

University of North Carolina at Chapel Hill Summary
National Research Council (NRC):
A Data-Based Assessment of Research Doctorate Programs in the United States

- **The NRC assessed more than 5,000 doctoral programs in 62 fields. The goal was to measure the quality and characteristics of doctoral programs.**
 - The NRC wanted to make the doctorate ratings more transparent, quantitative and valuable to prospective students, as well as faculty and administrators.
- **In 2006 we submitted information about 53 programs evenly split among the disciplines, including the arts and humanities, life sciences, physical sciences, mathematics and engineering, and the social and behavioral sciences.**
 - Some things have changed here and elsewhere since these data were collected. NRC's intent is to help departments and faculty take an objective look at the snapshot in time the new report provides.
- **Overall, the NRC results affirm that Carolina is one of the nation's great research universities. The quality of our doctoral programs contributes to the success of our undergraduate program and our overall excellence.**
- **The NRC study is academically rigorous and highly complex. The resulting NRC rankings are only one outcome and one measure of quality. And they cannot capture the full range of strengths in graduate education.**
 - The real value of this project will come in the following weeks and months as we compare ourselves with peers on specific variables and according to what is important to each graduate program.
 - We can pinpoint where we are strong and where we should consider improvements.
- **The NRC methodology represents years of debate and refinement.**
 - The ratings are specific to each discipline; the NRC surveyed faculty in the programs to find out what each discipline values. For example, English, chemistry and nursing are very different. The criteria used in the ratings reflect those differences.
- **There are five illustrative ranges of rankings – two for the program overall (“R” and “S” rankings) and three dimensional components of programs (faculty research activity, student support and outcomes, and diversity).**
 - These ranges of rankings cover 90 percent of the estimated results for a program.
 - The NRC ranges of rankings are illustrative and **not intended** to produce an ordinal ranking – or anything close to a top 10 list – of programs in a field or discipline.
 - The “S” rankings are survey-based. Faculty who completed surveys rated the importance of 20 key variables to the quality of doctoral programs in their field. The NRC weighted each variable using **explicit data and objective weights** of importance.
 - The “R” rankings are regression-based. Subsets of faculty rated a sample of programs in their field, so there is a **reputational** component to this method. The NRC used

- sophisticated statistical methods to objectively relate these rankings to the same 20 variables used in the “S” rankings and their implicit weights of importance.
- It is impossible to state with certainty how a specific academic area ranked by number; it can only be stated by percentile ranges.
- **Carolina’s programs performed well on balance. Our higher-ranked programs are spread across the disciplines -- we have the sciences, arts and humanities, public health, social sciences, and biomedical programs represented.**
 - This outcome is impressive since we are assessing national standing in all doctoral programs. It shows Carolina values graduate education widely and is not focused on just one specialty area or field.
 - The results also reflect the strong interdisciplinary culture among faculty at Carolina that brings strength to every aspect of the University’s mission: teaching, research, and public service. Almost a quarter of our faculty were considered interdisciplinary on average. Thirteen of our doctoral programs reported over half of their actively-participating faculty were based in other campus units, a true sign of interdisciplinary and novel approaches to research and student training.
 - **Several UNC programs are very highly rated, according to the various methods the NRC used. It is important to remember the NRC reported ranges of rankings, so the outcomes are uncertain by design.**
 - By one overall ranking method (“S”), these programs could fall within the top 10 percent of programs in their field or discipline nationally: **Nutrition; Pharmacology; Religious Studies; Cell and Molecular Physiology; Chemistry; History; Genetics and Molecular Biology; Computer Science; Sociology; Pharmaceutical Sciences; Statistics; Art History; Materials Sciences; and Human Movement Science** (this program is interdisciplinary involving exercise and sport science, physical therapy, biomedical engineering and focuses on human movement, aging, the prevention of injuries).
 - By another overall ranking method (“R”), these programs could fall within the top 10 percent of programs in their field or discipline nationally: **Nutrition; Pharmacology; Religious Studies; Chemistry; History; Genetics and Molecular Biology; Computer Science; Toxicology; Communication Studies; English; Pharmaceutical Sciences; Romance Languages – Spanish; Sociology; Political Science; Epidemiology; Cell and Molecular Physiology; Classics; Human Movement Science; Statistics; and Art History.**
 - For both lists, these academic areas rated are connected with our **Gillings School of Global Public Health, School of Medicine, Eshelman School of Pharmacy, and the College of Arts and Sciences.**
 - **The NRC also provided illustrative ratings on three dimensional categories that capture a subset of the program characteristics.**
 - On the Research Activity rankings, these programs could fall within the top 10 percent of programs in their field or discipline nationally: **Nutrition; Pharmacology; Religious Studies; Chemistry; History; Nursing; Cell and Molecular Physiology;**

- Computer Science; Pharmaceutical Sciences; Sociology; Genetics and Molecular Biology; and Materials Sciences.**
- On the Student Services and Outcomes rankings, these programs could fall within the top 10 percent of programs in their field or discipline nationally: **Human Movement Science; Maternal and Child Health; Public Policy; Communication Studies; Religious Studies; Genetics and Molecular Biology; Political Science; Sociology; Biochemistry and Biophysics; Nutrition; Philosophy; Microbiology and Immunology; Art History; and Journalism and Mass Communication.**
 - On the Diversity rankings, these programs could fall within the top 10 percent of programs in their field or discipline nationally: **Materials Sciences; Maternal and Child Health; Art History; and Neurobiology.**
 - These programs are associated with the previously listed schools and the college, as well as the **School of Journalism and Mass Communication** and the **School of Nursing.**
- **If we broaden our perspective to include the top quartile of graduate programs in their field or discipline, then virtually all of our doctoral programs could fall within the top 25 percent nationally in at least one of the NRC ranking methods.**
 - We could additionally highlight the following programs: **Biology; Psychology; Musicology; Comparative Literature; Germanic Languages and Literatures; Operations Research; Ecology; Environmental Sciences and Engineering; Geography; Biomedical Engineering; Marine Sciences; Mathematics; Health Policy and Management; Biostatistics; Pathology; Economics; Cell and Developmental Biology; Physics and Astronomy; and Health Behavior and Health Education.**
 - These programs are associated with the previously listed schools and the college.
 - **In general, our graduate programs rank favorably compared with their national peers. Among other public universities, Carolina's programs are typically held in very high regard.**
 - **Nonetheless, there is always room for improvement and this incredibly rich data set will provide the information we need to take a strategic approach to improving many of our graduate programs.** There has never been a study of graduate programs done in this way. The yield of information is truly astonishing. It will give us plenty to think about and analyze to make the University even better in the years to come.

Posted: September 28, 2010