

# NRC Assessment—What Is It?

- A study of the quality and characteristics of doctoral programs in the U.S.
- Third in a series of efforts to help universities improve the quality of their doctoral programs through:
  - Benchmarking
  - Providing potential students with accessible, readily available information on doctoral programs nationwide
  - Enhancing the nation's overall research capacity



# NRC Assessment—What's New?

- In addition to the previously gathered data of size, university resources, program faculty productivity, and student characteristics, this assessment includes data relating to:
  - Ph.D. student financing
  - Teaching
  - Other aspects of student resources
  - Doctoral programs in over 60 areas of study
- Previous studies included ranking of programs; this study utilizes new approaches to ratings and rankings.



# Methodology used to Assess Research Doctorate Programs

Three components to the NRC Assessment:

- Data for more than 5,000 programs
- Ranges of rankings for programs within each discipline based on twenty program characteristics
- Ranges of rankings based separately on three dimensions of educational quality



# Methodology (cont'd)

## Calculating Ranges of Rankings from the data:

- Two approaches were taken and then combined to calculate ranges of rankings. One approach asked about the importance of program characteristics independent of any particular program. The second approach asked about the quality of specific programs without specifying particular characteristics. The results of the two approaches were then combined to form one set of weights.



# Methodology (cont'd)

- In the first approach, doctoral faculty members were asked directly what they considered to be the most important characteristics that contributed to program quality. The faculty responses, calculated separately for each field, constituted a first set of weights.
- In the second approach, samples of programs were rated on their perceived quality by samples of faculty separately for each field. From a statistical analysis of these program quality ratings weights were derived for each of the characteristics. These weights constituted a second set of weights for each field. The weights calculated by each method were similar but not identical.
- These two sources of “importance weights” were then combined to give a final weight for each of the 20 variables.



# Methodology (cont'd)

- Uncertainty was allowed for by taking 500 samples of raters, since rater opinions may vary, and by allowing for the variance of each characteristic within a range. The ratings were then arranged from highest to lowest (that is, ranked) for all the programs in a field. For each program, the middle quartiles of rankings were then calculated. This calculation results in a **Range of Rankings** for each program rather than a single rank order. Similarly derived ranges of rankings are calculated for each of the supplementary measures.



# NRC Assessment—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 ed.
- Serves as a benchmark for future assessments



# What to Look For in the Final Report on the NRC Assessment of Research Doctorate Programs

The final report will be accompanied by an on-line database.

Each university will receive an individualized set of analyses for:

- ***Comparison of programs:*** Look for the range of rankings for all four measures for programs in each field. See the ranges of rankings for the programs at your institution.
- ***Understanding the Range of Rankings.*** What are the most important variables in each field? Where does a program stand on those variables compared to other programs in the field?
- ***Data Beyond the 20 variables:*** The on-line database will contain a wealth of additional data on student financing, teaching and research training, and offerings for students. These data may be compared across programs.



**More information is available at:**

<http://sites.nationalacademies.org/pga/Resdoc/index.htm>

