REPORT TO THE
LOUISIANA BOARD OF REGENTS

RECRUITMENT OF SUPERIOR GRADUATE STUDENTS COMPONENT OF THE BOARD OF REGENTS SUPPORT FUND

TRADITIONAL GRADUATE FELLOWSHIPS

FY 2016-17 COMPETITION FOR AWARDS TO BEGIN IN FY 2018-19

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INTRODUCTION

The review panel for the Recruitment of Superior Graduate Students Program met on March 4 and 5, 2017 to discuss and make funding recommendations for proposals submitted in the FY 2016-17 competition for awards to begin in FY 2018-19. Members of the panel were Dr. John Mayfield (Chair), Iowa State University; Dr. Roger Chalkley, Vanderbilt University School of Medicine; and Dr. Charles Ambler, University of Texas at El Paso.

Seven (7) institutions submitted a total of twenty-four (24) proposals within the disciplines eligible for this year's competition in the Traditional Graduate Fellows subprogram. In some cases two or more departments within an academic unit submitted a single proposal.

Prior to the meeting, consultants read and evaluated each proposal individually according to the guidelines provided by the Louisiana Board of Regents in the FY 2016-17 Graduate Fellows Request for Proposals. Each consultant assigned a preliminary rating to each proposal before the March meeting. Preliminary composite scores were then computed to facilitate discussions at the panel meeting. The total amount of first-year funds requested in the Traditional Graduate Fellows subprogram was $1,992,556. Consultants were advised that $800,000 was budgeted for expenditure.

After thorough assessment of the merits of each proposal individually, the consultants established a rank order for all proposals and recommended monetary levels for awards according to established criteria. Recommendations were made consistent with the limits of available funding as determined by the Board of Regents. Final composite scores assigned to the proposals ranged from 65.7 to 91.1 out of a maximum of 100. The panel did not recommend funding for those proposals receiving scores lower than 75.

The panel recommends that twenty-one (21) of the twenty-four (24) proposals submitted under the Traditional Graduate Fellows subprogram be funded in the amounts specified in Appendix A. A total of $797,500 in first-year monies was recommended for expenditure. Appendix B consists of brief narrative summaries of the panel’s assessment of each proposal and Appendix C contains a listing of all proposals submitted.

Cumulative requests substantially exceed the total amount of funding available. Reviewers sought to ascertain the degree to which each award could bring about the successful recruitment of superior graduate students, consistent with the Support Fund goals of enhancing the overall quality of higher education in and the social, cultural and economic development of Louisiana. Moreover, panel members considered in each case whether the dollar value of the requested fellowship stipend would ensure each program's competitiveness with comparable institutions and accord with past recruiting efforts.

Once again, the panel members commend all involved in this endeavor to elevate the level of graduate study in Louisiana's institutions of higher education.

The panel urges applicants to carefully review the summary critiques, included in this report, relating to each submitted proposal. Most summaries offer specific suggestions to help applicants in development of future competitive proposals.

Panel Comments, Recommendations and Suggestions:

1. Successful graduate programs generally have multiple sources of funding and the intent of the BoRSF Graduate Fellows Program is to supplement other sources of student support to enhance recruiting. Due to this intent and the necessarily limited Board of Regents funding, the reality is that awards of more than three fellowships are unusual. Thoughtful proposals should address how only one or two fellowships will leverage other funding streams and positively benefit the graduate program under review.

2. Applicants must complete the required tables correctly. Though data reporting has improved in most proposals, there continue to be mistakes, omissions, and misinterpretations of the data requested. These data are very important to the panel's understanding of graduate programs' strengths and challenges, so missing, incomplete, or error-filled data tables will have serious consequences for the proposal.

3. As noted above, the panel relies heavily on and carefully analyzes data submitted in the proposals for thorough analysis. If data suggest problems with funding, recruitment, retention, time to degree, minority participation, or other elements of a graduate program's performance, the proposal should specifically address the problem(s) in the narrative and indicate what the program is doing or will do to respond. For example, if large numbers of students leave without the intended degree, explain this trend and the steps being taken to improve retention and completion.

4. Placement of program graduates following completion of the degree is an extremely important measure of a graduate program's success, and proposals are significantly enhanced by the inclusion of quantitative data. Only in exceptional circumstances should anecdotal evidence be included, and it should always supplement comprehensive, systematically presented data. A well-constructed pie chart can convey information better than a lengthy narrative.

5. Recruitment plans that have been in place for many years and are not yielding results, particularly those relating to increasing diversity, should be reevaluated. This panel sometimes sees the same proposals putting forth the same plans with the same results year after year and wonders why plans do not evolve or change, particularly when performance is stagnant or in decline. Convincing proposals will include an evaluation of what has worked, what has not and what concrete changes are proposed to address deficiencies.

6. The panel notes that the current section on Mentoring and Tracking is still not well addressed in many proposals. Proposals are enhanced by the inclusion of clear and systematic mentoring plans coupled with, but not replaced by, meaningful benchmarks and timelines for satisfactory progress. Descriptions of resources available to students who fall behind or fail to meet benchmarks should be included in addition to the statements describing consequences. If possible, proposals should discuss how mentoring procedures put in place for Board of Regents fellowship recipients have impacted the quality of mentoring for all students in the graduate program. Many applicant institutions are not using Individual Development Plans (IDP). We recommend that programs familiarize themselves with this concept (myidp.sciencecareers.org).

7. Programs that have received fellowship funding for more than a few years should document how those fellowships have led to the recruitment of talented and diverse graduate students and enhanced the overall quality of programs. Applications with no or few past fellows should clearly identify the expected impact on the students and the program.

8. Economic development is a specific goal of the Board of Regents Support Fund and the Traditional Graduate Fellows subprogram. Most proposals can be improved by providing specific examples in addition to generalities in their descriptions of economic development success and/or potential. Applicants should also include information on how program curricula prepare students for non-academic careers.

9. Though the terms of BoRSF fellowships (two years for academic master's, three years for professional master's, and four years for doctoral studies) are insufficient for many students to complete their studies, most proposals do not address the issue of funding for fellowship recipients after Board support concludes. Proposals can be enhanced by including plans or pledges regarding the level and duration of support after BoRSF fellowship support is exhausted.

10. Though this has improved in recent years, the panel continues to note that a few proposals provide names and personal information for students in and graduates of programs seeking funding. **This practice is inappropriate and does not strengthen the proposal in any way.** Applicants are urged to maintain the anonymity of students.

11. Though ETS guidelines clearly state that use of composite GRE scores is a misuse of test results and the panel has for several years urged applicants to provide only the scores most relevant to the graduate program for which funding is sought, a handful of proposals continue to provide composite scores. ETS's most recent comments on use of scores may be found at http://www.ets.org/s/gre/pdf/gre_guide.pdf. As in several recent competitions, this year the use of combined scores resulted in reduced scoring by the reviewers. In addition, it is no longer acceptable to give GRE scores by converting to the old scoring system. Nationwide, many programs now use percentiles.

12. There has been great improvement in proper use of the term "underrepresented minority". The panel still reminds applicants that Asian Americans and non-citizens who do not have permanent resident status are not to be categorized as underrepresented in this competition.

13. Applicants should not include lengthy appendices, which are rarely used by the review panel. Material should be provided in appendices only when it is absolutely necessary to specifically illustrate or document in a concise manner points made in the proposal narrative.

APPENDIX A

RECOMMENDATIONS FOR FUNDING

LOUISIANA BOARD OF REGENTS SUPPORT FUND
TRADITIONAL GRADUATE FELLOWS
FY 2016-17 CYCLE FOR AWARDS TO BEGIN IN FY 2018-19

TABLE I
PROPOSALS RECOMMENDED FOR FUNDING

RANK	PROPOSAL NO.	INSTITUTION	DISCIPLINE	LENGTH/TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BORSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1ST YEAR AWARDS
1	003GF-18	LSU A&M	CHEMISTRY	4 YR. DOC	2	$32,000	Year 1	$ 64,000	$64,000
							Year 2	$ 64,000	
							Year 3	$ 64,000	
							Year 4	$ 64,000	
							TOTAL	$256,000	
2	002GF-18	LSU A&M	PHYSICS & ASTRONOMY	4 YR. DOC	3	$27,000	Year 1	$ 81,000	$145,000
							Year 2	$ 81,000	
							Year 3	$ 81,000	
							Year 4	$ 81,000	
							TOTAL	$324,000	
3	004GF-18	LSU A&M	ENGINEERING	4 YR. DOC	3	$30,000	Year 1	$ 90,000	$235,000
							Year 2	$ 90,000	
							Year 3	$ 90,000	
							Year 4	$ 90,000	
							TOTAL	$360,000	
4	018GF-18	TULANE	ENGINEERING	4 YR. DOC	2	$30,000	Year 1	$ 60,000	$295,000
							Year 2	$ 60,000	
							Year 3	$ 60,000	
							Year 4	$ 60,000	
							TOTAL	$240,000	
5	006GF-18	LSU A&M	EARTH & ENVIRONMENTAL SCIENCES	4 YR. DOC	2	$28,000	Year 1	$ 56,000	$351,000
							Year 2	$ 56,000	
				2 YR. MS	0	$25,000	Year 3	$ 56,000	
							Year 4	$ 56,000	
							TOTAL	$224,000	
6	015GF-18	TULANE	CHEMISTRY	4 YR. DOC	1	$32,000	Year 1	$ 32,000	$383,000
							Year 2	$ 32,000	
							Year 3	$ 32,000	
							Year 4	$ 32,000	
							TOTAL	$128,000	
7	017GF-18	TULANE	PHYSICS & ASTRONOMY	4 YR. DOC	1	$30,000	Year 1	$ 30,000	$413,000
							Year 2	$ 30,000	
							Year 3	$ 30,000	
							Year 4	$ 30,000	
							TOTAL	$120,000	

RANK	PROPOSAL NO.	INSTITUTION	DISCIPLINE	LENGTH/TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BORSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1ST YEAR AWARDS
8	021GF-18	UL LAFAYETTE	BIOLOGICAL SCIENCES	4 YR. DOC	1	$30,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$443,000
9	012GF-18	LA TECH	CHEMISTRY	4 YR. DOC	1	$27,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 27,000 $ 27,000 $ 27,000 $ 27,000 $108,000	$470,000
10	001GF-18	LSU A&M	MATHEMATICS	4 YR. DOC	1	$30,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$500,000
11	020GF-18	TUHSC	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	$28,500	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 28,500 $ 28,500 $ 28,500 $ 28,500 $114,000	$528,500
12	009GF-18	LA TECH	COMPUTER & INFORMATION SCIENCES	4 YR. DOC	1	$27,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 27,000 $ 27,000 $ 27,000 $ 27,000 $108,000	$555,500
13	005GF-18	LSU A&M	BIOLOGICAL SCIENCES	4 YR. DOC	1	$30,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$585,500
14	016GF-18	TULANE	SOCIAL SCIENCES	4 YR. DOC	1	$28,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 28,000 $ 28,000 $ 28,000 $ 28,000 $112,000	$613,500
15	010GF-18	LA TECH	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	$27,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 27,000 $ 27,000 $ 27,000 $ 27,000 $108,000	$640,500

RANK	PROPOSAL NO.	INSTITUTION	DISCIPLINE	LENGTH/TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BORSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1ST YEAR AWARDS
16	022GF-18	UL LAFAYETTE	ENGINEERING	4 YR. DOC	1	$30,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$670,500
17	007GF-18	LSU A&M	AGRICULTURAL SCIENCES	4 YR. DOC 2 YR. MS	1 0	$30,000 $25,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$700,500
18	011GF-18	LA TECH	ENGINEERING	4 YR. DOC	1	$27,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 27,000 $ 27,000 $ 27,000 $ 27,000 $108,000	$727,500
19	008GF-18	LSUHSC-NO	BIOLOGICAL SCIENCES	4 YR. DOC	1	$30,000	Year 1 Year 2 Year 3 Year 4 TOTAL	$ 30,000 $ 30,000 $ 30,000 $ 30,000 $120,000	$757,500
20	013GF-18	NICHOLLS	BIOLOGICAL SCIENCES	2 YR. MS	1	$18,000	Year 1 Year 2 TOTAL	$ 18,000 $ 18,000 $ 36,000	$775,500
21	024GF-18	UL LAFAYETTE	PHYSICS & ASTRONOMY	2 YR. MS	1	$22,000	Year 1 Year 2 TOTAL	$ 22,000 $ 22,000 $ 44,000	$797,500

TABLE II
PROPOSALS NOT RECOMMENDED FOR FUNDING

PROPOSAL NO.	INSTITUTION	ELIGIBLE DISCIPLINE
014GF-18	TULANE	HEALTH & MEDICAL SCIENCES
019GF-18	TULANE	EARTH & ENVIRONMENTAL SCIENCES
023GF-18	UL LAFAYETTE	MATHEMATICS

APPENDIX B

NARRATIVE ASSESSMENTS

COMMENTS ON PROPOSALS SUBMITTED UNDER THE BOARD OF REGENTS SUPPORT FUND TRADITIONAL GRADUATE FELLOWS SUBPROGRAM

001GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Recruitment of Superior Doctoral Students in Mathematics"
Requested: 4 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

Mathematics at LSU A&M is a strong doctoral program with good student placements. The number of PhD students has been steadily decreasing, while the number of U.S. applicants has been increasing. This is probably a good combination. The scores reported for recent incoming students are quite high. The high non-completion rate of a few years ago seems to have been addressed, but the panel does notice that over the past six years 12 of the 15 drops reported are U.S. students. Overall, the graduation to drop ratio is 5:1, which is reasonable. Data given about the recruitment of minorities is confusing. The number and percentage of URM students have increased slightly over the past six years, but the admissions data given in Table 10-GF is incompatible with the enrollment data given in Table 11-GF. Notably, the retention and graduation of minorities has not been as good as the student body as a whole, with two graduations and two drops reported. The percentage of women in the program is slowly declining. The program's economic development impact in Louisiana remains a weakness of the proposal, though the panel acknowledges that math departments are rarely major direct generators. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

002GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"GF Proposal FY 2016-17"
Requested: 3 Doctoral-Level Fellowships at $27,000/annum for 4 years

Recommended: <u>3 Doctoral-Level Fellowships at $27,000/annum for 4 years = $324,000 TOTAL</u>

The Physics Department is one of the largest and strongest at LSU A&M, with good external grant support and a long and successful history of graduate student training. The quality of new students seems high, and the large increase in U.S. applications is an indicator that this is a quality program. The ratio of research assistants to teaching assistants indicates an adequate level of grant funding necessary to support the graduate program. Last year the panel noted problems with data tables 10-GF and 11-GF; these problems have been rectified. The drop rate seems relatively low. The argument for the department's impact on the State economy is improved, but could be made even stronger by including examples of direct impact. Minority recruitment remains a problem, though the tables indicate that applications from underrepresented students have increased, possibly a result of increased effort. The $3,000 match for fellowship stipends is applauded. Overall this proposal is much improved from last year, and it is clear that Board of Regents fellowship support will have a positive impact on the program. Funding is recommended for three four-year, doctoral-level fellowships at $27,000 each per year.

003GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Graduate Fellowships in Chemistry for 2018"
Requested: 2 Doctoral-Level Fellowships at $32,000/annum for 4 years

Recommended: 2 Doctoral-Level Fellowships at $32,000/annum for 4 years = $256,000 TOTAL

LSU A&M's Chemistry Department has made a major commitment to doing graduate education right. The recruiting strategy (with separate recruiting and admissions committees) seems to be on track. The selectivity and yield, while still revealing some challenges for the program to address, are much improved. The retention among Board of Regents fellows is outstanding over the last 15 years, as is underrepresented minority recruiting. The training program is highly student-centered, with a priority on guiding student education rather than on examining. Sessions for the students on what amount to survival skills are also a good investment. The department is moving in the direction of establishing an Individual Development Plan (IDP) approach for students, but this effort is taking longer than seems to be necessary. Finally, outcomes analysis is important and the department is taking appropriate steps to do this. The panel's only concern is the loss in external funding over the last few years. It may be that the department's investment in new, junior faculty will help reverse this trend, but it is a concern given the importance of external funding for the health of graduate programs. Increasing teaching loads for the department overall might eventually put pressure on the graduate students in turn for more classroom time, which would pose an additional challenge. Full funding is recommended for two four-year, doctoral-level fellowships at $32,000 each per year.

004GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Board of Regents Fellowships in Engineering 2018-2023"
Requested: 4 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: 3 Doctoral-Level Fellowships at $30,000/annum for 4 years = $360,000 TOTAL

This is a college-wide proposal for the largest engineering school in Louisiana. Clearly its undergraduate and graduate programs are vitally important to the economy of the State. LSU A&M's College of Engineering carries out many exciting research projects, and recruits healthy pools of outstanding graduate students. In spite of funding challenges and uncertainty, the college seems to be doing well. The panel notes that attrition continues to be an issue, especially for underrepresented minority students. Over the past six years the number of underrepresented minority students who have dropped exceeds the number who have received the PhD. In contrast, retention has been good for Board of Regents fellows; can this success be translated to a broader group of students? The panel felt strongly that the individual graduate programs need more effective mentoring plans; a unified mentoring unit in the dean's office is unlikely to fulfill this need. As a final note, the funding table (12-GF) includes many expired grants, with updated data given in appendix A. This is inappropriate. Funding is recommended for three four-year, doctoral-level fellowships at $30,000 each per year.

005GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Graduate Fellowships in Biological Sciences at Louisiana State University"
Requested: 4 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

The doctoral program in Biological Sciences at LSU A&M is large and diverse, spanning ecology to biochemistry. Most of the faculty would likely consider themselves basic scientists. Appendix A lists $32 million in active research grants, while Table 12-GF lists 48 faculty mentoring graduate students and 23 with active research grants. The large number of unfunded faculty may explain why so many students are supported on teaching assistantships. Lack of funding may also explain the recent decline in the number of PhD students, though the panel notes that enrollment data given in Appendix C does not agree with that given in Table 11-GF. The plan for student retention appears to be sound. Appendix E would be much more useful if it had graduation dates. The panel also objects to the use of combined GRE scores as inappropriate per ETS; this seems to be deeply ingrained, as it occurs throughout the proposal, but has been considered inappropriate for many years. The admissions procedure appears to be heavily dominated by two numbers: combined GRE and grade point average. No mention is made of the extensive literature casting doubt on the value of GRE, and apparently no thought is given to relative usefulness of GREV vs GREQ or the appeals of ETS to abandon the use of combining GRE scores. The panel also sees, despite its admonitions in several previous reports, that the proposal continues to identify students by name. Specific accomplishments are appropriate to include, but names are not. The number of underrepresented minority students in the program is low and the panel had concerns about the accuracy of the data, which do not add up: the tables show 13 underrepresented students matriculated in the past six years, with one graduating, none dropping out, and the number in the program increasing by four. The economic development argument would benefit from more specifics. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

006GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences"
Requested: 2 Doctoral-Level Fellowships at $28,000/annum for 4 years
4 Master's-Level Fellowships at $25,000/annum for 2 years

Recommended: <u>2 Doctoral-Level Fellowships at $28,000/annum for 4 years = $224,000 TOTAL</u>

The LSU Departments of Oceanography & Coastal Sciences, Geology & Geophysics, and Environmental Sciences have joined together in this proposal. The three programs collectively have moved strategically to develop research programs that address the series of environmental disasters that Louisiana has experienced in recent years. Faculty members are active scholars and have considerable success in attracting external funding. The establishment of a Coastal Studies Institute has provided a focus for these strategic efforts, particularly in the development of applied research initiatives that the proposal persuasively argues make a significant impact on the Louisiana economy. There are currently approximately 70 students in the program, most of whom are U.S. students. The program has a strong record graduating Board of Regents fellows and recent increases in the numbers of applicants suggest that

the fellowships are having an impact on recruitment. The quality of students remains high; however, the proportion of underrepresented minority students in applicant pools and among those enrolled continues to cause concern. The data provided indicate that a substantial proportion of students are self-supporting. If this is accurate, the proposal might make clear whether self-supporting students are part-time professionals working in related fields while pursuing an advanced degree. If that is the case, it may explain what appears to be rather long times to degree. Attrition also seems to be a problem. The proposal would be more persuasive if it addressed these data points and provided evidence that the programs are moving to address them. Funding is recommended for two four-year, doctoral-level fellowships at $28,000 per year. No funding is recommended for master's fellowships.

007GF-18 LOUISIANA STATE UNIVERSITY AND A&M COLLEGE
"Recruitment of Outstanding Graduate Students in Renewable Natural Resources at Louisiana State University [FY 2018/2019]"
Requested: 2 Doctoral-Level Fellowships at $30,000/annum for 4 years
1 Master's-Level Fellowship at $25,000/annum for 2 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

This proposal from the Renewable Natural Resources program at LSU A&M requests one master's and two PhD fellowships, which would be the first Board of Regents slots held by the department. Overall this is a strong program with substantial extramural funding. The proposal outlines an approach which is heavy on coursework, and which includes an appropriate level of statistical support. The general approach is typical of graduate education, except that the qualifying exam is taken after three years. It is notable that a student identifies a mentor very early (even before arrival) and stays with that individual throughout. This can be an asset in terms of a timely progress through the graduate program, though problems could occur if the relationship breaks down. Recruiting was carefully thought out, but at present selectivity is low and the ability to recruit underrepresented minority students is less than optimal. The panel notes, however, that most recently (in the current year) the program had improved in these regards. Class size is relatively small, and attrition is excessive. Nevertheless, the program has excellent potential, particularly at the doctoral level, and is worthy of support. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year. No funding is recommended for master's fellowship.

008GF-18 LSU HEALTH SCIENCES CENTER – NEW ORLEANS
"Graduate Training in Integrative Pharmacological Sciences and Therapeutics"
Requested: 2 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

The LSU Health Sciences Center – New Orleans' program in integrative pharmacology is small, averaging 15 to 20 students. Most students enrolled are U.S. citizens/residents. The program attracts limited numbers of applicants, but the qualifications of those admitted are strong. The recent decline in applications is cause for concern, however, as is the small number of underrepresented minorities among those admitted. Students appear to receive good, personalized mentoring, and attrition rates are very low. The time to degree is reasonable, at five to five-and-a-half years. The core faculty are highly research

active. Ten faculty members are directing doctoral students, and eleven have funding, including several large grants. As the panel noted last year, the fact that relatively little of the external funding is allotted to student support is troubling. The proposal argues that an effective recruitment plan is in place, but the data presented do not support such a conclusion. Although the established links with New Orleans institutions are promising, a successful proposal should include a strategy that would make use of Board of Regents fellowships and other assets to increase the numbers and quality of applicants, especially from underrepresented groups. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

009GF-18 LOUISIANA TECH UNIVERSITY
"Recruitment of Superior Doctoral Graduate Fellows in Computational Analysis and Modeling"
Requested: 2 Doctoral-Level Fellowships at $27,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $27,000/annum for 4 years = $108,000 TOTAL</u>

Computational Analysis and Modeling (CAM) is one of four PhD programs in the College of Engineering and Science (COES) at Louisiana Tech University. Most research occurs in four "centers of excellence." The innovative administrative structure of the university means that all graduate programs in the sciences and engineering are interdisciplinary, making it extremely easy to develop interdisciplinary research projects. This can be a real advantage for faculty and students, though the panel has a concern that the four proposals submitted from COES do not sufficiently distinguish the individual characteristics of each PhD program. Proposals would be enhanced if greater degrees of specificity were provided regarding each program from the perspective of those students recruited to and enrolled in each program. Placement data for each would significantly help understand the programs' success. Overall, CAM appears to do well with limited support from the State. The well-documented impact on economic development mostly describes activities of the college as a whole rather than being limited to CAM, but clearly CAM faculty are actively involved in economic development projects. Table 11-GF shows a small decline in the number of students over the past six years (45-31). The small size of the reported applicant pool and the fact that most applicants are made offers suggest that prescreening occurs. How this works should be described in the proposal. The small numbers of U.S. matriculants have high GRE scores and grade point averages. The relatively large number of students who are admitted but do not finish is somewhat concerning and needs to be addressed. The $5,000 supplement is a very positive feature of the proposal. Funding is recommended for one four-year, doctoral-level fellowship at $27,000 per year.

010GF-18 LOUISIANA TECH UNIVERSITY
"Graduate Fellows in Biomedical Engineering 2017-2022"
Requested: 2 Doctoral-Level Fellowships at $27,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $27,000/annum for 4 years = $108,000 TOTAL</u>

Louisiana Tech's Biomedical Engineering program is small, with an average enrollment of approximately 30 students. Enrollments appear to have drifted downward over the last few years, and the majority of students are international. The representation of women is increasing, and the program has recruited two

underrepresented minority students in recent years. Over the last decade, three Board of Regents fellows have graduated and one has dropped, which is reasonable. Looking at the program in general, however, the higher drop rate of about 35% is of concern, possibly reflecting a very conventional training program in the department, with a heavy formal course load and limited time for research. The proposal mentions that students with a problem are welcome to discuss with the Associate Dean, but does not indicate how often this option is exercised or what its value might be. The panel has a concern that the four proposals submitted from COES do not sufficiently distinguish the individual characteristics of each PhD program. Proposals would be enhanced if greater degrees of specificity were provided regarding each program from the perspective of those students recruited to and enrolled in each program. Placement data for each would significantly help understand the programs' success. Funding is recommended for one four-year, doctoral-level fellowship at $27,000 per year.

011GF-18 LOUISIANA TECH UNIVERSITY
"Superior Graduate Fellows Supporting Five Centers of Excellence in Engineering 2018-2022"
Requested: 3 Doctoral-Level Fellowships at $27,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $27,000/annum for 4 years = $108,000 TOTAL</u>

The Louisiana Tech College of Engineering and Science (COES) requests support to recruit fellows who would be active in one of five centers—including focus areas in nanotechnology, cyber security, and STEM education. The college has successfully recruited a research-active faculty with substantial records of publication and external funding support. As would be anticipated, COES works closely with industry. The program has a strong track record of graduating previous Board of Regents fellows: of 21 fellowships previously awarded, only one student has dropped. Unfortunately, these fellowships have not been effectively leveraged to expand U.S. student, women and underrepresented minority enrollments in the program. Students admitted into the program appear well qualified, but applicant pools are small. In the most recent cycle for which there is data, there were no underrepresented minority applicants. The proposal presents a persuasive recruitment strategy, but it does not appear to be working. Stipends are generally low, and it appears that more than 60% of the students in the program are supported on teaching assistantships (Form 10-GF was only partially completed). Given the size of the program, more systematic tracking and mentorship are essential. As in previous proposal reviews, the panel is troubled by continued high rates of attrition. The panel has a further concern that the four proposals submitted from COES do not sufficiently distinguish the individual characteristics of each PhD program. Proposals would be enhanced if greater degrees of specificity were provided regarding each program from the perspective of those students recruited to and enrolled in each program. Placement data for each would significantly help understand the programs' success. Funding is recommended for one four-year, doctoral-level fellowship at $27,000 per year.

012GF-18 LOUISIANA TECH UNIVERSITY
"Superior Graduate Fellows in Molecular Sciences and Nanotechnology 2017-2022"
Requested: 2 Doctoral-Level Fellowships at $27,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at $27,000/annum for 4 years = $108,000 TOTAL

This is a proposal for two doctoral fellowships for Louisiana Tech's program in Molecular Science and Nanotechology which grew in 2012 out of a previous master's-level program. The program recruits a modest number of students from a small applicant pool, which is comprised heavily of international students. It is difficult from so small a pool to generate a meaningful review of selectivity and yield. That being said, however, the program, enrolling approximately 24 students, has not yet had a single drop, which speaks to the quality of the training. It will be interesting over time to see how this success translates into timely graduates. In the detailed description of the PhD program, the proposal specifies that the expected time to degree is 7-8 years; this is excessive and should be addressed if it is accurate. The educational program is traditional, as one might expect for a school of engineering in which some students may bring varying backgrounds, particularly in quantitative training. The faculty is fairly small, but they do seem to be well funded and able to support this promising graduate program. The panel has a concern that the four proposals submitted from COES do not sufficiently distinguish the individual characteristics of each PhD program. Proposals would be enhanced if greater degrees of specificity were provided regarding each program from the perspective of those students recruited to and enrolled in each program. Placement data for each would significantly help understand the programs' success. Funding is recommended for one four-year, doctoral-level fellowship at $27,000 per year.

013GF-18 NICHOLLS STATE UNIVERSITY
"Enhancement of Marine and Environmental Biology Student Recruitment through Graduate Study"
Requested: 2 Master's-Level Fellowships at $18,000/annum for 2 years

Recommended: 1 Master's-Level Fellowship at $18,000/annum for 2 years = $36,000 TOTAL

Reflecting the institution's mission and strategic plan, the master's program in Biological Sciences at Nicholls State University has focused on scientific problems related to the south Louisiana ecosystem and on the development of the regional scientific workforce. The department has attracted a core of research-active faculty who actively publish and have succeeded in securing research funding, notably from regional government agencies and industry. The program has had success recruiting and graduating previous Board of Regents fellows, but once again the proposal could be enhanced with a clearer explanation of how these fellowships are used to support a broader recruitment effort. Nevertheless, the program has had reasonable success attracting a pool of qualified applicants, almost all of whom are U.S. students. There has been limited success in recruiting underrepresented minority students, which is surprising given the diverse student population at Nicholls. From the data provided, it appears that time to degree should be a concern (although this may be accounted for by enrollment of part-time students). The program takes pride in providing students with professional experiences, but the curriculum does not seem to integrate that approach. Future proposals should provide comprehensive data on graduate

placement, in particular to demonstrate the importance of the program to the Louisiana economy. Funding is recommended for one two-year, master's-level fellowship at $18,000 per year.

014GF-18 TULANE UNIVERSITY
"Superior Graduate Students in Neuroscience / 2018-2023"
Requested: 2 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: - 0 -

Neuroscience at Tulane is the oldest and most successful interdepartmental graduate program at the university. The Board of Regents has supported Neuroscience PhD students for nearly 30 years and is currently supporting six. The program has 32 faculty and the university provides nine teaching assistants. A major advantage to the program is a funding stream from the master's program. The situation with research support has greatly improved from a few years ago, and research income appears sufficient to support program students. The panel applauds the reported submission of an NIH training grant, even though it was not funded. Future efforts might fare better. One issue that needs to be addressed is that nearly 10% of program students are opting out each year (2 per year for the past 6 years). This is very high for the biomedical field. Over this same time period, however, it appears that no Board of Regents fellows have left the program without graduating. The high drop rate is a drag on program size. The lack of minority students and the fact that the three most recent minority students opted out are significant negatives that must be addressed. This is a particular surprise given that Tulane overall has a good record in underrepresented minority student retention. It seems likely that more attention should be paid to creating an active mentoring climate in the program. The recruiting plan seems adequate but the panel notes that the number of applications peaked in 2012-2013. No funding is recommended.

015GF-18 TULANE UNIVERSITY
"Recruitment of Superior Graduate Students in Chemistry"
Requested: 3 Doctoral-Level Fellowships at $34,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at $32,000/annum for 4 years = $128,000 TOTAL

Tulane's strong Chemistry Department currently has 12 active Board of Regents fellowships, supporting approximately 20% of the program's doctoral students. To the program's credit, attrition is very low: about 15% overall and non-existent for Board of Regents fellows over the past decade. The mechanisms of recruiting seem to be acceptable, and underrepresented minority enrollment is good. The use of faculty visitors as a recruiting tool is interesting and likely successful. Plans for tracking are disappointing, consisting only of identifying a set of requirements that students must satisfy and their completion dates. The stipend requested is higher than other applications from this institution or any other in the competition, and is not well justified. As a result the panel recommends a lower fellowship level of $32,000, consistent with similar programs funded through this mechanism. If the department determines that more funding is needed to maintain competitiveness, the institution or the department may supplement the fellowship from other funding sources, as many campuses do already. Funding is recommended for one four-year, doctoral-level fellowship at $32,000 per year.

016GF-18 TULANE UNIVERSITY
"Psychology Graduate Fellows in Health and Educational Disparities"
Requested: 2 Doctoral-Level Fellowships at $27,778/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $28,000/annum for 4 years = $112,000 TOTAL</u>

The Psychology PhD program at Tulane involves 15 research-active faculty, many of whom focus on problems related to health and education disparities. Although the department has succeeded in attracting considerable external funding, only six of the faculty direct current grants. Admissions to the program are highly competitive, and those who are admitted have strong academic backgrounds. Applicant pools are diverse, and this is reflected in the composition of the PhD student population. Currently, nine of 30 students come from underrepresented minority backgrounds. The data provided indicate a reasonable time to degree. The proposal outlines a supportive environment for doctoral students and well-thought-out strategy that incorporates a range of academic experiences and effective mentoring. Nevertheless, the attrition rate is still considerably higher than it should be. The program appears to have made effective use of the Board of Regents fellowships as a recruitment tool. A thoughtful case is made for the impact of the program on the Louisiana economy, focusing in particular on the substantial proportion of graduates who work as professionals in the State. Funding is recommended for one four-year, doctoral-level fellowship at $28,000 per year.

017GF-18 TULANE UNIVERSITY
"Graduate Fellowships in Physics 2018-2023"
Requested: 2 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

This small department is in the process of rebuilding with a new emphasis on materials. Five of 11 faculty are assistant professors. It is encouraging that most of the new faculty have obtained research funding. Economic development activities are quite strong, with three faculty research programs having direct impact on the local economy; efforts to emphasize materials science should provide many future opportunities in this area. Over half of students are supported by teaching assistantships—too high for a small program. Recruiting has improved over the past six years with a steady increase in domestic student grade point averages. The program has only one minority student. The dual degree programs with Xavier, Dillard and Loyola should provide a marvelous opportunity for recruiting minority students, but no success has so far been realized. One concern is the long time to degree. Seven years may be the national average in physics, but this seems excessively long. Other experimental fields do a better job of moving students along and into postdoctoral positions to finish their education. Seven years is also problematic given institutional rules. How does this average work when the department has a five-year limit on student support, four faculty with no external support, and a School of Science and Engineering limit of seven years (are half of graduating students in violation of this rule)? Overall the proposal paints the picture of a dynamic program that is improving, but with some continuing challenges. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

018GF-18 TULANE UNIVERSITY

"Enabling the Future: Graduate Fellowships for Biomedical and Chemical & Biomolecular Engineering"

Requested: 2 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>2 Doctoral-Level Fellowships at $30,000/annum for 4 years = $240,000 TOTAL</u>

Tulane Engineering seeks two $30,000 fellowships to support its improving doctoral programs. Of 65 students in the combined program, a significant number are female and the percentage of underrepresented minorities has increased to 11%. Though the increase in these students is based largely on the most recent year, the recruiting picture is improving. Board of Regents fellows, after a period of significant attrition from 2008-2013, now seem to be continuing in the program and finishing. The educational program is largely traditional, with a fairly heavy dependence on coursework. The proposal presents some attractive ideas for studying outcomes and tracking. These include a course review process which bring students at all levels into the equation, and which seems to be helping performance overall, with attrition down to a reasonable 20-25%. Currently eight doctoral students of a total of 65 are supported through Board of Regents fellowships, so a significant fraction of the program's overall support is furnished through this program. Funding is recommended for two four-year, doctoral-level fellowships at $30,000 each per year.

019GF-18 TULANE UNIVERSITY

"Recruitment and Mentoring of Graduate Students in Earth and Environmental Sciences at Tulane University"

Requested: 2 Doctoral-Level Fellowships at $26,000/annum for 4 years
2 Master's-Level Fellowships at $25,000/annum for 2 years

Recommended: <u>- 0 -</u>

Tulane's Earth and Environmental Sciences program is small, with a total of nine faculty, of whom six are funded. The graduate enrollment appears to be steady at around 15 students; the data provided suggest that last year only one student was admitted. Diversity seems minimal, though only a fraction of the class is international. Outcomes are problematic, with seven of 18 students leaving the program without the intended degree over the last six years. The mechanisms for recruiting are conventional with minimal creative thinking and commensurately minimal success. Based on the proposal descriptions, mentoring appears to be done only by the faculty advisor and focused on the research project. Tracking consists chiefly of meeting appropriate deadlines in a timely fashion. The application did mention a couple of interesting new strategies to engage students, including hosting of speakers and a course called "the Scientific Enterprise", which examines how science is done using a broad range of examples, and not restricted to earth science. The program currently has one Board of Regents fellowship, but also only one student in the first-year program. Though the program seems to be moving in the right direction, it is difficult to justify supporting another fellowship. No funding is recommended.

020GF-18 TULANE UNIVERSITY HEALTH SCIENCES CENTER
"Predoctoral Training in Biomedical Sciences"
Requested: 4 Doctoral-Level Fellowships at $28,500/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $28,500/annum for 4 years = $114,000 TOTAL</u>

The Biomedical Sciences program at Tulane Health Sciences Center has had strong outcomes over the past six years, with no attrition among the Board of Regents fellowship holders. The program recruits 12-13 students per year, which is a significant decrease from previous periods. Underrepresented minority recruitment is good, with an average of two to three minority students enrolled during this time period. The general student population mirrors the Board of Regents fellows in terms of low attrition, which suggests that the training program is functioning well. The program objectives defined in the proposal are entirely appropriate and very well enunciated. The tracking and outcomes still read primarily as a compendium of deadlines to be met; tracking can be more creative and effective than this. Funding is recommended for one four-year, doctoral-level fellowship at $28,500 per year.

021GF-18 UNIVERSITY OF LOUISIANA AT LAFAYETTE
"Recruitment of Superior PhD Students in Environmental and Evolutionary Biology for 2018"
Requested: 3 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: <u>1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL</u>

UL Lafayette's PhD program in Environmental and Evolutionary Biology is based in a strong department with more than 25 active research faculty. Recent retirements have permitted the department to recruit new faculty to enhance the program's strength in research areas related to the Louisiana environment. That focus is further enhanced through connections with nearby national laboratory facilities, including the involvement of laboratory staff in the program. Only about half of the faculty, however, have current external funding and relatively few students are supported on grants. The program has had good success utilizing Board of Regents fellowships to attract students and in particular has a strong record recruiting and graduating students from underrepresented backgrounds. The data provided in the proposal indicate, worryingly, that there has been a sharp drop in the applicant pool. In 2015-16 one U.S. student was admitted and only seven applied (in comparison to 28 in the previous year). The proposal provides no explanation for this development. This is a crucial issue, since it is unlikely that the program would be able in such circumstances to recruit students qualified for the Board of Regents fellowship. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

022GF-18 UNIVERSITY OF LOUISIANA AT LAFAYETTE
"Graduate Fellowships in Systems Engineering Focusing on Smart Engineering Systems"
Requested: 6 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at $30,000/annum for 4 years = $120,000 TOTAL

The applied PhD program in Systems Engineering at UL Lafayette was established in 2012 to combine training in traditional engineering disciplines with exposure to systems planning and management theory. The program has a strong industry focus, is highly interdisciplinary, and is oriented toward product development and design rather than pure research. The PhD involves 13 core faculty, but draws in more than 30 faculty from across departments in engineering and the sciences. The faculty have strong publication records. Ten faculty involved in the program have external funding, but fewer than half of students are supported on grants. The program has been steadily growing toward a goal of 50 students, although it is unclear whether the program has the resources to support that number. Although the program has attracted large numbers of international applicants, only ten to 15 U.S. students apply each year, very few of whom are underrepresented minorities. Currently fewer than one-third of the students are U.S. citizens/permanent residents and no minority students are enrolled. Attrition rates are extremely high, and future requests for funding should document concrete steps taken, in the program itself, to help students complete successfully. The proposal suggests that there is no systematic effort to promote effective mentorship and student support. The program has addressed the issue of applicant yield by introducing fellowships—supplementary to Board of Regents fellowships—to attract particularly talented students. The plan described in the proposal to use the "smart engineering" focus to attract applicants makes sense. The argument for the program's impact on Louisiana's economic development should be made more explicitly, since this is one of the key factors in determining funding. This is still a relatively new program, but it is important at this stage to address some of the critical issues that have arisen. Funding is recommended for one four-year, doctoral-level fellowship at $30,000 per year.

023GF-18 UNIVERSITY OF LOUISIANA AT LAFAYETTE
"Recruitment of superior graduate students in Mathematics for PhD program"
Requested: 3 Doctoral-Level Fellowships at $30,000/annum for 4 years

Recommended: - 0 -

This department takes pride in training large numbers of high school math teachers. At the PhD level, the program struggles to recruit, support, and retain high-quality students. The grade point averages of matriculants have improved over the last few years, but major concern of the panel is the extremely high drop rate, with more students leaving the program than graduating over the past six years. Despite the panel's requests in the past, the high non-completion rate has not been sufficiently explained or addressed. The program does a fair job recruiting women and underrepresented minorities. The faculty are very active in publishing, but only one faculty member has external funding and few students are supported on grant funds. The economic development argument lacks specifics, so is difficult to evaluate. The program would certainly benefit from three high-quality graduate students, but the impact of such

students on the overall capacity and reputation of the program is likely to be minimal. No funding is recommended.

024GF-18 UNIVERSITY OF LOUISIANA AT LAFAYETTE
"Recruitment of Superior Graduate Students in Physics"
Requested: 2 Master's-Level Fellowships at $22,000/annum for 2 years

Recommended: <u>1 Master's-Level Fellowship at $22,000/annum for 2 years = $44,000 TOTAL</u>

This small program has successfully offered the MS degree in physics since 1958. Graduates move on to jobs or PhD programs elsewhere. The faculty are research active and many of their projects are concerned with local issues, which may impact the Louisiana economy indirectly. Students are encouraged to attend summer programs at national labs. Most faculty do not have regular federal grant support, though State funding may be important because more students are reported to be on research assistantships than the data in Form 12-GF suggest. The data given indicate a very low drop rate. The application pool seems adequate to support the proposal, especially if recruiting is stepped up. Data on student placement following graduation would be very helpful for the reviewers, particularly in assessing program impact and contributions to the State. Old GRE scores are still being cited in the proposal, which is unacceptable. Funding is recommended for one two-year, master's-level fellowship at $22,000 per year.

APPENDIX C

LISTS OF PROPOSALS SUBMITTED

Traditional Graduate Fellows Program
2016-17 Competition
Proposals Submitted

Proposal#/ Discipline	**PI Name(s)**	**Institution**	**Proposal Title**	**Duration**	**Funds Requested**
001GF-18 MATH	William Adkins	LSU A&M	Recruitment of Superior Doctoral Students in Mathematics	4 years 4 PhD @ $30K	Y1: $120,000 Y2: $120,000 Y3: $120,000 Y4: $120,000 Total: $480,000
002GF-18 PHYSICS	Dana Browne	LSU A&M	GF Proposal FY 2016-17	4 years 3 PhD @ $27K	Y1: $81,000 Y2: $81,000 Y3: $81,000 Y4: $81,000 Total: $324,000
003GF-18 CHEM	Samuel Gilman	LSU A&M	Graduate Fellowships in Chemistry for 2018	4 years 2 PhD @ $32K	Y1: $64,000 Y2: $64,000 Y3: $64,000 Y4: $64,000 Total: $256,000
004GF-18 ENG	Craig Harvey	LSU A&M	Board of Regents Fellowships in Engineering 2018-2023	4 years 4 PhD @ $30K	Y1: $120,000 Y2: $120,000 Y3: $120,000 Y4: $120,000 Total: $480,000
005GF-18 BIO	Michael Hellberg	LSU A&M	Graduate Fellowships in Biological Sciences at Louisiana State University	4 years 4 PhD @ $30K	Y1: $120,000 Y2: $120,000 Y3: $120,000 Y4: $120,000 Total: $480,000

Proposal#/ Discipline	**PI Name(s)**	**Institution**	**Proposal Title**	**Duration**	**Funds Requested**
006GF-18 EARTH	Kanchan Maiti	LSU A&M	Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences	4 years/2 years 2 PhD @ $28K 4 MS @ $25K	Y1: $106,000 Y2: $106,000 Y3: $106,000 Y4: $106,000 Total: $424,000
007GF-18 AG	Sabrina Taylor	LSU A&M	Recruitment of Outstanding Graduate Students in Renewable Natural Resources at Louisiana State University [FY 2018/2019]	4 years/2 years 2 PhD @ $30K 1 MS @ $25K	Y1: $85,000 Y2: $85,000 Y3: $60,000 Y4: $60,000 Total: $290,000
008GF-18 BIO	Andrew Catling	LSUHSC-NO	Graduate Training in Integrative Pharmacological Sciences and Therapeutics	4 years 2 PhD @ $30K	Y1: $60,000 Y2: $60,000 Y3: $60,000 Y4: $60,000 Total: $240,000
009GF-18 CIS	Sumeet Dua	LA Tech University	Recruitment of Superior Doctoral Graduate Fellows in Computational Analysis and Modeling	4 years 2 PhD @ $27K	Y1: $54,000 Y2: $54,000 Y3: $54,000 Y4: $54,000 Total: $216,000
010GF-18 HEALTH	Steven Jones	LA Tech University	Graduate Fellows in Biomedical Engineering 2017-2022	4 years 2 PhD @ $27K	Y1: $54,000 Y2: $54,000 Y3: $54,000 Y4: $54,000 Total: $216,000

Proposal#/ Discipline	**PI Name(s)**	**Institution**	**Proposal Title**	**Duration**	**Funds Requested**
011GF-18 ENG	James Palmer	LA Tech University	Superior Graduate Fellows Supporting Five Centers of Excellence in Engineering 2018-2022	4 years 3 PhD @ $27K	Y1: $81,000 Y2: $81,000 Y3: $81,000 Y4: $81,000 Total: $324,000
012GF-18 CHEM	Bala Ramachandran	LA Tech University	Superior Graduate Fellows in Molecular Sciences and Nanotechnology 2017-2022	4 years 2 PhD @ $27K	Y1: $54,000 Y2: $54,000 Y3: $54,000 Y4: $54,000 Total: $216,000
013GF-18 BIO	Aaron Pierce	Nicholls State University	Enhancement of Marine and Environmental Biology Student Recruitment through Graduate Study	2 years 2 MS @ $18K	Y1: $36,000 Y2: $36,000 Total: $72,000
014GF-18 HEALTH	Jill Daniel	Tulane University	Superior Graduate Students in Neuroscience / 2018-2023	4 years 2 PhD @ $30K	Y1: $60,000 Y2: $60,000 Y3: $60,000 Y4: $60,000 Total: $240,000
015GF-18 CHEM	Bruce Gibb	Tulane University	Recruitment of Superior Graduate Students in Chemistry	4 years 3 PhD @ $34K	Y1: $102,000 Y2: $102,000 Y3: $102,000 Y4: $102,000 Total: $408,000
016GF-18 SOC SCI	Stacy Overstreet	Tulane University	Psychology Graduate Fellows in Health and Educational Disparities	4 years 2 PhD @ $27,778	Y1: $55,556 Y2: $55,556 Y3: $55,556 Y4: $55,556 Total: $222,224

Proposal#/ Discipline	**PI Name(s)**	**Institution**	**Proposal Title**	**Duration**	**Funds Requested**
017GF-18 PHYSICS	Jerry Shakov	Tulane University	Graduate Fellowships in Physics 2018-2023	4 years 2 PhD @ $30K	Y1: $60,000 Y2: $60,000 Y3: $60,000 Y4: $60,000 Total: $240,000
018GF-18 ENG	Daniel Shantz	Tulane University	Enabling the Future: Graduate Fellowships for Biomedical and Chemical & Biomolecular Engineering	4 years 2 PhD @ $30K	Y1: $60,000 Y2: $60,000 Y3: $60,000 Y4: $60,000 Total: $240,000
019GF-18 EARTH	Kyle Straub	Tulane University	Recruitment and Mentoring of Graduate Students in Earth and Environmental Sciences at Tulane University	4 years/2 years 2 PhD @ $26K 2 MS @ $25K	Y1: $102,000 Y2: $102,000 Y3: $52,000 Y4: $52,000 Total: $308,000
020GF-18 HEALTH	Robert Garry	TUHSC	Predoctoral Training in Biomedical Sciences	4 years 4 PhD @ $28.5K	Y1: $114,000 Y2: $114,000 Y3: $114,000 Y4: $114,000 Total: $456,000
021GF-18 BIO	Paul Klerks	University of Louisiana at Lafayette	Recruitment of Superior PhD Students in Environmental and Evolutionary Biology for 2018	4 years 3 PhD @ $30K	Y1: $90,000 Y2: $90,000 Y3: $90,000 Y4: $90,000 Total: $360,000

Proposal#/ Discipline	PI Name(s)	Institution	Proposal Title	Duration	Funds Requested
022GF-18 ENG	Jim Lee	University of Louisiana at Lafayette	Graduate Fellowships in Systems Engineering Focusing on Smart Engineering Systems	4 years 6 PhD @ $30K	Y1: $180,000 Y2: $180,000 Y3: $180,000 Y4: $180,000 Total: $720,000
023GF-18 MATH	Arturo Magidin	University of Louisiana at Lafayette	Recruitment of superior graduate students in Mathematics for PhD program	4 years 3 PhD @ $30K	Y1: $90,000 Y2: $90,000 Y3: $90,000 Y4: $90,000 Total: $360,000
024GF-18 PHYSICS	Gabriela Petculescu	University of Louisiana at Lafayette	Recruitment of Superior Graduate Students in Physics	2 years 2 MS @ $22K	Y1: $44,000 Y2: $44,000 Total: $88,000

TRADITIONAL GRADUATE FELLOWS PROPOSAL SUBMISSION SUMMARY, FY 2016-17

TOTAL NUMBER SUBMITTED: 24

Agricultural Sciences: 1
Biological Sciences: 4
Business: 0
Chemistry: 3
Computer & Information Sciences: 1
Earth/Environmental Sciences: 2
Education: 0
Engineering A&B: 4
Health & Medical Sciences: 3
Mathematics: 2
Physics/Astronomy: 3
Social Sciences: 1

FIRST-YEAR FUNDS REQUESTED: $1,992,556

TOTAL FUNDS REQESTED: $7,660,224