

Annual Report of the Graduate School 2011-2012

1.0 CHANGES IN SERVICE ENVIRONMENT

1.1 The Graduate School has set into place changes designed to make the GSSP economically viable. The issue for the upcoming year is to implement those changes and to monitor their effectiveness in achieving the goal.

1.2 During the past year, the Graduate School invested in an essentially paperless system of student files, a positive change in our service environment. The next challenge is to create the IT infrastructure that allows the university community to take full advantage of the system.

1.3 A significant change in our service environment is the shift to a more centralized planning procedure for new academic programs. The role of the Graduate School will change from simply facilitating the development and approval process to participating in establishing university priorities for proposed programs.

1.4 The upcoming SACS reaccreditation will require that the Graduate School take on an important leadership role in preparing compliance reports.

2.0 GRADUATE SCHOOL INITIATIVES

2.1 **Professional Development of Graduate Students and Postdocs: Preparing Future Leaders (PFL).** PFL piloted a certificate for participation in all three PFL themes, career skills, teaching and mentoring, and responsible conduct of research. PFL also offered 139 events, workshops and seminars with a total attendance of 3,044: 2,567 graduate students, 432 postdoctoral scholars, and 45 other participants. Twelve graduate students earned the new PFL Season Pass, 21 completed the Preparing the Professoriate program, 67 earned the Certificate of Accomplishment in Teaching, 7 completed the Mentoring and Teaching Practicum, 22 completed the Graduate Leadership Development Series, and 2 earned the Certificate in Career

Development. PFL also offered new on-demand events in a variety of formats to better reach our audience, offerings reached at least 3,309 participants and perhaps as many as 3,539.

2.2 Professional Science Master's (PSM) Degree Programs. The Graduate School established 4 new PSM programs, 3 at NC State and 1 at UNC Charlotte, while an additional 2 programs at NC State have been developed and are ready for final approval by NC State's Administrative Board. We have led monthly meetings with the NC State PSM Council, the UNC system-wide PSM Operations Group, and the national System-Wide, Statewide & Regional PSM Operations Group with members from 10-15 states. Some milestones for the NC State PSM Council were the launch of several professional skills courses, an internship pilot program with the Small Business Technology and Development Center and with RTI International, and the resolution of the future financial climate for several of the PSM programs. We provided 12 mini grants for development of new PSM programs in the UNC System and launched the electronic mentoring program for the entire UNC System.

2.3 Support for Postdoctoral Scholars. *The Scientist* has included NC State as one of the top 30 universities for postdocs, noting especially family and personal life and equity. NC State moved from number 36 last year to number 30. The first Postdoc Research Symposium is scheduled for June 2012, with postdocs presenting research posters.

2.4 Program and Course Development and Approval. The Graduate School started the approval process for 5 programs: Elementary Education (MS, MR), New Literacies and Global Learning (DE concentration), Technology Education (DE: Med and MS); and 1 graduate certificate: Elementary Mathematics Education. We completed implementation of 4 programs: Biomanufacturing (MS, MR), Electric Power Systems Engineering (MR), Climate Change and Society (MR), and 2 graduate certificates: City Design and Energy, and Technology in

Architecture. To enhance efficiency, we participated with other campus units to design and develop an electronic system for document tracking and storage for new graduate programs and purchased a new system for course and program review and approval. We also reviewed the graduate faculty status for all course sections in preparation for the upcoming SACS reaccreditation.

2.5 New Academic Partnerships. The Graduate School approved agreements for Cooperative Education Training in Veterinary Epidemiology with UNC-Chapel Hill, the dual-degree Master of Global innovation and Management with a concentration in Global Luxury Management with SKEMA Business School, and the FREEDM Systems Center Cooperative Agreement for Distance Access of Courses.

2.6 Growing Enrollment. The Graduate School processed about 14,300 applications, an increase of nearly 4% over the previous year. Graduate enrollment has grown over 5% from the previous year. In addition, during 2010-11, we managed the dispersal process of approximately \$4 million in 26 different fellowship/grant programs for 417 graduate students, including 101 University Graduate Fellowships. Recruiting grants of a total of \$51,636 were awarded to 38 graduate programs. Graduate School personnel (and others) attended 29 recruiting fairs/conference, including recruitment at institutions in Puerto Rico.

2.7 Graduate Program Evaluation. The Graduate School managed the external reviews of 8 programs and conducted post-review meetings for 11 programs. Outcomes assessment of graduate programs continued, with 26 programs submitting biennial reports.

2.8 Publicizing Graduate Education. The Graduate School participated in the third annual Graduate Education Week on March 18-24, including the annual student research symposium, seminars and workshops, the “Outstanding Graduate Teaching Assistant” awards celebration, a

service project for Habitat for Humanity, and recreational opportunities. On Graduate Education Day, May 23, selected NC State graduate students joined others from across N.C. to present research posters for state legislators at the legislative building.

2.9 Improved Interface with Graduate Programs. Working with its Administrative Board, the Graduate School: (1) refined the appointment and re-appointment of Graduate School Representatives, (2) simplified full-time rules, (3) eliminated the 9-hour cap on assistantship student registration; (4) revised a grievance regulation for graduate students, and (5) implemented a parental leave policy for graduate students. Assistance to individual programs included: developing a process to minimize PhD attrition in the psychology program by allowing final exams given before internships to be given a conditional pass, (2) minimizing the number of Engineering OnLine students reaching graduation with nearly all of the hours taken in PBS, (3) moving a large number of regulations to rules in the PRR system.

2.10 Operations and Fiscal Affairs. The Integrated Support Service Center (ISSC) associated with the Graduate School has provided services to the university community. For personnel support and human services, the ISSC has played a lead role in facilitating the transition of graduate fellowship stipend payments out of the Human Resource System and into the Financial Aid and has overseen changes in the administration of postdoctoral scholar employment. For admissions and records, it has moved to an essentially paperless office, digitally automated the former paper patent agreement required for all graduate students, and developed a new on-line form for managing student academic program and plan changes. For the GSSP, it has innovated new ways to control cost and better manage shrinking resources and implemented new health insurance requirements by overseeing the move to hard-wavier insurance requirements. For information technology support services, the ISSC redesigned websites for various units,

developed a new system to monitor grant sub-recipients, implemented the new Shibboleth security system, and integrated the GradWatch student system into the graduate admissions system. For accounting and budget management services, it rolled out a major upgrade to the ORIED Research Commitment Tracking System.

3.0 DIVERSITY: INITIATIVES AND PROGRESS

3.1 **Visitation Programs:** Forty-four students from 22 colleges and universities from across the country participated in “Visit NC State Day.” Formerly funded through AGEP, this program has now been institutionalized. Also, the Graduate School, in collaboration with the Office of Diversity and Inclusion and UNCF, continued to implement Cultivating High Achieving Motivated Professionals and Scholars (CHAMPS), which sponsored 24 students from Benedict, Claflin, Johnson C. Smith, St. Augustine’s, and Xavier to visit NC State to learn about graduate educational opportunities. UNCF provided NC State with a matching grant of \$17,000 to help cover the costs of the CHAMPS program.

3.2 **NSF AGEP.** A no-cost extension was received for the \$10 million NSF Alliances for Graduate Education and the Professoriate program through February 28, 2013.

3.3 **The North Carolina Alliance to Create Opportunity Through Education.** This year’s OPT-ED Alliance day had 708 participants from 80 educational institutions.

3.4 **NIH Initiative for Maximizing Student Diversity.** NIH renewed the NC State IMSD program for \$3.6 million through 2017. This year, the first IMSD graduate student was graduated and the program retained all 33 students in the program.

3.5 **Other Support for Recruiting and Retaining Minority Students.** We developed a new MOU with Spelman College, Fayetteville State University, Tennessee State University, and University of Puerto Rico-Cayey with the aim of recruiting outstanding graduate students.

Graduate Student Crosstalks, opportunities for doctoral students from underrepresented groups from area institutions to network and hear about topics related to graduate education, was attended by about 50 students. The topic was “Tips on Grant Writing.”

4.0 FUND-RAISING

The Graduate School is partnering with University Advancement and other campus units in instituting the Chancellor’s Cabinet on Innovation, which aims to transform graduate education to enhance the university’s role as an economic engine for the state. In addition, the Graduate School has submitted a campaign case statement for the upcoming development campaign that focuses on a Center for Graduate Student Success and fellowships for graduate students.

5.0 ADMINISTRATION: STAFF CHANGES AND ACHIEVEMENTS

5.1 **Staff Changes.** Dean Larick was appointed Senior Vice Provost for Strategic Initiatives and Dean of the Graduate School and Associate Dean Rebeca Rufty became Senior Associate Dean. Carolyn Krystoff was replaced by Crystal Wilson as residency officer.

5.2 **Assistant Dean Lisbeth Borbye** published an article with colleague David Edelman. She gave presentations about the automation of online mentoring, academic planning, professional skills assessment, and program management at 1 national meeting; sustainable innovation for Novozymes; PSM programs and new online tools; and the E-mentoring system.

5.3 **Associate Dean Michael Carter** published three co-authored articles, presented four scholarly conference papers, and gave seven invited workshops, including two at King Fahd University for Petroleum and Minerals. He has continued serving as co-PI on two NSF grants.

5.4 **Interim Assistant Dean George Hodge** taught 4 courses, mentored 1 PhD student and 2 MS students, and advised 28 undergraduates. He was appointed the Program Chair for the

Textile Technology undergraduate program and serves as the coordinator for the Graduate Certificate in Textile Supply Chain Management. He co-authored of three research papers.

5.5 **Dean Duane Larick** was appointed Senior Vice Provost for Strategic Initiatives in October 2011. He presented workshops at both the Council of Graduate School and Conference of Southern Graduate Schools (CSGS) meetings. He currently serves on the Finance Committee for the Institute of Food Technologists and as Secretary for CSGS. He continues serving as Co-PI on multiple training grants funded by the US Department of Education and the US Department of Agriculture.

5.6 **Associate Dean Rebeca Ruffy** gave 6 invited presentations and workshops on mentoring and responsible conduct of research. She managed the Dissertation Completion Grant in the fall and spring and served as co-PI in writing the grant proposal Doctoral Initiative on Minority Attrition and Completion, which was awarded for 2012-2013.

5.7 **Assistant Dean David Shafer** served on a National Phi Kappa Phi committee, as Chair of the NC State Phi Kappa Phi Fellowship Selections Committee, on the Executive Committee as Past President, and chair of the Graduate School Fellowships and Awards Committee. He was invited to speak at a number of events at NC State and Meredith.

5.8 **Assistant Dean Dan Willits** taught BAE 402, Transport Phenomena, and 4 sections of Research Methods for graduate students. He also served as DGP of BAE.

6.0 RECOMMENDATIONS AND CONCERNS FOR THE FUTURE

6.1 **Center for Graduate Student Success.** We recommend support for this center, which would represent the university's priority for the success of graduate students. It would serve as a resource, referral, and information center, offering programs and workshops, meeting and study

space, tutoring for writing and oral presentations, and an expanded Preparing Future Leaders. The Center is one of the top priorities in the Graduate School's 2012-13 strategic investments.

6.2 Improvement of mentoring. Good mentoring is critical to the success of students, especially doctoral. We recommend that the university make improvement of mentoring a high priority, with workshops, evaluation of mentors, and clear expectations for mentors. This item is one of the top priorities in the Graduate School's 2012-13 strategic investments.

6.3 Inadequate financial support for strategically growing graduate enrollment. The university has a goal to grow graduate enrollment, increasing the percentage of doctoral to master's students. There are two concerns in meeting these goals: (1) the number stipends for doctoral students and (2) the uncertainty in our ability to sustain GSSP support.

6.4 Inability to attract the best graduate students. An acute lack of fellowships has made NC State unable to compete with its peers for top graduate students. The Graduate School has proposed fellowships as a priority for the upcoming development campaign. A concern is to position the Graduate School in that campaign so that fellowships become a university priority.

6.5 New procedures for academic planning. The more centralized approach to academic planning and priorities is a welcome improvement to the relatively haphazard approach of the past. A concern is that we must create a process that is fair, transparent, and open, one that both encourages the creativity of faculty and establishes realistic expectations for university priorities.

6.6 New space for the Graduate School. The Graduate School plans to move to new offices in the Textiles complex. Our main concern in that move is that it not be an economic hardship on us.

Additional Material

CONTRIBUTIONS TO ACHIEVING THE 5 STRATEGIC GOALS

1. Enhancing the success of our students through educational innovation:

Innovative professional development through Preparing Future Leaders (2.1); extending innovative opportunities through the development of Professional Science Master's degrees (2.2); administering funding to students through fellowships (2.6); broadening opportunities through diversity initiatives (3.0)

2. Enhancing scholarship and research by investing in faculty and infrastructure:

Training in the responsible conduct of research (2.1); support for postdoctoral education and professional development (2.3); managing fellowship funding to doctoral students; broadening research opportunities through diversity initiatives (3.0)

3. Enhancing interdisciplinary scholarship to address the grand challenges of society:

Increasing opportunities for interdisciplinarity through the development of Professional Science Master's degrees (2.2)

4. Enhancing organizational excellence by creating a culture of constant improvement:

Overseeing the approval of new graduate programs (2.4); providing administrative improvements through the development of policies for graduate education (2.9); improving efficiencies in services to the graduate community (2.10)

5. Enhancing local and global engagement through focused strategic partnerships:

Extending engagement to industries through Professional Science Master's degrees (2.2); expanding opportunities through diversity initiatives (3.0)