

Recommended Reading

Gender Issues - National Interest

[Sex Differences in Application, Success, and Funding Rates for NIH Extramural Programs](#) Analysis of NIH funding showed that women and men were similarly successful across career stages, but men with previous NIH grants had higher application and funding rates. [from Academic Medicine email announcement, 6/1/2011] **The ADA and Medical Education**

You Go Girl Deputy Director Dr. Sally Rockey expresses the commitment of the NIH Office of Extramural Research to female scientists in biomedical and behavioral research and reviews and analyzes the data available on the participation and experience of female scientists within the Office. Reader responses to the blog raise questions about implicit and explicit bias. [Researcher by the numbers](#) [from AWIS Washington Wire April 2011 Issue I]

The Enduring Gender Gap in Faculty Pay A study presented at the annual meeting of the American Education Research Association backs up previous studies on the gender disparities in academic salaries and further disputed the standard explanations for why women faculty earn less than their male colleagues. The study found that women who are on similar career trajectories as men are still discriminated against in salary calculations. [Different salaries for different folks](#) [from AWIS Washington Wire April 2011 Issue I]

Do Daughters Ease the Pay Gap? A new study called The Daughter Effect suggests that the gender of a CEO's newest born child affects how that CEO addresses gender pay equity within their own organization. The authors of the study write that their "results suggest that the first daughter 'flips a switch' in the mind of a male CEO, causing him to attend more to equity in gender-related wage policies." [Like daughter, like father](#); [Read the study](#) [from AWIS Washington Wire April 2011 Issue I]

Report on the Status of Women Faculty in the Schools of Science and Engineering at MIT is a study released in March 2011 by Massachusetts Institute of Technology (MIT), which assesses progress since its 1999 study and the challenges ahead. For more information, see: <http://web.mit.edu/newsoffice/2011/women-mit-report-0321.html> [from AAMC's GREATmail, 3/27/2011] [posted 4/18/2011]

Gender Wage Gap Will Persist Until 2056 New research from the Institute for Women's Policy Research (IWPR) shows that it will take until 2056 for women and men's earnings to reach pay parity- if the wage gap continues to close at the same pace it has for the last fifty years. [from AWIS Washington Wire, 3/15/2011] [Do we really need to wait ANOTHER 40 years?](#)

Blurred Work-Family Boundaries More Stressful for Women Women who are contacted at home by colleagues, bosses and clients are more anxious about such disruptions than men are, a University of Toronto study found. The research published in the Journal of Health and Social Behavior finds that women feel more guilty about handling work issues at home, even if their families are not affected. [from AWIS Washington Wire, 3/15/2011] [Moral dilemma](#)

"Understanding current causes of women's underrepresentation in science" is an article in The Proceedings of the National Academy of Sciences. The authors state: "Although real barriers are still faced by women in science, especially mathematical sciences, our findings suggest that historic forms of discrimination cannot explain current underrepresentation, and that resources should be redirected toward current rather than historical causes of women's underrepresentation in math-based careers." [from GREATmail news, 2/9/2011] The article is available at: <http://www.pnas.org/content/early/2011/02/02/1014871108.abstract>

Twelve Percent of Biotech Startup Founders are Women New research shows that 12% of biotech founders are female, compared to 8% of all startups and 1% of high-tech startups. Why are women better represented in biological science startups than other startup sectors? The debate rages, but it is highly likely that it has something to do with the fact that 50% of recent life sciences PhD graduates were given to women, compared to 20% in engineering and 27% in computer science. Furthermore, many women may benefit from biotech's less hierarchical, team-based structure and the lack of "old boys' club" dynamics. While 12% still represents only a small fraction of biotech startups, women-owned and women-run firms are a fast-growing sector. [from AWIS Washington Wire, Oct. 2010 Issue II] [Women and biotech startups](#)

More Moms Make it to the Top of the Corporate Ladder The long held idea that women must choose between climbing the corporate ladder and having a family is constantly being challenged and one needs to look no further than the 11 CEOs of Fortune 500 companies who are also moms to see it. While this number is still small, the chance of becoming both a CEO and a mom are greater now than ever before. Women who have made it to the top, cite making concessions, having a supportive spouse, and flexibility as some of the key features that helped them get where there are today. They also point out how sometimes their viewpoint as a mother has helped them improve things in their work place. [from AWIS Washington Wire, Oct. 2010 Issue II] [Corner office moms](#)

Gender Gap Report Rates Equality The World Economic Forum this week released its 2010 Global Gender Gap Report which points to enduring gaps in women's economic power worldwide. While education and health have improved, they still lag behind their male counterparts in economic and political authority. The good news: The United States (19) closed its gender gap, rising 12 places to enter the top 20 for the first time in the report's five-year history. [from AWIS Washington Wire Oct. 2010, Issue 1] [Closing the gap](#)

Large Study Shows Females the Equal of Males in Math Skills UC Berkeley research team is again offering evidence that genders have equal abilities in math. While the findings were not that surprising to educational researchers, researchers found different perceptions among teachers and parents. [from AWIS Washington Wire Oct. 2010, Issue 1] [Reducing stereotypes and self-fulfilling prophecies](#)

Barriers of Female Scientists In June 2010, L'Oréal USA commissioned a national survey of U.S. scientists in partnership with the American Association for the Advancement of Science (AAAS) "to better understand the barriers that female scientists experience in their pursuit of scientific careers." Survey respondents included male and female scientists who hold doctoral degrees and are registered users of Science online. Survey "questions focused on the barriers that scientists face when beginning and advancing their professional careers, the extent to which the barriers affect females and males

differently, and solutions to overcome these obstacles." A summary of the survey results have been posted on-line. [from GWIMS-AAMC email 10/1/2010]

[http://www2.lorealusa.com/en/us/FWIS2007/downloads/survey fact sheet 9 8 2010.pdf](http://www2.lorealusa.com/en/us/FWIS2007/downloads/survey_fact_sheet_9_8_2010.pdf)

Gender Segregation in Science AAUW Senior Researcher Andresse St. Rose discusses the relationship between gender segregation in science, technology, engineering, and mathematics (STEM) and the gender pay gap among college-educated men and women in the most recent edition of [*On Campus with Women*](#), a publication of the Association of American Colleges and Universities. [from AAUW Mission & Action eBulletin, Sep. 16, 2010]

[A Gender-based Analysis of Work Patterns, Fatigue, and Work/Life Balance Among Physicians in Postgraduate Training](#) is an article in the September, 2010 issue of *Academic Medicine*

Recent limitations on duty hours are insufficient to manage fatigue risk and enable the maintenance of a healthy work/life balance of doctors in postgraduate training. [September, 2010]

Dad, Version 2.0 A new generation of scientist-fathers is emerging. Increasing numbers of fathers are becoming involved in the day-to-day child rearing activities that have consumed working mothers for years. Scientists like Chad Nusbaum, co-director of the Genome Sequencing and Analysis program at the Broad Institute of Harvard and M.I.T., chose to take two months away from work to bond with his newborn son while his wife, a tenured professor at Brandeis University, went back to work. With increasing numbers of men taking advantage of this time for family actively involved fathers may soon become a common feature of the modern family rather than a rare phenomenon. [More than breadwinners](#) [from AWIS Washington Wire, August 2010, Issue I]

Women CEOs Shatter Glass Ceiling in Chemical Industry The public image of two major chemical companies had a face lift when Ellen J. Kullman of DuPont and Lynn L. Elsenhans of Sunoco took the helm as CEOs of their respective companies. Until 2009 there were always women executives at chemical companies but never as CEO. Low job satisfaction has led to job-jumping for many women, and company hopping can become a major barrier to women when trying to rise through the ranks. The chemical industry lags behind other corporations in terms of the number of women managers. In order to retain women managers need to ask women what they need. In other words, it's not just about shattering the glass ceiling, but we need to send-down a ladder for those who follow. [Chemical industry gets face lift](#) [from AWIS Washington Wire, August 2010, Issue I]

New Survey Finds Widespread Gender Inequity, Despite Support for Equality A 22-nation survey conducted by the Pew Research Center's Global Attitudes Project recently found that while global support for gender equality is high, gender inequalities still exist in many countries. The survey found that despite a general agreement that women and men should have equal rights, many worldwide believe that men should be given preference when it comes to jobs and higher education, and that life is generally better for men than it is for women. [From AWIS Washington Wire, July 2010, Issue I] [Equal but separate](#)

Offering the "Luxury" of Paid Maternity Leave Companies are trying to cut costs as much as they can due to the state of the current economy. Some consider maternity leave a "luxury" which may be next on the chopping block. According to the Family and Medical Leave Act of 1993, employees are

allowed up to 12 weeks of unpaid, job-protected leave, to care for a child. Companies with fewer than 50 employees are not required to abide by this act. In fact, about 12% companies with fewer than 100 employees offer paid maternity leave and many are planning to reduce or eliminate this benefit. There are, however, some companies which are creating their own trends and betting on the idea that good parental leave benefits are consistent with retaining and attracting good employees. [From AWIS Washington Wire, July 2010, Issue I] [Good benefits](#)

AAAS Report: How Local Networks Can Boost S&T Diversity Modeled after the extension services approach pioneered by the US Department of Agriculture, which links farmers to agricultural researchers, the new AAAS (Am. Assoc. for Advancement of Science) report details how local networks of experts can help bring more women and minorities in to S&T careers. Just as research findings are integrated into farmers' best practices in use of food and water, experts are trained to deliver best data-driven practices for advancing diversity in science and engineering. The interim report gives the National Science Foundation, which funded the program, an overview of the structure and achievements of the nine ongoing projects. [Read more.](#) [From AAAS Advances - July 2010 email newsletter]

Tierney in NY Times: No Gender Bias in STEM? In back-to-back articles in *The New York Times* on [June 7th](#) and [June 14th](#), John Tierney makes inflammatory claims that there is no real gender bias in "math-related sciences." Instead, he suggests, all disparities between the number of women and men in these fields can be explained by biological differences in the brain and by "personal preferences." Tierney critiques legislation by the Senate funding an NSF initiative to "enhance gender equality" in academic science, defends controversial Lawrence H. Summers' remarks about biological differences between men and women, and refers to studies that find little evidence of gender discrimination, preferential differences, or differences between the brains of men and women. [Adapted from MentorNet email news dated July 8, 2010]

Gender Gap in Activities, Productivity, and Compensation "The gender gap in pay has been well-documented, but what was not understood was whether academic accomplishments could overcome the pay gap," study leader Catherine DesRoches, of the Mongan Institute for Health Policy at Massachusetts General Hospital, said in a news release. "Our study [published in April 2010 issue Academic Medicine] found that, across the board, men are being paid substantially more than equally qualified and accomplished women at academic medical centers." [posted 7/2010] Link to article: [http://journals.lww.com/academicmedicine/Fulltext/2010/04000/Activities, Productivity, and Compensation of Men.23.aspx](http://journals.lww.com/academicmedicine/Fulltext/2010/04000/Activities,_Productivity,_and_Compensation_of_Men.23.aspx)

Academic Women Making 40% Less A study published in *Nature* found that women in academic fields are making up to 40% less money than their male colleagues. Salary discrepancies between male and female academic scientists in Europe start much earlier than those in North America, but nevertheless this is still happening across the board. [from AWIS Washington Wire, June 2010, Issue II] [Fair compensation](#)

[A Proposed Model for an Optimal Mentoring Environment for Medical Residents: A Literature Review](#) The authors of this Academic Medicine article identified six interactional foundations that

allow protégés to capitalize on their mentors' strengths and enable protégés to engage in four key developmental behaviors. [adapted from Academic Medicine email date 6/4/2010]

[In It for the Long-Term: Defining the Mentor-Protégé Relationship in a Clinical Research Training Program](#)

The authors of this Academic Medicine article determined seven attributes of good mentoring, and mentors and protégés in a clinical research training program agreed that the mentors demonstrated these attributes. [adapted from Academic Medicine email date 6/4/2010]

[Searching for Excellence and Diversity: Increasing the Hiring of Women Faculty at One Academic Medical Center](#)

The authors of this Academic Medicine article describe the workshops presented in the UW-Madison School of Medicine and Public Health between 2004 and 2007, and compare the subsequent hiring of women faculty in participating and nonparticipating departments and the self-reported experience of new faculty within the hiring process. [adapted from GWIMS email 6/3/2010]

\$200 Million Gender Discrimination Class Action Suit Against Novartis A 5,600-plaintiff class action suit has been brought against Novartis, in which it is claimed that the company discriminated against women by encouraging a culture that ignored complaints of sexual harassment, discouraged pregnancies, underpaid women, and failed to discipline managers who were inappropriate with female staff. With only 30% of district sales managers being women, the class action also describes what it claims is an environment that made it difficult for women to obtain higher-level positions. These claims substantiate violations of Title VII of the Civil Rights Act.[from AWIS Washington Wire–April 2010, Issue I] [Gender bias cited in suit against Novartis](#)

Women Win and Lose with the New Health Care Bill Several provisions in the recently signed Health Care Bill will have a positive impact on women in particular, whereas others will have the opposite effect. Positive aspects include elimination of discrimination based on pre-existing conditions (which has been known to include pregnancy), increased access to OB-GYN and midwifery care, partial elimination of gender rating (which often leaves women being charged higher premiums) and free preventative care. Negative aspects include continuation of age and gender rating (for some policies), lack of coverage for immigrant women and changes to abortion coverage by insurance. For a more in-depth analysis, follow the link below. [from AWIS Washington Wire – March 2010, Issue II] [The health care bill and women](#)

The Future is Bright for Harvard's Female Faculty This New York Times article reports on the improvements for female Harvard University faculty members since its female President Drew Gilpin Faust has been at the helm. Faust succeeded former president Larry Summers, who became infamous (and subsequently resigned) for his suggestion that women's underrepresentation in math and science fields might be the result of innate differences. Under Faust, professors can now get up to \$20,000 to help pay for childcare, and new programs to encourage young women to pursue science and research careers. Furthermore, over a quarter of Harvard's faculty are now women and last year, tenure offers were extended to 16 women and 25 men, compared with four women and 28 men in the last year of Summers' presidency. [from AWIS Washington Wire – March 2010, Issue II] [Women making gains on faculty at Harvard](#)

Pay and Promotion Matter A new working paper examines the exodus of women from the science and engineering fields, and upends some popularly accepted wisdom. The author, Jennifer Hunt, finds that the gap is primarily driven by the engineering field, and that "60% of the gap can be explained by the relatively greater exit rate from engineering of women dissatisfied with pay and promotion opportunities." Family-related explanations, which are often blamed for the gap, play a much smaller role. Hunt finds a strong positive relationship between share of male workers and excess female exits, which suggests a need for policies aimed at improving female mentoring and networks, and reducing discrimination, across male-dominated fields.[from AWIS Washington Wire – March 2010, Issue II] [Still facing bias and barriers](#)

The Gender Wage Gap Narrows (a little) The Institute for Women's Policy Research has released a fact sheet that they have compiled from data on full time workers in 2009, gathered by the US Bureau of Labor Statistics. The good news is that the gender wage gap narrowed slightly in 2009. However, it is still above its lowest point of 19% in 2005. The 2009 median weekly earnings for women were \$657 compared with \$819 for men. This is a female-to-male-earnings ratio of 80%. The gender wage gap is particularly large for African-American and Hispanic/Latina women whose median weekly earnings are \$582 and \$509, respectively. This equates to 69% and 60% of white male earnings respectively. [from AWIS Washington Wire - March 2010, Issue I] [Gender wage gap 2009 fact sheet](#)

[**Why So Few? Women in Science, Technology, Engineering, and Mathematics**](#) is a comprehensive report on the controversial issue of the continued underrepresentation of women in these fields. Drawing upon a large and diverse body of research, the report from the Association of University Women provides compelling evidence of environmental and social barriers - including unconscious gender bias, stereotypes, and the climate within college and university science and engineering departments - that continue to limit women's participation and progress. The report also includes up-to-date statistics on girls' and women's achievement and participation in these areas and offers new ideas for what each of us can do to more fully open scientific and engineering fields to girls and women. [posted 3/23/2010]

I'm A Phony Scientists, and especially women scientists, are plagued by feelings of inadequacy. Cheryl Murray, President of the American Physical Society and incoming Dean of Harvard's School of Engineering, still describes "an overwhelming sense of being a fraud, a phony, of not being good enough for her job, despite much evidence to the contrary". This special report by Nature delves into the 'impostor phenomenon', a term coined 30 years ago to describe how women (though later research show that men are afflicted too) have difficulty internalizing their successes. From 'sitting-on' papers to not applying for promotions, this often leads to sabotaging one's own career. The article ends by listing some strategies for helping purge the inner critic such as establishing a relationship with a good mentor, and tackling areas of weakness head-on. [Unmasking the impostor](#)[AWIS Washington Wire - February 2010, Issue I]

The Shriver Report Unwrapped Mary Ann Mason, professor and co-director of the Berkeley Law Center on Health, Economic and Family Security, discusses the recently published "Shriver Report: A Woman's Nation Changes Everything," in which she contributed. Mason describes the challenges that

a woman entering the workforce faces and the male-female wage-gap that still very much exists. [Still earning less](#) [from AWIS Washington Wire - January 2010, Issue II]

Nobel Laureates Call for Gender Balance in Science Elizabeth H. Blackburn and Carol W. Greider, two Nobel Prize winners of 2009, have urged scientific institutions to make some active alterations in their career structures. They point out that women do really well in sciences but are often daunted by the lack of flexibility in career structure at a life crux where they have to balance having a family and advancing in their scientific careers. Drs. Blackburn and Grieder call for a more flexible approach to part-time research or career breaks for women scientists as well as incorporation of women into key committees and decision-making positions. The two Nobel laureates emphasize that active measures need to be taken to help more women scientists reach top positions. [from AWIS Washington Wire Dec. 2009 Issue I] [Even out gender gap](http://abcnews.go.com/International/wireStory?id=9263248) = <http://abcnews.go.com/International/wireStory?id=9263248>

Family Obligations & an Academic Career A new report, based on extensive original research, considers the impact of children and family obligations on women's willingness to pursue faculty positions, and identifies both when and why women and men with caregiving plans or responsibilities drop or opt out of the academic science career path. The report is by Marc Goulden, Ph.D., Karie Frasch, Ph.D., and Mary Ann Mason, J.D., Ph.D., of the University of California, Berkeley, the Berkeley Center on Health, Economic, & Family Security and The Center for American Progress. The report and executive summary are available at: http://www.americanprogress.org/issues/2009/11/women_and_sciences.html [This info from the 11/13/2009 AAMC GREAT email newsletter].

Gender and Leadership in Higher Education The Cornell Higher Learning Research Institute released a working paper early in December 2009 describing a study that examined how the gender composition of leaders of American colleges and universities influences the rate at which academic institutions diversify the gender of their faculty. The leadership positions studied for this research included trustees, presidents, chancellors, and provosts or academic vice presidents.

The researchers found that leadership gender composition at American colleges and universities was significantly associated with the rate at which these institutions have diversified the gender of their faculty from 1984 to 2007. Academic institutions with female presidents, chancellors, provosts or academic vice presidents and those with a greater share of female trustees, increase their share of female faculty more quickly compared to institutions with few women in these leadership roles. Researchers also found that the magnitude of this effect seems to be larger at smaller institutions and that there may be a "critical share" of female trustees (25%) or a critical number of female trustees (5) that must be reached before the gender composition of the board of trustees influences the rate of diversification of the faculty across gender lines. [AWIS Washington Wire Dec. 2009 Issue II] [Read the full paper and findings](http://www.ilr.cornell.edu/cheri/upload/cheri_wp127.pdf) = http://www.ilr.cornell.edu/cheri/upload/cheri_wp127.pdf

"Women in Science at the National Institutes of Health 2007-2008" is a new publication showcasing the achievements of some of the accomplished women at the NIH and is intended to inspire a diversity of girls and boys, women and men to enter or continue in science careers. Sponsored and prepared by the NIH Office of Research on Women's Health with assistance from the members of the NIH Coordinating Committee on Research on Women's Health, the book celebrates the careers and

accomplishments of 289 talented female scientists and administrators who are part of the NIH community. For the press release and a link to the report, please visit:

<http://www.nih.gov/news/health/nov2009/od-12.htm> [This info from the 11/13/2009 AAMC GREAT email newsletter].

Women Making Strides in Graduate Education The Council of Graduate Schools (CGS) today released its annual report on graduate education trends. The report shows that the number of doctoral degrees awarded to women in 2008 grew by 5.7%, compared to a 3.5% increase for men. Between 1998 and 2008, the average annual growth rate in doctorates for women was almost triple that for men, 3.9% vs. 1.4%. Women received just over 49% of doctorates awarded in 2007-08, up from 48% the previous year. The proportion varied by field, from 22% in engineering to almost 70% in health sciences. [Who's moving on](#) [from AWIS Washington Wire, Sept. 2009 issue I]

Unconscious Bias in Faculty and Leadership Recruitment: A Literature Review A new Analysis in Brief released by the American Association of Medical Colleges reviews the the scientific literature on unconscious bias and how it relates to job recruitment and evaluations. Women and minorities have made strides in achieving equality in the workplace, but they are still underrepresented in the upper strata of organizations, including senior faculty and leadership positions at medical schools and teaching hospitals. Social science researchers have pursued the theory of "unconscious bias" as one barrier to workplace equality that may persist despite a commitment to increase diversity. [Stereotypical](#) [from AWIS Washington Wire, Sept. 2009 issue I]

Equitable Rewards and Recognition for Women The Association for Women in Science (AWIS) has been awarded a three-year grant from the National Science Foundation for a new project: "Advancing Ways of Awarding Recognition in Disciplinary Societies (AWARDS)." AWARDS is designed to create a sustainable framework for assuring progress towards more equitable rewards and recognition for women and members of underrepresented groups in a wide range of scientific communities. To read more about the project, visit www.awis.org. [AWIS Washington Wire Aug. 2009 issue II]

Women Receive Almost a Third of The Presidential Early Career Awards for Scientists and Engineers President Obama named this year's recipients of the Presidential Early Career Award for Scientists and Engineers (PECASE), touted in the press release as "the highest honor bestowed by the United States government on young professionals in the early stages of their independent research careers." The winners are selected by nine federal departments and agencies and receive up to five years of grant funding. Thirty-one women will be amongst the 100 who are to receive this highly coveted award at a White House ceremony in the fall. [AWIS Washington Wire Aug. 2009 issue II]

Unprecedented Number of Female Faculty Hired at UT Austin College of Liberal Arts About half of the 49 professors who will be joining the [College of Liberal Arts](#) faculty in 2009-2010 are female. That includes an unprecedented five women coming in as full professors from such schools as Harvard University, the University of California at Berkeley and the University of Southern California. The hires come less than a year after an internal University of Texas at Austin report identified potential strategies for eliminating gender inequity on the faculty. They represent one of the university's biggest successes to date in closing the gender gap. See the entire article at:

http://www.utexas.edu/news/2009/08/12/female_faculty_hires/?AddInterest=1292 [From UT Austin Alumni newsletter, August 2009]

US House Hearing Details Gender Gap in Science and Engineering Despite substantial gains made by women in science and engineering fields during the past four decades, "the gap is real, the gap persists," AAAS CEO Alan I. Leshner told a House Subcommittee on Research and Science Education. Although the gaps between boys and girls have disappeared in precollege classes such as chemistry, advanced algebra, and precalculus math, gaps persist in high school and college classes in physics, calculus, and computer science. Although women now receive nearly half of the doctoral degrees in the biological sciences, and are awarded nearly half of all M.D. degrees, they lag in Bachelor's degrees in physics and engineering, earning only one out of five. The hearing cited low science and math standards in the K-12 grade level as the largest problem facing education today. Participants urged policy makers to gather better data on effective practices to recruit and train women in scientific fields and to provide funding support. [Read more](#). [from Am. Assoc. for Advancement of Science electronic Aug. 2009 newsletter]

Unconscious Bias in Faculty and Leadership Recruitment: A Literature Review Although women and minorities have made significant strides in achieving equality in the workplace, they are still underrepresented in the upper strata of organizations, including senior faculty and leadership positions at medical schools and teaching hospitals. Within the last decade, social science researchers have pursued the theory of "unconscious bias" as one barrier to workplace equality that may persist despite a general commitment to increase diversity across the academic medicine workforce and other organizations. This AAMC Analysis in Brief reviews the scientific literature on the theory of unconscious bias, explores the role of unconscious bias in job recruitment and evaluations, and offers suggestions for search committees and others involved in hiring decisions at medical schools and teaching hospitals. As shown in Table 1, research on unconscious bias suggests that, given equal weighting on all other variables, people prefer males over females and white and Asian American individuals over individuals of other races in career-related evaluations. [Read Analysis in Brief](#) (PDF) [posted Aug. 2009]

More Women Breaking the Biotech Glass Ceiling Massachusetts has seen a sudden surge of women in the boardroom with three new female chiefs appointed to helm drug developers since last summer. Abbie Celniker of Taligen Therapeutics, Bonnie Fendrock of Hepregen and Katrine Bosle of Avila Therapeutics gained recognition and top jobs in the industry after years of hard work, notes the *Boston Business Journal*. And the *Journal* says that there are plenty more women coming up through the ranks of Bay State biotechs. [Women moving up](#) [from AWIS Washington Wire July 2009]

Want to know how many women receive NIH funds? The average size of their grants? NIH has created a website on the involvement of women in its various grant programs! see: *Sex/Gender in the Biomedical Science Workforce*
http://grants1.nih.gov/grants/policy/sex_gender/q_a.htm

Study: Girls Do Understand Math, but We Don't Want Them To In 2005, former Harvard University president and current economic adviser to President Obama, Lawrence Summers, stated that males are naturally smarter than females in the fields of science and engineering. This comment and

others like it encouraged Janet Hyde and Janet Mertz, professors of psychology and oncology at the University of Wisconsin-Madison, to collect and analyze global data on math performance and gender inequality, as measured by the World Economic Forum's Gender Gap Index. The [study](#) was published in the journal *Proceedings of the National Academy of Sciences*, and demonstrated that girls' math scores display the same level of variability as boys' in some countries and in some ethnic groups in the United States (e.g. Asian Americans). Hyde and Mertz attribute a number of cultural factors to the prevention of female success and interest in mathematics, including teachers paying more attention to males than females in math classes and a lack of female role models in math-related fields. [It all adds up](#) [from AWIS Washington Wire June 2009]

Evaluating Science or Evaluating Gender? On the surface it seems women are receiving awards at increasing rates due to women-only awards. However, women are 65 percent less likely to win an award if the reviewing committee chair is a man. Between 1997 and 2009 the American Physical Society gave out 464 individual awards that were first reviewed by a committee. Only 20 awards were given to women physicists. [Women don't get the prize](#) [from AWIS Washington Wire June 2009]

Survey Shows Two-Thirds of Americans Can't Name a Woman Scientist A new national survey commissioned by L'Oreal USA shows that Americans are generally unaware of the contributions of women to science. According to the survey *Women, Science and Success: The New Face of Innovation*, 65 percent of American adults cannot name a single famous female scientist. Read more of the results from this telephone survey in the prnewswire press release. [Read about women in science](#) [AWIS Washington Wire, May 2009 Issue I]

Gender of Instructors May Affect Success of Female Students A new study reports that the gender gap in course grades and STEM majors is eradicated when high performing female students' introductory math and science classes are taught by female professors. Three economists examine a unique dataset of college students who have been randomly assigned to professors over a wide variety of mandatory standardized courses. The results suggest that while professor gender has little impact on male students, it has a powerful effect on female students' performance in math and science classes, their likelihood of taking future math and science courses, and their likelihood of graduating with a STEM degree. [AWIS Washington Wire, May 2009 Issue II] [Sex matters](#)

Men Needed to Secure Gender Equity A new report from Catalyst, *Engaging Men in Gender Initiatives: What Change Agents Need to Know*, looks at some of the hurdles keeping men from supporting gender initiatives in the work place and what factors made men more likely to support such initiatives. [Download the report here](#) [AWIS Washington Wire, May 2009 Issue II]

Childless Women Face Workplace Discrimination Too Professional women who opt not to have children often are "vilified at work" as supervisors view them as less than human, according to research by Dr. Caroline Gatrell of the Lancaster University Management School in the U.K. Gatrell says many supervisors view these women as "cold, odd and somehow emotionally deficient in an almost dangerous way that leads to them being excluded from promotions that would place them in charge of others." [Damned if you do, damned if you don't](#) [AWIS Washington Wire, May 2009 Issue II]

"Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty" During the week of June 1, 2009, the National Academies released a report, by this name. Although women are still underrepresented in the applicant pool for faculty positions in math, science, and engineering at major research universities, those who do apply are interviewed and hired at rates equal to or higher than those for men, says the report. Similarly, women are underrepresented among those considered for tenure, but those who are considered receive tenure at the same or higher rates than men. The report contains other findings of interest and the study panel makes specific recommendations for both research institutions and academic societies. For more information, visit: <http://www.nas.edu/morenews/20090602.html> [posted June 24, 2009]

Is Tenure a Trap for Women? Choosing family over career or vice versa is a constant theme in academe these days. It becomes even more difficult as lifestyles of the modern professor change. Female leaders of higher education like Shirley M. Tilghman, first woman president of Princeton University, argue that the tenure system should be abolished. Is that good or bad for women? [Trapped](#) [from AWIS Washington Wire, April 2009, Issue II]

Bringing Students to the STEM Fields: What Eastfield College is Doing Eastfield Community College -- part of the Dallas County Community College District -- with help from the National Science Foundation, has improved enrollment of minority groups, women, and people with disabilities in the STEM majors by more than 57 percent. More importantly, the college increased its very low retention rate from 15 to 46 percent. The secret? Students work in a science setting and receive a stipend. The students work at universities providing basic lab support, in national parks, or other areas where they conduct sampling activities and aid scientists with large projects. This avoids what is known as a "drill and kill," where students in introductory sciences courses become frustrated and quit. [Attracting STEM Students](#) [adapted from AWIS Washington Wire, April 2009]

NSF Releases Updated Report on Women, Minorities, and People with Disabilities This report continues a series of Congressionally-mandated biennial reports and can be used to track progress, inform the development of policies to increase participation in science and engineering, and evaluate the effectiveness of such policies. [New Data and Analyses](#) [from AWIS Washington Wire, Mar. 2009]

Change in Boardroom Dynamics as Women's Presence Increases on College Boards A recent survey by the Cornell Higher Education Research Institution and the Association of Governing Boards of Universities and Colleges shows an increase from 20% to 31% of female members on college boards. During the same period, the percentage of college and university boards being chaired by women increased from 10% to 18%. These findings are consistent with Wellesley Centers for Women research on women serving on boards of Fortune 1000 companies. According to the Wellesley Centers' research, as the number of women on boards increases, the less likely their viewpoints are marginalized or ignored. And consistent with the notion of a "critical mass," women who served on boards with at least two other females reported that their opinions were more highly valued. [Increase of Women on College Boards](#) [from AWIS Washington Wire, Feb. 2009]

What it Takes for African American Women to Succeed in Science This research demonstrates that despite a great interest in science many young African American women find that to stay in afloat in the sciences they must "swim against the tide." Given the low expectations and race discrimination

they often encounter, an unexpected conclusion, according to the research, is that they persevere. The book, *Swimming Against the Tide: African American Women and Science Education* indicates how these students succeed and what obstacles they overcome. Based on statistics, surveys, and interviews, the author shows this pool of young women should be recruited and nurtured to study science if the US hopes to overcome an expected decrease in up and coming scientists. [Swimming Against the Tide](#) [from AWIS Washington Wire, Feb. 2009]

Lilly Ledbetter Act: First Legislation Signed by Obama At the end of her 19-year career at Goodyear Tire and Rubber Company, worker Lilly Ledbetter learned that her pay was only 75-80% of her male counterparts. Ms. Ledbetter sued, alleging gender-based pay discrimination and the case was ultimately argued before the U.S. Supreme Court in 2007. In a 5-4 decision, the majority ruled that employees must file a discrimination claim within 180 days of the first discriminatory event, regardless of when the disparity is discovered. The Lilly Ledbetter Fair Pay Act, which Obama signed on January 29, 2009, overturns this Supreme Court decision by defining every paycheck as a new act of discrimination, thereby extending the 180-day statute of limitations. [Obama Signs Ledbetter Act \(video and article\)](#) [from AWIS Washington Wire, Jan. 2009]

Perceived Work-life Demands of Academic Research Doctoral students are eschewing the "fast-track" to tenured, research-intensive positions because of perceived work demands. In a survey issued to over 19,000 University of California doctoral students, the majority of respondents cited work environment and expectations for these positions as being too demanding to permit a tolerable work-life balance. As compared to previous generations, today's doctoral students include a higher percentage of women, anticipate being part of a two-income household, and expect a greater degree of job flexibility. The faculty culture of most academic institutions has not changed to accommodate this new candidate profile. The authors suggest that by developing part-time and leave-of-absence programs, and fostering a culture supportive of working parents, these institutions can overcome such negative perceptions and reap the rewards of a diverse, motivated candidate pool. [Finding Work/Life Balance](#) [from AWIS Washington Wire, Jan. 2009]

Final Report of The Gender Equity Task Force The University of Texas at Austin published its Final Report of The Gender Equity Task Force. Nine areas, gender gap in faculty representation, promotion and attrition gap for faculty advancing through the ranks, salary gap, climate concerns, leadership gap, policy awareness and use, governance, family-friendly policies, position of senior women are examined. Although women are generally satisfied with their current positions, the report found that promotions for women lagged that of men and a salary disparity persists even when accounting for "salary structure and rank." [Assessing Gender Equity](#) [from AWIS Washington Wire, posted December 2008]

Awards to Women Ever wonder about how many of those scientific awards given by societies are going to women? Check out the data collected via the raise project <http://raiseproject.org/faq.php> [posted 10/6/08]

Appearance of equity more important than reality, report says Interviews with 80 women at a large research university revealed individual and institutional discrimination still exists even while women are increasing in prominent authoritative positions. The report, conducted by the University of

California at Irvine in conjunction with the National Science Foundation, says importance of these positions is often downplayed in these situations. Women in the study "attributed the persistence of gender inequality not to biology but to a professional environment in which university administrators care more about the appearance than the reality of gender equality and a professional culture based on a traditional, linear male model ." [Quiet Desperation Read more about the report and possible solutions](#) [from June, 2008 AWIS Washington Wire; updated July 2009]

Gender Matters Being first a female scientist and then a male scientist has given Professor Ben Barres a unique perspective on the debate over why women are so rare at the highest levels of academic science and math. Read his News and Views article from Nature by clicking the Quick Link located top right of this page, entitled "Ben A. Barres Article: Does Gender Matter?". A video recording of his March, 2008 presentation entitled "**Some Reflections on the Dearth of Women in Science**" is made available by the Office of Faculty Development & Diversity at Harvard University; the URL for the video recording is given below. You will need [RealPlayer](#) software, which you can download for free. Sections of the video:

- Introduction & acknowledgements by Dr. Liza Cariaga-Lo, Assistant Provost for Faculty Development and Diversity at Harvard University: first 5 min.
- Introduction by Dr. Barbara Grosz, Higgins Professor of Natural Sciences at Harvard: 5-12 min.
- Presentation by Dr. Ben Barres: 12 min – 1 hr. 19 min.
- Q & A: 1 hr. 20 min – 1 hour 49 min.

Video Recording:

http://stream.fas.harvard.edu/ramgen/permanent/HCWC/Ben_Barres_HCWC_20080317.rm [Posted Apr. 2008]

The Representation of Women on the Editorial Boards of Major Medical Journals: A 35-Year Perspective: Jagsi and colleagues rigorously examine the representation of women as editors and editorial board members of 16 major biomedical journals that published research from 1970 through 2005. [Arch Intern Med.2008;168\(5\):544-548](#)[posted 3/08]

[Study Suggests Current Journal Practices are Biased Against Female Authors](#) Traditional single-blind peer review practices hinder the number of women authors who get their work published. [from MentorNet News, posted 3/08]

<http://www.mentornet.net/news/newsart.aspx?nid=32&sid=1>

Study reveals reason for women's departure from the sciences Women scientists are not pursuing advanced research careers because of a heavier burden of family responsibility and lower confidence compared to men, according to a study by the National Institutes of Health (NIH) of its own research staff appearing in the November 2007 issue of the "EMBO Reports". The first author is Elisabeth D. Martinez who is now an asst. professor in the Department of Pharmacology here at UT Southwestern. <http://www.nature.com/embor/journal/v8/n11/full/7401110.html> [posted Nov 19, 2007, updated Jan, 2010]

Women can't win Too bold, too meek, too strong, too weak-women are never perceived as "just right" when it comes to their behavior on the job, or so the data suggests. This New York Times article surveys several recent studies and attempts to make sense of the conflicting signals women are sent about how they should act in order to get ahead. [from AWIS Washington Wire, Nov. 2007]
http://www.nytimes.com/2007/11/01/fashion/01WORK.html?_r=2&ex=1194580800&en=91feaf95fabced83&ei=5070&emc=eta1&oref=slogin&oref=slogin [posted Dec. 19, 2007]