquiring the equipment, and specific team members are designated to be trained on the equipment, then train remaining members. A plan is presented to track equipment usage among faculty and students and research dollars generated. However, the proposal did not include expected metrics for evaluating overall project outcomes.

Detailed information on the impact of the acquisition on existing resources, curriculum and instruction, research capacity, faculty and student capacity, workforce development, and the economy, was well presented. The equipment supports several graduate student and post-doctoral projects. The equipment is also key to LSU Ag Center's research for the Louisiana sugar industry, so has high economic impact. If the old unit is not replaced, researchers will not be able to continue work on novel uses for the biofuel industry.

Funding has been acquired from industry sources to support the maintenance of the equipment. Faculty will also contribute to the upkeep, calibration, and use of the equipment. Team members are experienced with the current equipment and appear quite capable of learning and training quickly on the upgraded equipment. Investigators are well qualified. The budget is strongly supported by a detailed justification. Full funding is recommended.

Ranking: **#11 in Targeted Enhancement**
Proposal #: **143ENH-20**
Institution: **Tulane University**
Discipline: **Social Sciences**
Title: **City, Culture, and Community [CCC] Department Enhancement Program [DEP]**
Total Requested: **$117,865** **Total Recommended:** **$117,865**

The proposal request is heavily oriented toward department personnel, focusing on the enhancement of research, faculty development, curriculum development, workshops, and experiential activities for graduate assistants. The project represents an investment in the continuous expansion of the City, Culture, and Community (CCC) program, consistent with Tulane's and departmental missions.

Project objectives are measurable and relate directly to the goals. The central strength of the proposal is the focus on expanding a diverse body of students for doctoral training. A very specific timeline is presented. The key tasks are bulleted as well as presented in narrative form, making them easy to understand, and clear accountability is established for team members. The evaluation plan is outstanding, with metrics tailored specifically to each objective. A variety of data sources is included, such as students, faculty, program and research outcomes.

The sustainability plan's timeline surpasses the proposal timeline and increases the likelihood that funding from other identified sources (e.g., community partners, business leaders, external funding, other university offices) may help to support future research endeavors. The project team appears highly capable, with significant administrative and grant-writing experience. The budget justification clearly articulates the need for each requested item and its relation to the success of the project. Full funding is recommended.

Ranking: **#12 in Targeted Enhancement**
Proposal #: **138ENH-20**
Institution: **Southern University at Shreveport**
Discipline: **Humanities**
Title: **English and Math Resource Center**
Total Requested: **$92,778** **Total Recommended:** **$92,778**

This project proposes establishing an English and Math Resource Center that combines technology-enhanced classrooms and curricular innovation to improve student success through the implementation of an alternative to the traditional classroom (the Emporium Model).

The goals are clear, reasonable and directly related to the departmental and institutional missions. The objectives are well defined and measurable. The work plan clearly delineates tasks and is linked to the objectives. The timeline is reasonable and not rushed. The first six months are devoted to transforming traditional classroom space, and the second six months are targeted for initial engagement, active learning, tutoring and hybrid learning activities. Tasks are evenly spread among team members.

The impact of the project is far-reaching. The proposal targets improved teaching and learning, as well as increased student success, retention and graduation. Developmental education in English and Math is central to the campus mission. The creation of the proposed resource center will greatly facilitate student access to instructors, tutors, and self-paced and hybrid learning materials, resulting in increased success. Faculty will benefit from exposure and access to digital technology tools to enhance their pedagogy. The impact on workforce development is linked to both student success and enhanced curricula that prepare students to graduate with an associate's degree and with honed skills applicable to the workplace.

The evaluation plan is multilayered and robust. It builds on the assessment and reporting that the institution already carries out each quarter as part of its Title III obligation. In addition to the assessment data and benchmarks used for Title III, the project team will administer pre- and post-tests to compare the skills gained by students who participated in the Emporium Model with those who did not participate.

The institution is committed to maintaining the remodeled learning space and activities after the grant has ended; Title III funding will be requested to maintain equipment. The TRIP Program will provide tutors for the resource center. The budget is modest for the enhancements sought and the broad impact that the projecy will surely have. Full funding is recommended.

Ranking: **#13 in Targeted Enhancement**
Proposal #: **028ENH-20**
Institution: **Baton Rouge Community College**
Discipline: **Targeted Workforce**
Title: **BRCC PTEC Tool School Project**
Total Requested: **$146,108** **Total Recommended:** **$146,108**

The proposal requests funding to enhance BRCC's Process Technology (PTEC) Department and support the Associate of Applied Science in Process Technology degree program. Graduates of the program go on to work in industries key to workforce development in Louisiana, such as petrochemical, oil and gas, paper and pulp, pharmaceutical, and food processing. Mastery of tools is a best practice for preventative maintenance and plant safety. Expanded knowledge of tools required to maintain and operate equipment is quickly becoming standard.

The goals and objectives are clear and measurable. The goals are relevant and respond to the needs of the regional economy. While the objectives are practical and attainable, there appears to be some disconnect between the objectives and the investment (largely tools and a monitoring toolbox with tracking system). As data are gathered and reported, the project team should clearly articulate how high-tech toolbox usage impacts student performance and success.

The work plan is sequential and reasonable to achieve the proposed objectives. There may be a need for interventions to move performance against the metrics identified, such as remediation, test prep and career prediction. The impact statement is clear and persuasive, showing broad benefits reaching faculty, students, workforce development and the State economy. The proposed activities address preparation for current and future employment needs.

The evaluation plan is clearly laid out, with strategic benchmark periods and formative assessments. The partnership with BRCC's Institutional Research Office provides for an "outside-the-department" look at performance. The team should consider interventions to ensure that the Tool School curriculum positively impacts both admission rates and student performance, including GPA.

This enhancement should last for years and require little further investment outside of software updates. The team is well qualified and experienced, with good credentials as well as applicable work and teaching/tutoring experience. The budget is clearly presented. The institution covers travel for training and professional development. Full funding is recommended.

Ranking: **#14 in Targeted Enhancement**
Proposal #: **032ENH-20**
Institution: **Centenary College of Louisiana**
Discipline: **Physics**
Title: **Enhanced Laboratory for Optics/Modern Physics**
Total Requested: **$14,443** **Total Recommended:** **$14,443**

The proposal requests very modest funding for acquisition of laboratory teaching equipment focused on optics and modern physics. The aim is to enhance student learning in waves, classical, and modern physics through a series of laboratory activities in an intermediate-level laboratory. This plan is consistent with the mission of the department, which provides physics courses for general education and science majors.

In a predominantly teaching department where students do not have access to modern research facilities, the acquisitions requested will provide good opportunities for students to experience modern physics concepts. The proposal addresses an important gap in the Physics curriculum at Centenary: the need to incorporate suitable lab exercises to absorb/apply/verify the quantum nature of the modern physics theoretical framework. The project will help to modernize the curriculum and enhance student training. The budget requested is small, but the benefit to student training and enhancement of the physics curriculum is significant. Students in Biology and Chemistry going for the dual-degree Engineering program that Centenary has with Columbia University will be particularly impacted.

Project goals are clear and achievable. The work plan is reasonable, though more details of the experiments envisioned would be helpful. The timeline is adequate. A faculty hire to rebuild the Physics program is critical for a successful outcome. The evaluation plan is clearly mapped and based on best practices. The project team is well qualified. The budget is modest and reasonable. Full funding is recommended.

Ranking: **#15 in Targeted Enhancement**
Proposal #: **152ENH-20**
Institution: **University of Louisiana at Lafayette**
Discipline: **Engineering B**
Title: **Acquisition of FTIR Microscope for Advancement in Chemical, Materials, and Biological Science Research and Education**
Total Requested: **$85,303** **Total Recommended:** **$85,303**

This funding request is to purchase a chemical imaging FTIR microscopy system to enhance ongoing materials, engineering, energy, and biological research/teaching programs at UL Lafayette. The proposed equipment will be critical to achieve the goal of fostering innovation and education. The proposal is well written and clearly supportive of the mission of the Institute for Materials Research and Innovation.

Project goals are clearly stated and aligned with closely related objectives. Both goals and objectives are reasonable, achievable, and related to the mission of the Institute for Materials Research and Innovation. The work plan includes a compelling timeline for grant activities, with a clear delineation of tasks among the team members. Potential impacts include performing research activities leading to extramural funding for significant projects. The acquisition will also affect education through enhanced recruitment and retention of top students and faculty members. The evaluation metrics are measurable and appropriate to assess the success of the project. The operation of the facility appears sustainable beyond the life of the grant, and the user-fee schedule and technician time are positive features. The investigators are highly qualified and have the necessary expertise to implement the project. The budget is well structured to maximize the project impact. Full funding is recommended.

Ranking: **#16 in Targeted Enhancement**
Proposal #: **116ENH-20**
Institution: **Southeastern Louisiana University**
Discipline: **Social Sciences**
Title: **Southeastern Student Studio**
Total Requested: **$75,460** **Total Recommended:** **$75,460**

SLU's Department of Communication and Media Studies requests video and audio equipment to enhance a live-streaming lab to provide students with workforce skills in broadcasting as well as podcasting and social media content development. The proposed improvements will allow for expanded class projects and student portfolio building.

Project goals are connected to the objectives, aligned with the mission statement, and very reasonable and achievable. The selected equipment is appropriate and essential for building and maintaining a successful program. Current equipment is limited and outdated. The work plan is overly general and lacks details connecting the equipment, facility improvements and proposed activities to specific classes.

The key impact of the project is on workforce competitiveness. SLU has been successful in placing graduates, and the modest request to enhance program functionality will help maintain student recruitment and retention. The evaluation plan is compelling, consisting of straightforward measures of the utilization of new equipment items. The sustainability plan is adequate relative to the expected life of the equipment. The project team is very competent and capable. The budget is reasonable and very efficient. Full funding is recommended.

Ranking: **#17 in Targeted Enhancement**
Proposal #: **137ENH-20**
Institution: **Southern University at Shreveport**
Discipline: **Targeted Workforce**
Title: **Fly Southern: Launching Careers in Aerospace Technology**
Total Requested: **$112,778** **Total Recommended:** **$98,394**

Southern University at Shreveport requests funding to enhance its Aerospace Technology program. These transferable degrees and other credentials are certified by the Federal Aviation Administration (FAA). Graduates will work in four- and five-star, high-demand, high-wage occupations in key target industries as identified by Louisiana Economic Development. This proposal aims to enhance simulation labs to reinforce hands-on, skills-based learning, embed short-term training certifications of value into the curriculum, and enhance outreach and recruitment to maintain a pipeline of talent for the aerospace sector. Expanded capacity in the Aerospace Technology program will meet industry workforce needs and support a vibrant domestic manufacturing sector necessary for a solid defense industrial base to produce military components.

The proposal clearly explains that jobs are available for students who achieve these new credentials. The project goal seems modest in terms of the percentage increase of students anticipated, but employment opportunities and salaries are impressive. Excellent data are provided on occupations, salaries and employment projections. The strategies to improve access for underserved populations are compelling.

The work plan is well reasoned and nicely presented in table form. It was helpful to include the evaluation component in the work plan. The impact is reasonably well explained, though the actual number of students who will gain employment is not clear. The planned impacts on existing resources, curriculum/instruction, workforce development, and faculty development are described well, but are too general. Additional metrics and specifics would strengthen the case for support. The evaluation component is well defined, including qualitative and quantitative measures. The project team is equipped with strong educational backgrounds, credentials, and experience.

The budget is generally well presented and aligned with project objectives, though the consultant fees and supplies seem high. Investments in marketing, software, and travel are also excessive. The recommended budget of $98,394 reduces the marketing consultant expense from $7,000 to $3,000; eliminates the Qualtrics Software ($4,000) purchase, which does not appear related to the certification investments; and reduces travel from $9,384 to $3,000.

Ranking: **#18 in Targeted Enhancement**
Proposal #: **041ENH-20**
Institution: **Louisiana College**
Discipline: **Humanities**
Title: **Improvements to Lecture and Learning Environment**
Total Requested: **$87,330** **Total Recommended:** **$87,330**

This proposal seeks to prepare Louisiana College graduates to transform communities through teaching and service. In order to be effectively prepared, students need to be familiar with the current pedagogies and common facilities used in these activities. This project proposes upgrading four classrooms that are currently lacking basic media technology and standard moveable furniture. The classroom upgrades will directly impact more than 1,000 students who take the core courses.

The project will result in improved quality of course offerings and instructional methods across Louisiana College. Faculty will develop new expertise in technology-enhanced teaching and interactive pedagogies. More flexible learning opportunities will become possible, including new certificate and online programs. Graduates will be much better prepared for the workforce. In addition, the Physical Therapy Assistant (PTA) program and the College's faculty and students generally will be impacted by the upgrades, as the classrooms are used for PTA courses and regular College meetings. This is a meaningful additional benefit of investment in this project.

The budget justification clearly describes the need of each budget item in two categories: furniture and audiovisual equipment. The project team has chosen the particular brands and service providers based on recent comparable upgrade work successfully completed. The budget is efficient and directly tied to project goals. Full funding is recommended.

Ranking: **#19 in Targeted Enhancement**
Proposal #: **079ENH-20**
Institution: **Louisiana Tech University**
Discipline: **Engineering B**
Title: **Enhancement of Educational and Research Capabilities to Meet Industry 4.0 Workforce Need**
Total Requested: **$52,730** **Total Recommended:** **$52,730**

This proposal requests funds to purchase Fischertechnik Industry 4.0 Factory Simulation Kits and programmable logic controllers. The acquisition will allow the establishment of several smart factories and a private cloud infrastructure on campus for collection of factory-related sensor data and integration with Smart City sensor data. This project, once completed, will enhance the educational capability of the Industrial Engineering program in preparing its graduates for future Industry 4.0 jobs while enhancing research capacity in the fields of embedded systems and cloud computing.

The project goal is clearly stated, reasonable, achievable, and related to the mission of the academic unit. The objectives are measurable and related to the goals. The work plan is very detailed, with a clear schedule and delineation of responsibilities among the team members. The project impacts are well described and cover various areas including research, teaching, and workforce development. Curricula developed through the project should help to increase student recruitment, retention and workforce competitiveness. The evaluation plan is nicely established and driven by specific metrics, though development of direct assessments would help to ensure project success. The plan for sustainability beyond the life of the grant is reasonable and detailed, with specific personnel involved. The investigators are well qualified to carry out the work plan. The budget and budget justifications support the goal and work plan. Full funding is recommended.

Ranking: **#20 in Targeted Enhancement**
Proposal #: **145ENH-20**
Institution: **Tulane University**
Discipline: **Social Sciences**
Title: **Modernizing Methods to Study the Ancient Past: Enhancing the Research Potential of the Center for Archaeology at Tulane University**
Total Requested: **$149,383** **Total Recommended:** **$149,383**

Tulane's Center for Archaeology seeks to expand research capacities by creating three new integrated laboratories. This is a well-written proposal with reasonable and achievable goals that align well with the departmental mission. The project will provide capabilities available in premiere national departments and will make the department more competitive in publishing, external funding, and student and faculty recruitment. The equipment is appropriate and connected to the goals. The project team has operational experience with all requested items, and the labs can quickly become established. The acquisitions will allow work to be done that previously has been outsourced, which will save time and money. The equipment is tied to future workforce needs and will provide valuable, state-of-the-art training to students.

The work plan is well defined and effectively integrates the proposed labs into teaching and research. Evaluation metrics presented are compelling. The sustainability plan is suitable for the expected lifespan of the equipment. The team is highly capable of executing the project. The budget is reasonable and the justification is clearly presented. Full funding is recommended.

Ranking: **#21 in Targeted Enhancement**
Proposal #: **067ENH-20**
Institution: **Louisiana State University in Shreveport**
Discipline: **Biological Sciences**
Title: **High Capacity Autoclave to Enhance Teaching and Research at LSUS**
Total Requested: **$49,112** **Total Recommended:** **$49,112**

This proposal seeks the acquisition of a high-capacity autoclave that will be utilized by the Departments of Biological Sciences, Chemistry, and Physics. The autoclave is essential for the smooth running of the affected departments' laboratory courses and for the research productivity of the faculty. The equipment will directly assist the departments in fulfilling their academic missions and will significantly impact their curricula, instruction, and research capacities. The affected departments teach twelve courses that require sterile instrumentation, lab wear, water, solutions, microbial broth, and agar-based media. Beyond its use in courses, an autoclave is essential to decontaminate biological wastes prior to disposal. This equipment is mission-critical for the educational and research activities of the departments involved in the project and is mandatory for safety.

The grant very nicely describes the work of multiple faculty members whose research depends on use of the autoclave. The evaluation plan is somewhat limited and could be developed to encompass all of the proposal goals. The equipment's sustainability after the project is appropriately considered, and will be through the School of Sciences' indirect cost recovery fund. The PI is an established faculty member who has a demonstrated track record in teaching, research productivity, and grant funding; he has successfully implemented BoRSF-funded projects and other grants in the past. The budget and justification of the requested equipment are appropriate. Given the critical nature of the requested equipment, full funding is recommended.

FY 2019-20 Departmental Enhancement
Targeted Enhancement Proposals: Recommended for Funding if Additional Monies Become Available

Ranking: **#22 in Targeted Enhancement**
Proposal #: **151ENH-20**
Institution: **Tulane University Health Sciences Center**
Discipline: **Health & Medical Sciences**
Title: **Surgical Education Enhancement for Complex Training to Proficiency through Advanced Medical Simulation**
Total Requested: **$200,000** **Total Recommended:** **$200,000**

This proposal seeks to acquire equipment to enhance surgical training, with acquisitions to include two simulators and software modules. One module will be new to the department and the other will supplement an existing module. The proposal is closely aligned with the departmental and institutional missions. The proposal also takes advantage of the expertise of the Tulane University Simulation Core, which should assure the availability of appropriate facilities and expertise to successfully implement and support the proposed project.

The project addresses a serious need for appropriate advanced training for surgeons. It is well-designed and in line with the goals and objectives of the Departmental Enhancement program. The project team is experienced and well equipped to implement the proposed program. The goals are clearly stated, measurable and achievable. A detailed timeline is provided. The work plan is clear and well connected to goals and objectives. The project is likely to elevate recruitment and retention of residents, as well as medical students who complete the program. In preparing surgeons, the project will impact workforce development across the State. A detailed evaluation plan rooted in measurable criteria is provided and a sustainability plan is in place. The team is qualified for the project, though has only limited experience with extramural funding. The budget is effectively crafted and a small cost share is provided. Full funding is recommended if additional monies are available.

Ranking: **#23 in Targeted Enhancement**
Proposal #: **040ENH-20**
Institution: **Louisiana College**
Discipline: **Health & Medical Sciences**
Title: **Improved Technology for Promotion of Nursing Student Achievement**
Total Requested: **$17,107** **Total Recommended:** **$17,107**

The purpose of the proposed program is to introduce nursing students to a broader range of subjects through the enhancement of teaching facilities. Activities include the purchase and installation of modern projectors and associated equipment. The proposal is closely aligned with the mission statement of Louisiana College and the goals of the division. It is well designed to meet a critical need for enhanced nursing instruction and the project would enable introduction of training equipment that is standard in most institutions.

The goals and objectives, as presented, are not measurable. Using enhanced equipment provides better learning opportunities but does not increase learning. Additional details about how this equipment will be used in instruction would be helpful, given the intended outcome. A clear plan for implementation is described.

The evaluation plan focuses on student and faculty satisfaction with the classroom equipment, ATI test scores, NCLEX pass rates, and retention rates. While benchmarks for progress were provided, the current rates are for this program are not defined. Do the benchmarks reflect an increase in rates and scores? There appear to be no plans to increase enrollment, which would boost the number of BSN-prepared nurses.

The team members are experienced educators and administrators. The budget is very economical, modest and detailed, and a maintenance plan is in place. Given the need for these basic tools, full funding is recommended if additional monies become available.

Ranking: **#24 in Targeted Enhancement**
Proposal #: **057ENH-20**
Institution: **Louisiana State University and A&M College**
Discipline: **Biological Sciences**
Title: **SAXS Multi-Purpose Sample Environment Based on a Modular Size Exclusion Chromatography Instrument**
Total Requested: **$162,088** **Total Recommended:** **$162,088**

This proposal requests funds to acquire a size-exclusion chromatography (SEC) instrument to complement LSU's small angle x-ray scattering beamline instrument (SAXS). This equipment will expand the capabilities of the SAXS, as there is no existing equipment on campus that fulfills this need. Implementation of this equipment would position LSU amongst the key cyclotron facilities (only seven total) in the U.S., thus the potential impact is extremely high. At LSU, this equipment will benefit up to 21 faculty members and around 75 PhD students and post-doctoral fellows, making LSU extremely competitive for research grants in this field. In addition, several existing courses, including a summer course, will be impacted. The benefit of this proposal extends beyond LSU to other universities across the region as there are no other facilities in the area that currently have this technology. The project team asserts that, in combination with the ongoing neutron scattering research in Louisiana, this facility has the potential to become the only location in the country where these capabilities exist together in a single facility. Achieving this unique position will increase the visibility of Louisiana as a unique place to do high-quality organic and biological materials research. The equipment requested is directly in line with LSU's mission to enhance the quality of research at all levels and provide cutting-edge R&D infrastructure for campus, Louisiana, and national users.

The evaluation plan is not thoroughly developed, which weakened enthusiasm for the proposal. The project team proposes monitoring of instrument logs and tracking research publication/funding increases, which will only give limited indication of the significance of the project's impact. Sustainability is also a concern, as the proposal does not indicate how preventative maintenance or needed repairs will be funded. It does appear that LSU already has a repair team on site for the current SAXS instruments, which could potentially be utilized to support this requested equipment, but the proposal does not address this. The project team is highly qualified and consists of researchers who are experienced in the use of the requested equipment and well suited to implement this project.

The budget is reasonable and very detailed, including vendor-reduced quotes on the requested equipment. Given its projected economic impact and the technical sophistication of the new equipment, the cost is reasonable. Full funding is recommended if additional monies are available.

Appendix A

Summary List of Proposals

Proposals Submitted to the Departmental Enhancement Program - Comprehensive
for the FY 2019-20 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Duration	Amount Requested					
								Year 1	Year 2	Year 3	Year 4	Year 5	Total
001ENH-20	Ms. Emily Cosper	Delgado Community College	Supporting Transformation: Developmental Reading & Writing Reform at Delgado Community College	Education	Single Discipline	Humanities	5 Year(s)	$152,970.00	$129,685.00	$154,210.00	$149,929.00	$153,475.00	$740,269.00
002ENH-20	Dr. Kayanush Aryana	Louisiana State University Agricultural Center	Improving research education on healthier and safer rice based foods at Louisiana State University Agricultural Center.	Research	Multidisciplinary	Agricultural Sciences	1 Year(s)	$216,194.00	$0.00	$0.00	$0.00	$0.00	$216,194.00
003ENH-20	Prof. Qinglin Wu	Louisiana State University Agricultural Center	Enabling the LSU AgCenter's Louisiana Institute for Biofuels and Bioprocessing for Bioeconomy Development in Louisiana	Research	Multidisciplinary	Agricultural Sciences	5 Year(s)	$285,241.00	$192,921.00	$194,137.00	$163,577.00	$153,654.00	$989,530.00
004ENH-20	Dr. Annie Daniel	Louisiana State University and A & M College	Developing a Pipeline to Healthcare Careers by Preparing African American Undergraduate Students to Enter a Career in Healthcare through Mentorship	Education	Multidisciplinary	Health and Medical Sciences	5 Year(s)	$197,500.00	$164,000.00	$159,000.00	$159,000.00	$151,000.00	$830,500.00
005ENH-20	Dr. Cynthia DiCarlo	Louisiana State University and A & M College	Workforce Development: LSU Early Childhood Leaders Program	Workforce	Single Discipline	Social Sciences	5 Year(s)	$237,443.00	$188,681.00	$189,958.00	$191,272.00	$192,625.00	$999,979.00
006ENH-20	Prof. Emily Elliott	Louisiana State University and A & M College	Neuroscience Equipment and Training to Enhance Student Research Outcomes through LSU MIND [Multidisciplinary Initiative for Neuroscience Discovery]	Research	Multidisciplinary	Social Sciences	5 Year(s)	$299,910.00	$199,835.00	$199,993.00	$199,500.00	$98,040.00	$997,278.00
007ENH-20	Dr. Erin Harmeyer	Louisiana State University and A & M College	The Expansion of Online Curricular Offerings in LSU's Child and Family Studies Program	Education	Single Discipline	Social Sciences	5 Year(s)	$168,840.00	$143,537.00	$150,275.00	$122,449.00	$125,523.00	$710,624.00
008ENH-20	Dr. Dimitris Nikitopoulos	Louisiana State University and A & M College	Departmental Enhancement: Empower Research for Industry Engagement	Research	Single Discipline	Engineering B (Industrial, Materials, Mechanical)	5 Year(s)	$300,000.00	$200,000.00	$200,000.00	$200,000.00	$100,000.00	$1,000,000.00
009ENH-20	Dr. Ward Plummer	Louisiana State University and A & M College	Acquisition of low temperature, high magnetic field scanning tunneling microscope for research and education in Quantum Materials	Research	Multidisciplinary	Physics	3 Year(s)	$300,000.00	$200,000.00	$200,000.00	$0.00	$0.00	$700,000.00
010ENH-20	Dr. Kristin Stair	Louisiana State University and A & M College	Expanding Louisiana's Pipeline for Careers in Agricultural Leadership, Education, and Extension: A Statewide Partnership to Support Baccalaureate Degree Completion	Education	Single Discipline	Agricultural Sciences	5 Year(s)	$96,231.00	$76,000.00	$88,000.00	$48,000.00	$22,000.00	$330,231.00
011ENH-20	Dr. Charles Taylor	Louisiana State University and A & M College	Below Ground Truth	Research	Multidisciplinary	Engineering B (Industrial, Materials, Mechanical)	5 Year(s)	$299,942.00	$199,502.00	$200,000.00	$200,000.00	$100,000.00	$999,444.00
012ENH-20	Dr. Carol Corbat	Louisiana State University at Alexandria	Enhancing the Biology Curriculum at LSUA through Undergraduate Researcb	Education	Single Discipline	Biological Sciences	5 Year(s)	$136,450.00	$28,668.00	$174,530.00	$52,000.00	$52,000.00	$443,648.00
013ENH-20	Dr. Demetrius Porche	Louisiana State University Health Sciences Center - New Orleans	Training, Mentoring, Resources, and Collaborative Pilot Research Grants to Increase Nursing Research Capacity and Funding in the State of Louisiana	Research	Single Discipline	Health and Medical Sciences	5 Year(s)	$198,968.00	$199,690.00	$199,300.00	$198,609.00	$199,916.00	$996,483.00
014ENH-20	Dr. Duane Smith	Nicholls State University	Preparing Tomorrow's Scientists Today: Enhancing the Undergraduate Biochemistry Experience for Science Majors	Education	Multidisciplinary	Biological Sciences	2 Year(s)	$275,000.00	$200,000.00	$0.00	$0.00	$0.00	$475,000.00
015ENH-20	Dr. Ephraim Massawe	Southeastern Louisiana University	Robotic Equipment and Infrastructure for Filtration Efficiency, Nanotechnology and Bioaerosol Research	Research	Multidisciplinary	Engineering B (Industrial, Materials, Mechanical)	5 Year(s)	$289,068.00	$190,504.00	$189,255.00	$137,373.00	$193,800.00	$1,000,000.00
016ENH-20	Dr. Mahmoud Braima	Southern University and A&M College - Baton Rouge	Enhancement of the Mass Communication Undergraduate Program	Education	Single Discipline	Humanities	1 Year(s)	$477,590.00	$0.00	$0.00	$0.00	$0.00	$477,590.00
017ENH-20	Prof. Diane Blake	Tulane University Health Sciences Center	Broadening Experiences in Scientific Training for STEM Graduate Students	Education	Multidisciplinary	Health and Medical Sciences	5 Year(s)	$51,347.00	$46,772.00	$44,400.00	$45,600.00	$47,040.00	$235,159.00
018ENH-20	Dr. Hua Lu	Tulane University Health Sciences Center	Enhancement of a Proteomics Core Facility for the Tulane University Community	Research	Single Discipline	Health and Medical Sciences	5 Year(s)	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$200,000.00	$1,000,000.00
019ENH-20	Dr. Ziad Ashkar	University of Louisiana at Lafayette	Technology Enhancement of Learning Environment-Health [TELE-Health]	Education	Single Discipline	Health and Medical Sciences	5 Year(s)	$285,355.00	$181,703.00	$184,800.00	$179,850.00	$161,850.00	$993,558.00
020ENH-20	Dr. Alan Barhorst	University of Louisiana at Lafayette	Acadian Center for Advanced Manufacturing	Education	Multidisciplinary	Engineering B (Industrial, Materials, Mechanical)	5 Year(s)	$300,000.00	$200,000.00	$200,000.00	$200,000.00	$100,000.00	$1,000,000.00
021ENH-20	Dr. Michael Gervais	University of Louisiana at Lafayette	High-Definition [HDTV] Digital Video Production Studio & Control Room Facility	Education	Single Discipline	Humanities	4 Year(s)	$282,679.00	$193,749.00	$187,443.00	$186,230.00	$0.00	$850,101.00
022ENH-20	Dr. David Khey	University of Louisiana at Lafayette	Comprehensive Enhancement of Applied Research for the Public Good of Louisiana	Research	Single Discipline	Social Sciences	5 Year(s)	$130,061.00	$177,782.00	$199,544.00	$169,450.00	$7,064.00	$683,901.00
023ENH-20	Dr. Erin Sigel	University of Louisiana at Lafayette	Advancing to the Next-Generation: Establishing an 'Omics Instrumentation Facility at UL Lafayette	Research	Single Discipline	Biological Sciences	5 Year(s)	$279,978.00	$126,672.00	$93,400.00	$90,900.00	$90,900.00	$681,850.00
024ENH-20	Dr. Paula Zeanah	University of Louisiana at Lafayette	Faculty Enhancement for Advancement of Trauma-informed Education [FEATE]	Education	Multidisciplinary	Social Sciences	4 Year(s)	$202,759.00	$143,434.00	$198,654.00	$141,874.00	$0.00	$686,721.00
025ENH-20	Prof. Xiao-Dong Zhou	University of Louisiana at Lafayette	Comprehensive Enhancement of Materials Programs in Energy, Biology and Additive Manufacturing for the Interdisciplinary Research and Education at UL Lafayette	Research	Multidisciplinary	Engineering B (Industrial, Materials, Mechanical)	5 Year(s)	$300,000.00	$197,497.00	$188,109.00	$147,910.00	$148,361.00	$981,877.00
026ENH-20	Dr. Paul Schilling	University of New Orleans	3D Studio: Interdisciplinary Design Education at UNO	Education	Multidisciplinary	Engineering B (Industrial, Materials, Mechanical)	4 Year(s)	$290,107.00	$191,574.00	$171,291.00	$168,402.00	$0.00	$821,374.00

Total Number of Proposals submitted	26
Total Funds Requested for First Year	$6,253,633.00
Total Funds Requested for Second Year	$3,972,206.00
Total Funds Requested for Third Year	$3,966,299.00
Total Funds Requested for Fourth Year	$3,351,925.00
Total Funds Requested for Fifth Year	$2,297,248.00
Total Funds Requested	$19,841,311.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
027ENH-20	Ms. Raven Dora	Baton Rouge Community College	BRCC Integrating a Corporate Environment into the Computer Science Academic Experience	Workforce	Single Discipline	Targeted Workforce	$50,696.00
028ENH-20	Ms. Chorondalette Moore	Baton Rouge Community College	BRCC PTEC Tool School Project	Workforce	Single Discipline	Targeted Workforce	$146,108.00
029ENH-20	Ms. Rhonda Picou	Baton Rouge Community College	Revitalization of BRCCs Practical Nursing Program	Workforce	Single Discipline	Health and Medical Sciences	$92,658.00
030ENH-20	Mr. Rhett Poche	Baton Rouge Community College	Building a Creative Computing Workforce by Enhancing BRCC's Interactive Digital Media and Graphic Arts Programs	Workforce	Single Discipline	Targeted Workforce	$48,180.00
031ENH-20	Dr. June Schneider	Bossier Parish Community College	Engineering Tomorrows Innovators: BPCC Targeted Enhancement Grant Project	Education	Single Discipline	Engineering B	$74,400.00
032ENH-20	Dr. Chandra Pokhrel	Centenary College	Enhanced Laboratory for Optics/Modern Physics	Education	Single Discipline	Physics	$14,443.00
033ENH-20	Dr. Ruby Broadway	Dillard University	Enhancing the Curriculum in Biology via Phase II Virtual Laboratory	Education	Single Discipline	Biological Sciences	$59,727.00
034ENH-20	Mr. Mark Raymond	Dillard University	Interdisciplinary Media Arts Program	Education	Multidisciplinary	Humanities	$199,304.00
035ENH-20	Dr. Casey Schreiber	Dillard University	Mobile Technology for 21st Century Classrooms	Education	Single Discipline	Social Sciences	$48,344.00
036ENH-20	Dr. Ebony Turner	Dillard University	Development of an Emergency Preparedness and Disaster Response Certificate Program	Workforce	Single Discipline	Health and Medical Sciences	$180,750.00
037ENH-20	Dr. Wen Zhang	Dillard University	Dillard University Music Industry Program	Education	Single Discipline	Humanities	$111,690.00
038ENH-20	Dr. Michael Ludwig	Franciscan Missionaries of Our Lady University	Augmentation of Graduate Anatomy Education with HoloLens 2	Education	Single Discipline	Health and Medical Sciences	$155,665.00
039ENH-20	Dr. Elizabeth Christian	Louisiana College	Digital Enhancement of Media Platforms for High-Level College instruction	Education	Single Discipline	Humanities	$166,331.00
040ENH-20	Dr. Marilyn Cooksey	Louisiana College	Improved Technology for Promotion of Nursing Student Achievement	Education	Single Discipline	Health and Medical Sciences	$17,107.00
041ENH-20	Dr. Justin Langford	Louisiana College	Improvements to Lecture and Learning Environment	Education	Single Discipline	Humanities	$87,330.00
042ENH-20	Dr. Bayne Pounds	Louisiana College	Human Behavior Curriculum Enhancement through the Creation of a Flexible, Collaborative Classroom	Education	Single Discipline	Social Sciences	$30,478.00
043ENH-20	Mr. Charles Stevenson	Louisiana Delta Community College	Louisiana Delta Community College CNC Operator Program: Providing Targeted Workforce Training to Increase Economic Growth in Rural Louisiana	Workforce	Single Discipline	Targeted Workforce	$159,314.00
044ENH-20	Dr. Kayanush Aryana	Louisiana State University Agricultural Center	Enhancing research and education on healthier and safer fluid foods in Louisiana.	Research	Multidisciplinary	Agricultural Sciences	$153,500.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
045ENH-20	Dr. Collins Kimbeng	Louisiana State University Agricultural Center	Capacity building of the LSU AgCenter Sugarcane Research Station's sucrose laboratory through the acquisition of a state-of-the art NIR equipment	Research	Multidisciplinary	Agricultural Sciences	$200,000.00
046ENH-20	Dr. Heather Kirk-Ballard	Louisiana State University Agricultural Center	Sustainable Landscapes at Louisiana House: Interactive Teaching and Demonstration Gardens	Education	Multidisciplinary	Agricultural Sciences	$24,228.00
047ENH-20	Dr. Subramaniam Sathivel	Louisiana State University Agricultural Center	Producing bioactive components from food processing byproducts using bioprocessing technologies	Research	Multidisciplinary	Agricultural Sciences	$200,000.00
048ENH-20	Dr. Brett Wolfe	Louisiana State University Agricultural Center	Acquisition of a field spectroradiometer for rapid assessment of plant traits and performance	Research	Single Discipline	Agricultural Sciences	$76,495.00
049ENH-20	Dr. Brant Faircloth	Louisiana State University and A & M College	A DNA Tapestation to Support Genomic Analyses in Biological Sciences	Research	Single Discipline	Biological Sciences	$29,070.00
050ENH-20	Dr. Manas Ranjan Gartia	Louisiana State University and A & M College	Robotic Diagnostic Tools for Biomedical and Materials Applications using Multiphoton Endoscopic Probe	Research	Single Discipline	Engineering B	$160,000.00
051ENH-20	Dr. Jun Heo	Louisiana State University and A & M College	Creative Sandbox Project: Enhancing the Collaborative and Creative Learning Environment	Education	Single Discipline	Social Sciences	$77,938.00
052ENH-20	Dr. Achim Herrmann	Louisiana State University and A & M College	Acquisition of sample preparation instrumentation to improve research and teaching in the Biological Sciences	Research	Single Discipline	Biological Sciences	$107,437.00
053ENH-20	Dr. Brian Irving	Louisiana State University and A & M College	Enhancing Tools for Bioenergetic Analyses for Research and Teaching	Research	Single Discipline	Health and Medical Sciences	$195,971.00
054ENH-20	Dr. Hyun Woo Jeon	Louisiana State University and A & M College	LSU Advanced Manufacturing Minor and Manufacturing Unit	Education	Single Discipline	Engineering B	$164,706.00
055ENH-20	Prof. Omar Magana-Loaiza	Louisiana State University and A & M College	Multiphoton Quantum Simulation through the Control of Electromagnetic Near-Fields in Photonic Networks	Research	Single Discipline	Physics	$199,708.00
056ENH-20	Dr. Genevieve Palardy	Louisiana State University and A & M College	Smart cobotic composites manufacturing research laboratory	Research	Single Discipline	Engineering B	$155,983.00
057ENH-20	Dr. Miriam Siebenbuerger	Louisiana State University and A & M College	SAXS multi-purpose sample environment based on a modular size exclusion chromatography instrument	Research	Single Discipline	Biological Sciences	$162,088.00
058ENH-20	Dr. Eamonn Walker	Louisiana State University and A & M College	Targeted Departmental Enhancement Proposal: Updated Equipment for ME 4201 Machine Design Laboratory	Education	Single Discipline	Engineering B	$121,379.00
059ENH-20	Dr. Sibei Xia	Louisiana State University and A & M College	Enhancement of Education and Research Infrastructure in Fashion Automation by Building a Holistic Fashion Technology Lab	Education	Single Discipline	Social Sciences	$199,459.00
060ENH-20	Prof. Kebede Beshera	Louisiana State University at Eunice	Laboratory Capacity Enhancement for Genetics and Cell Biology Instruction at Louisiana State University at Eunice [LSU Eunice]	Education	Single Discipline	Biological Sciences	$190,706.00
061ENH-20	Dr. Lisa Hawthorne	Louisiana State University at Eunice	Promoting Self-Assessment of Psychomotor Skills by Nursing Students through Peer-Mentoring and Deliberate Practice	Education	Single Discipline	Health and Medical Sciences	$163,579.00
062ENH-20	Dr. Benita Chatmon	Louisiana State University Health Sciences Center - New Orleans	Enhancement of an Academic Success Center to Decrease Attrition Rates Among Minority Students at a Health Science Center	Education	Single Discipline	Health and Medical Sciences	$118,090.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
063ENH-20	Dr. Alison Davis	Louisiana State University Health Sciences Center - New Orleans	Enhancement of Maternity Nursing Education Through the Use of High-Fidelity Simulation to Impact Maternal Mortality and Morbidity in Louisiana	Education	Single Discipline	Health and Medical Sciences	$130,006.00
064ENH-20	Dr. Leanne Fowler	Louisiana State University Health Sciences Center - New Orleans	Enhancing Advanced Practice Nursing Clinical Education and Diagnostic Reasoning for the Diverse and Complex Needs of all Patient Populations	Education	Single Discipline	Health and Medical Sciences	$151,679.00
065ENH-20	Dr. Francis Giacona	Louisiana State University Health Sciences Center - New Orleans	Aquisition of a multi-material, multi-color 3D printer to enhance dental and medical education at LSUHSC School of Dentistry	Education	Multidisciplinary	Health and Medical Sciences	$194,950.00
066ENH-20	Dr. Suzanne Tinsley	Louisiana State University Health Sciences Center Shreveport	Geaux Up-State Technology Enhancement II	Education	Single Discipline	Health and Medical Sciences	$171,581.00
067ENH-20	Prof. Stephen Banks	Louisiana State University in Shreveport	High Capacity Autoclave to Enhance Teaching and Research at LSUS	Education	Multidisciplinary	Biological Sciences	$49,112.00
068ENH-20	Dr. Amy Erickson	Louisiana State University in Shreveport	Advancing awareness and appreciation of the Louisiana coast	Education	Single Discipline	Biological Sciences	$48,098.00
069ENH-20	Dr. Amy Erickson	Louisiana State University in Shreveport	Enhancement of Environmental Science Equipment at LSUS	Education	Single Discipline	Biological Sciences	$68,400.00
070ENH-20	Dr. Amy Erickson	Louisiana State University in Shreveport	Providing GIS training to the LSUS community and Northwest Louisiana	Education	Multidisciplinary	Biological Sciences	$87,400.00
071ENH-20	Ms. Tracie Johnson	Louisiana State University in Shreveport	College of Business Finance and Analytics Laboratory	Workforce	Multidisciplinary	Targeted Workforce	$109,332.00
072ENH-20	Dr. Lee Purvis	Louisiana State University in Shreveport	Innovative Psychological Assessment & Intervention Services Clinic for the Underserved	Education	Single Discipline	Social Sciences	$84,543.00
073ENH-20	Dr. Timothy Winter	Louisiana State University in Shreveport	Creating a Virtual Reality Anatomy Lab to Enhance Health Science Education at LSUS	Education	Multidisciplinary	Health and Medical Sciences	$158,280.00
074ENH-20	Dr. Simone Camel	Louisiana Tech University	Nutrition Assessment and Education Laboratory Enhancement	Education	Single Discipline	Health and Medical Sciences	$93,636.00
075ENH-20	Dr. Michael Crosby	Louisiana Tech University	Enhancing Educational and Student Research Opportunities in Agricultural Science and Forestry at Louisiana Tech University	Education	Single Discipline	Agricultural Sciences	$83,028.00
076ENH-20	Dr. Mark DeCoster	Louisiana Tech University	HyperFlo: Establishing an interdepartmental micro/nano characterization laboratory using hyperspectral imaging and fluorescence analysis	Research	Multidisciplinary	Health and Medical Sciences	$200,000.00
077ENH-20	Dr. Kimmerly Harrell	Louisiana Tech University	LA Tech Center for Communication and Neurological Disorders [LATCAND]	Education	Single Discipline	Health and Medical Sciences	$132,329.00
078ENH-20	Dr. Jane Jacob	Louisiana Tech University	Enhancing Human Interaction, Accessibility, and Connectivity in the College of Education	Education	Single Discipline	Social Sciences	$72,844.00
079ENH-20	Dr. Jun-Ing Ker	Louisiana Tech University	Enhancement of Educational and Research Capabilities to Meet Industry 4.0 Workforce Need	Education	Single Discipline	Engineering B	$52,730.00
080ENH-20	Prof. Daniela Mainardi	Louisiana Tech University	Nano/microelectronics Fabrication Capabilities at Louisiana Tech University	Education	Multidisciplinary	Engineering B	$183,194.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
081ENH-20	Dr. Scott Poh	Louisiana Tech University	Enhancing Instrumentation Capabilities for the Biomolecular Research Shared Laboratory	Research	Multidisciplinary	Biological Sciences	$101,520.00
082ENH-20	Prof. Bala Ramachandran	Louisiana Tech University	Enhancing Atomic Force Microscopy Capabilities of the Institute for Micromanufacturing at Louisiana Tech University	Research	Single Discipline	Engineering B	$199,640.00
083ENH-20	Dr. Lee Sawyer	Louisiana Tech University	Targeted Enhancement: Acquisition of an X-ray Diffractometer for Enhancing Research, Education, and Training in Physics, Chemistry and Materials Sciences	Research	Multidisciplinary	Physics	$59,105.00
084ENH-20	Dr. C. Shawn Sun	Louisiana Tech University	Enhancement of Concrete Testing Capabilities to Foster Research on Infrastructure Sustainability	Research	Single Discipline	Engineering B	$154,000.00
085ENH-20	Ms. Joanna Ward	Louisiana Tech University	Enhancement of Presentation Skills through a Virtual Innovation Studio	Education	Single Discipline	Health and Medical Sciences	$19,646.00
086ENH-20	Dr. Brian Roberts	Louisiana Universities Marine Consortium	Enhancement of the biological analytical capabilities for Louisiana researchers at the Louisiana Universities Marine Consortiums DeFelice Marine Center	Research	Single Discipline	Biological Sciences	$119,627.00
087ENH-20	Dr. Erin Dupuis	Loyola University New Orleans	Neuroscience for Undergraduates: Enhancing Laboratory and Collaborative Research From Multiple Disciplines	Education	Multidisciplinary	Social Sciences	$143,595.00
088ENH-20	Mr. Robert Racine	Loyola University New Orleans	High Resolution Media Collaboration System for Communication, Film, and Design	Education	Multidisciplinary	Social Sciences	$130,326.00
089ENH-20	Dr. Ahmed Abdel-Mohti	McNeese State University	Enhancement Plan to Add a Thermal Cycling Laboratory for Engineering and Science Education at McNeese State University	Education	Multidisciplinary	Engineering B	$75,589.00
090ENH-20	Dr. Amber Hale	McNeese State University	Enhancement of Research and Teaching in the McNeese State University Department of Biology Through the Acquisition of a Scanning Electron Microscope	Research	Single Discipline	Biological Sciences	$109,284.00
091ENH-20	Ms. Sonya Hidalgo	McNeese State University	Creation of a Molecular Diagnostics Hands-on Medical Laboratory Science Student Laboratory	Education	Single Discipline	Health and Medical Sciences	$46,400.00
092ENH-20	Dr. Zhuang Li	McNeese State University	Enhancement of Education in Predictive Maintenance	Education	Multidisciplinary	Engineering B	$86,636.00
093ENH-20	Dr. William Storer	McNeese State University	Enhancement of MSU Farms Research Capacity to Include Hemp Production and Research: A New Crop for Louisiana	Research	Single Discipline	Agricultural Sciences	$98,011.00
094ENH-20	Prof. Raj Boopathy	Nicholls State University	Enhancement of Environmental Biology Curriculum at Nicholls State University	Education	Single Discipline	Biological Sciences	$33,625.00
095ENH-20	Dr. Sherry Foret	Nicholls State University	Multidisciplinary Collaboration in Allied Health Sciences Using High Fidelity Simulation	Education	Single Discipline	Health and Medical Sciences	$49,776.00
096ENH-20	Mrs. Kristie Hartman	Nicholls State University	The Impact of Wearable Simulation and Its Role in Facilitating Clinical Judgement and Enhancement of Psychosocial Communication	Education	Single Discipline	Health and Medical Sciences	$17,665.00
097ENH-20	Prof. Xiaoxu Jiang	Nicholls State University	Developing a Moodle Based Open Access Assessment Platform for Nursing Students to Enhance General, Organic and Biological Chemistry Learning	Education	Multidisciplinary	Health and Medical Sciences	$57,647.00
098ENH-20	Dr. En Mao	Nicholls State University	Creating a High Impact Learning Environment for Workforce Readiness and Development	Workforce	Single Discipline	Targeted Workforce	$101,243.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
099ENH-20	Mrs. Meryn Olivier	Nicholls State University	Enhancement of Quality CPR in Trained and Untrained Bystanders Using Gamification and Simulation Tools	Education	Single Discipline	Health and Medical Sciences	$5,877.00
100ENH-20	Dr. Andrew Simoncelli	Nicholls State University	Vanishing Louisiana: Preserving the Lands, Histories, and Cultures of the Bayou Region	Education	Multidisciplinary	Social Sciences	$139,600.00
101ENH-20	Dr. Himanshu Verma	Nicholls State University	Structural, mechanical, and magnetic characterization of nanocomposites using AFM and MFM	Research	Single Discipline	Physics	$39,203.00
102ENH-20	Dr. Darcey Wayment	Nicholls State University	Using a liquid chromatograph mass spectrometer [LCMS] to enhance learning in the agricultural, biological and chemical sciences	Education	Multidisciplinary	Agricultural Sciences	$116,000.00
103ENH-20	Dr. Jerry Brunson	Northwestern State University	Building a local phage bank and the application of the phage therapy	Research	Single Discipline	Biological Sciences	$91,862.00
104ENH-20	Dr. Xinjia Chen	Northwestern State University	Establishment of Automation, Robotics and Operation Research Laboratory for Engineering Technology	Education	Single Discipline	Engineering B	$28,075.00
105ENH-20	Dr. Joel Hicks	Northwestern State University	Enriching Radiologic Science Education through Cutting Edge Digital Imaging Equipment	Education	Single Discipline	Health and Medical Sciences	$61,250.00
106ENH-20	Dr. Jennifer Hodges-Crowder	Northwestern State University	Interactive Psychological Assessment Resource Enhancements for Student Learning, Community Service Outreach and Professional Development	Education	Single Discipline	Social Sciences	$24,011.00
107ENH-20	Dr. Md Shahriar Hossain	Northwestern State University	Installation of Smart Manufacturing System Prototype for Enhancing IET Students Learning Experience	Education	Single Discipline	Engineering B	$79,899.00
108ENH-20	Ms. Maxine Johnson	Northwestern State University	Clinical Nursing Skills: From Novice to Competent Practice	Education	Single Discipline	Health and Medical Sciences	$85,883.00
109ENH-20	Dr. Christopher Lyles	Northwestern State University	Enhancement of analytical instrumentation for capstone laboratories and research-related activities	Education	Single Discipline	Biological Sciences	$68,578.00
110ENH-20	Dr. Nabin Sapkota	Northwestern State University	Improving Industrial Engineering Technology Students Learning Through an Enhanced Technology-Driven Experiential Learning Environment	Education	Single Discipline	Engineering B	$80,681.00
111ENH-20	Mr. Stephen Waddell	Nunez Community College	Planting for Community/An Enhancment in Biology	Education	Single Discipline	Biological Sciences	$125,665.00
112ENH-20	Dr. David Burk	Pennington Biomedical Research Center	Brightfield and Multiplex Fluorescence-Capable Whole Slide Scanner to Enhance Research at PBRC	Research	Single Discipline	Health and Medical Sciences	$200,000.00
113ENH-20	Mr. Chad Dufrene	Southeastern Louisiana University	Enhancing the Biomechanics Laboratory at Southeastern Louisiana University	Education	Single Discipline	Health and Medical Sciences	$52,990.00
114ENH-20	Dr. Ahmad Fayed	Southeastern Louisiana University	Interdisciplinary Makerspace	Education	Multidisciplinary	Engineering B	$118,835.00
115ENH-20	Dr. Patrick Moyer	Southeastern Louisiana University	Advanced Physics Laboratory Equipment for State-of-the-Art Education of STEM students	Education	Multidisciplinary	Physics	$59,023.00
116ENH-20	Dr. Amber Narro	Southeastern Louisiana University	Southeastern Student Studio	Education	Single Discipline	Social Sciences	$75,460.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
117ENH-20	Dr. Jerry Parker	Southeastern Louisiana University	Developing, Strengthening, and Advancing Language Study in southeast Louisiana, a Departmental Technology Update	Education	Single Discipline	Humanities	$42,427.00
118ENH-20	Dr. Kyle Piller	Southeastern Louisiana University	Enhancing Research and Education Through the Acquisition of Equipment for Genomics at Southeastern Louisiana University	Research	Single Discipline	Biological Sciences	$184,288.00
119ENH-20	Dr. Mohammad Saadeh	Southeastern Louisiana University	Investing in the Welding Technology Concentration to Promote Workforce Development	Workforce	Multidisciplinary	Targeted Workforce	$195,435.00
120ENH-20	Mr. Patrick Settoon	Southeastern Louisiana University	High Definition Upgrade to the Columbia Theatre's Robotic Camera System	Education	Multidisciplinary	Social Sciences	$45,611.00
121ENH-20	Dr. Martha Sherrill	Southeastern Louisiana University	Telepractice as an approach to student-clinician education and access to Speech-Language services for persons with acquired cognitive-communicative disorders.	Education	Single Discipline	Health and Medical Sciences	$15,659.00
122ENH-20	Dr. Stephen Akwaboa	Southern University and A&M College - Baton Rouge	Enhancement of Research and Education in Material Science through the Acquisition of Discovery Laser Flash [DLF1600] Investigative Thermal Equipment	Research	Multidisciplinary	Engineering B	$200,000.00
123ENH-20	Prof. Tangela Colson	Southern University and A&M College - Baton Rouge	Social Work By Doing: Using Technology & Simulation to Enhance Student Readiness	Education	Single Discipline	Social Sciences	$197,752.00
124ENH-20	Dr. Harold Mellieon, Jr.	Southern University and A&M College - Baton Rouge	Journey's in Agricultural Science Developing Educational Networks [JAG'S DEN]	Education	Multidisciplinary	Agricultural Sciences	$139,500.00
125ENH-20	Dr. Terrence Reese	Southern University and A&M College - Baton Rouge	Educational Enhancement Through a Departmental Planetarium	Education	Single Discipline	Physics	$142,700.00
126ENH-20	Dr. Jung-Im Seo	Southern University and A&M College - Baton Rouge	Enhancement of Students' Design Hand-On Experiences through Computer Technological Support for Apparel Merchandising and Textiles Program	Education	Single Discipline	Agricultural Sciences	$184,172.00
127ENH-20	Dr. Haitham Eid	Southern University at New Orleans	Regional Hub for Museum Diversity, Digital Literacy and Innovation	Education	Single Discipline	Humanities	$91,779.00
128ENH-20	Dr. Clyde Robertson	Southern University at New Orleans	Development of an Oral History Digital Laboratory for Departmental Enhancement	Education	Single Discipline	Humanities	$60,661.00
129ENH-20	Dr. Patricia Robertson	Southern University at New Orleans	An Urban and Regional Planning Training Center Supporting Student Internships in the Public Workforce	Education	Single Discipline	Social Sciences	$94,439.00
130ENH-20	Dr. Harry Russell	Southern University at New Orleans	Enhancing Departmental Infrastructue for Online Capability Capacity Expertise and Broadened Participation	Education	Single Discipline	Social Sciences	$39,280.00
131ENH-20	Dr. Meiko Thompson	Southern University at New Orleans	[Withdrawn by Institution]	Education	Single Discipline	Biological Sciences	$199,503.00
132ENH-20	Ms. DeNesia Anderson	Southern University at Shreveport	Seeding Skills Reading Plus	Education	Multidisciplinary	Humanities	$150,000.00
133ENH-20	Ms. DeNesia Anderson	Southern University at Shreveport	Seeding Skills Reading Plus Clinic	Education	Multidisciplinary	Humanities	$170,765.00
134ENH-20	Ms. DeNesia Anderson	Southern University at Shreveport	"Building the Capacity for the Paramedic Training Program at SUSLA"	Education	Single Discipline	Health and Medical Sciences	$162,186.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
135ENH-20	Mrs. Cheryl Blackshire	Southern University at Shreveport	INSTITUTING EVIDENCE-BASED STRATEGIES TO INCREASE FIRST-TIME NCLEX PASS RATES	Education	Single Discipline	Health and Medical Sciences	$135,985.00
136ENH-20	Mrs. Joyce Cottonham	Southern University at Shreveport	Embracing Technology in the Department of Humanities	Education	Single Discipline	Humanities	$106,858.00
137ENH-20	Dr. Barry Hester	Southern University at Shreveport	Fly Southern: Launching Careers in Aerospace Technology	Workforce	Single Discipline	Targeted Workforce	$112,778.00
138ENH-20	Dr. Lonnie McCray	Southern University at Shreveport	English and Math Resource Center	Education	Multidisciplinary	Humanities	$92,778.00
139ENH-20	Dr. Kenie Moses	Southern University at Shreveport	Diversifying Medical Career Pathways for Students Through Biomedical Engineering Technology	Education	Multidisciplinary	Engineering B	$115,547.00
140ENH-20	Dr. William Mayo	Sowela Technical Community College	Enhancing Equipment to Further Competencies in the Aviation Maintenance Workforce	Workforce	Single Discipline	Targeted Workforce	$140,250.00
141ENH-20	Dr. Charles Stewart	Sowela Technical Community College	Enhancing SOWELA Technical Community College's Biological Sciences Lab	Education	Multidisciplinary	Biological Sciences	$42,650.00
142ENH-20	Dr. Hannah Frank	Tulane University	Acquisition of Illumina MiSeq to increase research, teaching and training capacity	Research	Single Discipline	Biological Sciences	$101,634.00
143ENH-20	Prof. Kevin Gotham	Tulane University	City, Culture, and Community [CCC] Department Enhancement Program [DEP]	Education	Multidisciplinary	Social Sciences	$117,865.00
144ENH-20	Dr. Michael Naguib	Tulane University	A Multidisciplinary Materials Science and Engineering Teaching Laboratory	Education	Single Discipline	Engineering B	$196,883.00
145ENH-20	Prof. Jason Nesbitt	Tulane University	Modernizing Methods to Study the Ancient Past: Enhancing the Research Potential of the Center for Archaeology at Tulane University	Research	Single Discipline	Social Sciences	$149,383.00
146ENH-20	Prof. Noshir Pesika	Tulane University	Acquisition of a Universal Materials Tester to Enhance Materials Research at Tulane	Research	Single Discipline	Engineering B	$163,000.00
147ENH-20	Dr. Rick Snow	Tulane University	Enhancing Creative Tools for a Curriculum in Documentary Filmmaking & Production	Education	Single Discipline	Humanities	$199,994.00
148ENH-20	Dr. Bruce Bunnell	Tulane University Health Sciences Center	Expanding the live animal imaging capabilities of Tulane School of Medicine and LSUHSC with an in vivo Bruker SkyScan 1176 imager	Research	Multidisciplinary	Health and Medical Sciences	$198,000.00
149ENH-20	Dr. Chi Dola	Tulane University Health Sciences Center	Ultrasound Training with Performance Measurement to Enhance Women’s and Fetal Healthcare	Education	Single Discipline	Health and Medical Sciences	$94,920.00
150ENH-20	Dr. Mary Mulcahey	Tulane University Health Sciences Center	Enhancing Orthopaedic Arthroscopic Cases with Simulation of Fundamental Skills	Education	Single Discipline	Health and Medical Sciences	$84,400.00
151ENH-20	Dr. Rebecca Schroll	Tulane University Health Sciences Center	Surgical Education Enhancement for Complex Training to Proficiency through Advanced Medical Simulation	Education	Single Discipline	Health and Medical Sciences	$200,000.00
152ENH-20	Dr. DILIP DEPAN	University of Louisiana at Lafayette	Acquisition of FTIR microscope for advancement in chemical, materials, and biological science research and education	Research	Multidisciplinary	Engineering B	$85,303.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
153ENH-20	Dr. Tanvir Faisal	University of Louisiana at Lafayette	Acquisition of Multiaxial Mechanical Testing System to Enhance Research and Education in Biomedical Engineering	Research	Multidisciplinary	Engineering B	$154,917.00
154ENH-20	Dr. Raju Gottumukkala	University of Louisiana at Lafayette	Smart Systems Laboratory	Research	Multidisciplinary	Engineering B	$184,278.00
155ENH-20	Dr. Gholam Massiha	University of Louisiana at Lafayette	Enhancing Automation Control Laboratory by Integrating Programable Logic Controllers and Hardware in the Loop Emulators	Education	Multidisciplinary	Engineering B	$101,010.00
156ENH-20	Dr. Robert Michael	University of Louisiana at Lafayette	Enhancing psychological laboratories to facilitate behavioral research	Research	Single Discipline	Social Sciences	$155,481.00
157ENH-20	Prof. Beth Stauffer	University of Louisiana at Lafayette	Enhancement of Biology Research and Teaching through Personal Flow Cytometry	Research	Single Discipline	Biological Sciences	$85,554.00
158ENH-20	Prof. Harry Whitlow	University of Louisiana at Lafayette	Ultra-high BRILLIANCE multi-cusp ion source for research users at the Louisiana Accelerator Center [BRILLIANT@ LAC]	Research	Multidisciplinary	Physics	$191,035.00
159ENH-20	Dr. Wesley Wilson	University of Louisiana at Lafayette	Increasing the Workforce of Adapted Physical Educators	Workforce	Single Discipline	Targeted Workforce	$118,929.00
160ENH-20	Dr. Peng Yin	University of Louisiana at Lafayette	Acquisition of a Micro Combined Heat and Power [Micro-CHP] System to Enhance Thermofluids Teaching and Energy Research	Education	Single Discipline	Engineering B	$65,815.00
161ENH-20	Dr. Nektarios Barabutis	University of Louisiana at Monroe	Establishment of a Research Laboratory Focused on Vascular Barrier Function	Research	Single Discipline	Health and Medical Sciences	$52,580.00
162ENH-20	Dr. Thomas Foster	University of Louisiana at Monroe	Request for New Recording Technology for the Counseling Training Clinic	Education	Single Discipline	Social Sciences	$52,077.00
163ENH-20	Mr. John Herrock	University of Louisiana at Monroe	Industrial Hygiene Teaching Laboratory Equipment Enhancement	Education	Single Discipline	Health and Medical Sciences	$45,194.00
164ENH-20	Dr. Susan Lacey	University of Louisiana at Monroe	Obstetrical, Neonatal, and Gynecological Human Patient Simulators: Furthering skills and knowledge of undergraduate and nurse practitioner students, Northeast Louisiana first responders, SANE and neonatal nurses	Education	Single Discipline	Health and Medical Sciences	$94,769.00
165ENH-20	Dr. Thomas Sasek	University of Louisiana at Monroe	School of Sciences on a Sphere	Education	Multidisciplinary	Biological Sciences	$66,270.00
166ENH-20	Dr. Connie Atkinson	University of New Orleans	Creating Public-Facing Histories of Slavery in New Orleans	Research	Single Discipline	Social Sciences	$36,305.00
167ENH-20	Dr. Lothar Birk	University of New Orleans	Subtractive Rapid Prototyping of 3D Ship Models and Molds	Education	Single Discipline	Engineering B	$199,885.00
168ENH-20	Dr. Robert Dupont	University of New Orleans	History Education and Workforce Awareness: Developing a Skills-Cognizant Curriculum	Education	Single Discipline	Humanities	$49,957.00
169ENH-20	Dr. Martin Guillot	University of New Orleans	Fluid Mechanics Laboratory Enhancement and Expansion	Education	Single Discipline	Engineering B	$196,196.00
170ENH-20	Dr. Paul Herrington	University of New Orleans	Additive Manufacturing Laboratory Enhancement	Education	Single Discipline	Engineering B	$141,843.00

Proposals Submitted to the Departmental Enhancement Program - Targeted
for the FY 2017-18 Review Cycle

Proposal Number	PI Name	Institution	Project Title	Primary Category	Single/ Multidisciplinary	Primary Discipline	Amount Requested
171ENH-20	Dr. Bernard Rees	University of New Orleans	Facility for Multidisciplinary Studies of Cellular and Mitochondrial Respiration	Research	Multidisciplinary	Biological Sciences	$94,827.00
172ENH-20	Dr. Bethany Stich	University of New Orleans	UNO Research, Technology and Innovation Design Lab: Department Enhancement	Research	Multidisciplinary	Social Sciences	$99,600.00
173ENH-20	Dr. John Wiley	University of New Orleans	Energy Dispersive Spectroscopy for Materials Research	Research	Multidisciplinary	Engineering B	$49,059.00

Total Number of Proposals Submitte	147
Total Funds Requested	$16,360,197.00

Appendix B

Rating Form

Departmental Enhancement Rating Form

Goals/Objectives **10 Points** **_____**

-To what degree are the goals clearly stated, reasonable, achievable, and related to the mission statement of the academic unit? To what degree are the objectives measurable and related to the goals?

Work Plan **20 Points** **_____**

-To what degree does the proposal establish a compelling timeline for grant activities with a clear delineation of which team member is responsible for each task? To what degree does the work plan clearly establish the necessary tasks for achieving the project goals and objectives?

Impact **30 points** **_____**

-To what degree does the project elevate the unit's ability to perform significant research, compete for research funding, improve facilities or curriculum in a way that impacts recruitment, retention, and the workforce competitiveness of graduates? To what degree is this impact related to the mission statement of the academic unit?

Evaluation **10 Points** _____

-To what degree is a plan established for evaluating the impact of the project with criteria based on specific metrics?

Sustainability **10 Points** _____

-To what degree are the goals, impact and individual budget requests sustainable beyond the life of the grant? To what degree are maintenance or sustainability plans established for equipment, software, supplies, as well as funds dedicated to staff, faculty and graduate students?

Investigators **10 Points** **_____**

-To what degree do the team members appear capable of implementing the work plan?

Budget **10 Points** _____

-To what degree is the budget efficiently crafted to maximize the project's impact? To what degree does the budget justification clearly explain the relationship of each individual request to the proposal's impact, goals and work plan?