

**REPORT TO THE  
LOUISIANA BOARD OF REGENTS**

**RECRUITMENT OF SUPERIOR GRADUATE STUDENTS COMPONENT  
OF THE  
BOARD OF REGENTS SUPPORT FUND  
FY 2008-09 COMPETITION FOR AWARDS TO BEGIN IN FY 2010-11**

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## INTRODUCTION

**The panel urges applicants to read the summary critique, included in this report, relating to each submitted proposal. Most summaries, more importantly, also offer suggestions to help applicants design proposals for future competitions of the Recruitment of Superior Graduate Students Program.**

The review panel for the Recruitment of Superior Graduate Students Program met in Baton Rouge on February 21 and 22, 2009, to discuss and make funding recommendations relative to proposals submitted in the FY 2008-09 competition for awards to begin in FY 2010-11. Members of the panel were Dr. John Mayfield (Chair), Iowa State University; Dr. Roger Chalkley, Vanderbilt University Medical School; Dr. Charles Ambler, University of Texas, El Paso; and Dr. Suzanne Ortega, University of New Mexico.

Eleven (11) institutions submitted a total of thirty-one (31) proposals within the disciplines eligible for this year's competition in the Traditional Graduate Fellows Program. Two (2) universities submitted a total of two (2) proposals in the Graduate Fellowships for Teachers Program. In some cases two or more departments within an academic unit submitted a single proposal.

Prior to arriving in Baton Rouge, consultants individually read and evaluated each proposal according to the guidelines provided by the Louisiana Board of Regents in the FY 2008-09 Graduate Fellows Request for Proposals. Each consultant assigned a preliminary rating to each proposal before the February meeting. Preliminary composite scores were then computed and facilitated discussions at the panel meeting.

After thorough discussion of the merits of each proposal, the consultants established a rank order for all of the proposals and recommended monetary levels for the awards according to established criteria for budgetary cogency. 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 67 to 85 out of a maximum of 100. The panel did not recommend funding for those proposals receiving scores of less than 77. A total of \$900,000 available in first-year monies was recommended for expenditure.

The total amount of first-year funds requested in the Traditional Graduate Fellows Program was \$2,586,000. The Graduate Fellowships for Teachers proposals requested total first-year funds of \$169,500. Consultants were advised that \$720,000 was allotted for the Traditional Graduate Fellows Program and \$180,000 for the Graduate Fellowships for Teachers Program. The panel was also advised that any funds not committed to proposals submitted for the latter program should be recommended for expenditure under the Traditional Graduate Fellows Program, assuming that a sufficient number of meritorious proposals had been submitted to warrant the transfer.

The panel recommends that twenty-one (21) of the thirty-one (31) proposals submitted under the Traditional Graduate Fellows Program and two (2) proposals submitted under the Graduate Fellowships for Teachers Program be funded in the amounts specified in Appendix A. Appendix B consists of brief narrative summaries of the panel's assessment of each proposal submitted and Appendix C contains a listing of all proposals submitted under each program.

The cumulative requests substantially exceed the total amount of funding available. Panel members made every effort to keep recommendations within established funding limitations as well as in accordance with the collective assessment of each proposal's individual merits. Reviewers sought to ascertain the degree to which each award could bring about the successful recruitment of superior graduate students. Such efforts are consistent with the goal 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. In a few cases, requested stipend levels were increased to ensure consistency across programs and national competitiveness.

Once again, the four panel members commend all involved in this ongoing endeavor to elevate the level of graduate study in Louisiana's institutions of higher education. The members of the panel, collectively and individually, also wish to express their sincere appreciation to the staff of the Louisiana Board of Regents for their aid and support in the completion of this task.

### **Panel Recommendations and Suggestions:**

- Applicants continue to have problems filling out the required tables correctly and providing all requested information. These data are very important to the panel's understanding of the graduate programs' strengths and challenges. To facilitate data submission and ensure the panel receives accurate and complete information without overburdening applicants, the panel has worked with Board staff to clarify and simplify Tables 10-GF and 11-GF for next year's competition.
- Key indicators of program quality are improving trends in student quality, retention, completion rates, diversity of student populations, and placement outcomes. Applicants should clearly indicate how their programs are either steadily improving by these measures or addressing challenges encountered in these areas. Currently, proposals do not, in terms of data presentation or narrative, consistently address these critical issues.
- Once again, several proposals submitted in this competition provided names and personal information for students in and graduates of programs seeking funding. **This practice is inappropriate.** Further, a proposal is not strengthened in any way by the inclusion of student names and personal information. Applicants are urged to maintain the anonymity of students.
- Use of composite GRE scores is inappropriate. This position is taken directly from ETS guidelines which are very clear that this is a misuse of test results. This document may be found on the ETS website, at [http://www.ets.org/Media/Tests/GRE/pdf/gre\\_0809\\_guide.pdf](http://www.ets.org/Media/Tests/GRE/pdf/gre_0809_guide.pdf). This year the use of combined scores resulted in reduced scoring by the reviewers.
- There continues to be a problem with the definition of "under-represented minority". Asian Americans and non-citizens who do not have permanent resident status are not to be categorized as under-represented in this competition.
- When multiple departments/units apply together for a single level of fellowship support (e.g., master's or Ph.D.), data as presented in the tables should be combined for all participating programs. The RFP clearly states that "a proposal may include multiple sub-disciplines...provided that these sub-disciplines are integrated into one coherent proposal." This includes combined presentation of data.
- Economic development is very important to the Board of Regents Support Fund and to the Graduate Fellows panel. Most proposals can be improved by providing specific examples in addition to generalities in their descriptions of economic development potential.

- Proposals are enhanced by clear and systematic mentoring plans coupled with 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 penalties.
- Applicants are discouraged from including appendices, which are rarely used by the review panel because they are generally over-filled and difficult to navigate. Material should be provided in appendices only when it specifically illustrates or documents points made in the proposal narrative.
- Student outcomes following completion of the degree are an extremely important measure of a graduate program's success, and proposals are significantly enhanced by the inclusion of quantitative data on the placement of program graduates. This data should be summarized systematically rather than presented anecdotally in the proposals. To provide guidance for proposal writers, the panel suggests that data include a) the total number of program students awarded degrees over the past 15 years, b) the total number no longer working in the discipline, c) the number currently in postdoctoral positions, d) the number currently working in academia (but not employed as post-doctoral fellows), e) the number employed in industry, and f) the number in other discipline-related careers. If programs do not currently collect such data, the panel encourages them to institute mechanisms for acquiring it.
- BoR Fellowships are intended to enhance the recruitment of more talented and diverse graduate students to programs in Louisiana universities and to improve the overall quality of programs. The panel pays close attention to indications of how past Board funding has leveraged institutional funding to improve graduate programs and enhance recruiting. Some programs have received BoR funding for many years. Proposals should clearly explain how past fellowships have achieved the desired goals and what specific plans are in place to utilize new awards to achieve greater eminence.

## **APPENDIX A**

### **RECOMMENDATIONS FOR FUNDING**

**TABLE I**

**Louisiana Board of Regents Support Fund  
 Traditional Graduate Fellows Program and Graduate Fellowships for Teachers Program  
 Proposals Recommended for Funding  
 FY 2008-09 Cycle for Awards to Begin in FY 2010-11**

<b>RANK</b>	<b>PROP. NO.</b>	<b>SCHOOL</b>	<b>DISCIPLINE</b>	<b>LENGTH/ TYPE OF PROGRAM</b>	<b>NUMBER OF FELLOWSHIPS RECOMMENDED</b>	<b>ANNUAL STIPEND AMOUNT</b>	<b>YEAR</b>	<b>TOTAL BoRSF MONEY RECOMMENDED</b>	<b>CUMULATIVE AMOUNT OF 1st YEAR AWARDS</b>
1	006GF-10	LSU-BR	MATHEMATICS	4 YR. DOC	3	\$24,000	1 2 3 4 TOTAL	\$ 72,000 \$ 72,000 \$ 72,000 <u>\$ 72,000</u> \$288,000	\$72,000
2	007GF-10	LSU-BR	CHEMISTRY	4 YR. DOC	2	\$30,000	1 2 3 4 TOTAL	\$ 60,000 \$ 60,000 \$ 60,000 <u>\$ 60,000</u> \$240,000	\$132,000
3	025GF-10	TUHSC	HEALTH & MEDICAL SCIENCES	4 YR. DOC	2	\$28,500	1 2 3 4 TOTAL	\$ 57,000 \$ 57,000 \$ 57,000 <u>\$ 57,000</u> \$228,000	\$189,000
4	024GF-10	TUHSC	HEALTH & MEDICAL SCIENCES	4 YR. DOC	2	\$28,500	1 2 3 4 TOTAL	\$ 57,000 \$ 57,000 \$ 57,000 <u>\$ 57,000</u> \$228,000	\$246,000
5	029GF-10	UL LAFAYETTE	BIOLOGICAL SCIENCES	4 YR. DOC	2	\$26,000	1 2 3 4 TOTAL	\$ 52,000 \$ 52,000 \$ 52,000 <u>\$ 52,000</u> \$208,000	\$298,000

RANK	PROP. NO.	SCHOOL	DISCIPLINE	LENGTH/ TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BoRSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1st YEAR AWARDS
6	008GF-10	LSU-BR	BIOLOGICAL SCIENCES	4 YR. DOC	2	\$27,000	1 2 3 4 TOTAL	\$ 54,000 \$ 54,000 \$ 54,000 <u>\$ 54,000</u> \$216,000	\$352,000
7	009GF-10	LSU-BR	EARTH & ENVIRO. SCIENCES	4 YR. DOC	2	\$28,000	1 2 3 4 TOTAL	\$ 56,000 \$ 56,000 \$ 56,000 <u>\$ 56,000</u> \$224,000	\$408,000
8	023GF-10	TULANE	HEALTH & MEDICAL SCIENCES	4 YR. DOC	2	\$28,000	1 2 3 4 TOTAL	\$ 56,000 \$ 56,000 \$ 56,000 <u>\$ 56,000</u> \$224,000	\$464,000
9	001GF-10	LSU-BR	PHYSICS & ASTRONOMY	4 YR. DOC	2	\$26,000	1 2 3 4 TOTAL	\$ 52,000 \$ 52,000 \$ 52,000 <u>\$ 52,000</u> \$208,000	\$516,000
10	013GF-10	LA TECH	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$541,000
11	003GF-10	LSU-BR	COMPUTER & INFORMATION SCIENCES	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$566,000

RANK	PROP. NO.	SCHOOL	DISCIPLINE	LENGTH/ TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BoRSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1st YEAR AWARDS
12	014GF-10	LA TECH	ENGINEERING	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$591,000
13	012GF-10	LSUHSC-S	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$27,000	1 2 3 4 TOTAL	\$ 27,000 \$ 27,000 \$ 27,000 <u>\$ 27,000</u> \$108,000	\$618,000
14	011GF-10	LSUHSC-NO	BIOLOGICAL SCIENCES	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$643,000
15	010GF-10	LSUHSC-NO	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$668,000
16	019GF-10	TULANE	ENGINEERING	4 YR. DOC	1	\$24,000	1 2 3 4 TOTAL	\$ 24,000 \$ 24,000 \$ 24,000 <u>\$ 24,000</u> \$ 96,000	\$692,000
17	002GF-10	LSU-BR	ENGINEERING	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$717,000

RANK	PROP. NO.	SCHOOL	DISCIPLINE	LENGTH/ TYPE OF PROGRAM	NUMBER OF FELLOWSHIPS RECOMMENDED	ANNUAL STIPEND AMOUNT	YEAR	TOTAL BoRSF MONEY RECOMMENDED	CUMULATIVE AMOUNT OF 1st YEAR AWARDS
18	028GF-10	UL LAFAYETTE	PHYSICS & ASTRONOMY	2 YR MASTER'S	1	\$17,000	1 2 TOTAL	\$ 17,000 <u>\$ 17,000</u> \$ 34,000	\$734,000
19	031GF-10	UNO	CHEMISTRY	4 YR. DOC	1	\$ 30,000	1 2 3 4 TOTAL	\$ 30,000 \$ 30,000 \$ 30,000 <u>\$ 30,000</u> \$120,000	\$764,000
20	022GF-10	TULANE	BIOLOGICAL SCIENCES	4 YR. DOC	1	\$26,000	1 2 3 4 TOTAL	\$ 26,000 \$ 26,000 \$ 26,000 <u>\$ 26,000</u> \$104,000	\$790,000
21	004GF-10	LSU-BR	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$25,000	1 2 3 4 TOTAL	\$ 25,000 \$ 25,000 \$ 25,000 <u>\$ 25,000</u> \$100,000	\$815,000
1	002GFT-10	MCNEESE	EDUCATION	1 YR. MASTER'S	1	\$31,000	1 TOTAL	<u>\$31,000</u> \$31,000	\$846,000
2	001GFT-10	LSU-BR	EDUCATION	1 YR. MASTER'S	3	\$18,000	1 TOTAL	<u>\$54,000</u> \$54,000	\$900,000

## TABLE II

### SUPPORT FUND GRADUATE FELLOWS PROGRAM PROPOSALS NOT RECOMMENDED FOR FUNDING

PROPOSAL #	SCHOOL	ELIGIBLE DISCIPLINE
005GF-10	LSU-BR	AGRICULTURE
015GF-10	LA TECH	MATHEMATICS
016GF-10	NICHOLLS	MATHEMATICS
017GF-10	SOUTHEASTERN	BIOLOGICAL SCIENCES
018GF-10	SOUTHERN-BR	EARTH & ENVIRONMENTAL SCIENCES
020GF-10	TULANE	PHYSICS & ASTRONOMY
021GF-10	TULANE	CHEMISTRY
026GF-10	UL LAFAYETTE	COMPUTER & INFORMATION SCIENCES
027GF-10	UL LAFAYETTE	MATHEMATICS
030GF-10	UNO	BIOLOGICAL SCIENCES

## **APPENDIX B**

### **NARRATIVE ASSESSMENTS**

**COMMENTS ON PROPOSALS SUBMITTED UNDER THE BOARD OF REGENTS  
SUPPORT FUND PROGRAMS FOR TRADITIONAL GRADUATE FELLOWS AND  
GRADUATE FELLOWSHIPS FOR TEACHERS**

**001GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Graduate Fellows in Physics and Astronomy”**  
**Requested: 3 Doctoral-Level Fellowships at \$26,000/annum for 4 years**

**Recommended: 2 Doctoral-Level Fellowships at \$26,000/annum for 4 years = \$208,000 TOTAL**

The Physics Department at LSU-BR is large and has a strong faculty with good records of research productivity. The faculty are currently very well funded from a variety of sources, underscoring the department’s success. Moreover, the hiring of three new faculty members at the full professor level is very impressive. The review panel does not understand, however, why standard departmental teaching assistantships and graduate research stipends remain so low. Nevertheless, the department seems to be able to recruit well. The training program and monitoring of progress is conventional but appears adequate. The panel did not see any information on long term student outcomes – data which is critical to understanding the success of the graduate program. Data is confusingly presented and difficult to interpret; the under-represented minority data in particular is inconsistent and cannot be reconciled. Though the program’s total attrition rate appears to be low, it was not easy to determine its level and trends from the data presented; it is commendable that the attrition rate among BoR fellows is extremely low. Overall, this is a deserving program worthy of additional support. The panel recommends two doctoral fellowships at \$26,000 per year.

**002GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Board of Regents Fellowships in Engineering 2010-15”**  
**Requested: 2 Doctoral-Level Fellowships at \$25,000/annum for 4 years**  
**2 Master’s-Level Fellowships at \$20,000/annum for 2 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

This proposal, submitted by a group of seven departments within the College of Engineering at LSU, was difficult to evaluate. Given the importance of assessing proposals on the basis of empirical data demonstrating enrollment trends and a track record of success in timely degree completion for students, the applicants should work in future submissions to correct major inconsistencies in the data tables. It was particularly difficult to distinguish master’s from doctoral students. While attrition appears in general to be high, it is variable across programs and the pattern for under-represented minority (URM) students could not be discerned from the data. Nevertheless, there appears to be a substantial gap between majority and URM students in attrition. Despite previous investments of BoR fellowships, the domestic applicant pool remains small and admissions not particularly selective; in fact, applications are apparently declining. The master’s program appears to be particularly challenged and does not seem to have produced a graduate since 2004. For the purposes of this application, the College should consider focusing fellowships on select areas that show the greatest opportunities for success. The emphasis on using BoR support for recruitment of additional under-represented minority students is excellent and should be maintained. Funding is recommended for one doctoral fellowship at \$25,000 per year.

**003GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Recruitment of Superior Graduate Fellows in Computer Science”**  
**Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

LSU’s Computer Science Department has a surprisingly small faculty, but the quality appears to be high. The faculty are well-supported researchers with good productivity and national visibility. The mix of Ph.D. and master’s students is healthy. The reported ten under-represented minority students seeking the Ph.D. is excellent, though the panel is surprised that such a small program has three Pacific Islanders currently enrolled. The fraction of students supported on research funds indicates strong funding. The economic impact of the program is well-described and impressive. Funding is recommended for one doctoral fellowship at \$25,000 per year.

**004GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Graduate Studies in Comparative Biomedical Sciences, Pathobiological Sciences, & Veterinary Clinical Sciences 2008-11 Competition”**  
**Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

This proposal from three departments in the Veterinary School at LSU outlines a strong approach to recruiting, training and monitoring the progress of doctoral students. The strategies for recruiting are much improved from previous applications. This program had been criticized for a relaxed approach to recruiting in general, and to identifying URM students in particular. The data indicates that the department has adopted a more active approach which is having a positive effect, though there is still progress to make. For the first time, however, this program is considering strategies for visiting minority-serving institutions along with the regular vet school recruiters. In addition to changes to recruitment strategies, the applicants have addressed reviewer concerns about the quality and clarity of presented data. The data does reveal some concerns, particularly related to attrition. While the program has improved its monitoring of the students, it needs to undertake systemic mentoring to reduce the high drop rate. Among BoR fellows specifically, the attrition rate is a dramatic 30-50%, raising questions about the wisdom of the State investment. Nevertheless, the program is actively improving and may begin to see some results of its efforts. Based on this potential, the panel recommends one doctoral fellowship at \$25,000 per year.

**005GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Recruiting Superior Graduate Students for LSU’s School of Renewable Natural Resources”**  
**Requested: 4 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: - 0 -**

The proposal involves a significant number of faculty in a variety of disciplines including aquaculture, fisheries, forest products, forestry and wildlife. Faculty appointments are split between LSU for teaching and the LSU Agricultural Center for research and outreach. Faculty members, particularly in forestry, have strong records of scholarship, though the level of external funding appears somewhat low for this number of faculty. The Ph.D. program is small, with 23 students in two areas. The low numbers of U.S. students in the applicant pools raise questions about the effectiveness of Board of Regents fellowships in attracting high quality applicants. The plan for involving faculty in student recruitment seems impractical. Most troubling, however, is that while the program has had little success in attracting under-represented minority applicants, no strategy is laid out for addressing this issue. It is difficult to determine from the data presented whether retention efforts are effective and time to degree is acceptable. No funding is recommended.

**006GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Recruitment of Superior Doctoral Students in Mathematics”**  
**Requested: 4 Doctoral-Level Fellowships at \$22,000/annum for 4 years**

**Recommended: 3 Doctoral-Level Fellowships at \$24,000/annum for 4 years = \$288,000 TOTAL**

This is a strong department at LSU and appears to have a healthy graduate program with an adequate number of applications, good quantitative GRE scores, and a steady production of doctorates. The program has had some success in the recruitment of minorities, but could still improve. The LSU Chemistry Department or the University of Iowa Math Department could serve as models of best practices in minority student recruitment. The direct benefits of the program and its graduates to Louisiana’s economic development are not clear and might be better delineated. Future proposals should also address the issue of the large number of students who leave the program without receiving their intended degree. The panel applauds the \$8,000 stipend match and recommends the BoR provide an additional \$2,000 per fellowship to enable the department to use some of these supplementary funds for travel and research support for the fellows. Funding is recommended for three doctoral fellowships at \$24,000 per year.

**007GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“BOR Graduate Fellowships in Chemistry for 2010”**  
**Requested: 2 Doctoral-Level Fellowships at \$30,000/annum for 4 years**

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

The LSU Chemistry Department has established an excellent doctoral program that clearly works to identify strong students and support them once in place. As always, this program is particularly successful in minority recruitment and should be used as a model by other departments. Given the program's emphasis on student support, therefore, the high rate of attrition among BoR fellowship recipients is worrisome. That said, the program has developed and implemented approaches to remedy the situation, including special mentoring programs and strategies. Since much of the attrition involved students in good academic standing leaving for personal reasons, these strategies may not succeed in addressing the issue. The proposal justifies the value of these fellowships as they positively impact the larger graduate program. Certainly the applicants have outlined sound approaches to increase the effectiveness of recruiting, and seem likely to build the strength and success of the program. This program is well considered and taking steps to address challenges; as such, it is worthy of additional support. The panel recommends two doctoral fellowships at \$30,000 per year.

**008GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Graduate Fellowships in the Life Sciences at Louisiana State University”**  
**Requested: 4 Doctoral-Level Fellowships at \$27,000/annum for 4 years**

**Recommended: 2 Doctoral-Level Fellowships at \$27,000/annum for 4 years = \$216,000 TOTAL**

LSU's Department of Biological Sciences has a well-funded, productive faculty and a strong focus on graduate education. The department and program seem to be of excellent quality in terms of scholarship and academic emphasis. The applicants seem to have had success in recruitment and BoR fellows are making good progress in the program. Inconsistencies between the data tables and the proposal text make it difficult to interpret issues related to the selectivity of admissions, attrition rates, and the diversity of the student body. It would be in the department's best interest to have clean and verified data readily available to make it easier to develop appropriate strategies and, if necessary, interventions. Overall attrition rates appear to be low but the proposal describes no real mentoring or professional development plan which may be useful for all students but critical for the success of some. The minority recruitment plan is perfunctory and the department has had only moderate success in this area. Nevertheless, the program is one of the strongest at LSU and is worthy of support. Funding is recommended for two doctoral fellowships at \$27,000 per year.

**009GF-10      LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences”**  
**Requested: 5 Doctoral-Level Fellowships at \$28,000/annum for 4 years**  
**4 Master's-Level Fellowships at \$26,000/annum for 2 years**

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

This collaborative proposal links three areas with five programs: doctoral programs in Oceanography & Coastal Sciences and Geology & Geophysics and master's degrees in those fields as well as Environmental Sciences. The programs combine more than 50 faculty members, many of whom have impressive scholarly credentials and substantial records of attracting external funding. Clearly the training and research undertaken within these programs are strategically well placed to capitalize on the State's need to respond to challenges relating to coastal systems that have been put into relief in recent years. The program is commended for making targeted hires in these areas. The proposal should present a plan for a coordinated curricular approach to these questions. Student qualifications seem strong and the proposal demonstrates a good record with previous BoR fellows, some of whom have secured positions in the field. Moreover, the applicants have made excellent efforts to identify key components of student success and to orient recruitment efforts around them. Greater focus might be placed on capitalizing on BoR fellowships to generate larger pools of applicants. There has been some success with minority recruitment and the plan to focus attention on Louisiana institutions and students is probably appropriate. The apparent absence of linkages among these programs in the curriculum and support services represents a lost opportunity to capitalize on

interdisciplinary approaches to recruit superior students. The proposal does not make a strong case for the value of master's recruitment. The multiplicity of tables, presenting each program's data separately, makes it extremely difficult to assess the proposal as a cohesive whole. According to the program's RFP, "a proposal may include multiple sub-disciplines...provided that these sub-disciplines are integrated into one coherent proposal." There is no evidence of such coherence in this proposal and future funding may not be forthcoming unless this is addressed. Funding is recommended for two doctoral fellowships at \$28,000 per year.

**010GF-10**      **LSU HEALTH SCIENCES CENTER – NEW ORLEANS**  
**“Recruitment of Superior Graduate Students in Biostatistics”**  
**Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

This program includes several components, including a new Ph.D. in Biostatistics. There appear to be five students currently enrolled in this recently introduced program. The applicants outline a strategy for recruiting, which will not be easy due to the exceedingly stringent math requirements for these students. The entrance requirements in general, over and above the math expectations, are also extremely rigorous. The applicants plan to use the Web as a primary tool in this process, though some personal contacts will be made with math professors at other institutions. The program has an extremely heavy course load, though it is in line with other doctoral statistics programs. Plans for student tracking are perfunctory, though the mentoring and tracking may prove to be critical with these students who often tend to disappear into the “clinical trials” world of the medical environment. A successful doctoral program will need to be much more proactive in this regard. The panel recommends one doctoral fellowship at \$25,000 per year, to assist in recruitment to this new and interesting program.

**011GF-10**      **LSU HEALTH SCIENCES CENTER – NEW ORLEANS**  
**“Graduate Training in Integrative Pharmacology and Experimental Therapeutics”**  
**Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

This small program has a productive faculty and a strong record of post-doctoral placements for degree recipients. The domestic applicant pool remains limited and there has been only a marginal rebound in international applicants since the dramatic impact of Hurricane Katrina. While it is difficult to assess progress on diversity goals with such small numbers of matriculants, the program appears to have had some success in this regard. The absence of insurance benefits and apparently limited grant-related support for doctoral students may make it difficult to generate a more selective admissions profile. It is absolutely inappropriate to use combined GRE scores in admissions decisions, per ETS guidelines. Also, the proposal misses some obvious potential for addressing the economic development generated by the program as well as faculty/student research and student placement. Funding is recommended for one doctoral fellowship at \$25,000 per year.

**012GF-10**      **LSU HEALTH SCIENCES CENTER – SHREVEPORT**  
**“Recruitment of Superior Doctoral Students in Interdisciplinary Toxicology Program”**  
**Requested: 3 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 proposal is for student support in LSUHSC-S's Toxicology Program, which involves three related departments. The program is relatively small, with typically about 20 students. This proposal's attention to detail and thoughtful approach to the interests of the students are impressive. The awareness that performance measures are primarily dependent upon career outcomes is excellent and sharpens the program's focus. The curriculum was clearly presented, as was the mentoring and monitoring during the student's time in the program. The use of a summer research activity to facilitate student recruiting provides a good mechanism to recruit under-represented minority students. Despite this, the panel noted that 70-80% of all U.S. national applicants are offered admission, perhaps indicating a need for a broader applicant pool and increased selectivity. In addition, the data presented in the tables are confusing. The cohort beginning in 2007 is listed as having received four degrees. Are these master's degrees wrongly listed on the table or the number of degrees in the academic year regardless of the cohort? In addition, the

level of attrition appears to be high - close to 30% already, and 16 students still to graduate. Nonetheless the degree of care in this application underscores the program's sharp emphasis on its students, which should be supported. Funding is recommended for one doctoral fellowship at \$27,000 per year.

**013GF-10            LOUISIANA TECH UNIVERSITY**  
**“Graduate Fellows in Biomedical Engineering”**  
**Requested: 2 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

The Biomedical Engineering Program at Louisiana Tech draws strength from its interdisciplinarity and its focus. Faculty members associated with the program have high quality, productive research agendas and records of external funding. The pledged supplementary fellowship support is commendable and should help to recruit highly competitive students. However, the institution will need to find a way to provide insurance benefits to graduate students if it wishes to offer packages competitive with most research universities. Since the domestic applicant pool remains small and there has been virtually no progress in diversifying the student body, the proposed use of BoR fellowship funds to bolster these efforts is extremely laudable. Funding is recommended for one doctoral fellowship at \$25,000 per year.

**014GF-10            LOUISIANA TECH UNIVERSITY**  
**“Superior Graduate Fellows Supporting Three Centers of Excellence in Engineering”**  
**Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$25,000/annum for 4 years = \$100,000 TOTAL**

This proposal for general support of the College of Engineering at Louisiana Tech is less focused and therefore less compelling than that for Biomedical Engineering. The applicant pool remains very small. This is almost certainly due to the fact that there is insufficient research funding to adequately support a larger group of students. In fact, it appears that only half of current students are supported on research assistantships; this is extremely low for a College of Engineering. In addition, the University does not yet provide student insurance benefits necessary for the College to become nationally competitive for top applicants. While attrition rates are difficult to determine from the data provided, it is clear that the applicants need to develop a proactive mentoring and professional development program for students. Funding is recommended for one doctoral fellowship at \$25,000 per year.

**015GF-10            LOUISIANA TECH UNIVERSITY**  
**“Computational Analysis and Modeling Doctoral Graduate Fellows”**  
  
**Requested: 2 Doctoral-Level Fellowships at \$25,000/annum for 4 years**

**Recommended: -0-**

Computational Analysis and Modeling is one of three Ph.D. programs in the College of Engineering and Science at Louisiana Tech. The interdisciplinary nature of all of the Engineering programs is laudable, and it appears that some faculty members participate in all three. This is an essential component of truly cross-disciplinary work. This proposal, however, is in many ways the same as the one submitted by the College of Engineering as a whole and does little to highlight the distinctive accomplishments of and opportunities afforded to the faculty and students of the Computational Analysis and Modeling Program. The proposal provides no clear justification of why this program deserves individual support through the Graduate Fellows Program. The \$5,000 supplement is a very positive feature of the proposal, however, and would likely assist in recruitment. Minority recruitment efforts are fairly standard, and should be strengthened. No funding is recommended.

**016GF-10 NICHOLLS STATE UNIVERSITY**  
**“Graduate Fellowship Program in Mathematics at Nicholls State University”**  
**Requested: 2 Master’s-Level Fellowships at \$16,000/annum for 3 years**

**Recommended: -0-**

Nicholls’ Mathematics Department has 20 faculty members, five of whom hold doctoral degrees. The MCCM program is relatively new, just three years old, and has grown to 28 students. The concept of the program is very appealing, as is reflected by the student body growth. More information is needed, however, on the composition of the student body. No data are given, for example, concerning how many students are on campus and how many are entirely online; it seems likely that most are online. Minority student recruitment is disappointing and it is unacceptable to claim that minority student statistics are unavailable. The law allows students to self-identify and for statistics to be kept. Gender is reported; how is minority status different? Table 10-GF indicates that in the entire history of the program no minority students have applied. It is unclear whether this means no data were collected or students with under-represented status have actually not applied. If the latter is true the program should immediately plan to address this issue. First-generation under-represented groups should be a prime recruiting pool for this program. It is not clear how BoR fellowships will help this program achieve eminence. No funding is recommended.

**017GF-10 SOUTHEASTERN LOUISIANA UNIVERSITY**  
**“Recruitment of Exceptional Master’s Students in the Biological Sciences at Southeastern Louisiana University”**  
**Requested: 2 Master’s-Level Fellowships at \$21,000/annum for 3 years**

**Recommended: -0-**

This proposal from a predominately undergraduate regional university argues that competitive BoR fellowships can help build the graduate program in Biological Sciences and play a role in supporting research. The Biological Sciences Program has an active research faculty who have produced an impressive number of publications and generated substantial external funding, including student funding. With a well-equipped new building and the establishment of an Institute for Biodiversity, the department is poised to expand research in areas, notably related to the ecology of the Lake Pontchartrain Basin, that are vital to Louisiana. Information on student outcomes is positive; substantial numbers of master’s graduates have gone on to competitive Ph.D. programs and others have entered biology-related fields in the State. Given the argument that the BoR fellowships would enhance research, the proposal might have provided evidence of existing efforts to involve undergraduates in research. To date, the program has had little success in expanding numbers of applicants. To improve in this area, recruitment strategies should be more specific and focused. Although the plan to target local HBCUs to encourage minority enrollment is practical, it is a standard approach and no evidence is presented to show efforts have been made to establish these connections. No funding is recommended.

**018GF-10 SOUTHERN UNIVERSITY – BATON ROUGE**  
**“Strengthening Doctoral Research in Environmental Toxicology at Southern University – Baton Rouge”**  
**Requested: 6 Doctoral-Level Fellowships at \$20,000/annum for 4 years**

**Recommended: -0-**

The Environmental Toxicology Program at Southern University is potentially of critical importance to its immediate region—one of the most heavily polluted in the United States. The research and training undertaken in conjunction with this doctoral program would not only contribute to the amelioration of environmental pollution but could stimulate the development of a high-tech industry built around these issues. The faculty, drawn from chemistry, materials science, biological sciences, pharmacology and environmental engineering, have good records of publication and some have been successful in winning substantial federal grants. There are currently 25 students enrolled in the program, about half of whom are international. The program has successfully focused on recruiting under-represented minority students; however, there is cause for serious concern regarding the level of attrition. The applicant pools are small and those accepted include some students with low quantitative GRE scores and GPAs.

This may partly explain why three of four previously awarded BoR fellowship students left the program. The proposal should directly address these challenges with a creative and ambitious plan for tracking and mentoring. The focus on recruitment through the array of federally supported STEM programs makes sense, and recent sharp increases in stipend levels may lead to larger pools of better-qualified applicants. The level of stipend requested for the BoR fellowship seems insufficient to ensure that the program is competitive for outstanding students, and the applicants should show how the award of these fellowships would enhance the quality of the program. No funding is recommended.

**019GF-10 TULANE UNIVERSITY**  
**“Graduate Fellowships in Support of Biomedical and Chemical/Biomolecular Engineering”**  
**Requested: 6 Doctoral-Level Fellowships at \$24,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$24,000/annum for 4 years = \$96,000 TOTAL**

Fellowship support is sought for the two remaining engineering programs at Tulane, and the panel recognizes the enormous challenges presented by the post-Katrina restructuring of science and engineering programs. The data presented in the proposal are extremely confusing and suggest that the full impact and possibilities of the reorganization are as yet uncertain. Faculty members are active researchers and have sufficient grant support. The applicant pool is very small, making admissions non-selective, and the pool apparently is continuing to shrink. The information on under-represented minority students is difficult to interpret. A clear indication of how BoR fellowships would align with and enhance the new organizational structure would greatly strengthen the proposal. The panel was enthusiastic about the economic development potential of the new multi-institutional research collaborations. Funding is recommended for one doctoral fellowship at \$24,000 per year.

**020GF-10 TULANE UNIVERSITY**  
**“Recruitment of Superior Graduate Students in Physics and Engineering Physics”**  
**Requested: 3 Doctoral-Level Fellowships at \$26,000/annum for 4 years**

**Recommended: - 0 -**

Tulane’s Physics Department is small, reporting 15 faculty and 24 graduate students. That only six faculty members have active research funding indicates a department in transition. Another troubling sign is that 16 of the 24 students are supported on teaching assistantships and only six on research funds. A minimum GRE quantitative score of 650 seems very low for physics. The creation of a division of materials science and physics has the potential to provide a new sense of direction for the department, but it is too early to tell whether this will affect the graduate program. No funding is recommended.

**021GF-10 TULANE UNIVERSITY**  
**“Recruitment of Superior Graduate Students in Chemistry”**  
**Requested: 3 Doctoral-Level Fellowships at \$30,000/annum for 4 years**

**Recommended: - 0 -**

Tulane’s doctoral program in chemistry continues to be very traditional. The department is currently small, possibly a consequence of Katrina. After the recovery of research funding in 2006, the funding level has declined over the last two years. Student recruitment plans are conventional and the applicant pool is dominated by international students. As a result, the program is not very selective among domestic students. This is mitigated to a degree by some considerable success in recruiting minority students. The training program follows standard approaches in terms of content as well as student mentoring and tracking. Fellowship recipients are expected to maintain a certain GPA, identify a thesis advisor in a timely fashion, and pass the qualifying exam on schedule. All are entirely legitimate expectations, but more careful tracking might help avoid attrition and excessive time to degree in their premier training program. There is some evidence that a more proactive approach is needed with regard to previous BoR fellows. Since 2000 the program has graduated two BoR fellows, while two have dropped; the rest of the fellows are still in the program. The panel had difficulty assessing this program in detail since Table 11-GF was not completed. Even the portion the applicants did complete seemed incorrect, showing the graduation of six doctoral students from the class of 2006-07. No funding is recommended.

**022GF-10 TULANE UNIVERSITY**  
**“Recruiting Superior Students in Environmental Biology”**  
**Requested: 2 Doctoral-Level Fellowships at \$26,000/annum for 4 years**

**Recommended: 1 Doctoral-Level Fellowship at \$26,000/annum for 4 years = \$104,000 TOTAL**

Tulane’s Department of Ecology and Evolutionary Biology includes seven faculty members, with searches underway for additional members. All current faculty are active researchers with numerous publications. They have a substantial combined record in external funding. The doctoral program has 19 students, only one of whom is an under-represented minority. The information provided indicates that the applicant pool is small, but that student quality and preparation are strong. Following Hurricane Katrina, the program has sought to refocus around a series of key questions related to tropical and semi-tropical biology that influence ecosystems like Louisiana’s—for example, wetlands ecology and global climate change. It has become a particular goal to attract students from Louisiana to the program, particularly minority students. Direct involvement of students and faculty in disaster recovery, combining practical assistance with the development of research opportunities, would seem to represent a creative route to rebuilding. The University has committed to new hires to reinforce this initiative. The proposal indicates a thoughtful approach to the graduate curriculum. The program has had a good record with graduating and placing previous BoR fellows. In general there is little evidence of attrition. Funding is recommended for one doctoral fellowship at \$26,000 per year.

**023GF-10 TULANE UNIVERSITY**  
**“Superior Graduate Students in Neuroscience / 2010-2015”**  
**Requested: 2 Doctoral-Level Fellowships at \$28,000/annum for 4 years**

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

This is the only graduate program that links the Tulane Health Sciences Center with programs on the Uptown campus. The 25 faculty in the Neurosciences Program come from basic science and clinical departments at the Tulane School of Science and Engineering, the Tulane Health Sciences Center and the Tulane Primate Center. Faculty members have active research programs and strong records of attracting external funding. This is a consistently excellent program, though the limited number of applicants is a cause for concern. Nevertheless, those enrolled bring good credentials and few leave the program without the intended degree. This is partly due to a thoughtful program of tracking and mentoring. The plan to rethink the curriculum to reduce time to degree is commendable. The program has few minority students and few minority applicants. The emphasis on links to minority institutions and programs like GAELA and LAMP, as well as the introduction of a research experience for undergraduates (REU) program, may prove effective in attracting additional minority applicants, but there is a need for more ambitious efforts. Funding is recommended for two doctoral fellowships at \$28,000 per year.

**024GF-10 TULANE UNIVERSITY HEALTH SCIENCES CENTER**  
**“BoRSF Grad Fellow FY 2010-11”**  
**Requested: 4 Doctoral-Level Fellowships at \$28,500/annum for 4 years**

**Recommended: 2 Doctoral-Level Fellowships at \$28,500/annum for 4 years = \$228,000 TOTAL**

This is a well organized and presented proposal from an umbrella program involving multiple units at Tulane Health Sciences Center. The program has a successful record of recruiting, retaining and graduating students with BoR fellowships. The strategies for recruiting are well considered and likely to help maintain the program’s success. Mentoring and monitoring plans seem strong and there is evidence that the outcomes from this training are good. It was hard to discern the overall results of these educational programs from Table 11-GF, as the applicants neglected to complete all elements and misinterpreted the meaning of ‘AY cohort’. Based on the panel’s analysis, it appears that the program graduates only about 8% per year which would lead to one of two conclusions: either the time to degree is very long or there is significant attrition in the general training program. Without accurate and complete data, it is impossible to discern which is correct. On the whole, however, the applicants demonstrate notable success in the graduate program and a strong record with previous BoR fellowships. Funding is recommended for two doctoral fellowships at \$28,500 per year.

**025GF-10 TULANE UNIVERSITY HEALTH SCIENCES CENTER  
“Transdisciplinary Doctoral Training in Public Health”  
Requested: 6 Doctoral-Level Fellowships at \$28,000/annum for 4 years**

**Recommended: 2 Doctoral-Level Fellowships at \$28,500/annum for 4 years = \$228,000 TOTAL**

The proposal from Tulane Health Sciences Center’s Public Health Program is interesting in a number of ways. It appears to be a well planned graduate program in an area of significant need. Mentoring and oversight are strong. The panel had difficulty, however, in determining the success and trends of the program. The proposal mixes master’s and doctoral data in the narrative and does not directly state how many doctoral-level students are in the three programs (though tropical medicine indicated an enrollment of six to eight students). Table 11-GF suggests that there are typically 15-20 new students each year, while Table 10-GF indicates only four to five. While the panel assumes the larger number is for the three programs combined, the proposal does not clarify the point. One element, however, does seem to be consistent among the various tables: that these programs enroll excellent students who will complete the courses of study. Based on the data provided in the proposal, there has been no attrition among either BoR fellows or the general student population. Since the data provided suggest the program enrolls three to five students each year, it seems unreasonable to request six fellowships. In addition, as noted in previous competitions, the fellowship level should be consistent with other proposals submitted by TUHSC. The panel recommends two doctoral fellowships at \$28,500 per year.

**026GF-10 UNIVERSITY OF LOUISIANA AT LAFAYETTE  
“Recruitment of Superior Graduate Students in Computer Science and Computer Engineering”  
Requested: 2 Doctoral-Level Fellowships at \$26,000/annum for 4 years**

**Recommended: - 0 -**

The combined programs in Computer Science and Computer Engineering at UL Lafayette include 17 faculty, 75 doctoral students, and 175 master’s students. A ratio of 15 graduate students per faculty member seems excessive, given that only eight of the faculty have research grants. It is difficult to know how to interpret the data, which indicate that only four new students were enrolled to the Ph.D. program in each of the past two years. Only five graduated last year, and the proposal indicates the total doctoral enrollment to be 75 students. Extrapolating from this information, if it is accurate, the time to degree seems extremely long, perhaps as long as 15 years. The proposal should account either for the data or for the inferences about time to degree. Earlier admission and graduation data are equally difficult to interpret, as they suggest that nearly the entire student body graduated in a three-year period (2003-06). On the positive side, the economic impact of the program is impressive. Minority student recruitment seems ineffective, with only two new minority students enrolled over the past four years. No funding is recommended.

**027GF-10 UNIVERSITY OF LOUISIANA AT LAFAYETTE  
“Board of Regents Fellowship Proposal for Mathematics Sciences at UL Lafayette”  
Requested: 3 Doctoral-Level Fellowships at \$24,000/annum for 4 years**

**Recommended: - 0 -**

The Mathematics doctoral program at UL Lafayette appears to be a small but good quality program, with 18 faculty and 36 doctoral students. Recruitment is conventional and not likely to yield strong results. The increase in U.S. applicants over the past four years from seven to 15 is a positive step, but the program is still not able to be highly selective among this applicant pool. The dearth of applications from under-represented minority students indicates a lack of commitment, particularly given the number of program alumni who are faculty at minority-dominated universities in the region. The economic impact of the program appears to be minimal, and might be improved. No funding is recommended.

**028GF-10 UNIVERSITY OF LOUISIANA AT LAFAYETTE**  
**“Recruiting Superior Physics Graduate Students”**  
**Requested: 2 Master’s-Level Fellowships at \$17,000/annum for 2 years**

**Recommended: 1 Master’s-Level Fellowship at \$17,000/annum for 2 years = \$ 34,000 TOTAL**

The Physics master’s program at UL Lafayette is very small, with ten doctoral students and seven faculty. The faculty does excellent work with this highly focused master’s program, and more attention should be given to advertising it among undergraduate physics students. Ongoing cooperative projects with various federal and State laboratories is a benefit for existing students and a boon for recruiting. Plans to recruit under-represented minority students are traditional, and the department should make a more substantial effort in this area. Funding is recommended for one master’s fellowship at \$17,000 per year.

**029GF-10 UNIVERSITY OF LOUISIANA AT LAFAYETTE**  
**“Recruitment of Superior Graduate Students in Environmental and Evolutionary Biology for 2010”**  
**Requested: 3 Doctoral-Level Fellowships at \$26,000/annum for 4 years**

**Recommended: 2 Doctoral-Level Fellowships at \$26,000/annum for 4 years = \$208,000 TOTAL**

UL Lafayette’s Environmental and Evolutionary Biology Program capitalizes on close links with the USGS National Wetlands Research Center, the NOAA Estuarine Habitats and Coastal Fisheries Center (both of which are located on the UL Lafayette campus), the Louisiana Universities Marine Consortium (of which UL Lafayette is a member), the University’s primate center (the New Iberia Research Center), and the University’s Electron Microscopy Center. The faculty, including more than 20 full-time members and an equal number of adjuncts, has earned substantial funding from major federal sources. Many have good publication records, often in areas directly tied to Louisiana’s economic development. This is a stable, moderate-sized program with a good mix of domestic and international students. The proposal shows a gradually expanding pool of U.S. applicants, including under-represented minorities, and the program has apparently had success in matriculating those students who have been admitted. The data suggest there should be some concern about the level of preparation of some U.S. students who have been admitted; there has apparently been considerable attrition. This should be more explicitly addressed in both admissions processes and tracking and mentoring programs. Increased stipends for doctoral students presumably explain the success in enrolling admitted applicants. But, at \$14,000, stipends for teaching assistants are still too low to be competitive. A number of doctoral students have been successful in winning national recognition, including an NSF Doctoral Dissertation Improvement grant awarded to one of the BoR fellows. Funding is recommended for two doctoral fellowships at \$26,000 per year.

**030GF-10 UNIVERSITY OF NEW ORLEANS**  
**“Graduate Fellowships in Conservation Biology at the University of New Orleans”**  
**Requested: 2 Doctoral-Level Fellowships at \$27,000/annum for 4 years**

**Recommended: - 0 -**

This degree program was authorized in 1999 and experienced steady growth before Hurricane Katrina. Hurricanes Katrina and Rita have demonstrated the importance to the Louisiana economy of research in the areas that are the focus of this program and the need for highly trained specialists. The proposal correctly points to the value of work related to the Estuarine Research Laboratory and the University’s Pontchartrain Institute for Environmental Sciences, as well as the opportunities for student training and research that could develop out of these linkages and other research initiatives. In the past the department has been hampered by a lack of alignment between faculty resources and the interdisciplinary strategic research objectives of the doctoral program. The University is now making a concerted effort through new hires to align faculty strength with the focus of the degree program, but this strategy is unlikely to yield results until these new faculty members have had time to establish research programs and scholarly reputations. Previous BoR fellows have impressive records of publication as students; some program graduates have secured excellent post-doctoral positions. The small size of domestic and international application pools is cause for grave concern regarding the future of the program. Unfortunately, there is no indication of an aggressive effort to address this situation. The department has substantial minority enrollment in undergraduate and

master's programs, but has had little success recruiting under-represented minorities to the Ph.D. program. No funding is recommended.

**031GF-10 UNIVERSITY OF NEW ORLEANS**  
**“Graduate Fellowships for the Chemistry Doctoral Program at the University of New Orleans”**  
**Requested: 4 Doctoral-Level Fellowships at \$32,000/annum for 4 years**

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

UNO's doctoral program in chemistry is continuing to recover from the effects of Hurricanes Katrina and Rita. The institution is clearly committed to rebuilding the department and the graduate programs; the Chemistry Department now numbers a total of 57 students with an average of 15 students joining each year. The applicant pool still appears to be somewhat limited, which may have led the department to admit some weaker students. This is evidenced by the fact that a qualified student was not found for the new BoR position awarded for 2008. Though there are issues with recruitment, mentoring and tracking are at an appropriate level, as evidenced by extremely low attrition both in the graduate program in general and among BoR fellows in particular. Minority recruiting, primarily from Xavier, has been acceptable. The requested annual fellowship amount, \$32,000, is above market and not appropriate at this time. Funding is recommended for one doctoral fellowship at \$30,000 per year.

**001GFT-10 LOUISIANA STATE UNIVERSITY – BATON ROUGE**  
**“Improving Classroom Interest in Science and Mathematics by Preparing Highly Qualified Teachers”**  
**Requested: 8 Master's-Level Fellowships at \$18,000/annum for 1 year**

**Recommended: 3 Master's-Level Fellowships at \$18,000/annum for 1 year = \$54,000 TOTAL**

The panel had difficulty interpreting this proposal for GFT fellowships at LSU. While it is evident that a substantial reorganization has been undertaken, it is not clear exactly which students in the Holmes Program these fellowships are intended to support. Furthermore, the proposal makes no mention of the possibility or likely impact of fellowship recipients on economic development in the State and gives no evidence of either a track record of success in recruiting under-represented students or a creative new plan for doing better in this regard. The use of composite GRE scores as a selection criterion, in direct contradiction to ETS guidelines for the appropriate use of test scores, is particularly problematic in an education proposal. Given the urgent need for secondary math and science teachers, the panel supports additional funding, though the request for eight slots seems inappropriate given the small number of students enrolled in the mathematics and science components of the program. Funding is recommended for three master's fellowships at \$18,000.

**002GFT-10 McNEESE STATE UNIVERSITY**  
**“Highly Qualified Teachers in the Mathematics and Science Classroom”**  
**Requested: 1 Master's-Level Fellowships at \$25,500/annum for 1 year**

**Recommended: 1 Master's-Level Fellowship at \$31,000/annum for 1 year = \$31,000 TOTAL**

This is a valuable program which has proved to be successful in the past. Attrition has been non-existent, despite an aggressive course load. BoR fellowship funding will help defray the costs of an in-service teacher taking a salary cut as part of a sabbatical, as well as pay summer support. The time period for the master's degree requires one academic year (the sabbatical year) and two summers. This time commitment allows the fellowship recipient to participate in research in a meaningful way. The discussion of minority recruiting was appropriate. The panel recommends one master's fellowship at \$31,000. The stipend increase should be used to supplement the planned summer support to provide incentive for the fellowship recipient to complete the degree program before returning to the classroom.

## **APPENDIX C**

### **LISTS OF PROPOSALS SUBMITTED**

**Traditional Graduate Fellows Program  
2008-09 Competition  
Proposals Submitted**

<b>Proposal#/ Discipline</b>	<b>PI Name(s)</b>	<b>Institution</b>	<b>Proposal Title</b>	<b>Duration</b>	<b>Funds Requested</b>
001GF-10 PHYS	Dana Browne	LSU-Baton Rouge	Graduate Fellows in Physics and Astronomy	4 years 3 PhD @ \$26K	Y1: \$78,000 Y2: \$78,000 Y3: \$78,000 <u>Y4: \$78,000</u> Total: \$312,000
002GF-10 ENG	W. David Constant	LSU-Baton Rouge	Board of Regents Fellowships in Engineering 2010-15	4 years/2 years 2 PhD @ \$25K 2 MS @ \$20K	Y1: \$90,000 Y2: \$90,000 Y3: \$50,000 <u>Y4: \$50,000</u> Total: \$280,000
003GF-10 CIS	Sundaraja Iyengar	LSU-Baton Rouge	Recruitment of Superior Graduate Fellows in Computer Science	4 years 3 PhD @ \$25K	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 <u>Y4: \$75,000</u> Total: \$300,000
004GF-10 HM	Thomas R. Klei	LSU-Baton Rouge	Graduate Studies in Comparative Biomedical, Pathobiological, & Veterinary Clinical Sciences 2008-11 Competition	4 years 3 PhD @ \$25K	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 <u>Y4: \$75,000</u> Total: \$300,000
005GF-10 AG	John Nyman	LSU-Baton Rouge	Recruiting Superior Graduate Students for LSU's School of Renewable Natural Resources	4 years 4 PhD @ \$25K plus annual increases	Y1: \$100,000 Y2: \$103,000 Y3: \$106,088 <u>Y4: \$106,088</u> Total: \$415,176

006GF-10 MATH	Leonard Richardson	LSU-Baton Rouge	Recruitment of Superior Doctoral Students in Mathematics	4 years 4 PhD @ \$22K	Y1: \$88,000 Y2: \$88,000 Y3: \$88,000 Y4: \$88,000 Total: \$352,000
007GF-10 CHEM	George Stanley	LSU-Baton Rouge	BOR Graduate Fellowships in Chemistry for 2010	4 years 2 PhD @ \$30K	Y1: \$60,000 Y2: \$60,000 Y3: \$60,000 Y4: \$60,000 Total: \$240,000
008GF-10 BIO	Jacqueline Stephens	LSU-Baton Rouge	Graduate Fellowships in the Life Sciences at Louisiana State University	4 years 4 PhD @ \$27K	Y1: \$108,000 Y2: \$108,000 Y3: \$108,000 Y4: \$108,000 Total: \$432,000
009GF-10 EAR	R. Eugene Turner	LSU-Baton Rouge	Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences	4 years/2 years 5 PhD @ \$28K 4 MS @ \$26K	Y1: \$192,000 Y2: \$192,000 Y3: \$192,000 Y4: \$192,000 Total: \$768,000
010GF-10 HM	Donald Mercante	LSUHSC-New Orleans	Recruitment of Superior Graduate Students in Biostatistics	4 years 3 PhD @ \$25K	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 Y4: \$75,000 Total: \$300,000

011GF-10 BIO	Emel Songu-Mize	LSUHSC-New Orleans	Graduate Training in Integrative Pharmacology and Experimental Therapeutics	4 years 3 PhD @ \$25K	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 <u>Y4: \$75,000</u> Total: \$300,000
012GF-10 HM	Kenneth McMartin	LSUHSC-Shreveport	Recruitment of Superior Doctoral Students in Interdisciplinary Toxicology Program	4 years 3 PhD @ \$27K	Y1: \$81,000 Y2: \$81,000 Y3: \$81,000 <u>Y4: \$81,000</u> Total: \$324,000
013GF-10 HM	Steven Jones	LA Tech University	Graduate Fellows in Biomedical Engineering	4 years 2 PhD @ \$25K	Y1: \$50,000 Y2: \$50,000 Y3: \$50,000 <u>Y4: \$50,000</u> Total: \$200,000
014GF-10 ENG	James Palmer	LA Tech University	Superior Graduate Fellows Supporting Three Centers of Excellence in Engineering	4 years 3 PhD @ \$25K	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 <u>Y4: \$75,000</u> Total: \$300,000
015GF-10 MATH	Galen Turner	LA Tech University	Computational Analysis and Modeling Doctoral Graduate Fellows	4 years 2 PhD @ \$25K	Y1: \$50,000 Y2: \$50,000 Y3: \$50,000 <u>Y4: \$50,000</u> Total: \$200,000
016GF-10 MATH	Brian Heck	Nicholls State University	Graduate Fellowship Program in Mathematics at Nicholls State University	3 years 2 MS @ \$16K	Y1: \$32,000 Y2: \$32,000 <u>Y3: \$32,000</u> Total: \$96,000

017GF-10 BIO	Kyle Piller	Southeastern Louisiana University	Recruitment of Exceptional Master's Students in the Biological Sciences at Southeastern Louisiana University	3 years 2 MS @ \$21K	Y1: \$42,000 Y2: \$42,000 <u>Y3: \$42,000</u> Total: \$126,000
018GF-10 EAR	John Owens	Southern University Baton Rouge	Strengthening Doctoral Research in Environmental Toxicology at Southern University – Baton Rouge	4 years 6 PhD @ \$20K	Y1: \$120,000 Y2: \$120,000 Y3: \$120,000 <u>Y4: \$120,000</u> Total: \$480,000
019GF-10 ENG	Vijay John	Tulane University	Graduate Fellowships in Support of Biomedical and Chemical/Biomolecular Engineering	4 years 6 PhD @ \$24K	Y1: \$144,000 Y2: \$144,000 Y3: \$144,000 <u>Y4: \$144,000</u> Total: \$576,000
020GF-10 PHYS	Dae Ho Kim	Tulane University	Recruitment of Superior Graduate Students in Physics and Engineering Physics	4 years 3 PhD @ \$26K	Y1: \$78,000 Y2: \$78,000 Y3: \$78,000 <u>Y4: \$78,000</u> Total: \$312,000
021GF-10 CHEM	Brent Koplitz	Tulane University	Recruitment of Superior Graduate Students in Chemistry	4 years 3 PhD @ \$30K	Y1: \$90,000 Y2: \$90,000 Y3: \$90,000 <u>Y4: \$90,000</u> Total: \$360,000
022GF-10 BIO	Thomas Sherry	Tulane University	Recruiting Superior Students in Environmental Biology	4 years 2 PhD @ \$26K	Y1: \$52,000 Y2: \$52,000 Y3: \$52,000 <u>Y4: \$52,000</u> Total: \$208,000

023GF-10 BIO	Jeffrey Tasker	Tulane University	Superior Graduate Students in Neuroscience / 2010-2015	4 years 2 PhD @ \$28K	Y1: \$56,000 Y2: \$56,000 Y3: \$56,000 Y4: \$56,000 Total: \$224,000
024GF-10 HM	Robert Garry	TUHSC	BoRSF Grad Fellow FY 2010-11	4 years 4 PhD @ \$28.5K	Y1: \$114,000 Y2: \$114,000 Y3: \$114,000 Y4: \$114,000 Total: \$456,000
025GF-10 HM	Richard Oberhelman	TUHSC	Transdisciplinary Doctoral Training in Public Health	4 years 6 PhD @ \$28K	Y1: \$168,000 Y2: \$168,000 Y3: \$168,000 Y4: \$168,000 Total: \$672,000
026GF-10 CIS	Magdy Bayoumi	University of Louisiana at Lafayette	Recruitment of Superior Graduate Students in Computer Science and Computer Engineering	4 years 2 PhD @ \$26K	Y1: \$52,000 Y2: \$52,000 Y3: \$52,000 Y4: \$52,000 Total: \$208,000
027GF-10 MATH	Keng Deng	University of Louisiana at Lafayette	Board of Regents Fellowship Proposal for Mathematics Sciences at UL Lafayette	4 years 3 PhD @ \$24K	Y1: \$72,000 Y2: \$72,000 Y3: \$72,000 Y4: \$72,000 Total: \$288,000
028GF-10 PHYS	William Hollerman	University of Louisiana at Lafayette	Recruiting Superior Physics Graduate Students	2 years 2 MS @ \$17K	Y1: \$34,000 Y2: \$34,000 Total: \$68,000

029GF-10 BIO	Paul Klerks	University of Louisiana at Lafayette	Recruitment of Superior Graduate Students in Environmental and Evolutionary Biology for 2010	4 years 3 PhD @ \$26K	Y1: \$78,000 Y2: \$78,000 Y3: \$78,000 Y4: \$78,000 Total: \$312,000
030GF-10 BIO	Bernard Rees	University of New Orleans	Graduate Fellowships in Conservation Biology at the University of New Orleans	4 years 2 PhD @ \$27K	Y1: \$54,000 Y2: \$54,000 Y3: \$54,000 Y4: \$54,000 Total: \$216,000
031GF-10 CHEM	John Wiley	University of New Orleans	Graduate Fellowships for the Chemistry Doctoral Program at the University of New Orleans	4 years 4 PhD @ \$32K	Y1: \$128,000 Y2: \$128,000 Y3: \$128,000 Y4: \$128,000 Total: \$512,000

**TRADITIONAL GRADUATE FELLOWS PROPOSAL SUBMISSION SUMMARY**

**NUMBER SUBMITTED: 31**

<b>Agriculture: 1</b>	<b>Education: 0</b>
<b>Biological Sciences: 7</b>	<b>Engineering A&amp;B: 3</b>
<b>Business: 0</b>	<b>Health &amp; Medical Sciences: 6</b>
<b>Chemistry: 3</b>	<b>Mathematics: 4</b>
<b>Computer &amp; Information Sciences: 2</b>	<b>Physics/Astronomy: 3</b>
<b>Earth/Environmental Sciences: 2</b>	

**FIRST-YEAR FUNDS REQUESTED: \$2,586,000**

**TOTAL FUNDS REQUESTED: \$10,137,176**

**TOTAL FIRST-YEAR FUNDS AVAILABLE: \$720,000**

**Graduate Fellowships for Teachers Program  
2008-09 Competition  
Proposals Submitted**

<b>Proposal#/ Discipline</b>	<b>PI Name(s)</b>	<b>Institution</b>	<b>Proposal Title</b>	<b>Duration</b>	<b>Funds Requested</b>
001GFT-10 ED	Byron Launey	LSU-BR	Improving Classroom Interest in Science and Mathematics by Preparing Highly Qualified Teachers	1 year 8 MS @ \$18K	\$144,000
002GFT-10 CHEM	Joseph Sneddon	McNeese State University	LEQSF Teachers Graduate Fellowship	1 year 1 MS @ \$25.5K	\$25,500

**GRADUATE FELLOWSHIPS FOR TEACHERS PROPOSAL SUBMISSION SUMMARY**

**NUMBER SUBMITTED: 2**

**TOTAL FUNDS REQUESTED: \$169,500**

**TOTAL FIRST-YEAR FUNDS AVAILABLE: \$180,000**