

## Annual Report of the Graduate School 2008-2009

### 1.0 PROGRAMS: GRADUATE SCHOOL ACTIVITIES

#### 1.1 **Professional Development of Graduate Students: Preparing Future Leaders.** PFL

consists of four programs. *Preparing the Professoriate:* The Graduate School organized 10 workshops for PTP fellows and mentors, with a total attendance of 183. Eighteen PTP fellows completed the program. *Professional Development Seminars:* We managed 16 seminars, with a total 499 participants. Three members of the Graduate School's Board of Advisers led seminars, including the FMI Business Development Series, and we worked with CSLEPS to deliver the highly successful four-hour workshop "Enhancing your Leadership by Understanding your Personality Preferences." *Responsible Conduct of Research:* PFL organized 5 RCR seminars with 151 in attendance. *Certificate of Accomplishment in Teaching:* We designed and facilitated 36 workshops offered in person, online, and in hybrid formats with a total of 582 participants.

#### 1.2 **Professional Science Master's (PSM) Degree Programs.** The Graduate School has taken the lead in the development of PSM programs at both the UNC system and NC State levels. With the aid of an Alfred P. Sloan Foundation grant, we have 8 operational programs, 2 at NC State, and have supported planning for 15 programs across the system, 7 at NC State and feasibility studies for 8 more. To publicize the UNC PSM initiative, we produced a Web site, a newsletter and a pilot version of a "Quick Guide to Start a PSM Program." We obtained a grant to organize a workshop for people in UNC universities interested in planning PSM programs.

#### 1.3 **Support for Postdoctoral Scholars.** The Graduate School established the Office of Postdoctoral Scholars and hired a director. To provide for governance, we formed a Postdoc Steering Committee, which wrote the bylaws for the NC State University Postdoctoral

Association, and created the OPA Faculty Advisory Group. We organized 13 professional development programs for postdocs with overall attendance of 219, developed an OPA Web site and postdoc listserv, and developed three online Mediasite career development workshops on the job interview, writing a research statement, and writing a cover letter.

**1.4 New Graduate Programs.** The Graduate School managed the approval process for **3 new doctoral programs**: Sociolinguistics; Adult, Higher and Human Resources Education; and Hispanic Studies; for **19 additional degrees to 12 existing programs**: Integrated Manufacturing Systems Engineering; Family Life and Youth Development; Environmental Engineering; Science Education, Instructional Technology; Geospatial Information Science and Technology; Industrial Engineering; Parks, Recreation & Tourism Management; Computer Networking; Environmental Assessment; Horticultural Science; Nutrition; Food and Feed Sciences; and **5 graduate certificates**: Counselor Education, Consumer Textiles Product Design & Development, Technology Entrepreneurship & Commercialization, Renewable Electric Energy Systems, Feed Science. Approval was also given to dual-degree programs between NC State and Campbell University (MPA and Juris Doctor) and Management Innovation and Entrepreneurship and Masters of Business Administration. We also received and approved over 200 changes in graduate course through Course Action Forms.

**1.5 Partnerships with International Entities.** The Graduate School is managing the admissions process for our existing international partnerships including: 3+X program (Zeijiang University, China); 3+2 agreement in Forestry (Nanjing Forestry University); 3+X agreement in Industrial Systems Engineering (National Chiao Tung University, Taiwan); Global Innovation Management (Universite Paul Cezanne, France); International Studies (University of Surrey,

England) and; doctoral dual degrees in Genomics (Seoul National University) and Industrial Systems Engineering (National Chiao Tung University, Taiwan).

With the assistance of the Graduate School, the university reached a agreements to launch the following: a 3-plus-x program with Donghua University in China and dual doctoral programs in Crop Science (Universidade Federal de Viscosa, Brazil) and Industrial System Engineering (Rostock University, Germany); and to renew the relationship between Forestry and Environmental Resources and the International Master's program of the Peace Corps. The Graduate School also recruited in Thailand for the Royal Thai Scholars program, generating applications for fully funded students to 15 programs.

**1.6 Growing Enrollment.** The Graduate School managed the dispersal of 25 different fellowship/grant programs for 292 graduate students representing virtually every department on campus, including 82 Provost Fellowships and 23 University Graduate Research Fellowships. We also awarded \$56,000 in matching funds to 31 graduate programs to enhance their recruiting efforts. We visited over 30 recruiting fairs. To increase visibility of our recruiting efforts and better leverage resources, we developed a Web site to publicize recruiting opportunities.

**1.7 Graduate Program Evaluation.** The Graduate School conducted external reviews of Poultry Science and Nuclear Engineering and held post-review meetings for Math, Science, and Technology Education; Mathematics and Applied Mathematics; Operations Research; Nuclear Engineering; History and Public History. For outcomes assessment, 15 of the 16 programs due in fall 2008 submitted their biennial reports; so far, over 85% of the first 3 cohorts have submitted reports. We successfully piloted the Graduate Student Online Academic Reporting System. We also managed the university's response to UNC-GA's low-productivity report. We also produced the first Annual Outcomes Assessment Report of the Graduate School (required by SACS).

1.8 **Publicizing the Graduate School.** The Graduate School designed and produced the first Annual Fact Sheet and Annual Report on Graduate Education for the purpose of highlighting the role of the Graduate School.

1.9 **Improved Interface with Graduate Programs.** The Graduate School (a) revised the forms and the forms distribution page to enhance usage, (b) drafted and obtained approval for a policy for conducting remote oral exams, (c) identified a number of inconsistencies in the Handbook that needed to be addressed either editorially or via Administrative Board of the Graduate School, and (d) drafted a proposal for expanding the acceptance matrix for students with undergrad GPAs less than 3.0.

1.10 **Operations and Fiscal Affairs.** The Graduate School implemented social networking sites for engaging past and future students; provided enhanced Web services for deans and staff to update their own Web sites; improved recruiting and admissions software; played major leadership, programming, testing, and training roles in the implementation of the Student Information System; made significant progress in integrating SIS and GSOARS; upgraded the RightNow frequently-asked-questions system; provided data for various reports produced by the Graduate School; and continued to support Graduate School functions such as the research ethics online community, Preparing Future Leaders, and the Electronic Thesis and Dissertation system.

2.0 COMPACT PLAN: MAJOR INITIATIVES

<i>New Funding Requested 2008/09</i>	<i>New Funding Received</i>
<p><b>Program Evaluation</b> 25,000 Stipends and travel for program reviewers</p>	55,000 support for salaries and operating budget for program review
<p><b>Graduate Enrollment</b> 60,000 Recruiting coordinator 32,000 International travel (VC/RGS)</p>	31,000 (VC/RGS) matching funds for recruiting proposals
<p><b>Professional Development</b> 24,000 GRA for Professional Development</p>	76,952 research ethics and professional development

10,000 Web site development 10,000 Honoraria and travel for invited speakers 20,000 Preparing the Professoriate 20,000 Graduate Student Travel Fund	
<b>Renovation of Building</b> 500,000 Renovation of Winslow Hall	Because the Graduate School no longer plans to move into Winslow, no funds were applied to its renovation.

### 3.0 DIVERSITY: INITIATIVES AND PROGRESS

3.1 **NSF AGEP.** The Graduate School continued to manage the AGEP program: (a) 8 students in the Academic Year Research Experience, (b) 22 in the Summer Undergraduate Research Experience, (c) 20 in the BRIDGE program, (d) 10 (3 doctoral and 7 master's) were graduated from NC State, (e) 14 (12 doctoral and 2 master's) enrolled as new students at NC State 2008 Undergraduate and Graduate Student Research Programs. We continued to recruit at multiple institutions across Puerto Rico resulting in 8 Puerto Rican students currently enrolled in graduate school at NC State and 6 others who are currently AGEP SRE participants.

3.2 **The North Carolina Alliance to Create Opportunity Through Education.** OPT-ED, also funded by AGEP, had 1000 participants from 10 states: 30 Colleges/Universities, 70 High Schools, 20 Middle Schools; 34 Recruiters. There were 18 targeted professional development workshops and 130 research presentations.

3.3 **NIH Initiative for Maximizing Student Diversity (IMSD).** Fifteen undergraduate and 5 graduate researchers were appointed for this new initiative. During this year we (a) recruited and selected five additional faculty mentors to work with IMSD students, (b) hired a postdoc to teach a research ethics course, (c) organized and facilitated research lab visits for IMSD students to help with the selection process of identifying a faculty mentor and research lab, (d) facilitated biomedical and behavioral science seminars and professional development workshops for IMSD

undergraduate students, and (e) created IMSD Web site and brochure to help promote the program and recruit students.

**3.4 Other Support for Recruiting and Retaining Minority Students.** We have sustained our collaboration with Duke and UNC-Chapel Hill to facilitate visits to our institutions by HBCU students from the Atlanta area and Tuskegee University. Also, 47 students from 28 institutions in 15 states and Puerto Rico participated in Visit NC State Day. We integrated our diversity efforts into numerous grant proposals, making them more competitive.

#### 4.0 FUND-RAISING

This year, the Graduate School was officially recognized as a part of the university's Annual Fund program. In a strategic shift of emphasis designed to increase the pool of prospective donors to the Graduate School, the role Board of Advisors moved from governance to "friendmaking." In conjunction with this shift, the Graduate School Tour program was created as way to engage board members in hosting friends for tours of research facilities. The first tour was in April 2009, yielding 3 major gift prospects. Tours are planned throughout 2009. Eighty-five percent of board members participated in Graduate School's Annual Fund effort, the greatest participation since 1995.

#### 5.0 ADMINISTRATION: STAFF CHANGES AND ACHIEVEMENTS

**5.1 Staff Changes.** Duane Larick became Dean of the Graduate School, replacing Terri Lomax, who was appointed Vice Chancellor of Research and Graduate Studies. Prema Arasu, former Interim Assistant Dean for Student Affairs, was replaced by Dan Willits (1/2-time). George Hodge (1/2-time) is now Interim Assistant Dean for Program Development. This past year, the Office of Postdoctoral Affairs (OPA) was established and Rhonda Sutton was hired as

Director. Barbi Honeycutt transferred from the Faculty Center for Teaching and Learning, bringing the Certificate for Accomplishment in Teaching program to the Graduate School.

5.2 **Assistant Dean Lisbeth Borbye** published *Industry Immersion Learning* (Wiley-Blackwell) and has attended and/or led a variety of workshops and meetings related to PSMs, including the CGS summer and winter conferences and the Academy for Business Education.

5.3 **Associate Dean Michael Carter** received the 2008 National Council of Teachers of English Award for Best Article on Pedagogy or Curriculum in Technical or Scientific Communication and had one article and two book chapters accepted for publication. He was an invited participant and panel leader in the NSF-sponsored Chautauqua, “Teaching Communication Skills in the Software Engineering Curriculum: A Forum for Professionals and Educators” at Miami University.

5.4 **Interim Assistant Dean George Hodge** published a paper in a conference proceedings and presented a keynote speech at the 86th Textile Institute World Conference. He taught 1 graduate and 4 undergraduate courses. He attended professional workshops and conferences.

5.5 **Dean Duane Larick** presented papers and workshops at various venues including the Council of Graduate School’s (CGS) New Deans Institute in Vail, CO and the CGS annual meeting in Washington, DC. He was elected a *Fellow* of the Institute of Food Technologists.

5.6 **Assistant Dean Rick Liston** published the results of a collaborative research project with colleagues from Iowa State University and the National Association of Graduate Admissions Professionals (NAGAP): “Technology and its Impact on the Profession: Trends, Realities and Perceptions,” NAGAP *Perspectives* news magazine, spring 2009.

5.7 **Associate Dean Rebeca Ruffy** presented papers and workshops at various venues, including the Third Forum of the Center for the Integration of Research, Teaching and Learning

(CIRTL), the University of Wisconsin; Canadian Association of Graduate Studies, Edmonton, Alberta; and the Kiwanis Club of Raleigh.

5.8 **Assistant Dean David Shafer** has continued to serve as PI for the \$10 million AGEP/OPT-ED Program and as co-PI for \$2.1 million grant from NIH–Initiative for Maximizing Student Diversity. He is chair of the national Phi Kappa Phi Love of Learning Award Selections Committee (630 applications in 2008). He was invited to give presentations at a variety of venues, including the UNC Center for School Leadership Development, Meredith College, U.S. Department of Education GAANN Technical Assistance Workshop, and CGS.

5.9 **Interim Assistant Dean Dan Willits** published 3 papers with one in press. He taught 1 undergraduate and 2 graduate courses. As DE coordinator for BAE, he submitted a record budget request of \$205,000 for DE courses to be taught in 09/10.

#### 6.0 RECOMMENDATIONS AND CONCERNS FOR THE FUTURE

6.1 **Funding for Graduate Education** – There are four primary areas of funding concern including: stipends, expansion of the GSSP, funding for our “plus” programs and development of new graduate programs. The Graduate School will continue to provide leadership in the development of interdisciplinary training grants, creative mechanism to increase funding for the GSSP and will continue to expand our development initiatives taking full advantage of the groundwork laid with the Advisory Board. We must continue to make fellowships a primary focus of the Development Office!

6.2 **Graduate Enrollment - Improving Graduate Student Recruiting and Increasing Diversity** – Our goal needs to be to continue to be to grow our graduate programs, especially our doctoral programs, in alignment with our enrollment plan. The Graduate School can help support enrollment growth in general by providing leadership for the growth of the GSSP and



continuing efforts like the website development, recruiting proposals, recruiting materials, etc. Additionally, we will continue our efforts to help insure a diverse graduate student population.

**6.3 Enhancing Graduate Student Professional Development, Administrative Services and Improving Efficiency in the Graduate School.** Given the current budget situation, we must focus on providing the graduate community enhanced services, performed as efficiently as possible. Examples of administrative enhancements/efficiencies include our continued educational efforts related to PeopleSoft Student Information System and development of an expedited transcript handling service. At the same time, we must find a way to continue our focus on those programs that the Graduate School is uniquely positioned to provide including the Preparing Future Leaders program, development of Professional Science Masters and program review/quality improvement. These are the programs that will enhance the quality of graduate education at NC State and thus continue to improve our national image as a leader in graduate education.

### **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), support for postdoctoral scholars (1.3), the various new degree programs (1.4), partnerships with international entities (1.5), 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 (1.4), partnerships with international universities (1.5), evaluation of graduate programs (1.7), improved interface with graduate programs (1.9).

**Improving health and well-being:** approved degree programs and certificates: Family Life and Youth Development; Parks, Recreation, and Tourism Management; Nutrition; Food and Feed Sciences; Feed Science (1.4).

**Fueling economic development:** the Professional Development Seminar series (1.1), the Professional Science Master's degrees (1.2), new programs approved (1.4), partnerships with international universities (1.5), 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:** approved degree programs and certificates: Environmental Engineering, Environmental Assessment, and Renewable Electric Energy Systems (1.4).