NSF Graduate Research Fellowships
Geoscience research and institutional trends since 2000

Trends across disciplines

NSF graduate research fellowship awards in the geosciences have consistently comprised less than 10% of all fellowship awards. The American Recovery and Reinvestment Act of 2009 boosted the overall number of graduate research fellowships across all disciplines and since 2010, just over 2,000 fellowships have been awarded per year. The bulk of graduate research fellowships have consistently been awarded in engineering and life sciences research.

Bioengineering and biomedical engineering, chemical engineering and mechanical engineering have comprised 47% to 57% of graduate research fellowships awarded to those pursuing engineering degrees. Within the life sciences, approximately one-fifth of fellowships have been awarded to those pursuing ecological research and an increasing percentage of fellowships (11% in 2000 to 14% in 2019) have been awarded to those pursuing neuroscience research.

Trends within the geosciences

As with other disciplines, the American Recovery Act of 2009 boosted the overall number of graduate research fellowships awarded in the geosciences. Between 2000 and 2008, 26 to 36 fellowships were awarded each year, and after 2008, between 78 and 148 were awarded annually.

Within the geosciences, the percentage of awards to fellows pursuing research in atmospheric science, geology and geochemistry have remained relatively steady since 2000. The percentage of awards to fellows pursuing research in paleontology declined from 22% in 2011 to 6% in 2019, as well as in geophysics from 13% in 2009 to 8% in 2019. Total awards to fellows pursuing research in oceanography increased from 17% in 2009 to 28% in 2019.
Top institutions of geoscience fellows

Three institutions have remained in the top baccalaureate and graduate institutions of geoscience graduate research fellows before and after 2009: Harvard University, Massachusetts Institute of Technology, and University of California, Berkeley. Before and after 2009, only four institutions have remained in the top baccalaureate institutions of geoscience graduate research fellows: Harvard University, University of California, Berkeley, Massachusetts Institute of Technology, and University of Chicago. In terms of graduate institutions, nine institutions have remained in the top graduate institutions of geoscience graduate research fellows before and after 2009.

Source: AGI Geoscience Workforce Program; data derived from NSF’s Graduate Research Fellowship Award Database