



## Data on Doctoral Scientists and Engineers in Academia

Data on academically employed research doctorate holders are drawn primarily from the Survey of Doctorate Recipients (SDR), a biennial National Science Foundation (NSF) survey of individuals, including those born in foreign countries, who received their research doctorate in an S&E field from a U.S. institution. This survey provides the most comprehensive data available on these individuals. Data are provided on educational background, employment status, occupation, and demographic characteristics. Unless specifically stated, estimates of S&E doctorates come from the SDR. The latest survey is available at <https://www.nsf.gov/statistics/srvydoctoratework/#qs>.

In 2015, the SDR was expanded with a much larger sample to produce better estimates of employment outcomes by the detailed field of degree taxonomy used in the Survey of Earned Doctorates, the SDR's sampling frame. As in prior years, underrepresented populations were oversampled, including women and certain racial and ethnic groups (blacks, Hispanics, and Native Americans or American Indians). As a result, more precise estimates by finer categories of field are available for all U.S.-trained S&E doctorate holders and for subpopulations that historically have been underrepresented in S&E employment. The expanded SDR also provides full representation of foreign-born S&E doctorate holders, especially those who became naturalized citizens, because the sampling frame included all respondents who had earned a degree from a U.S. academic institution since 1960, regardless of their residency in 2015.

Because the SDR covers only U.S.-trained individuals, it substantially undercounts postdoctoral researchers (postdocs), most of whom were trained outside the United States, and provides no estimates of foreign-trained doctoral holders in other positions in academia, such as full-time faculty. Two other surveys referenced in this section supplement SDR data to provide coverage of the foreign-trained doctorate recipients. To obtain more complete counts of postdocs, this section supplements SDR's estimated counts with counts provided in the Survey of Graduate Students and Postdoctorates in Science and Engineering, an annual survey cosponsored by NSF and the National Institutes of Health. The latest survey is available at <https://nsf.gov/statistics/srvygradpostdoc/>.

To provide more data on the role of foreign-trained doctorate holders in academic R&D, this section draws from NSF's National Survey of College Graduates (NSCG). Although the NSCG provides less detail on academic employment, it provides estimates of the foreign-trained component. See the sidebar Foreign-Trained Academic S&E Doctoral Workforce for data on foreign-trained individuals' presence in academic employment. The latest NSCG surveys are available at <https://nsf.gov/statistics/srvygrads/>.