



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 forward this e-newsletter to colleagues who may find it of interest.

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Report in JAMA Describes the Characteristics and Career Intentions of M.D./Ph.D. Graduates

Researchers from the Washington University School of Medicine reported on the characteristics and career intentions of recent M.D./Ph.D. graduates in the *Journal of the American Medical Association* (JAMA), using deidentified survey data from the Association of American Medical Colleges (AAMC) Graduation Questionnaire of over 88,000 medical graduates. They found that M.D./Ph.D. graduates are less diverse, have a lower debt burden, favor different medical specialties, and have greater planned career involvement in research than graduates of other M.D. programs. Only 30% of the M.D./Ph.D. graduates were women compared to 46% for other M.D. program graduates; similarly, only 7.4% of the M.D./Ph.D. graduates were underrepresented minorities compared to 12.8% for other M.D. program graduates. Being female or being part of an underrepresented ethnic group was associated with a lower likelihood of graduation from M.D./Ph.D. programs.

[Read more](#)

Ph.D. Completion Rates Lower for Women, Minorities, and Non-U.S. Citizens

The Council of Graduate Schools released data from the largest analysis of doctoral student completion rates, the [Ph.D. Completion Project](#). After ten years, 55% of women (compared to 58% of men) complete their Ph.D. program. Completion rates for women varied only a few percentage points by field with the lowest rates (52%) in Humanities and Math & Physical Sciences and the highest rates in Engineering (56%), Life Sciences (56%), and Social Sciences (57%). Among men, completion rates differed from 47% in the Humanities to 65% in Engineering. Overall, ten-year completion rates for Whites were highest at 55%, followed by Hispanic Americans (51%), Asian Americans (50%), and African Americans (47%). However, within the Life Sciences, African-Americans had the same completion rates as Whites (60%), followed by Hispanic Americans (54%) and Asian Americans (47%). In all fields, U.S. Citizens have a significantly higher ten-year completion rate (67%) than non-U.S. citizens (54%).

[Council of Graduate Schools Press Release](#)

[Executive Summary](#)

[News article from Inside Higher Ed](#)

[News article from Chronicle of Higher Education](#)

Salaries of Women Scientists Lag Behind Men at Senior Levels; Males with Traditional Views Earn Higher Salaries than Egalitarian Males

The Scientist has released the results of its 2008 Life Science Salary Survey, finding that the median total compensation was \$85,000, an increase of 13% since 2006. The survey results include detailed analyses of median salaries by specialization, citizenship, organization type, supervisory responsibility, ethnicity, and gender. For all degrees (B.S., M.S., Ph.D., M.D.), Whites received a higher salary than Asians, Hispanics, or Blacks. Females and males earned similar salaries within Assistant and Associate Professor

positions, but the average male Full Professor earned about 20% more (\$161,500) than the average female Full Professor (\$134,700).

In an unrelated study, the *Journal of Applied Psychology* published research from the University of Florida showing that "gender role orientation" is a strong predictor of earnings, especially for men. Males with a preference for "gendered separation of roles at work and at home" tended to have significantly higher salaries than males with an egalitarian gender role orientation, while females with more traditional gender role orientations tended to have slightly lower salaries than women with less traditional orientations.

[2008 Life Sciences Salary Survey \(*The Scientist*\)](#)

["Is the Gap More Than Gender?" \(*Journal of Applied Psychology*\)](#)

["Men with Sexist Views 'Earn More'" \(*BBC News*\)](#)

["Study Ties Wage Disparities To Outlook on Gender Roles" \(*Washington Post*\)](#)

Doctors in two Medical Disciplines Reflect on the Proportion of Women

Women now receive more M.D. degrees each year than men, but their proportional representation lags at more senior levels and in some disciplines. To learn more about the barriers facing women in neurosurgery, the Board of Directors of the American Association of Neurological Surgeons (AANS) requested a "White Paper on the Recruitment and Retention of Women in Neurosurgery," which was produced by the Women in Neurosurgery (WINS) and published in the September issue of the *Journal of Neurosurgery*. The WINS White Paper Committee found many obstacles, collectively classified under gender inequity, that serve as barriers to advancement of women neurosurgeons. In an accompanying editorial, the Executive Committee President of the AANS Board of Directors acknowledged the need for "active measures" in "dismantling the barriers and offering a hand across the remaining gulfs that separate the privileged from the deserving."

In another medical discipline, urology, the increase in women was described in the *New York Times* as a natural progression following from the appearance of "pioneer" female role models. However, barriers and stereotypes still exist, especially among male patients who assume that their female urologist is actually a nurse. Upon finding that they have been assigned to a female doctor, some men ask for a male doctor instead.

[The Future of Neurosurgery: A White Paper on the Recruitment and Retention of Women in Neurosurgery](#)

[Editorial in *Journal of Neurosurgery*](#)

[*New York Times* article on Urology](#)

Two Studies Examine Trainees' Perspectives on Mentoring

Two recent studies by MentorNet and researchers at the University of Pittsburgh asked trainees about their perspectives on mentoring and found that there are gender differences in their perceptions of mentoring (MentorNet study) and in their strategies to establishing mentoring relationships (University of Pittsburgh study).

MentorNet, the e-mentoring network for diversity in engineering and science, surveyed undergraduates, graduate students, and postdoctoral researchers in science, technology, engineering, and mathematics (STEM) fields about their perceptions of the value and need for mentors, and found that almost all (98%) respondents reported that having a mentor was important to them. Females were less likely to have support in the three areas that were considered (psychosocial, role modeling, and academic/career), but females were more likely than males to report that they felt supported by and connected to others in their fields. Almost 40% of all respondents reported that they were not encouraged to find a mentor. Only 20% of respondents indicated that it was important to have a mentor of their own race or of their own gender.

A pilot study on medical residents' perspectives on mentoring was published in *Medical Education Online*, and reported multiple barriers (for both men and women) in establishing mentoring relationships. Females tended to pursue passive approaches to finding a mentor, and assumed that mentors would approach them, while men identified mentors through research, similar interests, friendship, and networking. The authors suggested that residency programs should pay special attention to gender differences when developing opportunities for mentoring relationships.

[Student Perceptions of the Need for Mentoring \(MentorNet\)](#)

[University of Pittsburgh Pilot Study \(Medical Education Online\)](#)

Conference at Columbia University Highlights Questions on Women's Careers

The Sanford C. Bernstein & Co. Center for Leadership and Ethics at Columbia Business School held a [Research Symposium](#) on September 19, 2008, *Universities, Careers and Women*. Data from the [Harvard and Beyond Project](#), which is tracking career outcomes from three different cohorts of Harvard graduates (from 1970, 1980, and 1990), showed that the likelihood of women being unemployed fifteen years after graduation strongly correlated with the number of children they had. One interesting finding was the differences between doctoral degree holders: 65% of the women with a Ph.D. and one child were employed, while 81% of the women with an M.D., D.D.S., or D.V.M. and one child were employed.

[Read more \(Inside Higher Ed news article\)](#)

Of 21 High-income Countries, United States Found "Least Generous" in Parental Leave Policies

A report from the Center for Economic and Policy Research presents a detailed comparison of the parental leave policies in 21 high-income countries, finding that the United States has the least generous

policies. Although Switzerland provides less total weeks of leave to a two-parent couple (14 weeks) than the United States (24 weeks), 11 weeks are paid in Switzerland, compared to 24 weeks of unpaid leave in the United States under the Family Medical Leave Act (FMLA). Australia, which joins the United States as the only other country without paid parental leave, ranks higher in overall generosity because it offers 52 weeks of unpaid leave for mothers, in addition to a \$3,000 "baby bonus" to new parents. The authors also calculated a "Gender Equality Index" to take into account the "traditional gender roles and gender-wage differentials that push women out of the the labor market and push fathers out of child care." Under this measure, the United States moves to the middle of the group, ranked 11 out of 21, largely because of its "non-transferability of leave between fathers and mothers" (each parent is offered 12 weeks of unpaid leave), a key feature of gender equality.

Both the United States Congressional and Executive Branches have been proposing changes to parental leave policies this year. [HR5781](#), which provides that 8 of the 12 weeks of parental leave to a Federal employee be paid, passed in the House of Representatives, but may not make it to the floor of the Senate or past a White House veto, [according to the Washington Post](#). Meanwhile, the Department of Labor published a [Notice of Proposed Rulemaking](#) to [tighten the leave-of-absence provisions of the FMLA](#) ([according to CQ Weekly](#)) in February, and accepted public comments through April 2008.

[Press Release from the Center for Economic and Policy Research](#)

[Parental Leave Policies in 21 Countries: Assessing Generosity and Gender Equality](#)

Men Continue as Majority of Recipients for Prestigious Science and Technology Awards; National Academies Encourages Broadened Participation in Science and Technology Leadership

Recipients of several prestigious awards were announced in August and September, revealing a majority of men. Of the [eight recipients](#) of the U.S. National Medal of Science, only one was a female (Fay Ajzenberg-Selove, Ph.D.) and none of the [six individuals](#) who received the U.S. National Medal of Technology and Innovation were female. The [2008 Lasker Awards](#), considered by many to be predictors of Nobel Award recipients, were awarded to five men (under the categories of the Albert Lasker Basic Medical Research Award, the Lasker~DeBakey Clinical Medical Research Award, and the Lasker~Koshland Special Achievement Award in Medical Science). Meanwhile, L'Oreal USA [announced](#) the beginning of the 2009 application process for its respected L'Oreal USA [Fellowships for Women in Science](#), which is administered with the American Association for the Advancement of Science, and the National Academies released a report, [Science and Technology for America's Progress: Ensuring the Best Presidential Appointments in the New Administration](#), that encouraged broadening of the pool of potential candidates for science and technology appointments, stating "continuing efforts should be made to identify women and member of underrepresented groups for such positions."

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