

In the past decade, the number of PhDs conferred throughout the U.S. in scientific disciplines has risen dramatically, most notably in engineering (47%) and biological sciences (49%).¹ There has also been a marked influx of PhD-level scientists trained overseas coming to the U.S. following receipt of their degrees. These trends have increased the pool of applicants for tenure-track faculty positions substantially. Yet while the number of potential applicants has grown, the number of tenure-track jobs available has remained flat.

Given these changes in the academic job market, it is critical to provide insight into the vast array of choices available to PhD-trained scientists. While there are some data sets available via the National Center for Science and Engineering Statistics that illuminate career options for PhDs, gaps still remain in identifying skills developed by PhDs, occupations they move into, and their level of satisfaction in those occupations.

To address these gaps in data, a new survey instrument was created in 2014-2015 to capture information on recent PhDs in the U.S. job market. The survey included questions about educational background, postdoctoral training (if any), skill development, experiential activities, and career outcomes. The particular questions addressed by this instrument included:

- What skills, if any, are developed organically during graduate and postdoctoral training?
- Are these same skills required for success in particular occupations?
- In what sectors are recent science PhDs currently employed?
- What types of experiences are required for these positions?
- Are PhDs in science satisfied in their work?

The survey was launched in May of 2015 and captured 8,099 usable responses. This seminar will be the first to discuss the data set and illustrate responses to the above research questions. Future research directions will also be discussed.

¹ National Science Foundation. Survey of Earned Doctorates, 2000-2009.