

Edited by Jennifer Sills

Not just Salk

In her ScienceInsider News Story "Salk Institute hit with discrimination lawsuit by third female scientist" (20 July, http:// scim.ag/2uPXWCa), M. Wadman reports that three of the four senior women scientists at the Salk Institute have filed a lawsuit alleging gender discrimination. The concerns of these faculty serve to remind us that these issues are still relevant, and they are not unique to the Salk Institute.

In the 1990s, Nancy Hopkins became a spokesperson for fair treatment of women when she confronted the Massachusetts Institute of Technology (MIT) for systematically assigning less space and resources to women faculty. The now-famous MIT 1999 report (1) suggested steps to correct the bias, which were implemented by MIT. Subsequently, a number of institutions evaluated potential discrimination of their women faculty, including Stanford in 2002, University of Michigan in 2002, Princeton in 2003, Duke in 2003, Johns Hopkins in 2006, and Yale in 2014 (2). Among the concerns raised were bias in promotions, space and resource allocation, committee assignments, and leadership opportunities. These allegations of bias are substantiated by data, as summarized in the 2007 report by the National Academy of Sciences, "Beyond bias and barriers" (3), and in the 2010 American Association of University Women (AAUW) report, "Why so few?" (4). The reports highlight the role of unconscious bias that leads to fewer opportunities for women. Unconscious bias is difficult to assess, precisely because it is unconscious, and usually unintended,

yet it is deeply embedded in our culture ("Measuring and managing bias," J. Berg, Editorial, 1 September, p. 849). Notably, both men and women, nonscientists and scientists, display the same biases against women (5).

When leaders claim that there is no bias at their institutions, it is essential to examine the data. Whereas some reports (such as the AAUW report) suggest progress is being made, recent studies (5, 6) document the persistence of the problem. Indeed, the Salk lawsuit has led many of our colleagues to again raise questions of similar discrimination at their institutions, illustrating that gender discrimination problems are far from solved. Furthermore, we recognize that, while the Salk case is about gender discrimination, our minority colleagues face even greater challenges (7-9), and we need to include their concerns as we fight bias. Combatting all forms of discrimination and overcoming unconscious bias is an ongoing battle. It will require deep societal changes, in addition to strong institutional policies to commit to change. The Salk case reminds us of the challenge of diversifying academic biomedical communities, both for women and minorities.

We can look to several evidence-based solutions that can lead to real change (10, 11). It is time to take action and make changes that will solve this recurring issue. The next generation of scientists is watching, and many are choosing not to pursue a career in science, where they feel they will not have support. We need a vigorous national response to this national problem. The health of the scientific enterprise depends on it.

Carol Greider,1* Nancy Hopkins,2 Joan Steitz,3 Angelika Amon,2 David Asai,4 Ben Barres,⁵ Brenda Bass,⁶ Bonnie

Bassler,⁷ Robert Birgeneau,⁸ Pamela Bjorkman,9 Michael Botchan,8 Joan Brugge, 10 Tom Cech, 11 Rita Colwell, 12 Nancy Craig,1 Titia deLange,13 Michael Eisen,8 Susan Gottesman,14 Rachel Green,1 Jo Handelsman,15 Judith Kimble,15 Mary-Claire King,16 Ruth Lehmann,17 Eve Marder,18 Dyche Mullins,19 Erin O'Shea,4 Sandra Schmid,20 Geraldine Seydoux,1 Allan Spradling,21 Gisela Storz,14 Jack Szostak,10 Alice Telesnitsky,22 Shirley Tilghman,7 Robert Tjian,8 Ronald Vale,19 Cynthia Wolberger, Virginia Zakian7

Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA. 2Massacusetts Institute of Technology, Cambridge, MA 02139, USA. 3Yale University, New Haven, CT 06520, USA. 4Howard Hughes Medical Institute, Chevy Chase, MD 20815, USA. 5Stanford University, Stanford, CA 94305, USA. 6University of Utah, Salt Lake City, UT 84112, USA. 7Princeton University, Princeton, NJ 08544, USA.8University of California Berkeley, Berkeley, CA 94720, USA. 9California Institute of Technology, Pasadena, CA 91125, USA. 10 Harvard Medical School, Boston, MA 02115, USA. 11 University of Colorado Boulder, Boulder, CO 80309, USA. ¹²University of Maryland, College Park, MD 20742, USA. 13Rockefeller University, New York, NY 10065, USA. 14Bethesda, MD 20817, USA. 15University of Wisconsin, Madison, WI 53706, USA. 16University of Washington, Seattle, WA 98195, USA. 17 New York University, New York, NY 10016, USA. 18 Brandeis University, Waltham, MA 01454, USA. 19University of California San Francisco, San Francisco, CA 94158, USA. 20 University of Texas Southwestern Medical School, Dallas, TX 75390, USA. 21 Carnegie Institution of Washington, Baltimore, MD 21218, USA. ²²University of Michigan, Ann Arbor, MI 48109, USA. *Corresponding author. Email: cgreider@jhmi.edu

REFERENCES

- 1. MIT, "A study on the status of women faculty in science at MIT" (1999): http://web.mit.edu/fnl/women/women.pdf.
- 2. Women Faculty Forum, "Reports from Other Universities on Status of Women & Family Life" (http://wff.yale.edu/resources/ reports-other-universities-status-women-family-life).
- "Beyond bias and barriers: Fulfilling the potential of women in academic science and engineering" (National Academies Press, 2007)
- 4. C. Hill, C. Corbett, A. St. Rose, "Why so few?" (AAUW, 2010).
- C.A. Moss-Racusin, J. F. Dovidio, V. L. Brescoll, M. J. Graham, J. Handelsman Proc Natl Acad Sci U.S.A. 109 16474 (2012).

References continued above