NIH Office of Research on Women's Health

NIH...Turning Discovery Into Health



In this Issue

- ► Mentoring Women in Science
- ► Why Should I Be a Mentor?
- ► Becoming an Effective Mentor
- ► What Can Institutions Do to Encourage Productive Mentoring?

Mentoring is critical for achieving full potential at every career stage and in every field. It promotes efficiency, increases productivity, and enhances career satisfaction. Effective mentoring is especially important for women in science.

Share your personal story with your mentee. How did you end up in your position? What challenges did you face along the way?

Mentoring Women in Science

▶ for mentors

Men-tor: noun | 'men-,tôr, -tər| : a trusted counselor or guide : TUTOR, COACH Men-tee: noun | men-'te| : one who is being mentored : PROTÉGÉ

Mentoring Women in Science

Women are underrepresented in leadership positions in academia and often report feeling alienated and isolated.1 According to the National Science Foundation, only 20 percent of full-time, full professors in science and engineering are women.2 Access to quality mentoring remains important throughout a woman's scientific career. Women with mentors publish more frequently and are more likely to receive grant funding. Female assistant professors with mentors were 25 percent more likely to receive grant funding than their female colleagues without mentors.3

Why Should I Be a Mentor?

Mentoring is more than just professional generosity; the mentors also benefit from mentoring relationships. Discussions with your mentees can provide fresh perspectives on your research and advance your personal career development. • Keep in mind that you are mentoring Furthermore, mentoring gives you the opportunity to practice your leadership skills and build your professional network.

Becoming an Effective Mentor

Like anything else, effective mentoring requires time and practice. Before creating a mentoring relationship, take time to consider mentoring best practices. Talk to senior colleagues about their experiences, and participate in mentoring training sessions offered by academic institutions,

professional societies, and other sources. Best practices to consider include:

- Begin the relationship with a needs assessment that establishes expectations and articulates desired outcomes.
- Set clear boundaries and guidelines at the beginning: How often will you meet? Will you be discussing research issues, career development, personal problems, or all three? Are any topics off-limits?
- Strive for clear and effective communication. Give honest and objective feedback.
- Be encouraging and motivating, but also be realistic. Challenge your mentee to think broadly and to consider all opportunities.
- Maintain confidentiality to build a relationship based on trust.
- Create a judgment-free zone.
- not just a researcher, but a whole person who likely has competing professional and personal priorities. Be sensitive to this complexity, and be prepared to help with time management suggestions or tips for overcoming guilt and anxiety.
- Recognize that your mentee may have needs, goals, values, and priorities that differ from your own.
- Be approachable and accessible.

The Office of Research on Women's Health (ORWH) promotes women's health and sex differences research within and beyond the NIH and works to ensure that women and minorities are included in clinical research. ORWH establishes the NIH research agenda for women's health, co-funds research in partnership with NIH Institutes and Centers, and supports women in biomedical careers and women's health researchers.

"We always tell our BIRCWH Scholars that they should select their mentors VERY carefully: If they are successful, these mentors will last them for an entire lifetime!"

—Eugene P. Orringer, M.D., Professor of Medicine, University of North Carolina (UNC); Director, UNC Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Program

- Introduce your mentee to friends and colleagues to build her network.
- Recognize and respond to your mentee's unique professional needs presented by her gender, background, or culture. Be sensitive to issues specific to diversity groups defined by race/ethnicity, gender, and disability status.
- Continuously gauge effectiveness of your mentoring relationship and make adjustments as necessary.

What Can Institutions Do to Encourage Productive Mentoring?

One way that institutions can support women in science is to foster a culture that values and appreciates mentoring. There are concrete steps institutions can take to encourage productive mentoring. For example:

- Set up a formal mentor-match program to help mentors and mentees connect.
- Publicize the benefits of mentoring.
- Offer training sessions for both mentors and mentees.
- Acknowledge the time mentors dedicate to mentoring activities. Recognize and reward outstanding mentoring, if possible, through monetary or promotion rewards.
- Submit grants to support mentoring or training initiatives. For instance, NIH offers institutional mentored career development awards, such as the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) program.
- Evaluate mentoring programs, collecting data on both short-term and long-term outcomes.

References and Resources

- 1. National Research Council. *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering.* Washington, DC: The National Academies Press, 2007.
- 2. National Science Foundation, Division of Science Resources Statistics. 2011. Women, Minorities, and Persons with Disabilities in Science and Engineering: 2011. Special Report NSF11-309. Arlington, VA: National Science Foundation. Available at http://www.nsf.gov/statistics/wmpd/.
- 3. National Research Council. *Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty.* Washington, DC: The National Academies Press, 2010.
- 4. Dean, D. Getting the Most Out of Your Mentoring Relationships: A Handbook for Women in STEM. New York: Springer, 2009.
- 5. Handelsman, J., Pfund, C., Lauffer, S.M., and Pribbenow, C. *Entering Mentoring: A Seminar to Train a New Generation of Scientists*. Madison, WI: University of Wisconsin, 2005.
- 6. Burroughs Wellcome Fund and Howard Hughes Medical Institute. Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty. 2nd ed. Research Triangle Park, NC, and Chevy Chase, MD: Burroughs Wellcome Fund and Howard Hughes Medical Institute, 2004.
- 7. Lee, A., Dennis, C., and Campbell, P. Nature's guide for mentors. Nature 447 (791–797).
- 8. "Learning to Mentor" on Naturejobs.com. *Nature* 436, (436–437) (20 July 2005) 10.1038/nj7049-436a http://www.nature.com/naturejobs/2005/050721/full/nj7049-436a.html.
- 9. National Institutes of Health, Office of Research on Women's Health. 2008. *National Leadership Workshop on Mentoring Women in Biomedical Careers: Meeting Proceedings* (NIH Publication No. 09-6364). Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health. http://womeninscience.nih.gov/mentoring/.

For more information about career development for women scientists, visit the NIH Office of Research on Women's Health web site:

NIH Publication No. 12-7871 June 2012

http://orwh.od.nih.gov/career.html





