Interest in clinical research careers is falling among medical degree recipients, and particularly among women. This situation is worrisome because, according to the Association of American Medical Colleges, women will soon make up the majority of recipients of medical degrees and life science doctorates, and declining interest from the growing pool of future investigators may limit our understanding of human disease. Increased representation of women scientists as leaders in clinical research will be good for those individual women, for their institutions, and for society.

The Office of Research on Women’s Health (ORWH) at the National Institutes of Health (NIH) asked the National Research Council (NRC) to hold a workshop to explore ways in which scientific societies could enhance the clinical research careers of women scientists. One of ORWH’s mandates is to increase opportunities for recruitment, retention, advancement, and reentry of women into biomedical careers. The workshop, held in 2002 in Washington, D.C., expanded on the progress achieved at AXXS ’99, a previous workshop where representatives from over ninety professional science societies gathered to discuss ways to encourage women scientists.

**HOW WOMEN’S ROLE IN MEDICINE HAS CHANGED OVER THE YEARS**

Johns Hopkins University School of Medicine set the standard for diversity in American medicine when it admitted women in 1893. By the late 1980s, women constituted a third of the admitted class to U.S. medical schools. Each year during the seventies and the eighties, as more women were accepted, more women applied. Women applicants to medical schools numbered 2,800 in 1971 and rose to more than 17,000 in 2001.

**WHY PROFESSIONAL SOCIETIES ARE IMPORTANT**

Scientific societies play a crucial role in career development, serving as agents for change in health and research careers. Societies can help identify specific strategies to encourage women to enter and continue in clinical research careers. They can appoint women to editorial boards, important committees, and positions as committee chairs and speakers, and can nominate them for awards. Professional society activities such as lectures, workshops, and mentoring programs help ensure that women have a place to learn and develop their careers.

**SUGGESTIONS FROM WORKSHOP PARTICIPANTS**

Participants in the AXXS 2002 workshop identified many initiatives and activities that professional societies can undertake to help advance women’s careers and promote women’s contributions to their fields.
Leadership, Visibility, and Recognition

- Maintain editorial boards and governing bodies that reflect the demographics of their membership.
- Urge NIH to reconvene a clinical research panel, similar to the one chaired by NIH Director Harold Varmus, to ensure that progress is continuing.
- Offer leadership programs by way of national society meetings or research training programs.
- Collaborate with the NIH and the private sector for joint funding.
- Play a major role in defining criteria for excellence in clinical research and seek endorsement of the criteria by academic health centers to be used as valid criteria for promotion and tenure.

Mentoring and Networking

- Promote mentoring at all career levels, from predoctoral on, that can be supported by institutions and national organizations.
- Facilitate and highlight the value of mentorship through award programs.
- Find ways to institutionalize the accountability and value of mentorship.

Best Practices

- Promote collaboration and interaction among societies so that they share information, avoid duplication, highlight well-functioning models, and continue communicating.
- Convene meetings to provide a mechanism for ongoing interaction between mid-level and senior-level women.
- Provide courses to young scientists on how to negotiate and how to request resources and support from a university.
- Promote a strategy of both internal and external recruitment of women.

Oversight, Tracking, and Accountability

- Collect better data on clinical researchers to determine the demographics of societies and whether the leadership and staff of those societies reflect their memberships.
- Examine equity issues such as salary, perhaps starting with the American Association of Medical Colleges (AAMC), which does comprehensive salary surveys each year.
- Collect hard data on recruitment versus retention costs to document the cost-effectiveness of retention.
- Once data are available, disseminate them to department chairs and the society members.

STEERING COMMITTEE FOR AXXS 2002 WORKSHOP: Sally Shaywitz (Chair), Yale University; Nancy Andrews, Harvard Medical School; Janet Bickel, Association of American Medical Colleges; Michael Lockshin, Cornell University; Herbert Pardes, New York-Presbyterian Hospital; Deborah Powell, University of Minnesota Medical School; W. Sue Shafer, Institute for Quantitative Biomedical Research; Jeanne Sinkford, American Dental Education Association; Jong-on Hahm (Study Director), National Research Council

For More Information
Copies of Achieving XXcellence in Science: Role of Professional Societies in Advancing Women in Science: Proceedings of a Workshop, AXXS are available from the National Academy Press; call (800)624-6242 or (202)334-3313 (in the Washington metropolitan area), or visit the NAP website at www.nap.edu. For more information on the project, contact staff at (202) 334-1737 or visit the Policy and Global Affairs website at www.nationalacademies.org/pga.