

Annual Report of the Graduate School 2007-2008

1.0 PROGRAMS: GRADUATE SCHOOL ACTIVITIES

1.1 **Professional Development for Graduate Students: Preparing Future Leaders**

(PFL). The PFL initiative was conceived in the summer of 2007 to provide graduate students and post-docs with professional development skills to augment their disciplinary-based education and thereby make them more competitive in the global market. Six Professional Development Seminars provided training in several broad areas including effective grant writing, leadership, and effective communication and conflict resolution. Six seminars in the Responsible Conduct of Research series provided a venue for presenting and discussing issues in research ethics. Twenty-four students from 16 departments in 6 colleges participated with funding in Preparing the Professoriate. The Certificate of Accomplishment in Teaching is in the process of being transferred from the Faculty Center for Teaching and Learning to the Graduate School.

1.2 **Professional Science Master's (PSM) Degree Programs.** The Graduate School started a project to implement PSM programs university-wide, which will later serve as a model for the UNC System. NC State will then act as a facilitator for other universities. To advance this effort, we sponsored a Colloquium on Professional Graduate Education, met with UNC-GA and representatives from the Alfred P. Sloan Foundation and the Council of Graduate Schools, talked to interested faculty, and gained initial consent to investigate employers' needs for degrees in Pharmacology and Geospatial Science and Technology.

1.3 **New Graduate Programs.** Fifteen certificates or degree programs were approved by the Administrative Board of the Graduate School: MS in Analytics, Master of Materials Science and Engineering, MOU - Zhejiang University – BA-ABM program, Ph.D. Public/Applied History, MS in Computer Engineering, MS in Electrical Engineering, Master of School Administration

DE Cohort - Rocky Mount, Certificate in Program Development in Family Life Education, Master of Global Innovation Management, Master of Nuclear Engineering, Certificate in Public Policy, NCSU-UNC Joint Graduate Certificate in Medical Devices, MA in Teaching, Certificate in E-Learning, and Certificate in Textile Brand Management and Marketing.

1.4 Partnerships with International Universities. The Graduate School has worked toward establishing dual-degree programs with international universities, including Seoul National University, South Korea; Université Paul Cézanne, Aix-en-Provence, France; University of Surrey, England; Monterrey Tech, Mexico; National Chiao Tung University, Taiwan; Jordan University of Science & Technology, Jordan; Universidad de Concepcion, Brazil; University of Guadalajara, Mexico; Incheon Free Zone, South Korea; Zhejiang University, China; and Nanjing University, China. MOU's have been approved for Zhejiang University (3+1 program), Surrey University of (International Programs), Université Paul Cézanne, Aix-en-Provence (Global Innovation Management), National Chiao Tung University, Taiwan (Industrial Systems Engineering) and Seoul National University (Genomics). The Masters of Global Innovation required the creation of a new degree through the UNC-System as well as the exchange program.

1.5 Interdisciplinary (ID) Education. The Graduate School led an effort to enhance the quality and sustainability of interdisciplinary programs at NC State by appointing and overseeing the Interdisciplinary Program Task Force. Key recommendations in its final report include: seeking additional input on the task force report, creating the ID Academic Program Review Committee, recruiting and appointing an associate dean for ID programs, creating and staffing an ID resource team, and engaging the compact planning process to fund ID programs.

1.6 Graduate Recruiting. We initiated the Provost's Fellowship program and awarded approximately \$230,000 to fund 60 Provost's Fellows. We also began the Graduate Research

Fellowship program. Each doctoral program was allocated two \$4,000 Provost's Fellowships and one \$5,000 University Graduate Research Fellowship to be used as top-up grants to help in recruiting. The Graduate School continued its support for recruiting grants, receiving 33 grant applications and awarding \$61,699 to 31 programs with a 1:1 funding match. Also, we began to improve recruiting by working with GradSchools.com, a portal for prospective students to find graduate programs, starting with updating 101 NC State program listings.

1.7 **National Research Council Assessment of Graduate Programs.** We served as university coordinator for the NRC Assessment.

1.8 **Graduate Student Online Assessment and Reporting System (GSOARS).** GSOARS is designed to encourage accountability of graduate students through the online submission of annual progress reports and responses to those reports by faculty advisors. We began the first pilot of GSOARS in several programs.

1.9 **Graduate Program Evaluation.** The Graduate School conducted 10 external reviews and managed 12 post-review meetings. We also initiated a new system for accountability related to the external reviews, asking programs to summarize progress toward implementing reviewers' recommendations in their biennial reports. In addition, we began the campus-wide requirement to submit biennial reports of program outcomes assessment.

1.10 **International Teaching Assistant Testing with the SPEAK Test.** We tested 143 international students for English proficiency and developed a Web-based system that will greatly facilitate management of the program. We instituted the process of transferring the SPEAK test to the foreign languages department whose expertise in English as a second language can better address issues that are not within our domain.

1.11 **Enhanced Efficiencies through Internet Technologies.** The Graduate School

implemented the RightNow Frequently Asked Question Knowledge-Base software, which improves the experience for prospective graduate students as well as applicants and current students. We also did a complete revision of our Web site. As an intermediate step toward interface with the Student Information System, we assisted in improving and working out problems involving the graduation clearance process between the Graduate School and Registration and Records.

2.0 COMPACT PLAN: MAJOR INITIATIVES

<i>Compact Plan Funding 2007/08</i>	<i>Use of Compact Plan Funds</i>
<p>Program Evaluation 58,00 Complete funding of associate dean position 32,000 Operating costs for external reviews</p>	<p>Hired full-time associate dean for evaluation and conducted 10 external reviews of graduate programs.</p>
<p>Graduate Enrollment 31,000 VC for Research as matching funds for recruiting proposals 31,000 Grad School contribution</p>	<p>Awarded \$61,699 to 31 programs with a 1:1 funding match.</p>
<p>Professional Development 32,000 - 0.5 FTE Coordinator Research Ethics 57,500 0.5 FTE Director Research Ethics 14,000 Webmaster 10,000 Operating costs</p>	<p>Funded coordinator and director of research ethics. Hired coordinator of graduate teaching programs and a Webmaster. Offered an extensive range of professional development activities.</p>
<p>Renovation of Building Renovation of Winslow Hall - \$3M 1,500,000 from VC Finance 250,000 from VC Research (matching for fundraising) 500,000 Graduate School from capital campaign</p>	<p>Plans for moving the Graduate School to Winslow were canceled, so these funds were not required. The Graduate School will move to Research III on Centennial Campus.</p>
<p>Postdoctoral Scholars 85,000 Director, Postdoctoral Scholar Office 23,000 HR, clerical, and student asst. 25,000 Professional development 40,000 Travel grants 27,000 Operations</p>	<p>Due to budget constraints in the Office of Research and Graduate Studies, very little of this funding came to the Graduate School. We are currently advertising for the director position and have been working with HR to identify postdoctoral scholars on campus.</p>

3.0 DIVERSITY: INITIATIVES AND PROGRESS

3.1 **NSF AGEP.** The Graduate School has continued its comprehensive minority recruitment/mentoring initiative using the \$3.3 million awarded in March 2005. In March we hosted our 9th Visit NC State Day for 62 students from 37 colleges and universities from 67 states and Puerto Rico. Thirty-two undergraduates participated in our AGEP Summer Research Experience, including 6 from NC State, and 10 minority undergraduates from NC State participated in our complementary academic-year research experience.

3.2 **The North Carolina Alliance to Create Opportunity Through Education (OPT-ED).** For this collaborative program with other NC universities, we held our sixth OPT-ED Alliance Day, which featured a poster session, oral research presentations, student/faculty panels, and breakout workshops for nearly 1000 participants from underrepresented minority groups from 19 middle schools, 57 high schools, 5 community colleges, and 29 universities. In 2008, 76 faculty and graduate students from 14 North Carolina institutions attended OPT-ED's annual statewide mentoring workshop for faculty and future faculty.

3.3 **NIH Initiative for Maximizing Student Diversity (IMSD).** NC State was awarded this \$2.1 million grant designed to increase diversity in doctoral education and in the Ph.D. workforce in biomedical and behavioral sciences.

3.4 **Bioscience Research Initiative for Doctoral Graduate Education (BRIDGE) Program.** This NIH/NIGMS-funded program, designed to increase the number of minority researchers in the biomedical and life sciences, was renewed for 3 additional years with our partner institutions (Fayetteville State, NC A&T, and NC Central). Presently, 9 students are working on the MS, 7 on Ph.D.

3.5 Other Support for Recruiting and Retaining Minority Students. Graduate School staff attended over 30 recruiting fairs for minority and first-generation college students and hosted students from Morehouse College, Spelman College, and Tuskegee University in coordination with UNC-Chapel Hill and Duke University. In addition, we funded 91 students with \$106,000 in diversity funds and used \$139,500 for retention supplements.

4.0 FUND-RAISING

We reached out to graduate alumni in several ways: holding "Meet the Dean" events in New York City, Seattle, Korea, China, and Austin and a fellowship donors meeting at our 13th Annual Fellowship Dinner, inviting eminent graduate alumni to participate in the Graduate School's professional development series, and communicating with 220 graduate alumni as a follow-up to last year's feasibility study. Personal visits were scheduled with all members of the Board of Advisors to identify ways to further engage them in Graduate School activities and cultivate future gifts. We received our largest-ever individual annual fund gift from a board member.

5.0 ADMINISTRATION: STAFF CHANGES AND ACHIEVEMENTS

5.1 New Employees

- Prema Arasu, Interim Assistant Dean for Student and International Affairs
- Lisbeth Borbye, Assistant Dean for Professional Education
- Melissa Bostrom, Director of Academic and Professional Development Programs
- Hanna Compton, Assistant Director of Outreach & Development
- Dare Cook, Admissions Processor

- David Edelman, Business Applications
- Brett Locklear, Recruiting Coordinator
- Barbie Honeycutt, Director of Graduate Teaching Programs

5.2 **Assistant Dean Prema Arasu** represented the Graduate School on committees/task forces relevant to faculty development, summer school, university policies, and international partnerships. She developed guidelines for new international dual-degree agreements and streamlined administrative actions related to student affairs and the administrative handbook.

5.3 **Assistant Dean Lisbeth Borbye** published the article “PSM Program Assessment from All Perspectives.” She has coordinated a number of events related to PSM, including the first annual Colloquium on Professional Graduate Education, and was invited to the University of Copenhagen to discuss PSM and dual-degree programs.

5.4 **Associate Dean Michael Carter** gave workshops on program assessment at a meeting of the Council of Graduate Schools and papers at scholarly conferences. He published the article “Writing to Learn by Learning to Writing in the Disciplines” and received the Richard Braddock Award, the most prestigious honor for scholarship in his field.

5.5 **Senior Associate Dean Duane Larick** presented workshops at various meetings of the Council of Graduate Schools. He served as Past-Chair and Member of the Management Committee on Life-Long Learning and Careers for the Institute of Food Technologists and was elected a *Fellow* of the Institute of Food Technologists.

5.6 **Assistant Dean Rick Liston** completed a two-year term as the Technology Services Chair on the board of directors for the National Association of Graduate Admissions Professionals. During this time he conducted and presented a research study for the association’s 1,900 members across the U.S and Canada.

5.7 **Associate Dean Rebeca Rufty** has given presentations for professional development, responsible conduct of research, and other issues related to graduate education. The Ph.D. Completion Project, which she oversees at NC State, was given a 3-year continuing grant from CGS. She attended the National Postdoctoral Association Meeting.

5.8 **Assistant Dean David Shafer** was Co-PI of a \$2.1 million grant for National Institutes of Health–Initiative for Maximizing Student Diversity awarded April 2008. He also was an invited presenter or panelist for a variety of events related to graduate education.

6.0 RECOMMENDATIONS AND CONCERNS FOR THE FUTURE

- Successfully implementing the recommendations of the Interdisciplinary Program Task Force
- Increasing funds for graduate fellowships
- Improving graduate student recruiting and increasing diversity
- Planning for and moving the Graduate School to Research III
- Preparing for PeopleSoft Student Information System implementation
- Having sufficient operating funds for Preparing Future Leaders
- Hiring the right person to run the program for Responsible Conduct of Research
- Effectively propagating and sustaining professional master's programs on campus
- Creating an infrastructure for postdoctoral professional development and advocacy

Additional Material

CONTRIBUTIONS TO 5 FOCUS AREAS

Producing leaders for the state, nation, and the world: the Preparing Future Leaders program (1.1), the Professional Science Master's degrees (1.2), the various new degree programs (1.3), recruiting to bring the best students to NC State (1.6), the many diversity initiatives (3.1)

Creating educational innovation: the Professional Science Master's degrees (1.2), the various new degree programs (1.3), partnerships with international universities (1.4), improvements in interdisciplinary education (1.5), evaluation of graduate programs

Improving health and well-being: Professional Science Master's degree in microbial biotechnology and projected degree in pharmacology (1.2), approval of the new Joint Graduate Certificate in Medical Devices (1.3), proposed improvements to strengthen interdisciplinary programs such as nutrition, physiology, genomics, and immunology (1.5)

Fueling economic development: the Professional Development Seminar series (1.1), new programs approved (1.3), partnerships with international universities (1.4), recruiting to bring the best students to NC State (1.6), the many diversity initiatives designed to enroll underrepresented minority students (3.1)

Driving innovation in energy and the environment: implementing recommendations of the Interdisciplinary Program Task Force will allow the university to be much more effective in initiating and improving graduate programs related to energy and the environment (1.5).