REPORT TO THE LOUISIANA BOARD OF REGENTS

REVIEW OF TRADITIONAL ENHANCEMENT PROPOSALS IN THE SPECIAL MULTIDISCIPLINARY CATEGORY

February 2015

Prepared by:

P. Jonathan Patchett (Chair)
Professor, Geochemistry
University of Arizona
REPORT TO THE LOUISIANA BOARD OF REGENTS
REVIEW OF MULTIDISCIPLINARY ENHANCEMENT PROPOSALS
FY 2014-15

Introduction

Thirty-four (34) Multidisciplinary Enhancement Program proposals were supplied by the Louisiana Board of Regents staff for review by the panel chair, Dr. P. Jonathan Patchett of the University of Arizona. The proposals were divided into the root disciplines eligible for this year’s competition (Biological Sciences, Computer and Information Sciences, Engineering B, Humanities, and Social Sciences) and distributed to five subject-area reviewers. Total funding requested was $4,235,318, all in first-year funds.

Dr. Patchett received the following materials for review: (a) the thirty-four (34) proposals submitted; (b) a summary of proposals listing titles, principal investigators, their institutions, funds requested, etc.; (c) the FY 2014-15 Traditional and Undergraduate Enhancement Program Request for Proposals (RFP); and (d) thirty-four (34) rating forms.

The subject-area reviewers submitted their evaluations of individual proposals by February 9, 2015 electronically to Dr. Patchett for further review. After careful consideration and communication with subject-area reviewers, the proposals were ranked and $791,318 in first-year funds was recommended for eight (8) proposals, four (4) of them at a reduced funding level. Table I contains a rank-order list of proposals recommended for funding, with recommended funding levels. Table II contains a rank-order list of proposals recommended for funding should additional funds become available. Table III contains a rank-order list of proposals not recommended for funding.

A summary of all proposals submitted (Appendix A) and a copy of the rating forms used in the evaluations (Appendix B) are attached at the end of the report.
MULTIDISCIPLINARY ENHANCEMENT, FY 2014-15

SUBJECT-AREA REVIEWERS

Jeffrey Dean, Biological Sciences
Mississippi State University
Melissa Harrington, Biological Sciences
Delaware State University
John Gorgone, Computer and Information Sciences
Bentley University
David Beasley, Engineering B
Arkansas State University
Dawn Bratsch-Prince, Humanities
Iowa State University
John Pauly, Social Sciences
Marquette University
### TABLE I
PROPOSALS HIGHLY RECOMMENDED FOR FUNDING

<table>
<thead>
<tr>
<th>Rank</th>
<th>Rating</th>
<th>Proposal Number</th>
<th>Institution</th>
<th>First Year Funds Requested</th>
<th>First Year Funds Recommended</th>
<th>Second Year Funds Requested</th>
<th>Second Year Funds Recommended</th>
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<tbody>
<tr>
<td>1</td>
<td>98</td>
<td>28MUL-15</td>
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<td>$95,688</td>
<td>$88,188</td>
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<tr>
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<td>$17,420</td>
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<tr>
<td>3</td>
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<td>$252,367</td>
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<td></td>
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<td>LSU-BR</td>
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<td>5</td>
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<td>6</td>
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<td>8</td>
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<td>LSU-BR</td>
<td>$74,725</td>
<td>$49,600</td>
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**TOTALS:** $941,708 $791,318 $0 $0

### TABLE II
PROPOSALS RECOMMENDED IF ADDITIONAL FUNDING BECOMES AVAILABLE

<table>
<thead>
<tr>
<th>Rank</th>
<th>Rating</th>
<th>Proposal Number</th>
<th>Institution</th>
<th>First Year Funds Requested</th>
<th>First Year Funds Recommended</th>
<th>Second Year Funds Requested</th>
<th>Second Year Funds Recommended</th>
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<tbody>
<tr>
<td>9</td>
<td>91</td>
<td>25MUL-15</td>
<td>Tulane</td>
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<td>$148,713</td>
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<td>10</td>
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<td>LSU-AG</td>
<td>$76,181</td>
<td>$66,441</td>
<td></td>
<td></td>
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<td>11</td>
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<td>88</td>
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<td>$160,287</td>
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<td>SU-BR</td>
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<td>$89,015</td>
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**TOTALS:** $1,390,044 $1,255,296 $0 $0
<table>
<thead>
<tr>
<th>Rank</th>
<th>Rating</th>
<th>Proposal Number</th>
<th>Institution</th>
<th>First Year Funds Requested</th>
<th>First Year Funds Recommended</th>
<th>Second Year Funds Requested</th>
<th>Second Year Funds Recommended</th>
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<tr>
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<td>LSU-BR</td>
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**TOTALS:**  
$1,903,566 $0 $0 $0
This proposal seeks funds to renovate a radio station at Centenary College to produce programs and podcasts focused on academic research. Encouraging faculty and students to use multimedia tools to share their work with a larger audience is a worthy pedagogical goal. It appears that there is a community and regional niche that might be filled by such work. The proposal is clearly argued, and specific in its purposes. It establishes measurable objectives. The existing equipment is certainly inadequate for the educational purposes envisioned. However, it was not clear why this project depends upon renovating an over-the-air radio station rather than an online operation that would cost less and not require a transmitter or such elaborate studio facilities. Five hours of production per week seems overly ambitious. A small fraction of this time is represented by a well-established program that seems sustainable. Plans for the other hours of programming are tentative and depend upon organizing students and/or faculty to create quality material week after week. Funding is not recommended.
RATING FORM FOR ENHANCEMENT INSTRUCTIONAL
AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 02MUL-15
ROOT DISCIPLINE: C/IS

INSTITUTION: Louisiana State University Agricultural Center

TITLE OF PROPOSAL: Louisiana State University AgCenter Data Warehousing and Business Intelligence

PRINCIPAL INVESTIGATOR: Jefferson Ivey

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 8 (of 10 points)
B.2 17 (of 21 points)
B.3 5 (of 5 points)
B.4 5 (of 5 points)
B.5 5 (of 5 points)
B.6 5 (of 5 points)
B.7 5 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 6 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 12 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 1 (of 2 points)
E.2a 8.5 (For S/E)
or 8 (of 10 points)
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G. Total Score: 90.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

YEAR 1 YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS: Requested Amount: $76,181 $0
Recommended Amount: $66,441 $0
(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal requests funds for equipment and software to create an agriculture data warehouse and business intelligence system to collect, harvest, extract, transform and analyze large data sets for research analysis and decision support. Funds are also requested for six months of graduate assistant salary. Handling agricultural and population information on a local high-capacity system will allow innovative "big data" manipulations and presentations that are simply not possible currently. It is clear from the impact on existing resources that the proposal is multidisciplinary. The measurable objectives and proposed work plan are somewhat general and in need of strengthening. There should be details for how each objective will be measured and evaluated. The level of eminence, impact on curriculum, instruction, students, and faculty development are all well described. More information could be provided about economic and cultural impact. Students from the disciplines of users will be needed for data entry and other tasks, but the PIs could oversee the work. Funding for a graduate assistant is not recommended. Should additional funds become available, partial funding of $66,441 is recommended for the equipment only. The institutional match may be reduced proportionately.
The proposal requests funds for equipment, software, and supplies for a production-oriented lab for training, collaboration and research to support a new master's degree program in digital media. The proposal argues that training of master’s-level students for digital media employment (such as the video gaming industry) is lacking in Louisiana. The number of students likely to enroll is not given, but data from neighboring states show strong participation. The project objectives and work plan could be strengthened by defining measurable objectives and benchmarks (numbers of students enrolled, for example) and providing details on how the objectives will be evaluated. The project has potential for achieving recognized eminence. Impact on curriculum, instruction, students, and faculty development mainly target the master’s program but also include undergraduate programs through a minor degree. The equipment seems well chosen and will allow remote login from any device, with the new processors doing the heavy lifting. Faculty and staff expertise is strong. Economic impact has potential to be extensive. The cash match of $25,000 shows strong support from the institution. Full funding is recommended.
INSTITUTION: Louisiana State University and A&M College-Baton Rouge

TITLE OF PROPOSAL: The CoAD Fabrication Factory

PRINCIPAL INVESTIGATOR: Jason Crow

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 4 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 8 (of 10 points)
B.2 17 (of 21 points)
B.3 5 (of 5 points)
B.4 3 (of 5 points)
B.5 4 (of 5 points)
B.6 3 (of 5 points)
B.7 3 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 6 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 12 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a (For S/E) (No Points Assigned)
E.2b 9 (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)
G.1 Yes x No

G. Total Score: 84 (of 100 points)

YEARS 1

SPECIFIC BUDGETARY RECOMMENDATIONS: $190,040

Recommended Amount: $0

Recommended Amount: $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to create the multidisciplinary College of Art and Design Fabrication Factory to provide large-scale digital fabrication equipment for cutting multiple materials. The project builds upon previous awards from the BoRSF. The equipment would support important programs. The project team appears well qualified. The quality of students’ experiences would benefit from this investment. However, the proposal is written at a relatively high level of abstraction. It describes what the equipment can functionally accomplish without offering many examples of specific projects. The Vimeo link shows a fine art project, but it does not explain why the new equipment would be crucial to its realization. A clear sense of the limitations of existing equipment is not established. What would students be able to do in the new factory that they cannot do now? The multidisciplinary commitment could have been more assertively demonstrated. The new facility would be available to several campus units, but details on potential collaborations are lacking. The description of how outcomes would be evaluated seems preliminary. The budget is set up as an all-or-nothing purchase. The three machines have been bundled, and it would have been helpful to know if the concept of the factory is dependent on that or if the machines could be purchased individually. Funding is not recommended.
INSTITUTION: Louisiana State University and A&M College-Baton Rouge

TITLE OF PROPOSAL: LSU Robotics Engineering

PRINCIPAL INVESTIGATOR: Marcio de Queiroz

A. The Current Situation
(Total of 10 Points)

<table>
<thead>
<tr>
<th>A.1</th>
<th>Yes</th>
<th>x</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.2</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. The Enhancement Plan
(Total of 56 Points)

| B.1 | 9   |   |    | (of 10 points) |
|-----|-----|---|----|
| B.2 | 18  |   |    | (of 21 points) |
| B.3 | 5   |   |    | (of 5 points)  |
| B.4 | 4   |   |    | (of 5 points)  |
| B.5 | 5   |   |    | (of 5 points)  |
| B.6 | 4.5 |   |    | (of 5 points)  |
| B.7 | 5   |   |    | (of 5 points)  |

C. Equipment
(Total of 10 Points)

| C.1 | 5   |   |    | (of 6 points) |
|-----|-----|---|----|
| C.2 | 1   |   |    | (of 1 point)  |
| C.3 | 3   |   |    | (of 3 points) |

D. Faculty and Staff Expertise
(Total of 12 Points)

| D.1 | 11  |   |    | (of 12 points) |

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

| E.1 | 2   |   |    | (of 2 points) |
|-----|-----|---|----|
| E.2a| 9   |   |    | (For S/E)     |
| or  |   |   |    | (of 10 points) |
| E.2b|     |   |    | (For NS/NE)   |

F. Previous Support Fund Awards
(No Points Assigned)

| G.1 | Yes | x | No |

G. Total Score: 91.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY Requested Amount: $74,725
RECOMMENDATIONS: Recommended Amount: $49,600

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to establish three specific laboratory experiences for a new robotics engineering minor at LSUBR. Between seven and 15 teaching robotic units for five different machines will allow students to work in small teams on laboratory projects. Five programs within the College of Engineering along with the School of Kinesiology are participating in the project and the new minor. The degree of collaboration in the new minor should guarantee its success. The endeavor has the potential for high impact within the participating academic areas, as well as outside LSUBR. The proposal could be improved by a description of the types of exercises that students would perform with the requested equipment and, most importantly, the coding and/or control functions that would be learned. The budget is reasonable and there is a significant cash match from LSUBR. Partial funding of $49,600, to be used at the PI's discretion for purchasing fewer robotic units, is recommended. Should additional funds become available, full funding is recommended.
This proposal seeks to acquire a selective laser melting (SLM) system to be used for 3D fabrication of metal objects by researchers and educators at LSUBR, Southern University-Baton Rouge, and the University of New Orleans. The multi-university team is well qualified to undertake the project, which addresses a very important thrust in material sciences and manufacturing. The proposal describes cutting-edge research applications of SLM that are planned. Student use may be confined to graduate-level research and capstone thesis projects, but the level of activity will likely be significant. This project has a high potential to leverage the requested funding into nationally competitive projects and even a national center. The project’s objectives are appropriate and obtainable. LSUBR should cover the cost of the metal-powder supplies and their shipping. Partial funding of $186,800 is recommended. The institutional match may be reduced proportionately.
INSTITUTION: Louisiana State University and A&M College-Baton Rouge

TITLE OF PROPOSAL: Small Animal MRI System to Enhance Biomedical Teaching and Research

PRINCIPAL INVESTIGATOR: Guang Jia

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 4 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 4 (of 10 points)
B.2 15 (of 21 points)
B.3 5 (of 5 points)
B.4 5 (of 5 points)
B.5 5 (of 5 points)
B.6 5 (of 5 points)
B.7 4 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 6 (of 6 points)
C.2 1 (of 1 point)
C.3 1 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 12 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a 10 (For S/E)
or
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G. Total Score: 83 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY REQUESTED AMOUNT: $290,000
RECOMMENDED AMOUNT: $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

The proposal requests a small-animal MRI for biomedical imaging education and research. The equipment has the potential to put the institution at the forefront of biomedical research and training. A number of interesting research projects would be significantly enhanced. The writing, however, has significant weaknesses. The goals, objectives and benchmarks should be measures of how the project impacts the department and the institution, such as an increase in grant success rate, number of publications, or students trained. However, as written, they are activities which would be pursued during the acquisition, setup and use of the instrument. The work plan lacks details on what will be accomplished over a specific timeline and how it will be evaluated. The role of the external advisory board is not clear, and the role of the steering committee could have been more clearly explained. It is also not clear how time will be allocated between scanner users, and what will be the expected priority of educational versus research use. In spite of the many research avenues mentioned, the proposal lacks a meaningful demonstration of the impact that the new instrument would have and the benchmarks which might document that impact. Relying on the project director, a faculty member with a significant research program, for maintenance of the equipment, training of users, and evaluation of use seems like a large burden, particularly given the level of use that is proposed. Funding is not recommended.
### Proposal Number: 08MUL-15

### Root Discipline: Engineering B

#### INSTITUTION:
Louisiana State University and A&M College-Baton Rouge

#### TITLE OF PROPOSAL:
Reactive Ion Etching System for Material Science, Measurement and Device Fabrication at LSU

#### PRINCIPAL INVESTIGATOR:
Christopher O'Loughlin

<table>
<thead>
<tr>
<th>A. The Current Situation</th>
<th>B. The Enhancement Plan</th>
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<tbody>
<tr>
<td>(Total of 10 Points)</td>
<td>(Total of 56 Points)</td>
</tr>
<tr>
<td>A.1 Yes x No</td>
<td>B.1 7 (of 10 points)</td>
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<tr>
<td>A.2 3 (of 5 points)</td>
<td>B.2 13 (of 21 points)</td>
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<td>G.1 Yes x No</td>
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#### G. Total Score: 69 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $88,040

**RECOMMENDATIONS:** Recommended Amount: $0

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a semiconductor-grade reactive ion etcher (RIE) to replace an outdated piece of equipment and upgrade capabilities in the Electronic Material and Device Laboratory at LSU. The outdated equipment is more than 25 years old and it appears there has not been a replacement plan in place for this critical piece of equipment. While the proposal indicates that the equipment requested will benefit a number of engineering disciplines, all team members are located in Electrical and Computer Engineering (Engineering A) and the majority of intended uses appear to primarily target that area. Further, only one of the four faculty/staff members provided information on current and pending grant support. If the proposal is truly multidisciplinary and the equipment will benefit other disciplines, including those in the eligible category of Engineering B, the research team should provide evidence. Finally, a number of proposal sections appear incomplete and lack proper editing. Funding is not recommended.
RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 09MUL-15
ROOT DISCIPLINE: Humanities

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Writing Matters: Enhancing the Effectiveness of the Louisiana Tech Writing Center through the Creation of a Writing in the Disciplines Program

PRINCIPAL INVESTIGATOR: Paula Brown

A. The Current Situation  
(Total of 10 Points)
A.1 Yes x No
A.2 4 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan  
(Total of 56 Points)
B.1 7 (of 10 points)
B.2 17 (of 21 points)
B.3 3 (of 5 points)
B.4 4 (of 5 points)
B.5 5 (of 5 points)
B.6 4 (of 5 points)
B.7 4 (of 5 points)

C. Equipment  
(Total of 10 Points)
C.1 5 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise  
(Total of 12 Points)
D.1 12 (of 12 points)

E. Economic and/or Cultural Development and Impact  
(Total of 12 Points)
E.1 1 (of 2 points)
E.2a (For S/E)  
or (of 10 points)
E.2b 7 (For NS/NE)

F. Previous Support Fund Awards  
(No Points Assigned)
G.1 Yes x

G. Total Score: 81 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:  
Requested Amount: $146,531  
Recommended Amount: $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal aims to create a pilot multidisciplinary "writing in the disciplines" (WID) program and laboratory to improve STEM writing. The applicant makes a compelling case for need. The project would allow faculty to develop writing-intensive course assignments and provide electronic feedback. The PI has valuable expertise and a track record of success in approaches to writing instruction. Sophomores and juniors have been identified as the target audience since these students do not make regular use of writing centers or writing courses. The enhancement plan description is less clear on exactly what the WID learning environment will entail and how it will be used. The work plan clearly indicates that faculty training in how to develop writing-intensive pedagogy is a central element for the project's success. Outside experts will visit the campus to train faculty in intensive writing, but little detail is provided as to who they are and why they were chosen. The equipment proposal describes the purchase of 24 computers for the WID environment which will complement the currently limited writing center. Though research shows the necessity of having flexible space and chairs for interactive student learning, the $100,000 request for furniture and associated hookups and displays appears excessive. The proposal provides a minimal description of the filming component of the project to record teaching and tutoring strategies. Funding is not recommended.
### RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

**PROPOSAL NUMBER:** 10MUL-15  
**ROOT DISCIPLINE:** Engineering B

**INSTITUTION:** Louisiana Tech University

**TITLE OF PROPOSAL:** Bulldog Builders: SciTEC's Funnery for Educators and Innovators

**PRINCIPAL INVESTIGATOR:** Lindsey Keith-Vincent

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**G. Total Score:** 87 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $59,895  
**RECOMMENDATIONS:** Recommended Amount: $59,895 (if additional funds become available)

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This project seeks to enhance Louisiana Tech’s internal and external presentation of STEM topics by equipping a laboratory with a variety of technological devices that provide interesting and educational experiences for K-16 students. The proposal team members are very capable and extremely motivated in a number of academic areas and existing programs complement the proposed activities. Activities intended to introduce STEM concepts to primary school students, as well as to college-level students, in an entertaining context are commendable. There is some concern, however, that the proposed project may be attempting to be too many things to too many audiences. BoRSF Enhancement funds should primarily benefit the education of the college-level students the lab will serve. The outreach effort is a positive additional benefit, but only if it does not detract from the primary purpose. Full funding is recommended if additional funds become available.
INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Lumbopelvic Rhythm During Anterior Load Lifting

PRINCIPAL INVESTIGATOR: Braden Romer

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 5 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 9 (of 10 points)
B.2 19 (of 21 points)
B.3 5 (of 5 points)
B.4 4 (of 5 points)
B.5 4 (of 5 points)
B.6 5 (of 5 points)
B.7 4 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 5 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 10 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a 9 (For S/E)
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)
G.1 Yes x No

G. Total Score: 90 (of 100 points)

(Special note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY REQUESTED AMOUNT: $163,985
RECOMMENDED AMOUNT: $158,545

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This project is a joint submission from the Department of Kinesiology and the Center for Biomedical Engineering and Rehabilitation Services and will support acquisition of 3D motion capture and analysis equipment. That equipment will support education and research in biomechanics, specifically in the area of lower back pathology. The proposal is logical and well written and there is a high probability of positive impact in several areas. The proposed equipment should help answer some specific questions related to the lifting of loads by humans, as well as expose students to motion analysis. The industrial engineering program would also benefit from and contribute to the use of this equipment. Funding for shoes and supplies is not recommended. Should additional funds become available, partial funding of $158,545 for the motion capture equipment is recommended.
This proposed two-day symposium on North Louisiana history and culture is another in a series of themed symposia that Louisiana Tech faculty have developed to link disciplines, curricula, students and community around meaningful topics of interdisciplinary inquiry. The PIs do an excellent job of providing a detailed institutional context that underscores the importance of the proposed topic. Both the goals and the work plan are detailed and clear. The six courses across four disciplines will be tied to 11 invited speakers. Given the track record of past themed symposia, the PIs appear capable of making this a success. Faculty have agreed to coordinate syllabi, readings, and activities in their courses. The invited scholars will be on campus for two to three days each and, in addition to their campus lectures, will make class visits and will present at the local library, making a connection with the community and providing visibility for the University. The institution and local library are both providing some funding match, which signals a commitment to this project. Given the relatively modest budget, full funding is recommended.
This proposal from Loyola University seeks state-of-the-art equipment to introduce mutated transgenes into cultured cells and then test the effect of those mutations on cell membrane potential functions. This sophisticated equipment benefits from the involvement of two specialists with diverse backgrounds, representing the Physics and Biology departments. Its availability for student research projects will help ensure the development of a highly trained technical workforce. The proposed work is innovative and will help maintain a high profile for research at Loyola. Less compelling, however, is the argument that this instrumentation and its presence on campus will have a significant impact on curriculum and instruction. A few undergraduate lab assistants will undoubtedly have the opportunity for hands-on learning with the requested instrumentation. However, patch clamp work is technically challenging, even with the best equipment and skilled technicians, and is not generally considered robust and high throughput in a way that lends itself to undergraduate courses. Full funding is recommended if additional funds become available.
### RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

**PROPOSAL NUMBER:** 14MUL-15  
**ROOT DISCIPLINE:** C/IS  

**INSTITUTION:** McNeese State University  

**TITLE OF PROPOSAL:** C3ODE: Creating Community through Coding: Opportunities Designed for Equity  

**PRINCIPAL INVESTIGATOR:** Michelle Haj-Broussard

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<td>B.2 16 (of 21 points)</td>
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<th>G. Total Score: 75 (of 100 points)</th>
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(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $78,804  
**RECOMMENDATIONS:** $0

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This project seeks to attract, prepare and support high school students from underrepresented groups through a dual-enrollment course by preparing high school instructors to teach computer science. Funds are requested for equipment (mainly laptops) and the budget includes support for student employees as well as faculty summer salary. This project represents a worthy goal, but the proposal, as presented, has significant weaknesses. The rationale and impact on existing resources need strengthening. Better defined measurable objectives are needed. The project work plan is stated in general terms only. The proposal needs a stronger case for how this project will enhance the department’s stature. A better argument is needed for how the project will directly impact and benefit curriculum, instruction, faculty development and quality of students, as are stronger cases for equipment and economic/cultural impact. A worthy project could certainly be implemented with a less costly approach and without faculty summer salary. Funding is not recommended.
This project seeks to provide the engineering and engineering technology programs at McNeese State University with several training systems that demonstrate/simulate various aspects of smart power grid behavior. The investigative team appears to be well qualified. The main thrust of the proposal is educational, and very full data are given concerning majors, courses and the benefits of the proposed equipment. The equipment is appropriate and should provide an enhanced learning and teaching experience. It is not clear that photovoltaic and wind turbine technologies are likely to produce much energy in the Louisiana landscape, but they should still be part of up-to-date training for the job market. The student salary should be supplied by the University. Partial funding of $160,287 is recommended if additional funds become available.
This proposal seeks funds to purchase digital audio-visual equipment that will support streaming of course content. This technology has become increasingly important for servicing non-traditional students, accessing external information resources, and interacting at a distance with other researchers and educators. The request would equip four classrooms, as well as upgrade three rooms that already have recording capability. These classrooms are shared among four different departments and examples are given to show how specific courses and curricula in each of the four departments would be impacted. Although a need for distance learning exists and can be enhanced with the proposed equipment, the work plan seems to be mainly for delivery of oral lectures, perhaps neglecting other aspects of online learning. The request of $41,000 for installation seems high and is not explained. There is no specific discussion of why four new units were requested. Experience suggests that two systems should be sufficient to cover most of the proposed goals and needs if active scheduling and good collaboration between departments is in place. Partial funding of $89,000 is recommended for two systems if additional funds become available. The institutional match may be reduced proportionately.
INSTITUTION: Nicholls State University

TITLE OF PROPOSAL: A Paradigm Shift in Coastal Monitoring from Boats to Unmanned Aerial Systems

PRINCIPAL INVESTIGATOR: Balaji Ramachandran

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 5 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 8 (of 10 points)
B.2 18 (of 21 points)
B.3 4 (of 5 points)
B.4 4 (of 5 points)
B.5 4 (of 5 points)
B.6 4 (of 5 points)
B.7 4 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 5 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 11 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a 8 (For S/E) or 8 (For NS/NE) (of 10 points)

F. Previous Support Fund Awards
(No Points Assigned)

G. Total Score: 86 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:
Requested Amount: $162,687
Recommended Amount: $162,687
(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a UX5 flying platform equipped with LiDAR and hyperspectral instrumentation. The PIs have distinguished themselves as regional and national leaders in the area of environmental monitoring and the use of unmanned aerial vehicles (UAVs) as cutting-edge tools for rapid collection of the large datasets that underpin monitoring programs. Because the team has one UX5 platform equipped with a different set of sensors, they already have the necessary ancillary equipment, experience, and FAA release to use this platform. The new sensor package would greatly expand the types of experiments users are able to pursue. The students able to gain access to this equipment clearly have high potential to become leaders in use of the technology. However, stronger arguments could be made for the immediate need for another platform to supplement the equipment on hand. As far as hands-on training, students already have the potential to obtain excellent instruction with the current equipment. The new sensor platform will extend research potential, so increased emphasis on how this would make the team more competitive for research dollars could have strengthened the proposal, along with further discussion of how much difference in sensor type and sensitivity might be expected. Full funding is recommended if additional funds become available.
This proposal from the Department of Language and Communication aims to provide two traditional campus classrooms with lecture-capture technology in order to embed instructor video into online courses and face-to-face course materials. The department is wise to accommodate its increasing audience of online students. However, a weak case is made that the technology requested will be used for anything more than producing video of oral lectures. The enhancement plan section provides insufficient detail on project goals and does not provide required details in the work plan, including who will do what. Furthermore, the work plan does not clearly connect to the stated goals. While faculty training is absolutely essential to this project’s success and should be a goal, it is not described in the work plan. Though lecture-capture is a useful tool, it must be used strategically. The proposal discounts the pedagogy of video recordings, stating that faculty will need little to no knowledge of the technology to use them. High-quality online or blended instruction no longer utilizes instructor classroom recordings as a major component of effective instruction. The PI provides quotes for the equipment purchase, but did not provide a non-technical description or an explanation of what was needed and why. There are no matching funds. Funding is not recommended.
INSTITUTION: Southeastern Louisiana University

TITLE OF PROPOSAL: Enhancing Student Learning Experiences with a State-of-the-Art Multifunctional Mechanical Testing Instrument

PRINCIPAL INVESTIGATOR: Rana Mitra

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 5 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 8 (of 10 points)
B.2 18 (of 21 points)
B.3 4 (of 5 points)
B.4 4 (of 5 points)
B.5 5 (of 5 points)
B.6 4 (of 5 points)
B.7 5 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 5 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 10 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a 9 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)
G.1 Yes x No

G. Total Score: 88 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY REQUESTED Amount: $95,350
RECOMMENDATIONS: Recommended Amount: $95,350
(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a state-of-the-art multifunctional material properties testing instrument for the engineering technology and physics programs at Southeastern Louisiana University. The investigative team is experienced in the areas of material science and material properties, and the proposed equipment should enhance instruction in both programs, as well as provide additional capabilities that can be employed in Southeastern’s relationships with other institutions, industry, and government agencies. The objective dealing with the “Connect to Success” program with Northshore Technical Community College seems to be somewhat open-ended and not likely to add much to the project. While commendable in a generic sense, it is not clear if students in a two-year program are actually going to benefit from this equipment acquisition. Full funding is recommended if additional funds become available.
RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 20MUL-15
ROOT DISCIPLINE: C/IS

INSTITUTION: Southern University and A&M College-Baton Rouge

TITLE OF PROPOSAL: Computer Aided Enhancement of Mathematics Instruction and Learning [CA-EMIL]

PRINCIPAL INVESTIGATOR: Rachel Vincent-Finley

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<td>E.2b</td>
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<td>(For NS/NE)</td>
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F. Previous Support Fund Awards (No Points Assigned)

G. Total Score: 83 (of 100 points)

(Proposal with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS: $47,995 $0

YEAR 1 YEAR 2

Recommended Amount: $0 $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal from the Department of Mathematics requests funds to replace 2003-vintage computers in current teaching laboratories and acquire new furnishings. The proposal lacks a clear description of the existing computing facilities. Project goals are clear but could be strengthened if stated in measurable terms. The work plan is clear and the outcomes are reasonable with scheduled activities, time period, benchmarks and assigned personnel in charge. A measurable evaluation for each activity should have been provided. Evidence for achieving a level of eminence is weak. There would clearly be a degree of impact on curriculum and instruction, though details are lacking. A stronger multidisciplinary case needs to be made. All four PIs are in the Mathematics Department, and the proposal reads as if faculty are simply using computers to teach mathematics. Funding is not recommended.
This proposal seeks to acquire several pieces of research equipment to significantly improve Southern University's capabilities in the area of nano-catalysts, particularly in materials science and engineering. The investigative team appears to be well qualified and the proposed work would significantly enhance materials research and education. This project could also provide collaborative opportunities with LSUBR. However, it is not entirely clear how the project will actually enhance energy technologies. Although there are many positive generic statements about the importance of the proposed equipment to student programs and faculty development, details are lacking. It is not clear what work could be undertaken in the courses mentioned. The budget is reasonable and the project should help improve competitiveness at the University. Full funding is recommended if additional funds become available.
INSTITUTION: Southern University at New Orleans

TITLE OF PROPOSAL: Requesting High Performance Liquid Chromatography [HPLC] to Enhance Biology Curricula, Faculty Pedagogy and Student Learning

PRINCIPAL INVESTIGATOR: Bashir Atteia

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 4 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 7 (of 10 points)
B.2 15 (of 21 points)
B.3 3 (of 5 points)
B.4 4 (of 5 points)
B.5 4 (of 5 points)
B.6 4 (of 5 points)
B.7 4 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 5 (of 6 points)
C.2 1 (of 1 point)
C.3 2 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 10 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 1 (of 2 points)
E.2a 7 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G. Total Score: 75 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY Requested Amount: $69,361
RECOMMENDATIONS: Recommended Amount: $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks funds to purchase an HPLC system for the biological and forensic sciences programs at SUNO. The instrument is easily adaptable to a variety of uses within different degree programs and the addition of this capability would improve overall training opportunities for students. Unfortunately, the proposal suffers from lack of specific and detailed discussion of exactly how the instrument would be integrated into current courses. The proposal would be improved with discrete examples of experiments requiring analysis by HPLC that could be assigned to students in the various classes, the chromatography concepts these students would learn, and connections of those concepts to real-world jobs in Louisiana. Instead, the proposal provides less relevant information such as lists of chromatography journals and books on pages 2-3, and Table 1 on page 8. Specific examples would provide a much more compelling argument that adding this instrument to the courses at SUNO would truly improve the training of the students in those programs. Funding is not recommended.
This proposal focuses on modification of five courses popular with non-science majors (NSMs) at SUNO with the goal of improving overall comprehension and retention of relevant science themes. Approximately one third of the budget appears to be directed toward consumable supplies that are to be used in labs. Neither the enhancement plan nor the budget justification provide any real clarity as to how the remaining funds are to be expended. The overall goal of the proposal, improving the classroom experience for NSMs, is laudable and should be encouraged. However, very little detail was provided to explain specific ideas or novel pedagogical approaches that might be used in each course. Most of the discussion on the courses and the intended changes was unfocused and general in nature. Much more detailed descriptions and examples of novel course or module development and new modes of pedagogical presentation are a minimum requirement for any successful future submission. Funding is not recommended.
### In The Disciplines of English, JRDV, and Biology

**PRINCIPAL INVESTIGATOR:** Dionne Nichols

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<th>Subsection</th>
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**Total Score:** 73 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $151,384

**RECOMMENDED AMOUNT:** $0

**COMMENTS:**

This proposal seeks to enhance undergraduate teaching, especially distance learning, at SUNO. The proposal was submitted as a non-equipment proposal, though approximately 80% of the budget was for the purchase of four sets of teaching-support equipment such as computers and ELMO units. This severely detracted from its proper evaluation. Enhancement of undergraduate teaching is an important goal. However, the proposal was submitted as rooted in the Biological Sciences, while Biology courses appear to make up a relatively small part of the teaching that would be enhanced, and the expertise of the PIs is tilted towards educational management and enhancement. The proposal would benefit from a stronger effort to provide detailed examples of specific lesson plans in specific courses (e.g. Biology) that would make greatest use of the requested equipment. Funding is not recommended.
RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 25MUL-15
ROOT DISCIPLINE: Engineering B

INSTITUTION: Tulane University

TITLE OF PROPOSAL: Nanomaterials Separation and Characterization Enhancement

PRINCIPAL INVESTIGATOR: Scott Grayson

A. The Current Situation
(Total of 10 Points)
A.1 Yes [ ] No [X] (of 5 points)
A.2 [X] 5 (of 5 points)
A.3 [X] 5 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 9 (of 10 points)
B.2 18 (of 21 points)
B.3 [X] 5 (of 5 points)
B.4 [X] 4 (of 5 points)
B.5 [X] 4 (of 5 points)
B.6 [X] 4 (of 5 points)
B.7 [X] 4 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 [X] 6 (of 6 points)
C.2 [X] 1 (of 1 point)
C.3 [X] 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 [X] 12 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 [X] 2 (of 2 points)
E.2a [X] 9 (For S/E) (of 10 points)
or
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)
G.1 Yes [X] No [ ] (of 10 points)

G. Total Score: 91 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY REQUESTED AMOUNT: $148,713
RECOMMENDATIONS: Recommended Amount: $148,713
(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to enhance research and education in the areas of separation and characterization of nanomaterials at Tulane University. Several basic science and engineering departments would benefit from this project. This is an area of high interest and the investigative team is exceptionally qualified and very multidisciplinary. A similar proposal was submitted to the Multidisciplinary Enhancement component under the Chemistry discipline in FY 2013-14. The lead PI responded well to that review's critical assessment. Classroom use of the equipment is now detailed, and the project team now represents four different departments, with eleven biosketches presented for projected users of the equipment. Although the project focus still includes polymer research and chemical engineering, materials science applications are also detailed. The proposal submission under the Engineering B discipline is an acknowledgment that nanoscale study is causing overlap between chemical engineering and materials science in recent years. The budget is reasonable and the equipment will complement existing laboratory equipment at Tulane. Significant matching funds are provided for the chromatography columns. Full funding is recommended if additional funds become available.
This proposal seeks to centralize and upgrade fabrication spaces at Tulane University. A building is currently being renovated and already supports some of the related capabilities to the Maker Row facility. The facility will provide high-end fabrication opportunities for students in engineering, architecture, and the arts. Although the project’s objectives and budget are reasonably justified, they may be too ambitious. The equipment requested will certainly accomplish the goals of the project and the team is well qualified to implement it. A phased implementation, rather than purchasing and installing all printers in a single step, might yield a more sustainable outcome. Funding is not recommended.
**RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS**

**PROPOSAL NUMBER:** 27MUL-15  
**ROOT DISCIPLINE:** Biological Sciences

**INSTITUTION:** Tulane University Health Sciences Center  
**TITLE OF PROPOSAL:** Interdisciplinary Core of Excellence in Bio[molecular] Recognition

**PRINCIPAL INVESTIGATOR:** Diane Blake

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**A. The Current Situation**  
(Total of 10 Points)  
A.1 Yes x No
A.2 5 (of 5 points)  
A.3 5 (of 5 points)

**B. The Enhancement Plan**  
(Total of 56 Points)  
B.1 10 (of 10 points)  
B.2 21 (of 21 points)  
B.3 5 (of 5 points)  
B.4 4 (of 5 points)  
B.5 5 (of 5 points)  
B.6 4 (of 5 points)  
B.7 4 (of 5 points)

**C. Equipment**  
(Total of 10 Points)  
C.1 6 (of 6 points)  
C.2 1 (of 1 point)  
C.3 3 (of 3 points)

**D. Faculty and Staff Expertise**  
(Total of 12 Points)  
D.1 12 (of 12 points)

**E. Economic and/or Cultural Development and Impact**  
(Total of 12 Points)  
E.1 2 (of 2 points)  
E.2a 9 (For S/E)  
or (of 10 points)  
E.2b (For NS/NE)

**F. Previous Support Fund Awards**  
(No Points Assigned)  
G.1 Yes x No

**G. Total Score:** 96 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $354,057  
**RECOMMENDATIONS:** Recommended Amount: $252,367

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal is from a team of 15 researchers from several different units at Tulane and Xavier which have banded together to request a state-of-the-art instrument (Biacor T200) for studies of molecular interactions between biomolecules. Detailed and specific examples make it clear how this instrument, which uses surface plasmon resonance (SPR) to detect the subtle structural changes that occur during these molecular interactions, will impact a wide variety of ongoing research activities. The PIs are aware that this single instrument is an unusually expensive request for this competition and have obtained a quotation on a reconditioned instrument at a lower price. It is also noted that, at the time of submission, there is an active request to NIH for the full-price instrument, and that the proposal in this competition will be withdrawn if the NIH funding is secured. The status of the NIH proposal should be assessed before a final decision is made to fund this proposal. The PIs have made an excellent case for the value of the instrument to their research, and its visibility and competitiveness on a regional and national scale. They have also provided good arguments for its placement in a core facility where it can be shared among several Louisiana institutions. Provision has been made for supplies and maintenance for a period of several years. Partial funding of $252,367 is recommended for the reconditioned unit. The institutional match must be maintained in full.
RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 28MUL-15
ROOT DISCIPLINE: C/IS

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Equipment for Virtual and Augmented Reality Research for Education and Training Systems

PRINCIPAL INVESTIGATOR: Christoph Borst

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<tr>
<th>A. The Current Situation</th>
<th>B. The Enhancement Plan</th>
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<td>(Total of 10 Points)</td>
<td>(Total of 56 Points)</td>
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<tr>
<td>A.1 Yes x No</td>
<td>B.1 9 (of 10 points)</td>
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<td>A.2 5 (of 5 points)</td>
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<td>C.1 6 (of 6 points)</td>
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<td>C.2 1 (of 1 point)</td>
<td>B.7 5 (of 5 points)</td>
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<td>C.3 3 (of 3 points)</td>
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C. Economic and/or Cultural Development and Impact

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<td>F. Previous Support Fund Awards</td>
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<tr>
<td>E.2a 9 (For S/E)</td>
<td>(No Points Assigned)</td>
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<td>or 9 (of 10 points)</td>
<td>G.1 Yes x No</td>
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<td>E.2b 3 (For NS/NE)</td>
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G. Total Score: 98 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY REQUESTED AMOUNT: $95,688
RECOMMENDED AMOUNT: $88,188

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal from ULL's Center for Advanced Computer Studies and Department of Mechanical Engineering requests funds for equipment, software, supplies, and six months of graduate student stipend and tuition. The project goal is to enhance the quality of multidisciplinary research and education involving virtual reality, visualization, and educational technology. The sections on rationale and impact on existing resources are solid. The work plan is sound with scheduled activities, time frame, and benchmarks. The impacts on curriculum, instruction, quality of students, and faculty development are significant and will strengthen both undergraduate and graduate education. The equipment and software requested are appropriate for the project. The economic development and impact could be significant given that digital media represent a projected growth area in Louisiana. The PIs already have significant visibility in virtual reality research and substantial external funding, so targeted funds will likely enhance future funding opportunities. Though funding for student stipends and tuition is not recommended, partial funding of $88,188 is recommended. Note that the RFP states that BoRSF funds may not cover tuition costs. The institutional match may be reduced proportionately.
**RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS**

**PROPOSAL NUMBER:** 29MUL-15  
**ROOT DISCIPLINE:** Biological Sciences

**INSTITUTION:** University of Louisiana at Lafayette

**TITLE OF PROPOSAL:** Enhancement of Metal Analysis by Inductively Coupled Plasma Optical Emission Spectrometry in Chemistry and Biology Research and Education

**PRINCIPAL INVESTIGATOR:** Febee Louka

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**G. Total Score:** **84** (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $99,830  
**RECOMMENDATIONS:** $0

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal from ULL seeks to acquire a new ICP-OES platform to replace an aged one that was limited in capability and can no longer be maintained and supported. ICP-OES is an important tool widely utilized in chemistry, and experience in using this technology is considered a fundamental part of the training of students in the chemical and biochemical sciences. This request has been considered in previous years and the proposal has been modified based on comments received in response to those proposals. This proposal discusses how the new instrument would be integrated into curricula from four departments. Although the proposal is firmly connected to biological sciences, it appears that both the teaching and research applications of the instrument would be tilted towards the Chemistry Department. The connection of the proposal to external economic development was almost exclusively through training of students to become part of a better skilled workforce. No evidence was presented for direct connection between the researchers, departments, and local interests. Evidence for such relationships would strengthen the impact scores for the proposal. Funding is not recommended.
INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Integrating Programmable Logic Controller System into Automation and Manufacturing Technology Courses

PRINCIPAL INVESTIGATOR: Gholam Massiha

A. The Current Situation
(Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 4 (of 5 points)

B. The Enhancement Plan
(Total of 56 Points)
B.1 9 (of 10 points)
B.2 19 (of 21 points)
B.3 4 (of 5 points)
B.4 5 (of 5 points)
B.5 5 (of 5 points)
B.6 5 (of 5 points)
B.7 5 (of 5 points)

C. Equipment
(Total of 10 Points)
C.1 6 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)
D.1 10 (of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)
E.1 2 (of 2 points)
E.2a 9 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G. Total Score: 92 (of 100 points)

(Specific budgetary
Requested Amount: $63,280
Recommended Amount: $63,280

Comments: Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This project seeks to modernize and upgrade the programmable logic controller (PLC) laboratory and expand its capabilities at the University of Louisiana at Lafayette. The project team is well qualified to accomplish the goals of this project and the student body at ULL will benefit from instruction on modern equipment that is the basis for much of the control of automation in today’s industrial plants. As such, the economic relevance of the project is direct and significant. The number of students that will be impacted is quite large, through several courses. The rationale for the enhancement and measures of project evaluation are strong. The budget and the equipment list are reasonable. Full funding is recommended.
INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Integrating Analytical Ultracentrifugation into Chemistry Teaching and Research Laboratories for Undergraduates Majoring in Chemistry, Biology and Engineering

PRINCIPAL INVESTIGATOR: Wu Xu

A. The Current Situation (Total of 10 Points)
A.1 Yes x No
A.2 5 (of 5 points)
A.3 5 (of 5 points)

B. The Enhancement Plan (Total of 56 Points)
B.1 9 (of 10 points)
B.2 20 (of 21 points)
B.3 5 (of 5 points)
B.4 5 (of 5 points)
B.5 5 (of 5 points)
B.6 4 (of 5 points)
B.7 4 (of 5 points)

C. Equipment (Total of 10 Points)
C.1 6 (of 6 points)
C.2 1 (of 1 point)
C.3 3 (of 3 points)

D. Faculty and Staff Expertise (Total of 12 Points)
D.1 11 (of 12 points)

E. Economic and/or Cultural Development and Impact (Total of 12 Points)
E.1 2 (of 2 points)
E.2a 8 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

F. Previous Support Fund Awards (No Points Assigned)
G.1 Yes x No

G. Total Score: 93 (of 100 points)

SPECIFIC BUDGETARY REQUESTED AMOUNT: $58,366
RECOMMENDATIONS: Recommended Amount: $58,366

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal from eight PIs representing three departments at ULL seeks to acquire an ultracentrifuge. In addition to the diversity of cooperating investigators, strong points of this proposal include specific examples of discrete experimental projects involving undergraduate and graduate student researchers who will benefit from access to this piece of fundamental equipment. The proposal also includes supporting letters from external investigators who collaborate with the various PIs, showing how this equipment will help ongoing collaborations that extend beyond the confines of Louisiana and this university. Several specific and credible examples were also provided to show how this instrument will be integrated into classroom/laboratory exercises that will benefit many more students than just those using it for ongoing research. Overall, this is a solid, well-written proposal, representing an important enhancement. Full funding is recommended.
This project seeks to acquire a vector network analyzer to enhance the determination of high frequency properties of magnetic and dielectric materials at the Advanced Materials Research Institute (AMRI) of the University of New Orleans. The team is very experienced, and the area to be addressed has some promise. This is one of several proposals from AMRI and does not appear to provide the same level of capability enhancement as competing proposals. AMRI should consider utilizing internal resources for acquisitions like this if, indeed, the acquisition is in the best interest of the Institute. This piece of equipment may also be a candidate for NSF-MRI funding. The instrument is listed at $178,000 in the proposal text, but $184,000 in the budget. Funding is not recommended.
### A. The Current Situation

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### B. The Enhancement Plan

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<td>B.3</td>
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<td>B.7</td>
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### C. Equipment

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### D. Faculty and Staff Expertise

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### E. Economic and/or Cultural Development and Impact

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<tr>
<td>E.2a</td>
<td>9</td>
<td></td>
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<td>or</td>
<td>(For S/E)</td>
<td></td>
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<td>E.2b</td>
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<tbody>
<tr>
<td>G.1</td>
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### G. Total Score: 79 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

### SPECIFIC BUDGETARY REQUESTS

| Requested Amount: | $125,000 |
| Recommended Amount: | $0 |

### COMMENTS:

This proposal seeks to enhance UNO's Advanced Materials Research Institute’s (AMRI) helium recovery system. Many of the devices employed by AMRI require cryogenic operating temperatures, and some use liquid helium to achieve those low temperatures. Helium has become very expensive and the Institute has implemented (with BoRSF funding) recovery technologies to reuse this scarce resource.

The project team is very experienced and could easily accomplish the goals of this project. The equipment that is requested would increase the efficiency of helium recovery and would, therefore, increase availability of some equipment and save money on the helium supply. However, it would add no new capabilities to AMRI. Due to limited resources, funding is not recommended.
**RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS**

**PROPOSAL NUMBER:** 34MUL-15  
**ROOT DISCIPLINE:** Engineering B

**INSTITUTION:** University of New Orleans

**TITLE OF PROPOSAL:** Acquisition of Atomic Layer Deposition System for Seamless Nanostructured Materials Coating

**PRINCIPAL INVESTIGATOR:** Weilie Zhou

### A. The Current Situation  
(Total of 10 Points)

<p>| | | |</p>
<table>
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<td>A.2</td>
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### B. The Enhancement Plan  
(Total of 56 Points)

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<td>B.6</td>
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<td>B.7</td>
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<td>(of 5 points)</td>
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### C. Equipment  
(Total of 10 Points)

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<td>(of 3 points)</td>
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### D. Faculty and Staff Expertise  
(Total of 12 Points)

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### E. Economic and/or Cultural Development and Impact  
(Total of 12 Points)

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<tr>
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<tr>
<td>or</td>
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<td></td>
</tr>
<tr>
<td>E.2b</td>
<td></td>
<td>(For NS/NE)</td>
</tr>
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### F. Previous Support Fund Awards  
(No Points Assigned)

### G. Total Score: 89  
(of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

**SPECIFIC BUDGETARY REQUESTED AMOUNT:** $133,595  
**RECOMMENDED AMOUNT:** $125,395  
(if additional funds become available)

**COMMENTS:** (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to improve the control of nanostructured materials growth and coating capabilities at the Advanced Materials Research Institute (AMRI) of UNO by acquiring an atomic layer deposition system. The project team is well qualified and the additional capabilities to AMRI are notable. Of the three proposals submitted by AMRI in this competition, this adds the most to its competitive capabilities. Though the team currently has capabilities in the area of surface coating, this technology provides a significant improvement. Impact on curriculum and instruction is not described beyond general statements about opportunity for an improved graduate course and about summer visitors. Acquisition of this equipment could be possible through NSF’s Major Research Instrumentation program. There is no institutional match. No funding is recommended for shipping and training costs. Partial funding of $125,395 is recommended if additional funds become available.
Appendix A

Summary List of Proposals
<table>
<thead>
<tr>
<th>Proposal Number</th>
<th>PI Name</th>
<th>Institution</th>
<th>Duration</th>
<th>Equipment/Non Equipment</th>
<th>New/Continuation</th>
<th>Project Title</th>
<th>Amount Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>001MUL-15</td>
<td>Dr. Loren Demerath</td>
<td>Centenary College</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Facilitating Student Instruction, Faculty Development, and Educational Outreach through Enhancement of College Radio</td>
<td>$103,707.00</td>
</tr>
<tr>
<td>002MUL-15</td>
<td>Mr. Jefferson Ivey</td>
<td>Louisiana State University Agricultural Center</td>
<td>2 Years</td>
<td>E</td>
<td>New Request</td>
<td>Louisiana State University AgCenter Data Warehousing and Business Intelligence</td>
<td>$76,181.00</td>
</tr>
<tr>
<td>003MUL-15</td>
<td>Mr. Marc Aubanel</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Digital Media Arts &amp; Engineering Program Production Lab</td>
<td>$75,297.00</td>
</tr>
<tr>
<td>004MUL-15</td>
<td>Dr. Jason Crow</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>2 Years</td>
<td>E</td>
<td>New Request</td>
<td>The CoAD Fabrication Factory</td>
<td>$190,040.00</td>
</tr>
<tr>
<td>005MUL-15</td>
<td>Dr. Marcio de Queiroz</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>LSU Robotics Engineering</td>
<td>$74,725.00</td>
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<tr>
<td>006MUL-15</td>
<td>Dr. Shengmin Guo</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>A SELECTIVE LASER MELTING SYSTEM TO ENHANCE ADVANCED MANUFACTURING RESEARCH AND EDUCATION RE</td>
<td>$202,875.00</td>
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<tr>
<td>007MUL-15</td>
<td>Dr. Guang Jia</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Small Animal MRI System to Enhance Biomedical Teaching and Research</td>
<td>$290,000.00</td>
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<tr>
<td>008MUL-15</td>
<td>Mr. Christopher O'Loughlin</td>
<td>Louisiana State University and A &amp; M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Reactive Ion Etching System for Material Science, Measurement and Device Fabrication at LSU</td>
<td>$88,040.00</td>
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<tr>
<td>009MUL-15</td>
<td>Dr. Paula Brown</td>
<td>Louisiana Tech University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Writing Matters: Enhancing the Effectiveness of the Louisiana Tech Writing Center through the Creation of a Writing in the Disciplines Program</td>
<td>$146,531.00</td>
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<tr>
<td>010MUL-15</td>
<td>Mrs. Lindsey Keith-Vincent</td>
<td>Louisiana Tech University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Bulldog Builders: SciTEC's Funnery for Educators and Innovators</td>
<td>$59,895.00</td>
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<tr>
<td>011MUL-15</td>
<td>Dr. Braden Keith-Romer</td>
<td>Louisiana Tech University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Lumbopelvic Rhythm During Anterior Load Lifting</td>
<td>$163,985.00</td>
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<tr>
<td>012MUL-15</td>
<td>Dr. Virginia Thompson</td>
<td>Louisiana Tech University</td>
<td>1 Year</td>
<td>NE</td>
<td>New Request</td>
<td>North Louisiana History and Culture since the Civil War: A Symposium</td>
<td>$17,420.00</td>
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<td>013MUL-15</td>
<td>Prof. Armin Kargol</td>
<td>Loyola University New Orleans</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>From the cell membrane to the nucleus: enhancing collaborative research projects for undergraduates in molecular biology and biophysics</td>
<td>$99,968.00</td>
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<tr>
<td>014MUL-15</td>
<td>Dr. Michelle Haj-Broussard</td>
<td>McNeese State University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>C3ODE: Creating Community through Coding: Opportunities Designed for Equity</td>
<td>$78,804.00</td>
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<tr>
<td>015MUL-15</td>
<td>Dr. Kaisar Khan</td>
<td>McNeese State University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Enhancement of Power System and Energy Conversion Laboratory with Smart Grid Technology</td>
<td>$163,287.00</td>
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<tr>
<td>016MUL-15</td>
<td>Dr. Rajkumar Nathaniel</td>
<td>Nicholls State University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Enhancing Blended Learning Core Capabilities for STEM disciplines at Nicholls</td>
<td>$197,368.00</td>
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<td>017MUL-15</td>
<td>Dr. Balaji Ramachandran</td>
<td>Nicholls State University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>A Paradigm Shift in Coastal Monitoring from Boats to Unmanned Aerial Systems</td>
<td>$162,687.00</td>
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<td>018MUL-15</td>
<td>Dr. Thomas Reynolds</td>
<td>Northwestern State University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Department of Language and Communication Special Multidisciplinary Lecture Capture System Enhancement Grant</td>
<td>$76,392.00</td>
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<tr>
<td>019MUL-15</td>
<td>Dr. Rana Mitra</td>
<td>Southeastern Louisiana University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Enhancing Student Learning Experiences with a state-of-the-art Multifunctional Mechanical Testing Instrument</td>
<td>$95,350.00</td>
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<td>020MUL-15</td>
<td>Dr. Rachel Vincent-Finley</td>
<td>Southern University and A&amp;M College - Baton Rouge</td>
<td>2 Years</td>
<td>E</td>
<td>New Request</td>
<td>Computer Aided Enhancement of Mathematics Instruction and Learning [CA-EMIL]</td>
<td>$47,995.00</td>
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## Proposals Submitted to the Traditional Enhancement Program - Multidisciplinary for the FY 2014-15 Review Cycle

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<th>Institution</th>
<th>Duration</th>
<th>Equipment/Non Equipment</th>
<th>New/Continuation</th>
<th>Project Title</th>
<th>Amount Requested</th>
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<tbody>
<tr>
<td>021MUL-15</td>
<td>Prof. Guang-Lin Zhao</td>
<td>Southern University and A&amp;M College - Baton Rouge</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Equipment Enhancement for Research and Education on Nano-Catalysts for Energy Technology and Electrochemical Sensors</td>
<td>$89,015.00</td>
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<tr>
<td>022MUL-15</td>
<td>Dr. Bashir Atteia</td>
<td>Southern University at New Orleans</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Requesting High Performance Liquid Chromatography [HPLC] to Enhance Biology Curricula, Faculty Pedagogy and Student Learning</td>
<td>$69,361.00</td>
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<td>023MUL-15</td>
<td>Dr. Lisa Mims-Devezin</td>
<td>Southern University at New Orleans</td>
<td>1 Year</td>
<td>NE</td>
<td>New Request</td>
<td>Teaching Environmental Approach Concepts, Healthy Earth Restoration, and Sustainability [TEACHERS]: Enhancement of Environmental Awareness BoR Proposal</td>
<td>$93,460.00</td>
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<tr>
<td>024MUL-15</td>
<td>Dr. Dionne Nichols</td>
<td>Southern University at New Orleans</td>
<td>1 Year</td>
<td>NE</td>
<td>New Request</td>
<td>Enhancing faculty and student readiness for online learning in the disciplines of English, JRDV, and Biology.</td>
<td>$151,384.00</td>
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<td>025MUL-15</td>
<td>Prof. Scott Grayson</td>
<td>Tulane University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Nanomaterials Separation and Characterization Enhancement</td>
<td>$148,713.00</td>
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<td>026MUL-15</td>
<td>Prof. Cedric Walker</td>
<td>Tulane University</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Maker Row: A fabrication facility for all Tulane students</td>
<td>$159,022.00</td>
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<td>027MUL-15</td>
<td>Prof. Diane Blake</td>
<td>Tulane University Health Sciences Center</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Interdisciplinary Core of Excellence in Bio[molecular] Recognition</td>
<td>$354,057.00</td>
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<tr>
<td>028MUL-15</td>
<td>Dr. Christoph Borst</td>
<td>University of Louisiana at Lafayette</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Equipment for Virtual and Augmented Reality Research for Education and Training Systems</td>
<td>$95,688.00</td>
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<tr>
<td>029MUL-15</td>
<td>Dr. Febee Louka</td>
<td>University of Louisiana at Lafayette</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Enhancement of Metal Analysis by Inductively Coupled Plasma Optical Emission Spectrometry in Chemistry and Biology Research and Education</td>
<td>$99,830.00</td>
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<tr>
<td>030MUL-15</td>
<td>Dr. Gholam Massiha</td>
<td>University of Louisiana at Lafayette</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Integrating Programmable Logic Controller System into Automation and Manufacturing Technology Courses</td>
<td>$63,280.00</td>
</tr>
<tr>
<td>031MUL-15</td>
<td>Prof. Wu Xu</td>
<td>University of Louisiana at Lafayette</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Integrating Analytical Ultracentrifugation into Chemistry Teaching and Research Laboratories for Undergraduates Majoring in Chemistry, Biology and Engineering</td>
<td>$58,366.00</td>
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<tr>
<td>032MUL-15</td>
<td>Prof. Leonard Spinu</td>
<td>University of New Orleans</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Acquisition of a Vector Network Analyzer for Novel Materials Investigations</td>
<td>$184,000.00</td>
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<tr>
<td>033MUL-15</td>
<td>Prof. Leonard Spinu</td>
<td>University of New Orleans</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Upgrade of AMRI's Helium Recovery System</td>
<td>$125,000.00</td>
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<tr>
<td>034MUL-15</td>
<td>Prof. Wei Le Zhou</td>
<td>University of New Orleans</td>
<td>1 Year</td>
<td>E</td>
<td>New Request</td>
<td>Acquisition of Atomic Layer Deposition System for Seamless Nanostructured Materials Coating</td>
<td>$133,595.00</td>
</tr>
</tbody>
</table>

Total Number of Proposals submitted: 34
Total Money Requested for First Year: $4,235,318.00
Total Money Requested for Second Year: $0.00
Total Money Requested: $4,235,318.00
Appendix B

Rating Forms
A. THE CURRENT SITUATION--Total of 10 points

YES____ NO____ A.1 Has the applicant adequately described the institution and unit(s)/department(s) that will benefit from the proposed project, especially in terms of mission, faculty, students, and relevant institutional or departmental resources?

_____ of 5 pts. A.2 To what extent will the proposed project enhance the affected department(s) or unit(s)?

_____ of 5 pts. A.3 To what extent will the project complement and improve upon existing resources of the department(s) or unit(s)?

COMMENTS:

B. THE ENHANCEMENT PLAN--Total of 66 points

_____ of 5 pts. B.1 Are the goals and objectives clearly stated?

_____ of 23 pts. B.2 Does the work plan sufficiently describe the activities that will be undertaken to achieve the goals and objectives of the proposal with responsible individuals listed for each activity, a schedule of activities with benchmarks to be accomplished, and a description detailing how each objective will be evaluated?

_____ of 25 pts. B.3 To what extent will the proposed project catapult the department(s) or unit(s) into attaining a high level of regional, national, or international eminence—or maintaining a current high level of eminence—commensurate with degree offerings and/or functions?

_____ of 5 pts. B.4 To what extent will the proposed project have an impact on the variety and quality of curricular offerings and instructional methods within the affected department(s) or unit(s)? Appropriate to current thinking in the specific field(s) or discipline(s) of the proposed project, is reform of undergraduate education and/or teacher preparation encouraged?

_____ of 2 pts. B.5 To what extent will the proposed project enhance the ability of the department(s) or unit(s) to attract and/or retain students of high quality, particularly high quality students from Louisiana?

_____ of 6 pts. B.6 To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogical practices within the context of current thinking on reform of undergraduate education and teacher preparation, specific to field(s) or discipline(s) of the proposed project?

C. FACULTY AND STAFF EXPERTISE--Total of 12 points

_____ of 12 pts C.1 Are the faculty and support personnel appropriately qualified to implement this project? If special training will be required for faculty and/or other personnel, has an appropriate plan been developed?
Proposal Number: ____________________  Principal Investigator: ____________________

COMMENTS:

D. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT—Total of 12 points

_____ of 2 pts.  D.1   To what extent will the project assist in establishing a new relationship, or strengthen an existing relationship, with one or more industrial/institutional sponsors (e.g., private business, trade organization, professional organization, non-profit or community organization, another university or consortium of universities, federal government agency)?

NOTE TO REVIEWER: Depending on the discipline of the submitting department or unit, provide rating points for either D.2a OR D.2b:

_____ of 10 pts.  D.2a   For science/engineering proposals only: To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing the economic development of the State of Louisiana?

D.2b  For non-science/non-engineering proposals only: To what extent will the project contribute to the academic and/or cultural resources of the State of Louisiana?

COMMENTS:

E. PREVIOUS SUPPORT FUND AWARDS—No points assigned

YES__ NO__  F.1   If the Project Director or Co-Project Director has received previous Support Fund support, has it been adequately documented?

COMMENTS:

F. TOTAL SCORE (NOTE: Proposals with a total score below 70 will not be recommended for funding.)

_____ of 100 points

Proposal Number: ____________________  Principal Investigator: ____________________

SPECIFIC BUDGETARY RECOMMENDATIONS

Requested Amount:$_________________________  Recommended Amount:$_________________________

COMMENTS:

I agree to maintain in confidence any information, documentation and material of any kind (hereinafter referred to as "Material") included in this proposal; I further agree not to disclose, divulge, publish, file patent application on, claim ownership of, exploit or make any other use whatsoever of said "Material" without the written permission of the principal investigator. To the best of my knowledge, no conflict of interest is created as a result of my reviewing this proposal.

Reviewer's Name and Institution: __________________________________________________________

Reviewer's Signature: ______________________________________________________ Date: ____________

(Form 6.12, rev.2010)
BOARD OF REGENTS SUPPORT FUND ENHANCEMENT PROGRAM, FISCAL YEAR 2010-11

RATING FORM FOR TRADITIONAL AND UNDERGRADUATE ENHANCEMENT PROPOSALS
PURCHASE OF INSTRUCTIONAL AND RESEARCH EQUIPMENT

INSTRUCTIONS: The completed evaluation form should represent the consensus of the expert members of the review panel and, as such, must reflect the final decisions of that panel. Review this form and the program guidelines prior to reading the proposal. The higher the score, the more clearly the proposal satisfies the criterion under consideration. Guidelines should not be interpreted to exclude from eligibility departments and/or units engaged solely in instruction. Use the white space provided to explain the panel's ratings, especially on items given low scores. Attach additional pages, as necessary.

A. THE CURRENT SITUATION--Total of 10 points

YES____ NO____ A.1 Has the applicant adequately described the institution and unit(s)/department(s) that will benefit from the proposed project, especially in terms of mission, faculty, students, and relevant institutional or departmental resources?

_____ of 5 pts. A.2 To what extent will the proposed project enhance the affected department(s) or unit(s)?

_____ of 5 pts. A.3 To what extent will the project complement and improve upon existing resources of the department(s) or unit(s)?

COMMENTS:

B. THE ENHANCEMENT PLAN--Total of 56 points

_____ of 5 pts. B.1 Are the goals and objectives clearly stated? Can the objectives be completed within the timeframe detailed in the proposal?

_____ of 18 pts. B.2 Does the work plan sufficiently describe the activities that will be undertaken to achieve the goals and objectives of the proposal with responsible individuals listed for each activity, a schedule of activities with benchmarks to be accomplished, and a description detailing how each objective will be evaluated?

_____ of 20 pts. B.3 To what extent will the proposed project catapult the department(s) or unit(s) into attaining a high level of regional, national, or international eminence—or maintaining a current high level of eminence—commensurate with degree offerings and/or functions?

_____ of 5 pts. B.4 To what extent will the proposed project have an impact on the variety and quality of curricular offerings and instructional methods within the affected department(s) or unit(s)? Appropriate to current thinking in the specific field(s) or discipline(s) of the proposed project, is reform of undergraduate education and/or teacher preparation encouraged?

_____ of 2 pts. B.5 To what extent will the proposed project enhance the ability of the department(s) or unit(s) to attract and/or retain students of high quality, particularly high quality students from Louisiana?

_____ of 6 pts. B.6 To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogical practices within the context of current thinking on reform of undergraduate education and teacher preparation, specific to field(s) or discipline(s) of the proposed project?

No Points Given, but this is a required component. B.7 Does the proposal indicate how the Board of Regents or other entity will determine whether or not the project has been a success and the degree to which it has achieved its goals?
C. EQUIPMENT--Total of 10 points

_____ of 6 pts.   C.1  To what extent has the proposal established a relationship between the enhancement plan and the items of equipment requested? Is the equipment well-justified? Will it significantly enhance the existing technological capability of the department? Does it reflect current and projected trends in technology?

_____ of 1 pt.   C.2  Has there been a thorough survey of the current equipment inventory and does the proposal plan to make full use of it?

_____ of 3 pts.   C.3  To what extent does the proposal present a reasonable plan to ensure a maximum usable lifetime for the equipment? Are housing and maintenance arrangements for equipment adequate?

COMMENTS:

D. FACULTY AND STAFF EXPERTISE--Total of 12 points

_____ of 12 pts   D.1  Are the faculty and support personnel appropriately qualified to implement this project? If special training will be required for faculty and/or other personnel, has an appropriate plan been developed?

COMMENTS:

E. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT--Total of 12 points

_____ of 2 pts.   E.1  To what extent will the project assist in establishing a new relationship, or strengthen an existing relationship, with one or more industrial/institutional sponsors (e.g., private business, trade organization, professional organization, non-profit or community organization, another university or consortium of universities, federal government agency)?

NOTE TO REVIEWER:  Depending on the discipline of the submitting department or unit, provide rating points for either E.2a or E.2b:

_____ of 10 pts.  E.2a  For science/engineering proposals only: To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing the economic development of the State of Louisiana?

E.2b  For non-science/non-engineering proposals only: To what extent will the project contribute to the academic and/or cultural resources of the State of Louisiana?

COMMENTS:
F.  PREVIOUS SUPPORT FUND AWARDS--No points assigned

YES___ NO____  G.1  If the Project Director or Co-Project Director has received previous Support Fund support, has it been adequately documented?

COMMENTS:

G.  TOTAL SCORE (NOTE: Proposals with a total score below 70 will not be recommended for funding.)

_____ of 100 points

SPECIFIC BUDGETARY RECOMMENDATIONS

Requested Amount $_______________  Recommended Amount $_______________

COMMENTS:

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I agree to maintain in confidence any information, documentation and material of any kind (hereinafter referred to as "Material") included in this proposal; I further agree not to disclose, divulge, publish, file patent application on, claim ownership of, exploit or make any other use whatsoever of said "Material" without the written permission of the principal investigator. To the best of my knowledge, no conflict of interest is created as a result of my reviewing this proposal.

Reviewer's Name and Institution: ____________________________________________

Reviewer's Signature: ____________________________________________  Date: __________

(Form 6.11, rev 2010)