

**REPORT TO THE
LOUISIANA BOARD OF REGENTS**

**RECRUITMENT OF SUPERIOR GRADUATE STUDENTS
COMPONENT
OF THE
BOARD OF REGENTS SUPPORT FUND
FY 2005-2006 COMPETITION FOR AWARDS TO BEGIN FY 2007-08**

**Dr. John Mayfield
Professor
Iowa State University**

**Dr. Charles Ambler
Dean of the Graduate School
University of Texas at El Paso**

**Dr. Suzanne Ortega
Vice Provost and Dean of the Graduate School
University of Washington**

**Dr. Roger Chalkley
Senior Associate Dean for Biomedical Research Education and Training
Vanderbilt University Medical School**

INTRODUCTION

The panel urges each applicant to read the summary relating to the submitted proposal that is included in this report, which contains indications as to how the proposal was judged. 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 March 17 and 18, 2006, to discuss and make funding recommendations relative to proposals submitted in the FY 2005-06 competition for awards to begin in FY 2007-08. 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 Washington.

Ten (10) institutions submitted a total of thirty-three (33) proposals within the disciplines eligible for this year's competition in the Traditional Graduate Fellows Program. One (1) university submitted a total of one (1) proposal 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 2005-06 Graduate Fellows Request for Proposals. Each consultant assigned a preliminary ranking to each proposal before the March meeting. Preliminary composite scores were then computed. These composite scores facilitated discussions at the March 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 75 to 88 out of a maximum of 100. The panel did not recommend funding for those proposals receiving scores of less than 75. A total of \$949,000 of the \$1,000,000 available in first-year monies was recommended for expenditure. The panel felt that appropriate numbers of fellowships were awarded to all worthy programs, and did not feel that the remaining monies should be expended either for additional fellowships to the awarded programs or for limited fellowships for lower ranking proposals. The panel recommends that the remaining \$51,000 left in the budget for first-year awards be reserved and used by the Board to address special needs of campuses and programs affected by Hurricanes Katrina and Rita.

The total amount of first-year funds requested in the Traditional Graduate Fellows Program was \$2,635,100. The Graduate Fellowships for Teachers proposal requested total first-year funds of \$51,000. Consultants were advised that \$800,000 was allotted for the Traditional Graduate Fellows Program and \$200,000 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-two (22) of the thirty-three (33) proposals submitted under the Traditional Graduate Fellows Program and the one (1) proposal 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 the State 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 some cases, stipend levels were elevated to align them with national trends in fellowship funding or institutional patterns of funding.

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 our 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:

- Several proposals sought support either for activities or in funding arrangements specifically disallowed by the RFP. Board of Regents support in the Graduate Fellows program is limited to fellowship requests, and may not be awarded for faculty salaries, recruitment activities, student or faculty travel, or other activities. In addition, Board of Regents fellowships may not be awarded in a sequence, to provide new fellowship(s) in each year of the award. All applicants are urged to read carefully and adhere to regulations governing the program when developing their proposals.
- Several proposals did not define the term “under-represented minority”, though form 10-GF specifically requires that applicants do so. It is impossible for the panel to understand the applicant’s experiences with minority recruitment without this information. The panel urges PIs to submit all required data in a clear and easily accessible manner.
- Again this year, in several proposals the statistics provided in the required tables did not match information provided in the narrative sections of the proposal. This led to confusion and frustration on the part of reviewers attempting to interpret and make recommendations based on this data. Applicants are strongly urged to ensure that the data provided are correct and consistently presented in all parts of the proposal.
- Several applicants did not provide all required information. In some proposals, tables were missing or did not include essential information. In particular, a number of submissions failed to define “under-represented minority” for the purposes of their program, which made it difficult for the panel to assess the success of recruitment efforts and the diversity of programs. The data requested in each table are essential to the panel’s evaluation of proposals. Applicants are, therefore, urged to provide all required information fully and comprehensibly.
- Despite the suggestion presented in last year’s final report, the panel noted again this year that several proposals contained data, documentation, and examples of eminence that were either out-of-date or no longer relevant to the featured program's argument for graduate fellowship support. In light of this, the panel strongly recommends that all programs review their proposals and eliminate old data and out-of-date or irrelevant narrative segments. In fact, a newly written or extensively revised proposal often offers an up-to-date perspective to the panel that renders the information more useful and in turn

provides the panel with a clear understanding of the program as it is operating at the time of the proposal's submission. Data and information from the 1980s and 1990s, by contrast, often provides no insight into the program's recent and future trajectories.

- 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 and, in some cases, illegal.** 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.

APPENDIX A

TABLE I

**Louisiana Board of Regents Support Fund
 Traditional Graduate Fellows Program and Graduate Fellowships for Teachers Program
 Proposals Recommended for Funding
 FY 2005-2006 Cycle for Awards to Begin in FY 2007-2008**

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
1	007GF-07	LSU-BR	MATHEMATICS	4 YR. DOC	3	\$ 22,000	1 2 3 4 TOTAL	\$ 66,000 \$ 66,000 \$ 66,000 <u>\$ 66,000</u> \$264,000	\$66,000
2	001GF-07	LSU-BR	ENGINEERING	4 YR. DOC 2 YR. MASTER'S	2 2	\$ 23,000 \$ 16,000	1 2 3 4 TOTAL	\$ 78,000 \$ 78,000 \$ 46,000 <u>\$ 46,000</u> \$248,000	\$144,000
3	024GF-07	TUHSC	HEALTH & MEDICAL	4 YR. DOC	3	\$ 28,000	1 2 3 4 TOTAL	\$ 84,000 \$ 84,000 \$ 84,000 <u>\$ 84,000</u> \$336,000	\$228,000
4	005GF-07	LSU-BR	PHYSICS & ASTRONOMY	4 YR. DOC 3 YR. MASTER'S	2 1	\$ 23,000 \$ 19,000	1 2 3 4 TOTAL	\$ 65,000 \$ 65,000 \$ 65,000 <u>\$ 46,000</u> \$241,000	\$293,000
5	009GF-07	LSU-BR	CHEMISTRY	4 YR. DOC	1	\$ 22,000	1 2 3 4 TOTAL	\$ 22,000 \$ 22,000 \$ 22,000 <u>\$ 22,000</u> \$ 88,000	\$315,000

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	025GF-07	TUHSC	BIOLOGICAL SCIENCES	4 YR. DOC	2	\$ 28,000	1 2 3 4 TOTAL	\$ 56,000 \$ 56,000 \$ 56,000 <u>\$ 56,000</u> \$224,000	\$371,000
7	004GF-07	LSU-BR	HEALTH & MEDICAL SCIENCES	4 YR. DOC	2	\$ 25,000	1 2 3 4 TOTAL	\$ 50,000 \$ 50,000 \$ 50,000 <u>\$ 50,000</u> \$200,000	\$421,000
8	006GF-07	LSU-BR	BIOLOGICAL SCIENCES	4 YR. DOC	2	\$ 25,000	1 2 3 4 TOTAL	\$ 50,000 \$ 50,000 \$ 50,000 <u>\$ 50,000</u> \$200,000	\$471,000
9	033GF-07	UNO	CHEMISTRY	4 YR. DOC	2	\$ 30,000	1 2 3 4 TOTAL	\$ 60,000 \$ 60,000 \$ 60,000 <u>\$ 60,000</u> \$240,000	\$531,000
10	032GF-07	UNO	BIOLOGICAL SCIENCES	4 YR. DOC	2	\$ 23,000	1 2 3 4 TOTAL	\$ 46,000 \$ 46,000 \$ 46,000 <u>\$ 46,000</u> \$184,000	\$577,000

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
11	013GF-07	LA TECH	ENGINEERING	4 YR. DOC	2	\$ 24,000	1 2 3 4 TOTAL	\$ 48,000 \$ 48,000 \$ 48,000 <u>\$ 48,000</u> \$192,000	\$625,000
12	031GF-07	UNO	COMPUTER & INFORMATION SCIENCES	2 YR. MASTER'S	1	\$ 16,000	1 2 TOTAL	\$ 16,000 <u>\$ 16,000</u> \$ 32,000	\$641,000
13	017GF-07	SLU	COMPUTER & INFORMATION SCIENCES	2 YR. MASTER'S	1	\$ 18,000	1 2 TOTAL	\$ 18,000 <u>\$ 18,000</u> \$ 36,000	\$659,000
14	029GF-07	UL L	BIOLOGICAL SCIENCES	4 YR. DOC	1	\$ 22,000	1 2 3 4 TOTAL	\$ 22,000 \$ 22,000 \$ 22,000 <u>\$ 22,000</u> \$ 88,000	\$681,000
15	021GF-07	TULANE	CHEMISTRY	4 YR. DOC	1	\$ 22,000	1 2 3 4 TOTAL	\$ 22,000 \$ 22,000 \$ 22,000 <u>\$ 22,000</u> \$ 88,000	\$703,000
16	010GF-07	LSU-BR	EARTH & ENVIRO. SCIENCES	4 YR. DOC 2 YR. MASTER'S	1 1	\$ 24,000 \$ 20,000	1 2 3 4 TOTAL	\$ 44,000 \$ 44,000 \$ 24,000 <u>\$ 24,000</u> \$136,000	\$747,000

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
17	019GF-07	TULANE	ENGINEERING	4 YR. DOC	2	\$ 22,000	1 2 3 4 TOTAL	\$ 44,000 \$ 44,000 \$ 44,000 <u>\$ 44,000</u> \$176,000	\$791,000
18	023GF-07	TUHSC	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$ 28,000	1 2 3 4 TOTAL	\$ 28,000 \$ 28,000 \$ 28,000 <u>\$ 28,000</u> \$112,000	\$819,000
19	027GF-07	UL L	COMPUTER & INFORMATION SCIENCES	4 YR. DOC	1	\$ 24,000	1 2 3 4 TOTAL	\$ 24,000 \$ 24,000 \$ 24,000 <u>\$ 24,000</u> \$ 96,000	\$843,000
20	003GF-07	LSU-BR	COMPUTER & INFORMATION SCIENCES	4 YR. DOC	1	\$ 23,000	1 2 3 4 TOTAL	\$ 23,000 \$ 23,000 \$ 23,000 <u>\$ 23,000</u> \$ 92,000	\$866,000
21	026GF-07	UL L	HEALTH & MEDICAL SCIENCES	4 YR. DOC	1	\$ 24,000	1 2 3 4 TOTAL	\$ 24,000 \$ 24,000 \$ 24,000 <u>\$ 24,000</u> \$ 96,000	\$890,000
22	030GF-07	UL L	PHYSICS & ASTRONOMY	2 YR. MASTER'S	1	\$ 16,000	1 2 TOTAL	\$ 16,000 <u>\$ 16,000</u> \$ 32,000	\$906,000
1	001GFT-07	MCNEESE	EDUCATION	1 YR. MASTER'S	2	\$ 21,500	1 TOTAL	<u>\$ 43,000</u> \$ 43,000	\$949,000

TABLE II

SUPPORT FUND GRADUATE FELLOWS PROGRAM PROPOSALS NOT RECOMMENDED FOR FUNDING

PROPOSAL #	SCHOOL	ELIGIBLE DISCIPLINE
002GF-07	LSU-BR	AGRICULTURE
008GF-07	LSU-BR	EDUCATION
011GF-07	LSUHSC-S	HEALTH & MEDICAL SCIENCES
012GF-07	LA TECH	HEALTH & MEDICAL SCIENCES
014GF-07	LA TECH	MATHEMATICS
015GF-07	NICHOLLS	EARTH & ENVIRONMENTAL SCIENCES
016GF-07	SLU	BIOLOGICAL SCIENCES
018GF-07	SUBR	EDUCATION
020GF-07	TULANE	EARTH & ENVIRONMENTAL SCIENCES
022GF-07	TULANE	PHYSICS & ASTRONOMY
028GF-07	UL L	MATHEMATICS

APPENDIX B

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

001GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Board of Regents Fellowships in Engineering”
Requested: 2 Doctoral-Level Fellowships at \$23,000/annum for 4 years
2 Master’s-Level Fellowships at \$16,000/annum for 2 years

Recommended: 2 Doctoral-Level Fellowships at \$23,000/annum for 4 years
2 Master’s-Level Fellowships at \$16,000/annum for 2 years
TOTAL AWARD = \$248,000

This proposal brings together several graduate programs in LSU’s College of Engineering, all of which have had significant success in producing excellent engineering researchers. This proposal’s strengths are in the historic successes of the program, as well as in its thoughtful plan for assessing the impact of Board of Regents fellowships. A declining applicant pool over the last 3 years and a relatively low matriculation rate, especially of under-represented minority students, suggest the need for a more innovative and robust recruiting strategy. Likewise, the relatively low doctoral completion rates among previous Board of Regents fellows suggests that a much more personalized and comprehensive mentoring plan should be implemented. The proposal would be strengthened by the inclusion of a detailed discussion of the nature and scope of corporate partnerships that may enhance both graduate study and economic development in the State. LSU and the College of Engineering are to be commended for the creative use of supplemental fellowship support to insure that excellent students are offered the most competitive stipends possible. Support is recommended for two four-year doctoral-level fellowships at \$23,000 per year and two two-year master’s-level fellowships at \$16,000 per year

002GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Enhancing Graduate Education in Entomology through Recruitment of High-Caliber Students using BoR Fellowships”
Requested: 3 Doctoral-Level Fellowships at \$15,700/annum for 4 years
2 Master’s-Level Fellowships at \$15,000/annum for 2 years

Recommended: - 0 -

LSU’s Entomology Program has recently reorganized its graduate curriculum into three areas: agricultural integrated pest management, urban integrated pest management, and conservation biology and biodiversity. This reorganization, together with tentative plans to develop research initiatives related to hurricane recovery, represent promising efforts to enhance the program’s impact and reputation. The faculty includes a number of active scholars, although the level of competitive research funding for many of these faculty members is quite low. At present, for the graduate program the applicant pool is extremely small, and the proposal includes no well-articulated plan for increasing those numbers. Though the program has shown considerable success in recruiting women, there are few minority students enrolled. The proposal might be improved by the inclusion of a more thorough plan for student retention. The provision of additional funds as a supplement to the requested stipend is commendable, but the total fellowship seems still to be too low to attract high-quality students. No funding is recommended.

003GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Recruitment of Superior Students to the Doctoral Program in Areas of Distributed Sensor Networking at Louisiana State University”
Requested: 4 Doctoral-Level Fellowships at \$23,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at \$23,000/annum for 4 years = \$92,000 TOTAL

This project’s title is excellent, promising a tightly focused and defined graduate program in a subfield of the computer and information sciences. Unfortunately, however, the proposal does not maintain this focus.

In a difficult recruiting environment, it is essential for a graduate program to differentiate itself from the competition, and the panel believes the focus on “Distributed Networking” would do that for LSU. The proposal seems written for the entire department, rather than for a “distributed networking” subgroup. In addition, the proposal suffers from a lack of clarity and detail. Despite the strong faculty, there is a lack of documentation to support claims for economic impact. The pool of applicants is not clearly described, though there is no doubt the program is struggling to attract adequate numbers of outstanding U. S. students. The data given shows that, of 29 U.S. applicants, 16 were accepted, and four matriculated. The proposal did not address the 12 who went elsewhere. It would strengthen the proposal if the applicant were to indicate whether there were outstanding prospects among the 12 who were lost but might have been attracted by a Board or similar fellowship. That eight minority students applied last year is encouraging, though its effect is undercut by the fact that the application does not define what is meant by “minority.” The panel also has concerns about the slow graduation rate of past Board of Regents fellows and recommends that the applicants consider new approaches to mentoring and advising. The panel recommends one four-year doctoral-level fellowship at \$23,000 per year.

004GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Graduate Studies in Comparative Biomedical Sciences, Pathobiological Sciences,
and Veterinary Clinical Sciences”
Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years

Recommended: 2 Doctoral-Level Fellowships at \$25,000/annum for 4 years = \$200,000 TOTAL

This program has been funded for several years by the Board of Regents, and continues to be a strong applicant. It is led by a productive faculty and seems to have success in attracting excellent students. The panel continues to be impressed with the quality of the program, its strong links to economic development, and its top-notch faculty. The application itself, while full of interesting and important data, offered an overabundance of information, much of which hindered the panel in its assessment. In future applications, the proposal’s appendices should be eliminated and summarizing tables included in the text of the proposal. Additional information on the details of graduate training would be useful, and can be included in the place of departmental and unit histories currently provided. In the proposal, the panel was provided with additional useful information on attrition, which added significant insight into the program’s operation. Principally, these data seem to show most of the program attrition actually occurs among Board of Regents Fellowship recipients rather than across the program. The panel suggests that, though the oversight of the students is acceptable, it could likely be redesigned to offer quicker intervention for students as needed. Overview faculty meetings once a semester may not be nimble enough to assist students and avert academic problems. With this mechanism, it seems likely that Board fellows, many of whom feel themselves cut off from departmental support structures, will remain in the program and reach their degrees. Two four-year doctoral-level fellowships at \$25,000 are recommended.

005GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Graduate Fellows in Physics and Astronomy and Medical Physics Program”
Requested: 3 Doctoral-Level Fellowships at \$23,000/annum for 4 years
2 Master’s-Level Fellowships at \$19,000/annum for 3 years

Recommended: 2 Doctoral-Level Fellowships at \$23,000/annum for 4 years
1 Master’s-Level Fellowship at \$19,000/annum for 3 years
TOTAL AWARD = \$241,000

The department has a strong faculty and a good record of research productivity. The increasing numbers of applicants to the graduate program and the increasing average GRE scores are signs the department’s efforts to achieve excellence in graduate education and recruitment are yielding results. The low matriculation rate is still a problem, and the disparity between graduating students and matriculating students may be an indication that too many weak students have been admitted in the past. The recruiting plan presented in the proposal, however, is well considered. In particular, relationships that have been established with Southern University are excellent. The requested doctoral-level fellowship of \$23,000, which will be increased through a departmental supplement, is competitive. It remains unclear how

fellowships in the Medical Physics program will enhance the overall strength of the department, though the need for these professionals is obvious. Funding is recommended for two four-year doctoral-level fellowships at \$23,000 per year and one three-year master's-level fellowship at \$19,000 per year.

006GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Graduate Fellowships in Biological Sciences at Louisiana State University”
Requested: 3 Doctoral-Level Fellowships at \$25,000/annum for 4 years

Recommended: 2 Doctoral-Level Fellowships at \$25,000/annum for 4 years = \$200,000 TOTAL

LSU's Biological Sciences program, one of seven Foundation of Excellence Programs on the campus, offers degrees in biochemistry and biological sciences within three research areas: cellular, developmental and integrative biology; biochemistry; and molecular biology. The department has an active faculty that attracts very substantial external funding. The data presented suggest that the program is attracting growing numbers of U.S. applicants and that admission is becoming highly competitive. This is due in part to previously awarded Board of Regents fellowships and a departmental policy of providing supplemental funding for these fellowships. For future fellowships, the program might consider even higher levels of support to ensure its ability to matriculate outstanding students. Though historically a problem for this program, time to degree and degree completion seem to be improving. Nevertheless, the record of graduation for previous BOR Fellows is a cause for concern. Given the large numbers of students in the program, continued emphasis on tracking and intervention is essential. A program of this scale and quality should make an important impact on the Louisiana economy, which future proposals should articulate and argue in specific terms. Despite some very limited success, minority recruitment continues to lag, and the proposal includes no systematic plan for attracting high-quality minority applicants. The panel encourages the applicants to address this in the next round of competition. Funding is recommended for two four-year doctoral-level fellowships at \$25,000 per year.

007GF-07 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 \$22,000/annum for 4 years = \$264,000 TOTAL

The Mathematics Department at LSU has an excellent graduate program and has shown great success in training its students for scholarship and research. The application pool appears to be of high quality and the rising test scores of matriculated students is a positive trend. The high matriculation rate of students offered support indicates that prospective students are favorably impressed with the department. This suggests that the department could recruit more high-quality students if additional funding were available. The proposed stipend of \$22,000 is competitive and the \$8,000 supplement indicates very strong departmental support. The total fellowship package, combining departmental and Board of Regents contributions, is \$30,000, which is an aggressive package. The departmental record of minority recruitment and graduation is exemplary. This excellent program clearly continues to benefit from Board fellowships. Funding for three four-year doctoral-level fellowships at \$22,000 per year is recommended.

008GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Graduate Fellow Support in Education”
Requested: 6 Doctoral-Level Fellowships at \$18,000/annum for 4 years

Recommended: - 0 -

LSU's College of Education includes three major academic units - EDCI, ELRC, and Kinesiology - and it is not clear how the proposed fellowships are to be distributed across these units, which cumulatively include a very large number of graduate and undergraduate students. Thus, it is difficult to assess what role any awarded fellowships would have in enhancing the overall stature of the College. It appears that most matriculating students are recruited locally or from within Louisiana, and the proposal does not include a viable national recruitment plan. With 179 doctoral students enrolled and only 18 degrees conferred, it

appears that recent and current doctoral students have taken an overly long time to complete their degrees. This may be related to the substantial numbers of part-time students enrolled; nevertheless, it is a concern that should be discussed in the proposal. It is correspondingly unclear how successful the program will be in using the requested fellowships, which offer a modest \$18,000, to recruit a cohort of full-time, top-quality doctoral students. A more personalized and comprehensive system for reviewing and tracking the progress of doctoral students would also strengthen the proposal. No funding is recommended.

009GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Graduate Fellowships in Chemistry for 2007”
Requested: 3 Doctoral-Level Fellowships at \$22,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at \$22,000/annum for 4 years = \$88,000 TOTAL

This is a strong, well-funded department. The educational program is traditional, though a measure of flexibility has been added. In past years, the program has been able to identify a sufficient group of students to compete for Board of Regents fellowships. Notably, as the panel has seen in previous years, the department recruits very effectively among under-represented minority students and is among the most successful departments in the country in degree production among African-American candidates. Attrition continues to be a concern for the panel. To a degree, the proposal recognizes that the issue is of concern, but more than recognition is needed. A program-wide attrition level of 35% is worrisome and warrants the development of a proactive approach to student retention. A plan should be devised that addresses retention issues throughout the educational process, beginning with the arrival of new students on campus. The review panel has been concerned about retention and mentoring in this program for some years, and hopes to see an indication that these elements are on an upward trajectory in the future. One four-year doctoral-level fellowship at \$22,000 per year is recommended.

010GF-07 LOUISIANA STATE UNIVERSITY – BATON ROUGE
“Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences”
Requested: 5 Doctoral-Level Fellowships at \$24,000/annum for 4 years
4 Master’s-Level Fellowships at \$20,000/annum for 2 years

Recommended: 1 Doctoral-Level Fellowship at \$24,000/annum for 4 years
1 Master’s-Level Fellowship at \$20,000/annum for 2 years
TOTAL AWARD = \$136,000

This is a successful and recognized program that is developing a strategy for national eminence linked to research in areas of particular concern to Louisiana (especially in the aftermath of Hurricanes Katrina and Rita). The proposal brings together Ph.D. programs in geological sciences and oceanography with the master’s-level training in environmental studies. All of the participating programs are well-established, with productive faculty and strong records in obtaining external funding. The master’s degree in Environmental Science, in particular, plays an important role in preparing science professionals who can work in areas relating to coastal ecologies. Though these programs attract students nationally and internationally, efforts should be made to increase the pools of applicants—possibly by enhancing the BOR and other fellowships with supplemental departmental funding. Building a greater degree of collaboration among the three programs might also increase visibility and attract the best students, many of whom are interested in opportunities for interdisciplinary work. These programs continue to struggle to recruit under-represented minority students. The development of a comprehensive plan that takes advantage of the needs and opportunities associated with hurricane recovery might emphasize these programs’ importance to the Louisiana economy and yield a larger and more diverse pool of applicants. Funding is recommended for one four-year doctoral fellowship at \$24,000 per year and one two-year master’s-level fellowship at \$20,000 per year.

**011GF-07 LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER –
SHREVEPORT
“Toxicology Research Doctoral Training Program”
Requested: 4 Doctoral-Level Fellowships at \$22,000/annum for 4 years**

Recommended: - 0 -

LSUHSC-S's Program in Interdisciplinary Toxicology Research and Training Program consists of three departments, which indicate they are collectively focused on Toxicology. It appears that a student can satisfy department requirements, however, without a Toxicology interest. Students enter programs as a whole and can choose rotations in any department. This is of concern to the panel and should be discussed if the program intends to make toxicology its principal focus. For the toxicology focus, the curriculum is well devised and likely to produce well-trained researchers. The panel noted that the research faculty do not appear to be well funded. In addition, the program attracts relatively few applicants. This is not likely to improve over the near term as recruitment efforts appear to be largely passive. Monitoring of student progress is conventional, and the description in the proposal lacks specificity. Though the project has promise, there are significant questions about recruitment and program operation that limit the panel's enthusiasm. No funding is recommended.

**012GF-07 LOUISIANA TECH UNIVERSITY
“Superior Graduate Fellows in Audiology”
Requested: 2 Doctoral-Level Fellowships at \$18,000/annum for 4 years**

Recommended: - 0 -

This proposal makes a strong case for the need for audiologists in the State and documents the program's high pass rate on licensure exams as evidence of its quality. The faculty, however, has recently been reduced in size and has extremely limited research support, which raises questions for the panel about the training that doctoral candidates will receive. Moreover, the program receives a small number of applications and prospective students have low GRE scores, raising questions about quality and the department's ability to attract truly excellent candidates. Given the recent loss of faculty, it is unclear how fellowships would either improve the quality of the applicant pool or allow newly admitted students access to a sufficiently broad pool of active clinical research mentors. No funding is recommended.

**013GF-07 LOUISIANA TECH UNIVERSITY
“Superior Graduate Fellows in Engineering”
Requested: 4 Doctoral-Level Fellowships at \$24,000/annum for 4 years**

Recommended: 2 Doctoral-Level Fellowships at \$24,000/annum for 4 years = \$192,000 TOTAL

This proposal requests support for students in Louisiana Tech's interdisciplinary Ph.D. program in Engineering. The project focuses fellowships in areas of particular research strength and focus in the College: the Institute for Micromanufacturing and the Trenchless Technology Center. This strategy of focusing on strengths seems particularly important in light of the declining applicant pool over the last few years and the poor matriculation rate of those accepted into the interdisciplinary program. While the panel appreciates the general strength of the program, of serious concern is the absence of students from under-represented groups in the graduate student body. A much more comprehensive, integrated, and faculty-driven recruitment process is needed to make any real progress in this area. The proposal would also be strengthened by a clear explication of the program's connections to regional industry and the internships available to students. The presence of coursework on entrepreneurship is laudable. Funding of two four-year doctoral-level fellowships at \$24,000 per year is recommended.

014GF-07 LOUISIANA TECH UNIVERSITY
“Superior Graduate Fellows in Computational Analysis and Modeling”
Requested: 2 Doctoral-Level Fellowships at \$21,000/annum for 4 years

Recommended: - 0 -

The interdisciplinary Computational Analysis and Modeling Program at Louisiana Tech is an innovative approach to graduate education at a small university. The program has a track record of attracting small numbers of superior students. For this Graduate Fellows request, the small number of U.S. applicants is of concern; it is unclear that an adequate pool of candidates could be attracted to compete for the fellowships, though promotion of a small number of prestigious fellowships could help with visibility. Past performance in minority recruiting is poor, but plans to change this look promising. Students and faculty in this program should be making an economic impact on the region, and the argument for this must be strongly made and evidence provided in the proposal. The required entrepreneurship courses are a good step toward making the program a tool of economic development. Nevertheless, the panel does not feel that sufficient evidence has been provided that the fellowships will make a difference in the department and help to elevate performance. No funding is recommended.

015GF-07 NICHOLLS STATE UNIVERSITY
“Interdisciplinary Master Level Training in Marine and Environmental Biology”
Requested: 5 Master’s-Level Fellowships at \$15,000/annum for 2 years

Recommended: - 0 -

This relatively new master’s program has aggressively recruited talented new faculty to undertake teaching and research in marine and environmental biology, both areas of extreme importance to the State and Delta economies. The proposal seems to suggest that the program is beginning to attract strong students, though the data are either poorly presented or not provided at all. Efforts to attract minority applicants could be more aggressive. This is a research-oriented program, and the faculty has a reasonable record of scholarship and external funding. This master’s program seems likely make important contributions by training students who will go on to receive Ph.D. training and by providing science professionals for the State and regional workforces. These claims, however, are never articulated or supported well in the proposal, and should be argued more forcefully and with reference to real data. The plan presented to recruit students nationally seems overly ambitious; a regional approach would probably yield more and better applicants. Given stipend levels cited in the proposal, the program will need to avoid direct competition with Ph.D. programs for applicants. The panel suggests that the applicants in future submissions focus on providing strong data linked to the program’s claims for its success and growing eminence. No funding is recommended.

016GF-07 SOUTHEASTERN LOUISIANA UNIVERSITY
“Recruitment of Exceptional Masters Students for Research in Environmental Biology”
Requested: 3 Master’s-Level Fellowships at \$18,000/annum for 2 years

Recommended: - 0 -

Southeastern Louisiana University’s Environmental Biology master’s program prepares talented students to go on to Ph.D. programs or to go directly into the workforce in research or in resource management. Whatever the outcomes, the training the students receive is important to Louisiana’s future. The program benefits from its relationship with research programs in place at the Turtle Cove Environmental Research Center. The program has strong enrollments, including some minority students. The faculty includes a number of active researchers with good records in securing external funds. Given the workforce orientation of the program, however, the proposal should make a stronger argument for its impact on the State and regional economy. In addition, while it is appropriate for a program of this kind to concentrate its recruitment efforts among regional undergraduate institutions, it is not clear how the availability of Board

of Regents fellowships will result in higher-quality students and a stronger program. No funding is recommended.

017GF-07 SOUTHEASTERN LOUISIANA UNIVERSITY
“Recruitment of Superior Integrated Science and Technology Students”
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

The Integrated Science and Technology master’s program is a Professional Science Master’s (PSM) Program that was initially funded by a grant from the Sloan Foundation as part of a national effort to reshape the master’s degree in science to meet workforce needs. This is an interdisciplinary program that will prepare students to apply science knowledge in industrial and research contexts, in particular in areas that are key to the Louisiana economy. Industry outreach and linkages are built into the educational experience, and the faculty members are active in research. This insures that students receive broad training. The program seems to be graduating students in a timely manner and a Board of Regents Fellowship should assist in building up the pool of U.S. applicants. The program has creative plans for working with the PSM at Southern University in Baton Rouge on recruitment efforts, particularly of under-represented minority students. It seems appropriate for this program to focus exclusively on recruitment in Louisiana and neighboring states, rather than undertaking a national campaign. Funding for one two-year master’s-level fellowship at \$18,000 per year is recommended.

018GF-07 SOUTHERN UNIVERSITY AT BATON ROUGE
“Graduate Research Excellence in Science/Mathematics Education”
Requested: 5 Doctoral-Level Fellowships at \$25,000/annum for 4 years

Recommended: - 0 -

This proposal seeks to use Board of Regents fellowships as a springboard for recruiting a critical mass of full-time students necessary to create a research and graduate culture in the Science/Math Education program. The program has a limited faculty, and their qualifications were difficult to assess because faculty vitae were omitted from the proposal. Nevertheless, the fact that the program currently has only five faculty members and attracts a very small applicant pool for its graduate classes suggests that it would be premature and ineffective to use fellowships as building blocks. It appears unlikely that the program will be able to attract a sufficient number of superior applicants to meet this objective, particularly since it appears that previous Board of Regents fellowship awards were unsuccessful. The program should work on building capacity, then use fellowships strategically to secure the highest caliber students. No funding is recommended.

019GF-07 TULANE UNIVERSITY
“Graduate Fellowships in Support of Biomedical, Chemical and Biomolecular Engineering”
Requested: 8 Doctoral-Level Fellowships at \$22,000/annum for 4 years

Recommended: 2 Doctoral-Level Fellowships at \$22,000/annum for 4 years = \$176,000 TOTAL

The faculty of the Tulane College of Engineering has a strong record of research funding and seems capable of providing a productive research environment for incoming cohorts of doctoral students, despite the major restructuring that has occurred due to Hurricanes Katrina and Rita. The panel notes with concern, however, that the applicant pool was declining even prior to the hurricanes, especially among under-represented domestic students. There is little to suggest that the traditional recruitment plan outlined in the proposal will, by itself, be successful in expanding either the number of applicants or matriculating students, although competitive Board of Regents fellowship stipends may help in this regard. Attention to personalized mentoring of fellows should help to eliminate what appears to be a fairly high attrition rate among previous fellowship recipients, and the panel urges program directors to implement a comprehensive approach for mentoring incoming students. The panel strongly discourages the applicant from using combined GRE scores as either a selection criterion or as data for analysis in the next proposal

submission. Doing so disregards all ETS standards for appropriate use of test scores and does not, therefore, provide any meaningful information to reviewers. Funding of two four-year doctoral-level fellowships at \$22,000 per year is recommended.

020GF-07 TULANE UNIVERSITY
“Recruitment of Superior Graduate Students in Ecology and Evolutionary Biology at Tulane University”
Requested: 4 Doctoral-Level Fellowships at \$26,000/annum for 4 years

Recommended: - 0 -

This program’s focus on tropical and sub-tropical biology is significant given Louisiana’s needs and challenges, and Tulane’s faculty members have well-established scholarly reputations. Graduate students are recruited across three areas of strength: tropical ecology and conservation; evolutionary biology and systematics; and ecosystem ecology and global change. This tripartite structure is perhaps too ambitious given the small number of students enrolled in the program. The program needs to develop an effective plan for increasing numbers of quality applicants and matriculating students, particularly under-represented minority students. The proposal continues to center its minority recruitment strategy in its work with pipeline programs such as LS-LAMP, but these minority recruitment efforts have not appeared to be successful across several years of Board of Regents funding. The relatively small number of annual graduates is another cause for concern, though the most recent data show some improvement in this area. A different approach to monitoring student progress might address both time-to-degree and attrition problems. The proposal might better articulate the program’s importance to the New Orleans and Louisiana economies. No funding is recommended.

021GF-07 TULANE UNIVERSITY
“Recruitment of Superior Students in Chemistry”
Requested: 3 Doctoral-Level Fellowships at \$22,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at \$22,000/annum for 4 years = \$88,000 TOTAL

The Chemistry Department at Tulane is somewhat small, but seems to have a reasonably strong graduate program despite a recent decline in research funding. Currently the program attracts a large pool of international students, but few strong domestic applicants. More attention should be given to developing a recruitment strategy aimed at domestic students, and under-represented minority students in particular. Previous experience with Board of Regents fellowships raises some concern, and the panel notes that two fellowship recipients have recently left the program. There has been some overall restructuring of the department post-Katrina, which has brought Chemistry into a School of Science and Engineering. This could be a positive development for the department, but it is difficult to know what the effects will be over the long term. In the program as described, student monitoring is conventional and largely involves administrative personnel and advisory committees. The panel suggests that more creative faculty-centered mentoring might help to address problems with student attrition. Funding is recommended for one four-year doctoral-level fellowship at \$22,000 per year.

022GF-07 TULANE UNIVERSITY
“Recruitment of Superior Graduate Students in Physics”
Requested: 8 Doctoral-Level Fellowships at \$20,000/annum for 4 years

Recommended: - 0 -

The Tulane Physics Department is small but has an active research and graduate program. The faculty’s recent publication record is particularly impressive and suggests that students will receive excellent training. Nevertheless, the recent decline in the numbers of applicants is of concern to the panel. With only four U.S. applicants, which has been the department’s recent experience, there is no assurance that any would be of sufficient quality to receive a Board of Regents fellowship. While it is possible that the availability of Board fellowships would enhance recruitment, it is not a certainty. It is notable, too, that the

department has had success in the past in the recruitment of under-represented student groups, especially women. The proposal is not carefully prepared and contains errors and contradictory statements. Table 10-GF seems to be incorrect and the text indicates an increasing applicant pool. No attention was given to the serious question of how the department will overcome the negative publicity caused by Katrina and continue to at least maintain its applicant pool. No funding is recommended.

023GF-07 TULANE UNIVERSITY HEALTH SCIENCES CENTER
“BORSF Graduate Fellowships in Integrated Systems Biology Program”
Requested: 4 Doctoral-Level Fellowships at \$26,000/annum for 4 years

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

This is a proposal from Tulane Health Sciences Center’s former Pharmacology and Physiology programs which, after the hurricanes, were reorganized into a division of a larger Biomedical Program. This proposal started out offering creative solutions for problems resulting from Hurricane Katrina and its aftermath but, after an introductory paragraph, reverted to a narrative statement prepared for a competition two years ago. Only the tables contained updated information. Though the panel understands that the applicants may have had difficulty finding accurate and current information or time to draft a new statement, it is their responsibility to at least address the factors that contribute to the absence of new information. Moreover, the applicants missed a great opportunity to be creative in their approach to the proposal and to excite the reviewers with their innovation in the face of uncertainty. Nevertheless, this is a solid program with a strong faculty. Recent experience shows it attracts few applicants overall, and very few domestic applicants. This issue must be addressed soon for the program to succeed. Given the expected problems in recruiting because of the hurricanes, this program must be especially creative. The program’s strengths in faculty and student quality suggest, however, that the program will make good use of limited fellowship support. The panel feels that all units in the Tulane Health Sciences Center should receive equal stipends. Thus, funding for one four-year doctoral-level fellowship at \$28,000 per year is recommended.

024GF-07 TULANE UNIVERSITY HEALTH SCIENCES CENTER
“Predoctoral Training in the Molecular Biomedical Sciences”
Requested: 4 Doctoral-Level Fellowships at \$28,000/annum for 4 years

Recommended: 3 Doctoral-Level Fellowships at \$28,000/annum for 4 years = \$336,000 TOTAL

This proposal is submitted from a very strong research group at Tulane. The proposal’s chief strengths are the breadth and level of support for the research interests and the involvement of graduate students at all levels of this work. The panel notes, however, that the applicant pool for the graduate program is somewhat weak and urges the program administrators to devise a more aggressive and original recruitment plan. The program should, however, be commended for its success in the recruitment of under-represented minority students. The student monitoring and advising plan is traditional, raising questions about its potential for success. The proposal does not indicate that Board of Regents fellows will receive special mentoring; indeed, much of the supervision of progress seems to be by the GEC, rather than through a personalized approach, which would be preferable and more likely to yield positive results. Nevertheless, the panel notes that attrition has been minimized. Funding for three four-year doctoral fellowships at \$28,000 per year is recommended.

025GF-07 TULANE UNIVERSITY HEALTH SCIENCES CENTER
“Superior Graduate Students in Neuroscience / 07-12”
Requested: 3 Doctoral-Level Fellowships at \$27,000/annum for 4 years

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

This proposal requests support for a strong, well-defined graduate program. The faculty is clearly motivated, both in research and teaching, and the program’s design indicates an admirable consideration of student needs. The offering of teaching experiences through a lab course and in local schools is a strong component of the program. The faculty has an excellent record of external funding, providing research

opportunities to their students. Moreover, the proposal describes well-conceived strategies to help the graduate program recover from the effects of Hurricane Katrina. The panel feels that all units in the Tulane Health Sciences Center should receive equal stipends. Thus, funding for two four-year doctoral-level fellowships at \$28,000 per year is recommended.

026GF-07 UNIVERSITY OF LOUISIANA AT LAFAYETTE
“Regents Fellowships for the Applied Language and Speech Sciences Ph.D. Program”
Requested: 3 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

This is a small and relatively new doctoral program with a limited pool of applicants. Nevertheless, a strong case is made for the importance of the field to the State’s social and economic development. Though extramural support is minimal, the faculty is widely published, which suggests the presence of a good clinical research environment for doctoral students. The development of an innovative and comprehensive recruitment strategy, coupled with the competitive stipend a Board of Regents fellowship will provide should enable the program to draw a deeper and stronger group of applicants locally, regionally and nationally. Funding is recommended for one four-year doctoral-level fellowship at \$24,000 per year.

027GF-07 UNIVERSITY OF LOUISIANA AT LAFAYETTE
“Recruitment of Superior Graduate Students in Computer Science and Computer Engineering”
Requested: 4 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

This proposal seeks support for students in two excellent programs under the umbrella of the Center for Advanced Computer Studies (CACs). Of particular importance, links to regional industry seem to be strong. The panel had concerns about a steady decline in the number of U.S. applicants (down from 22 to 12 in a three-year period) and the lack of selectivity (80% of applicants admitted last year). Because data for the master’s and Ph.D. programs are mixed, it is not possible to determine whether the situation is brighter for the Ph.D. program considered alone. The panel also could not distinguish minority race status from gender when considering efforts to recruit from under-represented groups. In general, the recruiting plan needs to be pursued aggressively to assure an adequate pool of high-quality applicants. Funding is recommended for one four-year doctoral-level fellowship at \$24,000 per year.

028GF-07 UNIVERSITY OF LOUISIANA AT LAFAYETTE
“Board of Regents Fellowship Proposal for Mathematical Sciences at UL Lafayette”
Requested: 3 Doctoral-Level Fellowships at \$22,000/annum for 4 years

Recommended: - 0 -

This proposal requests support for a solid program primarily focused on doctoral-level education. The quality of students in the program appears to be reasonably high, but the panel wonders how it is possible to maintain this level of student performance when incoming students are offered between \$8,500 and \$12,000 per year. Moreover, the dramatic difference between this range of support and the requested Board of Regents fellowships does not promise to build the quality of the student population as a whole, but to bring in a handful of excellent students who potentially are of a different quality than the students supported through other means. The panel would like to see a stronger argument for the place of these fellowships in a programmatic plan to improve department performance and student quality. The department has some very active faculty who undoubtedly would benefit from more superior graduate students, and the relationship between Board fellowships and the faculty should be better articulated. Recruitment of under-represented minorities to the graduate program does not seem particularly effective

over the years. This contrasts with the undergraduate program, where progress has been made. No funding is recommended.

029GF-07 UNIVERSITY OF LOUISIANA AT LAFAYETTE
“Training Doctoral Fellows for Research in Wetlands Restoration after Hurricanes”
Requested: 3 Doctoral-Level Fellowships at \$22,000/annum for 4 years

Recommended: 1 Doctoral-Level Fellowship at \$22,000/annum for 4 years = \$88,000 TOTAL

The wetlands restoration focus outlined in this proposal makes great sense for UL at Lafayette’s Biological Sciences program, which is linked to the National Marine Fisheries Laboratory and the National Wetlands Research Center. Aggressive development of research in this area may help draw national attention to this worthy program. Graduate students benefit from working with a very large number of active and accomplished faculty members, many of whom are associated with national laboratories. However, it is not clear that faculty research interests are closely aligned to the theme that the proposal articulates, and the panel is concerned that the focus cannot be realized as described. In addition, given recent events, it will be increasingly important for this program to document the impact that it makes on the regional and State economies, and the panel encourages the applicants to strengthen this section of the proposal. The program has achieved a strong reputation at the University, as well as in the State and region, but this has not translated into substantial pools of applicants. Minority recruitment is particularly problematic, although the commitment of institutional funds to this goal is laudable. A more thorough plan for monitoring and intervention may be warranted given uneven success in retaining BOR Fellows. Funding is recommended for one four-year doctoral-level fellowship at \$22,000 per year.

030GF-07 UNIVERSITY OF LOUISIANA AT LAFAYETTE
“Recruitment of Superior Physics Graduate Students”
Requested: 2 Master’s-Level Fellowships at \$16,000/annum for 2 years

Recommended: 1 Master’s-Level Fellowship at \$16,000/annum for 2 years = \$32,000 TOTAL

This very small program provides an important service to Louisiana and to those students interested in physics who may not yet be ready for doctoral-level study. Average quantitative GRE scores suggest that some students in the program may not be capable of higher levels of study in physics. The number of U.S. applicants in a year averages around four. How many of these are accepted into the program is not clear from Form 10-GF, and the panel requests that data be better presented in future applications. Larger fellowships would undoubtedly improve the recruiting picture, but would not likely attract students also considering major Ph.D. granting programs. The program could more effectively recruit minority students, and the panel urges the applicants to devise a creative strategy to address this. Funding is recommended for one two-year master’s-level fellowship at \$16,000 per year.

031GF-07 UNIVERSITY OF NEW ORLEANS
“Recruitment of Superior Graduate Students in Computer Science at UNO”
Requested: 2 Master’s-Level Fellowships at \$16,000/annum for 2 years

Recommended: 1 Master’s-Level Fellowship at \$16,000/annum for 2 years = \$32,000 TOTAL

UNO’s Computer Science Department has large undergraduate and master’s programs, and aspires to raise its regional and national stature over the next several years. The department sees itself as playing a crucial role in a variety of economic development initiatives. Good evidence is provided to support the claim that the master’s program has recruited some outstanding students in the recent past. In addition, graduates are finding jobs locally and regionally, which contributes measurably to Louisiana’s economy. In fact, the argument for how this program participates in the local economy is better documented than in most other proposals in this submission pool. Form 10-GF is missing, though much of the requested data are included in the narrative sections of the proposal. The panel strongly encourages the applicants to include this form in future submissions. Funding is recommended for one two-year master’s-level fellowship at \$16,000 per year.

032GF-07 UNIVERSITY OF NEW ORLEANS
“Superior Graduate Fellows in Conservation Biology at the University of New Orleans”
Requested: 2 Doctoral-Level Fellowships at \$23,000/annum for 4 years

Recommended: 2 Doctoral-Level Fellowships at \$23,000/annum for 4 years = \$184,000 TOTAL

This is a new program with an interdisciplinary focus on conservation biology, which is an area of considerable strategic importance for the State. The plan described in the proposal to focus on post-hurricane research makes great sense and may provide an opportunity for the program to attract outstanding students and achieve national recognition. The graduates of this program and the research they conduct should make an important contribution to the management of coastal wetlands and related issues. Accordingly, a strong case is made for the impact this program could have on the regional and national economies. The program has attracted an active faculty that has developed an impressive publication record, but efforts need to be made to increase external funding if the goal of achieving national recognition for the Ph.D. and research programs is to be realized. Students initially recruited into the program with the assistance of Board of Regents Fellowships have already begun to publish their research findings – a promising development for the program’s future. The program appears to have a good record of attracting underrepresented minority students and the University’s commitment to provide additional funding on top of Board of Regents Fellowships promises to draw more highly qualified applicants. The program has already attracted reasonable pools of applicants; as the program matures, a more ambitious recruitment plan would permit a greater degree of selectivity among applicants. Funding is recommended for two four-year doctoral-level fellowships at \$23,000 per year.

033GF-07 UNIVERSITY OF NEW ORLEANS
“Graduate Fellowships for the Chemistry Doctoral Program at the University of New Orleans”
Requested: 4 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 Chemistry Department at UNO enrolls some sixty graduate students, and has strong research and training elements. The department’s experience with Board of Regents fellows is difficult to analyze because of conflicting data. The table 9-GF indicated that, since 2000, no Board fellowship recipients have graduated or dropped from the program; however, the text indicated that two fellowship recipients have graduated. The program is traditional in its operation and advising seems to be effective. Still, it was in fact difficult to assess the quality and success of the advising program, as specific details as to its operation and frequency of meeting were not provided. Recruitment was conventional and unimaginative. The PI indicated that recovery from Katrina is underway, and will take considerable time. It would have greatly strengthened the proposal if the applicant had indicated what special steps the department is taking to maintain productivity and program quality through the recovery period. It was difficult to assess the department’s success in recruiting as the proposal provided no information on number of applicants, qualifications, selectivity or matriculation. Nevertheless, the program is solid and has a proven record of success. Funding is recommended for two four-year doctoral-level fellowships at \$30,000 per year.

001GFT-07 McNEESE STATE UNIVERSITY
“Graduate Fellowship Teachers Program for Master of Science Program in Environmental and Chemical Sciences”
Requested: 3 Master’s-Level Fellowships at \$17,000/annum for 1 year

Recommended: 2 Master’s-Level Fellowships at \$21,500/annum for 1 year = \$43,000 TOTAL

Through this program, seven full-time faculty members in the Environmental and Chemical Sciences Program at McNeese State University will provide opportunities for advanced content mastery in Environmental and Chemical Sciences to currently certified Louisiana teachers. This program will enable secondary teachers to enhance their content knowledge in fields important to Louisiana’s economy and, as

such, is worthy of Board of Regents support. There were some problems in the presentation of the proposal; in particular, required data tables have a significant number of errors, making it very difficult for the panel to determine the size of the applicant pool or the currently enrolled student body. It is unclear, therefore, exactly how substantial the recruiting challenges will be for the program. Selection processes are enumerated, but criteria for selection are not specified. Consequently, it is also difficult to discern how well prepared applicants are likely to be, which raises questions about their potential success in the program. The panel was convinced, however, of the importance of the need for better-prepared science teachers in Louisiana and was impressed by the diversity of the student population the program currently enrolls. Funding for two master's-level fellowships at \$21,500, which includes fellowship support for one year plus one summer for each student, is recommended.

APPENDIX C

**Traditional Graduate Fellows Program
2005-06 Competition
Proposals Submitted**

Proposal#/ Discipline	PI Name(s)	Institution	Proposal Title	Duration	Funds Requested
001GF-07 ENG	W. David Constant	LSU-Baton Rouge	Board of Regents Fellowships in Engineering	4 years	Y1: \$78,000 Y2: \$78,000 Y3: \$46,000 <u>Y4: \$46,000</u> Total: \$248,000
002GF-07 AG	Linda M. Hooper-Bui; Timothy Schowalter	LSU-Baton Rouge	Enhancing Graduate Education in Entomology through Recruitment of High-Caliber Students using BoR Fellowships	4 years	Y1: \$92,100 Y2: \$95,784 Y3: \$99,615 <u>Y4: \$103,600</u> Total: \$391,099
003GF-07 CIS	S. S. Iyengar; Rajgopal Kannan; Bijaya B. Karki	LSU-Baton Rouge	Recruitment of Superior Students to the Doctoral Program in Areas of Distributed Sensor Networking at Louisiana State University	4 years	Y1: \$92,000 Y2: \$92,000 Y3: \$92,000 <u>Y4: \$92,000</u> Total: \$368,000
004GF-07 HM	Thomas R. Klei	LSU-Baton Rouge	Graduate Studies in Comparative Biomedical Sciences, Pathobiological Sciences, and Veterinary Clinical Sciences	4 years	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 <u>Y4: \$75,000</u> Total: \$300,000

005GF-07 PHYS	Roger McNeil; Dana Browne; Kenneth Hogstrom; Jonathan Dowling	LSU-Baton Rouge	Graduate Fellows in Physics and Astronomy and Medical Physics Program	4 years	Y1: \$107,000 Y2: \$107,000 Y3: \$107,000 Y4: \$69,000 Total: \$390,000
006GF-07 BIO	Thomas S. Moore; Terry M. Bricker	LSU-Baton Rouge	Graduate Fellowships in Biological Sciences at Louisiana State University	4 years	Y1: \$75,000 Y2: \$75,000 Y3: \$75,000 Y4: \$75,000 Total: \$300,000
007GF-07 MATH	Leonard F. Richardson; Jacek M. Cygan	LSU-Baton Rouge	Recruitment of Superior Doctoral Students in Mathematics	4 years	Y1: \$88,000 Y2: \$88,000 Y3: \$88,000 Y4: \$88,000 Total: \$352,000
008GF-07 EDU	Melinda A. Solmon; Paul Mooney; Amy B. Westbrook	LSU-Baton Rouge	Graduate Fellow Support in Education	4 years	Y1: \$108,000 Y2: \$108,000 Y3: \$108,000 Y4: \$108,000 Total: \$432,000
009GF-07 CHEM	George G. Stanley	LSU-Baton Rouge	Graduate Fellowships in Chemistry for 2007	4 years	Y1: \$66,000 Y2: \$66,000 Y3: \$66,000 Y4: \$66,000 Total: \$264,000

010GF-07 EAR/ENV	R. Eugene Turner; Edward Laws; Jeffrey Nunn	LSU-Baton Rouge	Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences	4 years	Y1: \$160,000 Y2: \$160,000 Y3: \$160,000 <u>Y4: \$160,000</u> Total: \$640,000
011GF-07 HM	Kenneth McMartin; Stephen Pruett; Chantal Rivera	LSUHSC-S	Toxicology Research Doctoral Training Program	4 years	Y1: \$88,000 Y2: \$88,000 Y3: \$88,000 <u>Y4: \$88,000</u> Total: \$352,000
012GF-07 HM	J. Clarice Dans; Sheryl S. Shoemaker	LA Tech	Superior Graduate Fellows in Audiology	4 years	Y1: \$36,000 Y2: \$36,000 Y3: \$36,000 <u>Y4: \$36,000</u> Total: \$144,000
013GF-07 ENG	Scott A. Gold; Raymond L. Sterling; Kody Varahramyan	LA Tech	Superior Graduate Fellows in Engineering	4 years	Y1: \$96,000 Y2: \$96,000 Y3: \$96,000 <u>Y4: \$96,000</u> Total: \$384,000
014GF-07 MATH	B. Ramachandran	LA Tech	Superior Graduate Fellows in Computational Analysis and Modeling	4 years	Y1: \$42,000 Y2: \$42,000 Y3: \$42,000 <u>Y4: \$42,000</u> Total: \$168,000

015GF-07 EAR/ENV	Raj Boopathy; Marilyn Kilgen	Nicholls State University	Interdisciplinary Master Level Training in Marine and Environmental Biology	2 years	Y1: \$75,000 <u>Y2: \$75,000</u> Total: \$150,000
016GF-07 BIO	Gary W. Childers	Southeastern Louisiana University	Recruitment of Exceptional Masters Students for Research in Environmental Biology	2 years	Y1: \$54,000 <u>Y2: \$54,000</u> Total: \$108,000
017GF-07 CIS	Melinda Miller Holt; Randolph Belter	Southeastern Louisiana Univeristy	Recruitment of Superior Integrated Science and Technology Students	2 years	Y1: \$36,000 <u>Y2: \$36,000</u> Total: \$72,000
018GF-07 EDU	Moustapha Diack	Southern University at Baton Rouge	Graduate Research Excellence in Science/Mathematics Education	4 years	Y1: \$50,000 Y2: \$75,000 Y3: \$125,000 <u>Y4: \$250,000</u> Total: \$500,000
019GF-07 ENG	Daniel De Kee	Tulane University	Graduate Fellowships in Support of Biomedical, Chemical and Biomolecular Engineering	4 years	Y1: \$176,000 Y2: \$176,000 Y3: \$176,000 <u>Y4: \$176,000</u> Total: \$704,000
020GF-07 EAR/ENV	David C. Heins; Taylor S. Feild; Thomas W. Sherry	Tulane University	Recruitment of Superior Graduate Students in Ecology and Evolutionary Biology at Tulane University	4 years	Y1: \$104,000 Y2: \$104,000 Y3: \$104,000 <u>Y4: \$104,000</u> Total: \$416,000

021GF-07 CHEM	Joel T. Mague	Tulane University	Recruitment of Superior Students in Chemistry	4 years	Y1: \$66,000 Y2: \$66,000 Y3: \$66,000 Y4: \$66,000 Total: \$264,000
022GF-07 PHYS	Jim McGuire; A. D. Hancock	Tulane University	Recruitment of Superior Graduate Students in Physics	4 years	Y1: \$44,000 Y2: \$44,000 Y3: \$44,000 Y4: \$44,000 Total: \$176,000
023GF-07 HM	Krishna C. Agrawal; L. Gabriel Navar	TUHSC	BORSF Graduate Fellowships in Integrated Systems Biology Program	4 years	Y1: \$104,000 Y2: \$104,000 Y3: \$104,000 Y4: \$104,000 Total: \$416,000
024GF-07 HM	Robert F. Garry; John D. Clements; Jess G. Thoene; Jim Karam	TUHSC	Predoctoral Training in the Molecular Biomedical Sciences	4 years	Y1: \$112,000 Y2: \$112,000 Y3: \$112,000 Y4: \$112,000 Total: \$448,000
025GF-07 BIO	Bradley K. Taylor	TUHSC	Superior Graduate Students in Neuroscience / 07-12	4 years	Y1: \$81,000 Y2: \$81,000 Y3: \$81,000 Y4: \$81,000 Total: \$324,000

026GF-07 HM	Martin J. Ball; John A. Tetnowski; Jack S. Damico	University of Louisiana at Lafayette	Regents Fellowships for the Applied Language and Speech Sciences Ph.D. Program	4 years	Y1: \$72,000 Y2: \$72,000 Y3: \$72,000 Y4: \$72,000 Total: \$288,000
027GF-07 CIS	Magdy A. Bayoumi; William R. Edwards, Jr.	University of Louisiana at Lafayette	Recruitment of Superior Graduate Students in Computer Science and Computer Engineering	4 years	Y1: \$96,000 Y2: \$96,000 Y3: \$96,000 Y4: \$96,000 Total: \$384,000
028GF-07 MATH	Keng Deng	University of Louisiana at Lafayette	Board of Regents Fellowship Proposal for Mathematical Sciences at UL Lafayette	4 years	Y1: \$66,000 Y2: \$66,000 Y3: \$66,000 Y4: \$66,000 Total: \$264,000
029GF-07 BIO	Paul L. Klerks	University of Louisiana at Lafayette	Training Doctoral Fellows for Research in Wetlands Restoration after Hurricanes	4 years	Y1: \$66,000 Y2: \$66,000 Y3: \$66,000 Y4: \$66,000 Total: \$264,000
030GF-07 PHYS	John Meriwether	University of Louisiana at Lafayette	Recruitment of Superior Physics Graduate Students	2 years	Y1: \$32,000 Y2: \$32,000 Total: \$64,000

031GF-07 CIS	Mahdi Abdelguerfi	University of New Orleans	Recruitment of Superior Graduate Students in Computer Science at UNO	2 years	Y1: \$32,000 <u>Y2: \$32,000</u> Total: \$64,000
032GF-07 BIO	Candace Timpte; Kathleen Burt-Utley	University of New Orleans	Superior Graduate Fellows in Conservation Biology at the University of New Orleans	4 years	Y1: \$46,000 Y2: \$46,000 Y3: \$46,000 <u>Y4: \$46,000</u> Total: \$184,000
033GF-07 CHEM	John B. Wiley	University of New Orleans	Graduate Fellowships for the Chemistry Doctoral Program at the University of New Orleans	4 years	Y1: \$120,000 Y2: \$120,000 Y3: \$120,000 <u>Y4: \$120,000</u> Total: \$480,000

PROGRAM SUMMARY

NUMBER OF PROPOSALS SUBMITTED: 33

Agriculture: 1

Biological Sciences: 5

Business: 0

Chemistry: 3

Computer & Information Sciences: 4

Earth/Environmental Sciences: 3

Education: 2

Engineering A&B: 3

Health & Medical Sciences: 6

Mathematics: 3

Physics/Astronomy: 3

FIRST-YEAR FUNDS REQUESTED: \$2,635,100

TOTAL FUNDS REQUESTED: \$10,303,099

TOTAL FIRST-YEAR FUNDS AVAILABLE: \$800,000

**Graduate Fellowships for Teachers Program
2005-06 Competition
Proposals Submitted**

Proposal#/ Discipline	PI Name(s)	Institution	Proposal Title	Duration	Funds Requested
001GFT-07	Joseph Sneddon	McNeese State University	Graduate Fellowship Teachers Program for Master of Science Program in Environmental and Chemical Sciences	1 year	<u>Y1: \$64,500*</u> Total: \$64,500

* **One year plus one summer of support requested.**

PROGRAM SUMMARY

NUMBER OF PROPOSALS SUBMITTED: 1

Mathematics: 0

Sciences: 1

FIRST-YEAR FUNDS REQUESTED: \$64,500

TOTAL FUNDS REQUESTED: \$64,500

TOTAL FIRST-YEAR FUNDS AVAILABLE: \$200,000