



# Survey of Doctorate Recipients

## Additional Survey of Doctorate Recipients (SDR) Publications and Presentations

### Other NSF Publications:

- [Doctorate Recipients in the Social, Behavioral, and Economic Sciences \(SBE\): 2017 \(2020\)](#)
- [2016 Doctorate Recipients from U.S. Universities \(2018\)](#)
- [The 2015 Survey of Doctorate Recipients Expands Its Population Coverage and Reporting on Field of Study \(2017\)](#)
- [Employment Decisions of U.S. and Foreign Doctoral Graduates: A Comparative Study \(2014\)](#)
- [Unemployment among Doctoral Scientists and Engineers Remained Below the National Average in 2013 \(2014\)](#)
- [Unemployment among Doctoral Scientists and Engineers Increased but Remained Below the National Average \(2014\)](#)
- [2013 Survey of Doctorate Recipients Technical Notes \(2014\)](#)
- [Employment and Educational Characteristics of Scientists and Engineers \(2013\)](#)
- [International Mobility and Employment Characteristics among Recent Recipients of U.S. Doctorates \(2012\)](#)
- [Racial and Ethnic Diversity among U.S.-Educated Science, Engineering, and Health Doctorate Recipients: Methods of Reporting Diversity \(2012\)](#)
- [Academic Institutions of Minority Faculty with Science, Engineering, and Health Doctorates \(2011\)](#)
- [Unemployment among Doctoral Scientists and Engineers Remained Below the National Average in 2008 \(2011\)](#)
- [The End of Mandatory Retirement for Doctoral Scientists and Engineers in Postsecondary Institutions: Retirement Patterns 10 Years Later \(2010\)](#)
- [Characteristics of Doctoral Scientists and Engineers with U.S. Doctorates \(biennial report\)](#)
- [Doctoral Scientists and Engineers Profiles \(biennial report 1995-2001\)](#)

### Select Publications from the Research Community:

Amsen, E. (2011). [Leaving the lab: career development for developmental biologists](#). *Development*, 138(10), 4107-4109.

Balsmeier, B. and Pellens, M. (2016). [How much does it cost to be a scientist?](#) *Journal of Technology Transfer*, 41(3), 469-505.

Blau, D. M., & Weinberg, B. A. (2016). Why the U.S. science and engineering workforce is aging rapidly. *PNAS*, 114(5), 3879-3884. Available at: <http://www.pnas.org/cgi/doi/10.1073/pnas.1611748114>.

- Blume-Kohout, M. (2014). [Understanding the gender gap in STEM fields entrepreneurship](#). *SBA Small Business Research Summary*, 424, 1-5.
- Campbell, T. A. (2015). [Career pathways in a knowledge-based economy: Earnings inequality among science and engineering doctorate recipients](#).
- Campbell, T. A., & Adamuti-Trache, M. (2016). [Science and engineering doctorate recipients entering the labor market: Income disparities for underrepresented minorities](#). *Career and Technical Education Research*, 41(2), 85-105.
- Carrillo, I. A., and Karr, A. F. (2013). [Combining cohorts in longitudinal surveys](#). *Survey Methodology*, 39(1), 149-182.
- Finn, M. G., & Pennington, L. A. (2013). [Stay rates of foreign doctorate recipients from U.S. universities, 2013](#). Oak Ridge, TN: Oak Ridge Institute for Science and Education.
- Fisch, C.O. et al. (2015). [University patenting: A comparison of 300 leading universities worldwide](#). *Journal of Technology Transfer*, 40(2), 318-345.
- Flaherty, C. (2013). [Working way past 65](#). *Inside Higher Education News*, Published Online 17 June 2013.
- Frehill, L., and Ivie, R. (2013). [Increasing the visibility of women of color in academic science and engineering: Professional society data](#). *New Directions for Higher Education*, 2013(163), 7-21.
- Garrison, H., Justement, L., and Gerbi, S. (2016). [Biomedical science postdocs: an end to the era of expansion](#). *FASEB Journal*, 30.
- Ginther, D. and Kahn, S. (2012). [Education and academic career outcomes for women of color in science and engineering](#), *Seeking Solutions: Maximizing American Talent by Advancing Women of Color in Academia: A Conference Report*.
- Goulden, M., Mason, M.A., and Frasch, K. (2011). [Keeping women in the science pipeline](#). *The Annals of the American Academy of Political and Social Science*, 638(1), 141-62.
- Hale, K. and Hamilton, K. (2016). [Trends in the relationship between U.S. academic scientific publication output and funding and personnel inputs: 1988-2011](#). Working Papers, NCSSES 16-200. Arlington, VA: National Science Foundation, National Center for Science and Engineering Statistics.
- Hopkins, A.L. et al. (2012). [Disparities in publication patterns by gender, race and ethnicity based on a survey of a random sample of authors](#). *Scientometrics*, 96, 515-534.
- Hur, H., Andalib, M.A., Maurer, J.A., Hawley, J.D., & Ghaffarzadegan, N. (2017). [Recent trends in the U.S. Behavioral and Social Sciences Research \(BSSR\) workforce](#). *PLoS ONE* 12(2), 1-18.
- Kahn, S., and Ginther, D. (2017). [The impact of postdoctoral training on early careers in biomedicine](#). *Nature Biotechnology*, 35, 90-94.
- Kim, D., Wolf-Wendel, L., and S. Twombly. (2011). [International faculty: experiences of academic life and productivity in U.S. universities](#). *The Journal of Higher Education*, 82(6), 720-747.
- Larsen, M. D., Qing, S., Zhou, B., & Foulkes, M. A. (2011). [Calibration estimation and longitudinal survey weights: Application to the NSF Survey of Doctorate Recipients](#).

- Larson, R. C., Ghaffarzadegan, N., & Xue, Y. (2013). [Too many phd graduates or too few academic job openings: The basic reproductive number  \$r\_0\$  in academia](#). *Systems Research and Behavioral Science*, 31(6), 745–750.
- Mamiseishvili, K. (2013). [Contributions of foreign-born faculty to doctoral education and research](#). *New Directions for Higher Education*, 2013(163), 89-98.
- Mason, M. A., Wolfinger, N. H., and Goulden, M. (2013). [Do babies matter?: Gender and family in the ivory tower](#). Rutgers University Press.
- Matchett, K. (Ed.). (2013). [Seeking solutions: Maximizing American talent by advancing women of color in academia](#). Summary of a Conference. National Academies Press.
- Millar, M. (2013). [Interdisciplinary research and the early career: The effect of interdisciplinary dissertation research on career placement and publication productivity of doctoral graduates in the sciences](#). *Research Policy*, 42(5), 1152-1164.
- Miller, D. I., and Wai, J. (2015). [The bachelorate to Ph. D. STEM pipeline no longer leaks more women than men: a 30-year analysis](#). *Frontiers in Psychology*, 6(37), 1-10.
- Morrison, E., Rudd, E., and Nerad, M. (2011). [Onto, up, off the academic faculty ladder: The gendered effects of family on career transitions for a cohort of social science Ph.Ds](#). *The Review of Higher Education*, 34(4), 525-553.
- Powell, D. (2017). [The price of doing a postdoc](#). In Science, January 10, 2017.
- Proudfoot, S. and Hoffer, T. (2016). Science and engineering labor force in the U.S. In L. Gokhberg, N. Shmatko, and L. Auriol (Eds.), *The Science and Technology Labor Force* (pp. 77-119). Springer International Publishing.
- Sabharwal, M. (2013). [Comparing research productivity across disciplines and career stages](#). *Journal of Comparative Policy Analysis*, 15(2), 141-163.
- Sharpe, R. V. and O. H. Swinton. (2012). [Beyond Anecdotes: A Quantitative Examination of Black Women in Academe](#). *The Review of Black Political Economy*, published online 28 July 2012.
- Stephan, P., Franzoni, C., and Scellato, G. (2013). [Choice of country by the foreign born for Ph.D. and postdoctoral study: A sixteen-country perspective \(no. w18809\)](#). National Bureau of Economic Research.
- Tao, Y. (2016). [Where do they do engineering? Gender differences in employment at the position level among engineering doctorate recipients](#). *Journal of Women and Minorities in Science and Engineering*, 22(1).
- Turk-Bicakci, L., Berger, A., and Haxton, C. (2014). [The nonacademic careers of STEM Ph.D. holders](#). American Institutes for Research Broadening Participation in STEM Graduate Education Infobrief, April.
- Waaijer, C. J. F. et al. (2016). [Stability and longevity in the publication careers of U.S. doctorate recipients](#). *PLoS One*, 11(4).
- Webber, K. L. (2013). [Cultivating the future of graduate education: Factors contributing to salary for recent doctorate degree recipients](#). *Planning for Higher Education*, 41(4), 102.

- Webber, K. L. and Canché, M. G. (2015). [Not equal for all: Gender and race differences in salary for doctoral degree recipients](#). *Research in Higher Education*, 56(7), 645-672.
- West, B.T., Sakshaug, J.W., and Aurelien, G. A. S. (2016). [How big of a problem is analytic error in secondary analyses of survey data?](#) *PLoS One*, 11(6).
- Whittington, K.B. (2011). [Mothers of invention?: Gender, motherhood, and new dimensions of productivity in the science profession](#). *Work and Occupations*, 38(3), 417-456.
- Yang, L. and Webber, K. L. (2015). [A decade beyond the doctorate: The influence of a US postdoctoral appointment on faculty career, productivity, and salary](#). *Higher Education*, 70(4), 667-687.
- Yin, S. (2017, December 17). Ranks of scientists aging faster than other workers. [The New York Times](#). Retrieved from <http://www.nytimes.com>

### Select Presentations:

- Blume-Kohout, M. (2015). [Gender, values, priorities and satisfaction in STEM occupations](#). Paper presented in the panel Gender in the workplace, Association for Public Policy Analysis and Management 2015 Fall Conference, Session 6231, Washington, DC.
- Brown, S. and Grigorian, K. (2016). 2015 SDR data collection results. Presented at the SDR Community User Meeting, National Center for Science and Engineering Statistics Human Resources Program Expert Panel, Arlington, VA.
- Chang, W-Y. (2016). Future SDR sample design. Presented at the SDR Community User Meeting, National Center for Science and Engineering Statistics Human Resources Program Expert Panel, Arlington, VA.
- Chang, W-Y et al. (2012). [Migration patterns of U.S.-trained doctorate-holders](#). Joint Statistical Meetings, San Diego, CA. August 2012.
- Chang, W-Y., Milan, L.M., and Proudfoot, S. (2014). [Balancing timeliness, data quality, and cost by optimizing data-collection strategies](#). Joint Statistical Meetings, Boston, MA. August 2014.
- Chang, W-Y., & Yang, M. (2016). 2015 Survey of Doctorate Recipients redesign & expansion human resources expert panel SDR sample redesign. Presented at the SDR Community User Meeting, National Center for Science and Engineering Statistics Human Resources Program Expert Panel, Arlington, VA.
- Foley, D. (2016). History of the Survey of Doctorate Recipients: 1973-2015. Presented at the SDR Community User Meeting, National Center for Science and Engineering Statistics Human Resources Program Expert Panel, Arlington, VA.
- Ginther, D.K. and Kahn, S. (2012). [Education and career outcomes for women of color in academia](#). National Academies' Conference Seeking Solutions: Maximizing American Talent by Advancing Women of Color in Academia, Washington, DC. June 2012.
- Grigorian, K., Cox, B.G., and Milan, L.M. (2012). [Development of the sample design for the International Survey of Doctorate Recipients](#). Joint Statistical Meetings, San Diego, CA. August 2012.

- Hart, B.M. (2011). [Salaries, student debt, and employment opportunities in psychology](#). Midwestern Psychological Association, Chicago. May 2011.
- Khan, S. and Ginther, D. (2015). [Good moves: Gender and race differences in academic mobility in the sciences and social sciences](#). Paper presented in the panel Factors in STEM workforce occupational choices, Association for Public Policy Analysis and Management 2015 Fall Conference, Session 5745, Washington, DC.
- Milesi, C., Hoffer, T.G., and Milan, L.M. (2012). [Science and engineering doctorate recipients as adjunct faculty: New findings from the Survey of Doctorate Recipients](#). American Educational Research Association. April 2012.
- [OECD/UNESCO Institute for Statistics/Eurostat Careers of Doctorate Holders \(CDH\) Project](#), The Organisation for Economic Co-operation and Development, December 2012.
- Reed, A. (2011). [The status of linguistics programs in higher education](#). Linguistic Society of America Annual Meeting, Pittsburgh. January 2011.
- Rockey, S.J. (2012). [Rock talk: NIH support of biomedical research](#). NIH Regional Seminar on Program Funding and Grants Administration, Washington, D.C. June 2012.
- Selfa, L. (2016). 2015 SDR data estimation results. Presented at the SDR Community User Meeting, National Center for Science and Engineering Statistics Human Resources Program Expert Panel, Arlington, VA.
- Sinclair, M. et al. (2012). [Utilizing a logistic regression approach for weight adjustment in a longitudinal dataset](#). Joint Statistical Meetings, San Diego, CA. August 2012.
- Woolf, L. (2014). [Preparing graduate students for non-academic careers](#). American Association of Physics Teachers Meeting, Panel DC02, Orlando, FL. January 2014.
- Yang, M. (2012). [Integration of the national and international 2008 SDR: Bridging effects and expected improvements to the time series data](#). Joint Statistical Meetings, San Diego, CA. August 2012.