NIH Efforts to Support and Advance the Careers of Women in Biomedical Careers

National Institutes of Health, Office of Research on Women's Health and the NIH Working Group on Women in Biomedical Careers

Background

In January 2007, the Director of the National Institutes of Health (NIH) established the NIH Working Group on Women in Biomedical Careers (WG) in response to the National Academies report *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*. That report concluded that women face institutional and environmental barriers to advancement at all career stages and called for broad, innovative action from universities, professional societies, and government funding agencies.

The Working Group, which is co-chaired by NIH Director, Francis S. Collins, M.D., Ph.D., and Office of Research on Women's Health (ORWH) Acting Director, Janine Austin Clayton, M.D., includes NIH Deputy Directors and Office of the Director (OD) senior staff, Institute and Center (IC) Directors, and other men and women representatives of NIH intramural and extramural staff.

The NIH intramural community comprises scientists and physicians who support and carry out research on the NIH campuses. The NIH extramural community is composed of NIH employees who administer and manage NIH grants, policies, and operations, as well as NIH grantees at institutions throughout the Nation.

Under the leadership of the NIH Director and ORWH, the members of the WG are continuing to work towards even greater accomplishments, acknowledging that this will be a long journey and recognizing that sustaining advancement of women in biomedical careers will require persistent attention. Here we summarize the primary activities and accomplishments of the WG to date.

Women in Science at the NIH

ORWH published *Women in Science at the National Institutes of Health 2007-2008*, a publication highlighting the career paths and accomplishments of 289 doctoral-level women scientists, administrators, and leaders at the NIH. In the profiles, the women shared their educational background, research interests, pivotal career events, insights on mentoring and work/life balance, and advice to women and men pursuing careers in science. Copies may be ordered and downloaded at the WG Web site.

In May 2011, the National Institute of Allergy and Infectious Diseases (NIAID) held a workshop honoring the NIAID women featured in the book. *Lessons in Leadership: Honoring NIAID's Women in Science*, was held to promote interaction among scientists and fellows, facilitate discussion of experiences and lessons learned, and create opportunities to foster career success for NIAID's trainees.

Resources on the WG Web site

- Links to over 330 articles and reports relevant to women's careers
- Data on the participation of women in NIH extramural grant programs on the WG and Office of Extramural Research RePORT Web sites
- FAQs that present relevant information related to NIH policies regarding the use of grant funds for parental leave and child care
- Lists of resources at the NIH, other Federal, and professional societies and organizations
- An e-newsletter featuring information on women's careers in science, examples of best practices for supporting women in science, and profiles of junior women scientists that reaches over 750 subscribers

http://womeninscience.nih.gov/

Workshops

The reports of the two workshops *Women in Biomedical Research: Best Practices for Sustaining Career Success* and the *National Leadership Workshop on Mentoring Women in Biomedical Careers* serve as resources informing the activities of the WG and the implementation and enhancement of NIH policies and programs.

Mid-Atlantic Higher Education Recruitment Consortium (M-A HERC)

The NIH helped establish and continues to play a leading role in the M-A HERC, which expands the job placement and other dual career resources available to the partners of current and potential NIH employees. M-A HERC forms a network of over 50 colleges, universities, professional societies, and other Federal agencies in Maryland, Virginia, and Washington, DC. Representatives of the M-A HERC member institutions meet twice a year to share best practices on recruiting, diversity, and other issues. In 2010, a CV/resume bank was added to the Web site, which also features a unique tool that allows dual career couples to search for two positions among all job postings at all the member institutions simultaneously.

MID-ATLANTIC HERC Higher Education Recruitment Consortium MEMBER INSTITUTION

http://www.midatlanticherc.org

Extramural Activities

The allowed period of paid parental leave for Ruth L. Kirschstein National Research Service Awards trainees has been doubled to sixty calendar days.

The *Research on Causal Factors and Interventions that Promote and Support the Careers of Women in Biomedical and Behavioral Science and Engineering* grant program was established and 14 R01 awards were made in 2009 with contributions from 11 ICs and 4 OD offices ($16.8M over 4 years). Topics being studied include:

- The roles mentoring and funding support play throughout women's academic careers;
- The impact of family-friendly policies in retaining women in the scientific workforce;
- Economic factors related to gender disparities in science;
- Factors which specifically impact the career paths of women of color.

The ORWH Re-entry Supplement Program, which provides opportunities for fully trained researchers to re-enter careers in science after a hiatus due to family or other responsibilities, has been expanded to include postdoctoral researchers.

The WG, with funding from ORWH, has developed the Women of Color Research Network, an online forum for interaction between students, researchers, and policy makers interested in supporting the development of a diverse scientific workforce and to provide networking, mentoring, and career development opportunities for women of color in biomedical careers: www.wocrn.nih.gov

The WG has disseminated information about the Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring, which is open to all scientists, and is exploring new options to recognize and encourage high quality mentoring in the biomedical research community.

The application for NIH Support for Conferences and Scientific Meetings (Parent R13/U13) now requires that applicants "Describe plans to identify resources for child care and other types of family care at the conference site to allow individuals with family care responsibilities to attend. That information should allow attendees to make arrangements for family care as needed."

Based on comments from the extramural community— concerns that the existing biosketch could work against applicants when there were unexplained gaps— the NIH developed a policy that allows applicants to use their biosketch to "briefly describe factors such as family care responsibilities, illness, disability, and active duty military service that may have affected your scientific advancement or productivity." **This change provides peer reviewers additional information on which to base their assessment of the qualifications and productivity of the applicant.**

The WG and the National Institute of Biomedical Imaging and Bioengineering have worked with imaging and bioengineering professional societies to include career development programs for women at their meetings.

Intramural Activities

A thorough review of intramural programs, practices, and policies resulted in a series of initiatives that may serve as models that other institutions might implement, including:

- Extension of the period of paid parental leave for NIH trainees to eight weeks;
- Extension of the tenure-clock for NIH scientists by one year to accommodate family leave;
- Establishment of a program to enable NIH investigators to hire a temporary lab manager while they are on extended leave;
- Implementation of an NIH leave bank which provides NIH employees with access to paid medical leave if they or a family member becomes sick or is seriously injured, and for the birth of a child, after the employee has exhausted all of his or her own leave;
- Construction of an additional child care center on the Bethesda campus, which will increase overall capacity when completed, and other child care services available from the Office of Research Services. http://does.ors.od.nih.gov/childcare/

Three focus groups of NIH investigators, staff scientists and clinicians, and postdoctoral fellows were held to garner insights and recommendations for improving the NIH climate for all scientists. The data from these focus groups has been analyzed and a comprehensive response and series of implementable actions have been approved by NIH Intramural leaders.

The recommendations of the Trans-NIH Mentoring Committee regarding individual development plans and annual reviews for NIH trainees, evaluation of mentoring by investigators as part of their review, and exit interviews for all intramural programs are being implemented, with provisions for accountability by NIH leadership.

In each of the last five years, the WG has sponsored a woman bioengineer to speak at the prestigious NIH Director's Wednesday Afternoon Lecture Series to bring attention to the contributions of women and encourage NIH trainees to consider to this field.

Summary

The NIH is demonstrating how attention from top leadership and the efforts of others across the spectrum of staff at a Federal funding agency can lead to the successful development and implementation of initiatives to maximize the potential of women scientists and engineers. The WG is committed to making the NIH a model for achieving the highest caliber of science by capitalizing on the perspectives, talents, and energies of a diverse and well-rounded workforce.

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