

# NRC: A Data-Based Assessment of Research Doctorate Programs *It's Here*

The Graduate School  
Office of Institutional Research  
and Assessment



UNC  
THE GRADUATE SCHOOL

# Package Materials

- Cover pages:
  - Overall Analysis and high level bullets
  - Key Messages
  - Explanation of Excel spreadsheet row
  - Methodology briefly
  - Public Communication points
- Excel spreadsheet row of your program's data
- Excel printout of your field's ranges of rankings
- NRC FAQ
- NRC Report Brief



# What is the NRC Assessment?

- A study to assess the quality and characteristics of research doctorate programs at institutions in the US
  - The last NRC rankings were provided in 1995
  - Methodology used in this study is quite different and more robust
- 220 institutions participating
  - Data for 5,004 PhD granting programs in 62 fields



# Why is it Important?

- Bureau of Labor Statistics estimates that 1/6 of the fastest growing occupations for 2006–2016 require a master's or doctoral degree.
- Speaks to the importance of doctoral education.
- Highlights graduate education community's efforts at continuous improvement.
- Comes at a time of increased scrutiny of higher education.
- Serves as a benchmark for future assessments.



# UNC-CH Participation

- UNC-Chapel Hill has **53 programs** participating in the NRC study
  - Programs fairly evenly split among the disciplines
    - arts and humanities, life sciences, physical sciences, mathematics and engineering, and the social and behavioral sciences
- Base year for analysis/reporting was AY 2005-06
  - The ratings and data will be 'dated'



# Data Collection

- Four questionnaires used to collect data
  - Institutional Questionnaire: completed by OIRA and GS
  - Program Questionnaire: response rate = 100%
  - Faculty Questionnaire: 1,352 Core and New faculty were invited to participate in the faculty surveys
    - Responses generated the pool for the secondary survey on discipline ratings and priorities, grants data
    - Response rate 82%
  - Student Questionnaire: 143 advanced doctoral students participated in the student surveys
    - Four fields: English, Economics, Physics, and Neurobiology
    - Data not included in the ratings



# Timeline

- Methodology guide v.1 released in July, 2009
- OIRA reviewed the guide as well as our campus data to generate basic analyses
  - Early July each participating doctoral program received a report with their data and some AAU peer comparison data
- Monday, September 20 – embargoed release
- Tuesday, September 28 at 1pm ET – final report, spreadsheets, analytic tables, and methodology guide released; national briefing and teleconference



# Results

- The NRC results provide for each program two overall ranges of rankings, as well as ranges of rankings for sub-categories for the areas of Research Activity of Program Faculty, Student Support and Outcomes, and Diversity of the Academic Environment.
- Programs can identify variables that make the largest contribution to the overall rating or dimension and compare their data to that of similar programs.





# Results – Ranges of Rankings

## Two Approaches

- Asked a sample of faculty in each field how they would rate a sample of programs. Related those ratings to 20 program characteristics through a regression (R-weights).
- Asked faculty what they thought was important to the quality of a doctoral program and developed weights (S-weights).
- Calculated ratings using each approach for all programs in a field, based on program values for the 20 characteristics.
- The rankings are *illustrative*.



# A Sample Comparison

## R and S-based Rankings for 5 Programs in a Field

Institution Name	R5	R95	S5	S95
Institution A	4	17	10	29
Institution B	4	27	3	10
Institution C	13	37	8	23
Institution D	31	79	31	86
Institution E	52	102	91	150



# Dimensional Rankings for the Same Programs

Institution Name	RA5	RA95	SS5	SS95	D5	D95
Institution A	7	29	9	66	81	131
Institution B	3	12	31	110	97	147
Institution C	9	39	6	42	101	151
Institution D	21	85	21	93	42	97
Institution E	53	124	53	133	77	128



# The Twenty Key Variables used in the Rankings

- Publications per allocated faculty
- Citations (exc. Humanities) per publication
- Percent faculty with grants
- Awards per faculty
- Percent 1<sup>st</sup> Yr. Full Support
- Percent Completing in 6 yrs. or less (8 yrs. for humanities)
- Median Time to degree
- Students with Academic Plans
- Collects Outcomes data
- Percent Faculty Minority
- Percent Faculty Female
- Percent Students Minority
- Percent Students Female
- Percent Students International
- *Percent Interdisciplinary*
- *Average GRE-Q*
- *Number of PhDs 2002-2006*
- *Student Workspace*
- *Student Health Insurance*
- *Student Activities*



# Reporting Ranges of Ratings for a Field

- Programs are arranged alphabetically and the range of ratings is given for each.
- Ranges overlap for most programs. This means that there may be a number of programs of roughly the same quality.
- You should identify those similar “in range” programs in discussing the quality of your programs.



# Outcomes

1. The data will help to determine where improvement is needed and which variables to focus on.
2. Identify variables rated most important by faculty in the field. These variables had the greatest effect on the range of ratings for each program.
3. Compare your program with those at other institutions on variables of interest. These values will be available in the online database.



# Outcomes

4. Prospective students may elect to use the public NRC database as one source of information as they investigate graduate programs suited to their academic goals and career aspirations.
5. Campus and state uses, e.g., program review



# Communications and Help

- We want to ensure there is a single message coming from UNC-Chapel Hill
  - The GS and University Relations will take the lead
  - We encourage all programs to direct people to our website for background information
- The campus NRC website will be updated frequently:

[gradschool.unc.edu/policies/nrc/](https://gradschool.unc.edu/policies/nrc/)





# Next Steps

- The Graduate School and Institutional Research will be resources for you in the coming weeks and months as we interpret the data and results.
- Customized peer comparisons on specific variables of interest.
- Contact us with any questions. We are here to help!

