NRC Assessment of Research Doctorates
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Q. Who is the NRC?

A> The National Research Council (NRC) functions under the auspices of the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), and the Institute of Medicine (IOM). The NAS, NAE, IOM, and NRC are part of a private, nonprofit institution that provides science, technology and health policy advice under a congressional charter signed by President Abraham Lincoln that was originally granted to the NAS in 1863. Under this charter, the NRC was established in 1916, the NAE in 1964, and the IOM in 1970. The four organizations are collectively referred to as the National Academies.

For more information: http://sites.nationalacademies.org/NRC/index.htm

Q> What is the purpose of this study?

A> About every ten years, the National Research Council (NRC) conducts a study, NRC Assessment of Research Doctorate Programs, to assess the quality and characteristics of doctoral programs in the United States. Similar assessments were published in 1982 and 1995.
The stated purpose of the NRC Assessment of Research Doctorate Programs is to help universities “improve the quality of their doctoral programs through benchmarking; providing potential students and the public with accessible, readily available information on doctoral programs nationwide, and enhancing the nation's overall research capacity.”

**Q> How was the study funded?**

**A>** Financial support for the study has been provided by the National Institutes of Health, the National Science Foundation, the Alfred P. Sloan Foundation, the Andrew W. Mellon Foundation, and approximately 200 participating universities.

**Q> How does this year's NRC study differ from that of previous years?**

**A>** The third assessment differs from previous studies in the amount of data gathered, the number of fields ranked, and the methodology used to assess this information. In previous studies, the NRC gathered information that described doctoral programs – size, university resources, program faculty productivity, and student characteristics. This assessment released in 2010 expands the data collection to include data relating to Ph.D. student financing, workspaces, and other aspects of student resources.

The number of fields included increased from 41 in previous reports to 62 in the 2010 study. At Cornell, 61 of our doctoral fields were ranked, although some NRC fields included more than one Cornell field. For instance, the NRC’s category of plant science included five Cornell fields (horticulture, plant biology, plant breeding, plant pathology, and soil and crop science).

In addition, this study uses a variety of new approaches to the rating and ranking of programs. The report displays broad ranges for program rankings overall and across the dimensions of faculty, student, and program indicators. These ranges will have a 90% confidence interval. This means that for a particular doctoral program there is a 90 percent chance that its rank will fall between the two values. Due to the highly complex methodology, it will not be possible to average across ranks.

**Q> When were the data collected?**

**A>** Data collection for the study began in July 2006.

**Q> How meaningful are the results of this study given the length of time between data collection and release of the results?**

**A>** The report reflects a snapshot in time. The results provide a comprehensive point-in-time analysis of research doctorates. However, programs at Cornell and elsewhere are not stationary so some of the data are no longer current. Additionally, the various ranking schemes are based on sets of
assumptions, which may not be the factors nor weightings that are most pertinent to individuals interested in comparing graduate programs. The Excel data file available from NRC allows individuals to manipulate weightings of different factors to explore those characteristics of most interest.

Q> What is the importance of the NRC report?

A> This latest NRC study speaks to the importance of doctoral education as a key driver in the quality of U.S. higher education. The results of this study come at a time of increased scrutiny of higher education. The data used to prepare the report serve as a benchmark for future assessment efforts here at Cornell University and at other U.S. institutions offering doctoral education. These data are available in the Excel data file on the NRC web site, and ultimately will likely prove more valuable than the ranking-ranges themselves.

Q> How credible is this NRC assessment?

A> This study is an exhaustive examination of U.S. doctoral education and the third such study conducted to date. It carries the imprimatur of the National Academies. Cornell University devoted considerable resources to providing the NRC with data across our fields of study. Several organizations, however, have expressed concerns about the NRC methodology (see for example, http://www.cra.org/resources/crn-archive-view-detail/dangers_of_rankings_with_inaccurate_data/).

Q>Who is on the NRC Committee?

A> The study director is Charlotte Kuh. Previously, she was the director of the Graduate Record Examinations at the Educational Testing Service, and she has taught at the Harvard Graduate School of Education and at Stanford.

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Q> How will this NRC assessment be useful to students, faculty, others?

A. The data revealed in this latest ranking will be available online through the NRC Web site (http://sites.nationalacademies.org/PGA/Resdoc/index.htm) enabling students, potential students, faculty and others to compare program-specific information across a range of interests and institutions. It provides a new level of detail that provides a better gauge with which to compare programs and their elements. The availability of data on 20 characteristics for each graduate field will help us understand the detailed relationships regarding what makes a field effective, and will suggest factors that we can influence to improve the quality of our fields as we move forward. PhD.org, an organization catering to prospective PhD students, will incorporate these data into a program search feature allowing prospective students to search for programs using NRC data.