



NIH **U**pdates on Women in Science News for Yo**U** to Use!

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NIH Updates on Women in Science is brought to you by the [NIH Working Group on Women in Biomedical Careers](#). We encourage you to share this e-newsletter with colleagues who may find it of interest.

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NIH Analysis of Sex Differences in Application, Funding, and Success Rates for its Extramural Programs Find Men and Women Mostly Have Comparable Rates, but Points out Some Differences

The National Institutes of Health (NIH) recently performed an analysis of data for extramural grants retrieved from internal NIH databases to determine any sex differences in securing initial or continuing NIH funding. The paper, published in *Academic Medicine* in June, contained “person-based” analyses to determine funding rates, that is the rate at which a given person receives funding independent of how many applications that person files, and “application-based” analyses to determine success rates, that is the rate at which a given application is funding. The authors found gender differences in trends for funding and success rates that were attributed to differences in application rates, that is men apply for more grants so they have a greater chance of being funded, but they are no more successful on any particular grant than women. While women and men were found to have generally equivalent success rates, men were found to have higher funding rates on renewal grants and were more likely than women to have multiple grants.

[Sex Differences in Application, Success, and Funding Rates for NIH Extramural Programs \(Academic Medicine\)](#)

[More on Women in Research Careers \(Rock Talk Blog\)](#)

On the Thirty-fifth Anniversary of the Double Bind, Scientists Examine Data on Women of Color in Science

The *Harvard Educational Review* devoted its summer issue to the 35th anniversary of the *Double Bind: The Price of Being a Minority Woman in Science*, the seminal examination of “the double oppression of sex and race or ethnicity, plus the third oppression in the chosen career, science,” experience by women of color in science, technology, engineering, and math (STEM) fields. The issue contains articles synthesizing the published data on undergraduate and graduate women of color in STEM, an analysis of the pipeline and pathways of women of color in STEM, and a discussion of the unique challenges faced by women of color as they transition from community colleges to four year institutions. These data are accompanied by a forward by one of the authors of the *Double Bind*, Shirley Malcom, director of education and human resources programs at the American Association for the Advancement of Science, and her daughter Lindsey E. Malcom, an assistant professor of higher education administration and policy who’s research centers on the relationship between higher education policy and access and success for underrepresented minorities (URMs) in the sciences and related STEM fields. The *Harvard Education Publishing Group* is also featuring a series of blogs on the *Double Bind*, including one by Evelyn M. Hammonds that recalls the 1975 meeting that lead to its publication and the influence the report has had over the past 35 years.

[The Double Bind – 35 Years Later \(The Harvard Educational Review\)](#)

[35 Years after the Double Bind: The Price of Being a Minority Woman in Science \(The Blog of Harvard Education Publishing\)](#)

A Survey of Women in Science, Technology, Engineering, Math, and Medicine in the UK Shows that Women Continue to Feel Isolated and Disadvantaged

The Athena Forum recently released the results of the *Athena Survey of Science Engineering and Technology (ASSET)*, a web-based survey of UK universities that explores how differences in career progression between men and women can be related to organization and the culture of science in universities. The 2010 ASSET builds upon previous surveys to identify trends in key areas of importance to career progression. Among the findings of this survey are that women report being less informed about promotion requirements and criteria than men and they report feeling that they are not visible to senior management. Further, women are more likely to work part-time or in contract positions and to limit their job choice by location. Although women are becoming more ambitious, they identify a number of factors that

continue to have a detrimental impact on their careers such as lack of feedback, role models, and mentoring, or heavy administrative and teaching loads.

[The 2010 Athena ASSET Survey Summary Report \(The Athena Forum\)](#)

[Female Scientists 'Still Overlooked by their Boss' \(Women in Technology\)](#)

A Study of US High School Transcripts Indicates Gender Differences in Courseload and Test Scores

The National Center for Education Statistics of the US Department of Education recently released the results of the *2009 National Assessment of Educational Progress (NAEP) High School Transcripts Study (HSTS)*. The HSTS collects and analyzes data on the number and types of courses taken by American high school graduates, what their grades were, and how many credits they earned. The study also compares these data to student achievement as measured by performance on the NAEP. The data in the latest study indicates that both male and female high school graduates earned more credits in 2009 than in previous years and that in 2009, a higher percentage of female graduates completed midlevel or rigorous curricula than male graduates. However, the data also showed that for male and females taking the same curriculum, male graduates achieved higher scores on the math and science portions of the NAEP than female graduates.

[America's High School Graduates: Results from the 2009 NAEP High School Transcript Study \(NCES\)](#)

An Opinion Piece on Women Physicians Who Work Part-time Leads to Discussion of the Health Care Shortage and Work-Life Balance

In June, the *New York Times* published an opinion column written by Karen Sibert, an anesthesiologist and mother of four in which the author called upon all doctors to work full-time. Citing the impending shortage of physicians and the fact that most medical schools receive federal funding, she stated that doctors have a responsibility to their patients and US tax payers to put their training to maximum use. Dr. Sibert took particular issue with women physicians who choose to work part-time in order to achieve better work-life balance. This column sparked several letters to the editor as well as rebuttal columns in the *Times* and in other forums. In the Motherlode column, Lisa Belkin calls upon the medical profession to “recalibrate the hours and expectations of the profession so they can be done by the ‘new worker’” who has more home responsibilities than the traditional male doctor with a wife at home. Cary Goldberg interviewed several experts in policy and management to develop “seven points on why the op-ed is off-base” including pointing out that the impending physician shortage is less a result women doctor’s working part-time and more a result of policies, access to care, and underutilization of other primary care health workers. They also point out that many part-time physicians are not spending the rest of their time on family care but on research and administration. Finally they note that “if women are not given the choice about how to structure their lives, they may reject medicine as a career choice altogether,” thereby exacerbating the shortage and further limiting access to high quality medical care.

[Don't Quit This Day Job \(New York Times\)](#)

[Should Women Be Doctors? \(New York Times\)](#)

[Seeking a Balance: Part-Time Doctor and Mom \(New York Times\)](#)

[7 Arguments In Defense Of Women Who Doctor Part-Time \(wbur.org\)](#)

Highlighting Best Practices –Reentry Programs

There are a variety of reasons why a scientist may take a hiatus from the lab including family responsibilities or illness, moving to accommodate a spouse’s job, clinical training, military service, or trying out a different career such as teaching or administration. Whatever the reason for leaving, many women and men face significant barriers when trying to reenter their field of research after taking time off. To address this barrier, many US and European agencies and professional societies have developed reentry programs to offer support for women and men to reenter scientific research after having interrupted their research careers to attend to family or other personal responsibilities.

One example is the NIH [Supplements to Promote Reentry into Biomedical and Behavioral Research Careers](#), which was started as a pilot program by the Office of Research on Women’s Health in 1992 and expanded to a trans-NIH program two years later. The program includes three necessary components that, together, contribute to the process of reestablishing awardees as independent, competitive research scientists: (1) full participation in the research project; (2) an opportunity to update and enhance research capabilities; and (3) a carefully planned mentoring program developed by the mentor and the awardee. Two subsequent evaluations of the program have shown the program to be an effective vehicle for increasing awardee expertise in a broad range of skill areas, including laboratory techniques, writing proposals and applications, and budgeting. Additionally, all awardees felt that the program had advanced their long-term career goals and would encourage others to participate in it.

Another example is the [M. Hildred Blewett Fellowship](#) from the American Physical Society that is designed to enable women to return to physics research careers after having had to interrupt those careers. An important aspect of both this award and the NIH program is that while applicants must secure an institutional affiliation during the tenure of their grant, institutional affiliation at the time of application is not necessary.

Several similar programs are available in Europe, including the Wellcome Trust Career Re-entry Fellowship and the Daphne Jackson Fellowship in the UK and the Helmholtz Association re-entry positions in Germany. *Nature* recently featured an article describing the experiences of several women who had participated in these programs.

Other programs help women and men who have spent time in industry reenter academia or change scientific fields. For instance, the University of Washington’s [On-Ramps into Academia](#) program, which was described in a recent *Inside Higher Ed* feature, is a two-day workshop designed to provide practical tools and support for women scientists and engineers who are considering a career move into academia from their current position. The Massachusetts Institute of Technology (MIT) [Career Reengineering Program](#) is a 10-month part-time program that helps participants acquire career development skills that will put their talents in focus and guide their job search process through workshops, access to MIT courses and research facilities, and internships in their chosen field. Participants include scientists who are returning from a hiatus and those wishing to make a career change.

[Back to the Bench \(Nature\)](#)

[Bringing Them Back \(Inside Higher Ed\)](#)

[Research Supplements to Promote Re-Entry into Biomedical and Behavioral Research Careers \(NIH\)](#)

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