Women in Science & Engineering Leadership Institute
Annual Report
2008

Principal Investigators, *University of Wisconsin-Madison***:**

Prof. Molly Carnes, Department of Medicine
Prof. Amy Wendt, Department of Electrical & Computer Engineering
Dr. Jennifer Sheridan, WISELI

Overview

An Overview of WISELI

The Women in Science & Engineering Leadership Institute (WISELI) is a research center at the University of Wisconsin-Madison. WISELI was formed in 2002 with funding from the National Science Foundation's ADVANCE: Institutional Transformation program. The center is currently funded with a combination of: contributions from eight UW-Madison schools, colleges, or units; grant funding from national scientific funding agencies; gift funds; and funds earned through WISELI's income-generating activities.

The long-term goal of WISELI is to have the gender of the faculty, chairs, and deans reflect the gender of the student body at UW-Madison. To accomplish these goals, WISELI is a visible, campus-wide entity, endorsed by top-level administrators, which uses UW-Madison as a "living laboratory" to study gender equity for women in science and engineering, implement solutions, and provide methods and analyses to measure indicators of success.

WISELI also disseminates "best practices" in gender equity programming and measurement. Our workshops and materials are in demand by colleges and universities nationally (and even internationally).

The major initiatives that WISELI has implemented include:

- *Searching for Excellence & Diversity* workshops for search committee chairs and members
- *Enhancing Department Climate: A Chair's Role* workshops for department chairs
- Celebrating Women in Science and Engineering Grant Program
- Vilas Life Cycle Professorship Program
- Denice D. Denton Distinguished Lecture Series
- WISELI Listserv

- WISELI Website, including an extensive online library and a "bookstore" where WISELI's publications can be purchased
- Documentary Videos
- *Running a Great Lab*: Workshops for New Principal Investigators
- Exit interviews for all UW-Madison faculty departures
- *Study of Faculty Worklife at UW-Madison* faculty climate surveys

Organizational Chart

WISELI
Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

Directors
Co-Director: Molly Carnes
Co-Director: Amy Wendt
Research & Executive Director: Jennifer Sheridan
Evaluation Director: Christine Maidl Pribbenow

Staff
Researcher: Eve Fine
Research Specialist & Webmaster: Deveny Benting
University Grants & Contracts Specialist: Carol Sobek
Project Assistant: Jessica Winchell

Administrative Partners

Chancellor Biddy Martin	Provost Pat Farrell	Dean Martin Cadwallader, Graduate School
Dean Molly Jahn, College of Agricultural & Life Sciences	Dean Paul Peercy, College of Engineering	Dean Gary Sandefur, College of Letters & Sciences
Dean Robert Golden, School of Medicine & Public Health	Dean Jeanette Roberts, Pharmacy	Dean Daryl Buss, Veterinary Medicine
Interim Dean Adam Gameron, School of Education	Dean Robin Douthitt, School of Human Ecology	Dean Katharyn May, School of Nursing
Vice Provost for Diversity & Climate Damon Williams	Vice Provost for Faculty & Staff Programs Steve Stern	Assoc. Dean for Physical Sciences Terry Millar, Graduate School
Assoc. Dean for Biological Sciences Donna Paulnock, Graduate School	Assoc. Dean Mariamne Whatley, School of Education	Douglass Henderson, Graduate Engineering Research Scholars (GERS)
Jocelyn Milner, Office of Academic Planning & Analysis	Luis Pinero, Equity & Diversity Resource Center	Lynn Edlefson, Office of Child Care and Family Resources
Don Schutt, Office of Human Resource Development	Manuela Romero, Wisconsin Alliance for Minority Participation	Jo Handelsman, Wisconsin Program for Scientific Teaching
Wendy Crone, Women Faculty Mentoring Program	Lindsey Stoddard Cameron, New Faculty Services	

Campus Affiliates
Women in Science and Engineering and other supporters, through WISELI Listserv

Papers and Presentations

WISELI Publications and Presentations

Papers Published:

Carnes, Molly; Claudia Morrissey; and Stacie E. Geller. 2008. "Women's Health and Women's Leadership in Academic Medicine: Hitting the Same Glass Ceiling?" *Journal of Women's Health*. 17(9): 1453-1462.

Ford, Cecilia E. 2008. *Women Speaking Up: Getting and Using Turns in Workplace Meetings.* New York: Palgrave Macmillan.

Ford, Cecilia. "Questioning in Meetings: Participation and Positioning." In *Why Do You Ask? The Function of Questions in Institutional Discourse* (Susan Erlich and Alice Freed, Eds.) Oxford University Press. In press.

Fine, Eve. 2008. "Response to Lawrence Summers' Remarks on Women in Science." In *The Blair Reader: Exploring Contemporary Issues,* 6th edition. Edited by Laurie G. Kirszner and Stephen R. Mandel. Prentice Hall. Originally published January 2005 on WISELI's website: (http://wiseli.engr.wisc.edu/news/LawrenceSummers_Response.pdf)

Handelsman, Jo and Robert Birgeneau. September 25, 2007. "Women Advancing Science: A Few Significant Changes in the Academic System Could Stem the Loss of Talented Women, Thereby Fortifying our Scientific Leadership." *Technology Review*. http://www.technologyreview.com/blog/guest/21855/ .

Marchant, Angela; Abhik Bhattacharya; and Molly Carnes. 2007. "Can the Language of Tenure Criteria Influence Women's Academic Advancement?" *Journal of Women's Health*. 16(7): 998-1003.

Sheridan, Jennifer; Eve Fine; Jessica Winchell; Christine Maidl Pribbenow; Molly Carnes; and Jo Handelsman. 2007. "Searching for Excellence & Diversity: Does Training Faculty Search Committees Improve Hiring of Women?" American Society for Engineering Education (ASEE) 2007 Conference Proceedings. http://papers.asee.org/conferences/paper-view.cfm?id=4254 . June 2007.

Sheridan, Jennifer; Christine Maidl Pribbenow; Eve Fine; Jo Handelsman; and Molly Carnes. 2007. "Climate Change at the University of Wisconsin-Madison: What Changed, and Did ADVANCE Have an Impact?" Women in Engineering Programs & Advocates Network (WEPAN) 2007 Conference Proceedings (on CD-ROM). http://dpubs.libraries.psu.edu/DPubS?service=Repository&version=1.0&verb=Disseminate&handle=psu.wepan/1200322686&view=body&content-type=pdf_1# . June 2007.

Pribbenow, Christine Maidl; Jennifer Sheridan; Molly Carnes; Eve Fine; and Jo Handelsman. "Departmental Climate: Differing Perceptions by Faculty Members and Chairs." *The Journal of Women and Minorities in Science and Engineering*. [2006 draft accepted and under revision.]

Carnes, Molly and JudyAnn Bigby. 2007. "Jennifer Fever in Academic Medicine." *Journal of Women's Health*. 16(3):299-301.

Carnes, Molly and Carole Bland. 2007. "A Challenge to Academic Centers and the NIH to Prevent Unintended Gender Bias in Selection of CTSA Leaders." *Academic Medicine*. 82(2):202-206.

Committee on Maximizing the Potential of Women in Academic Science and Engineering. 2006. "Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering." The National Academies Press: Washington, DC. http://www.nap.edu/catalog/11741.html .

Carnes, Molly. 2006. "Gender: Macho Language and Other Deterrents." Letter to the Editor. *Nature*. 442:868.

Sheridan, Jennifer; Patricia Flately Brennan; Molly Carnes; and Jo Handelsman. 2006. "Discovering Directions for Change in Higher Education Through the Experiences of Senior Women Faculty." *Journal of Technology Transfer*. 31(3): 387-396.

Carnes, Molly; Stacie Geller; Evelyn Fine; Jennifer Sheridan; and Jo Handelsman. 2005. "NIH Director's Pioneer Awards: Could the Selection Process be Biased Against Women?" *Journal of Women's Health*. 14(8):684-691.

Carnes, Molly; Jo Handelsman; and Jennifer Sheridan. 2005. "Diversity in Academic Medicine: The Stages of Change Model." *Journal of Women's Health*. 14(6):471-475.

Handelsman, Jo; Nancy Cantor; Molly Carnes; Denice Denton; Eve Fine; Barbara Grosz; Virginia Hinshaw; Cora Marrett; Sue Rosser; Donna Shalala; and Jennifer Sheridan. 2005. "More Women in Science." *Science*. 309(5738):1190-1191.

Gunter, Ramona and Amy Stambach. 2005. "Differences in Men and Women Scientists' Perceptions of Workplace Climate." *Journal of Women in Minorities in Science & Engineering*. 11(1):97-116.

Gunter, Ramona and Amy Stambach. 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." *Gender Issues*. 21(1):24-42.

Sheridan, Jennifer; Molly Carnes; and Jo Handelsman. 2003. "The University of Wisconsin-Madison ADVANCE Program: Progress to Date." Women in Engineering Programs & Advocates Network (WEPAN) 2003 Conference Proceedings (on CD-ROM). http://www.wepan.org/storelistitem.cfm?itemnumber=14 , Paper #1040. June 2003. Available online: http://dpubs.libraries.psu.edu/DPubS?service=Repository&version=1.0&verb=Disseminate&view=body&content-type=pdf_1&handle=psu.wepan/1181071718# .

Bakken, Lori L.; Jennifer Sheridan; and Molly Carnes. 2003. "Gender Differences Among Physician-Scientists in Self-Assessed Abilities to Perform Clinical Research." *Academic Medicine*. 78(12):1281-6.

Working Papers:

Griffin, Lindsay; Carol A. Isaac; and Molly Carnes. 2008. "The Emergent Department Chair: Building Success One Individual at a Time." Working paper.

Sheridan, Jennifer; Eve Fine; Christine Maidl Pribbenow; Jo Handelsman; Molly Carnes. 2008. "Searching Excellence." Working paper.

Sheridan, Jennifer; Jo Handelsman; Amy Wendt; and Molly Carnes. 2007. "ADVANCE at the University of Wisconsin-Madison: Progress Towards Transforming the College of Engineering." Working paper.

Crone, Wendy. *Survive and Thrive: A Self-Assessment Guide for Untenured Faculty*. 2007 draft under review/tentative publication agreement. Cambridge University Press.

Pribbenow, Christine Maidl; Jennifer Sheridan; and Deveny Benting. 2007. "Extending the Tenure Clock: The Experiences of Faculty at One University."

Frehill, Lisa; Cecily Jeser-Cannavale; Priscilla Kehoe; Ellen Meader; Jennifer Sheridan; Abby Stewart; and Helena Sviglin. January 2005. "Toolkit for Reporting Progress Toward NSF ADVANCE: Institutional Transformation Goals." http://www.advance.nmsu.edu/Documents/PDF/toolkit1.pdf .

Frehill, Lisa; Elena Batista; Sheila Edwards-Lange; Cecily Jeser-Cannavale; Jan Malley; Jennifer Sheridan; Kim Sullivan; and Helena Sviglin. May 2006. "Using Program Evaluation To Ensure the Success of Your ADVANCE Program." http://www.advance.nmsu.edu/Documents/PDF/toolkit2.pdf .

Ford, Cecilia E. and Barbara A. Fox. 2005. "'Can I Make a Brief Comment on That': Reference and Social Organization In and Around an Extended Turn." In progress.

Dissertations:

Gunter, Ramona. 2007. "Laboratory Talk: Gendered Interactions and Research Progress in Graduate Science Education." Doctoral Dissertation: University of Wisconsin-Madison.

Presentations:

Carnes, Molly. October 21, 2008. "Searching for Excellence & Diversity: An Evidence-Based Approach to Training Search Committees." Presented at the West Virginia Higher Education Policy Commission's workshop "Building Diversity in Higher Education: Strategies for Broadening Participation in the Sciences and Engineering." Charleston, West Virginia.

Fine, Eve. October 14, 2008. "Reviewing Applicants: Understanding and Minimizing the Potential Influence of Bias and Assumptions." North Carolina State University, "Forum on Recruiting Diverse Faculty." Raleigh, North Carolina.

Sheridan, Jennifer; Amy Wendt; Christine Maidl Pribbenow; Molly Carnes. October 10, 2008. "The Vilas Life Cycle Professorship Program at the UW-Madison." Poster

presented at "The New Norm of Faculty Flexibility: Transforming the Culture in Science & Engineering" Conference. Ames, IA.

Handelsman, Jo. June 2, 2008. "Beyond Bias and Barriers." American Society for Microbiology Annual Meeting. Boston, MA.

Harrigan, Margaret N. May 28, 2008. "Evaluation of a Hiring Initiative: Recruitment and Retention of Faculty of Color, Dual Career Couples, and Women in Science." Association for Institutional Research Annual Forum. Seattle, WA.

Carnes, Molly. May 27, 2008. "University of Wisconsin-Madison ADVANCE Program: Did We Transform the Institution in 5 Years?" Invited speaker. Women in Science and Medicine Advisory Committee (WISMAC), UT Southwestern. Dallas, TX.

Neuwald, Anuschka. May 15, 2008. "Creating change: an open-dialogue about educational and institutional barriers in STEM education." University of Wisconsin System Women in Science Program Spring Advisory Board Meeting. Wisconsin Dells, WI.

Wendt, Amy. May 9, 2008. Discussion with women faculty in Engineering (invited speaker). University of Maryland. College Park, MD.

Sheridan, Jennifer. May 13, 2008. "Making Data Work FOR You." 7th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 12, 2008. "Promoting and Sustaining Institutional Change" (Moderator). 7th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Pribbenow, Christine Maidl. April 29, 2008. "Talking About Leaving: Why Faculty Leave UW-Madison and What We Can Do About It." Wisconsin Center for the Advancement of Postsecondary Education Brownbag. Madison, WI.

Sheridan, Jennifer and Eve Fine. April 22, 2008. "Searching for Excellence & Diversity." Invited Presentation to Waisman Center Faculty and Staff. Madison, WI.

Carnes, Molly. April 4, 2008. "Eliminating Bias in Scientific Review." From Cells to Society: A joint symposium hosted by the Center for Women's Health Research and the Endocrinology-Reproductive Physiology Program. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. March 29, 2008. "Language and Women's Academic Advancement" and "Careers in Academic Medicine: Evaluation at Gatekeeping Junctures." Women in Medicine Day. University of Virginia. Charlottesville, VA.

Sheridan, Jennifer. March 4, 2008. "Enhancing Departmental Climate to Promote the Development of Women Leaders in Academia." Invited speaker, "Women in Biomedical Research: Best Practices for Sustaining Career Success" workshop. National Institutes of Health. Bethesda, MD.

Sheridan, Jennifer. February 20, 2008. "More Women in Science: The Institutional Challenge." Invited speaker, University of Minnesota-Duluth. Duluth, MN.

Sheridan, Jennifer. February 2008. "So You Want to Run a Climate Survey?" Presented at the "Improving the climate for Your Science and Engineering Work Force" career workshop. American Association for the Advancement of Science (AAAS) Annual Meetings. Boston, MA.

Carnes, Molly. November 29, 2007. ADVANCE Distinguished Lecture Series. "UW-Madison ADVANCE Program: Did we transform the institution in 5 years?" National Science Foundation. Washington, DC.

Carnes, Molly. November 27-28, 2007. "Procedures that Activate or Mitigate Gender Bias in Scientific Review." Chair, NIH National Leadership Workshop on Mentoring Women in Biomedical Careers. National Institutes of Health. Washington, DC.

Handelsman, Jo. November 15-16, 2007. "Beyond Bias and Barriers: Strategies for an Equitable Hiring Process." University of Maryland-Baltimore County. Baltimore, MD.

Mathews, Nancy. November 13, 2007. Invited presentation, "Balancing Work and Life in the Academy in the 21st Century: A Changing Paradigm for Women?" 28th Annual meeting of the Society for Environmental Toxicology and Chemistry. Milwaukee, WI.

Carnes, Molly. November 4, 2007. Panelist, "Women's Academic Advancement: The Influence of Language." Association of American Medical Colleges Annual Meeting. Washington, DC.

Sheridan, Jennifer. October 4, 2007. "The Climate for Faculty of Color in the Biological & Physical Sciences at UW-Madison." Invited Speaker, Graduate Engineering Research Scholars (GERS) Program. Madison, WI.

Sheridan, Jennifer; Eve Fine; Jessica Winchell; Christine Maidl Pribbenow; Molly Carnes; and Jo Handelsman. June, 2007. "Searching for Excellence & Diversity: Does Training Faculty Search Committees Improve Hiring of Women?" American Society for Engineering Education (ASEE) Annual Meetings. Honolulu, HI.

Sheridan, Jennifer. June, 2007. Moderator, "Climate Surveys Panel." 6th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer; Christine Maidl Pribbenow; Eve Fine; Jo Handelsman; and Molly Carnes. June 2007. "Climate Change at the University of Wisconsin-Madison: What Changed, and Did ADVANCE Have an Impact?" Women in Engineering Programs & Advocates Network (WEPAN) 2007 Annual Meeting. Orlando, FL.

Carnes, Molly. May 23-25, 2007. "Women Leaders in Medicine: Institutional Transformation Required" (Whittington Lecturer) and "Careers in Academic Medicine: Evaluation at Gatekeeping Junctions" (Medical Grand Rounds). University of Florida. Gainsville, FL.

Carnes, Molly. May 2-3, 2007. "NIH Director's Pioneer Award: Lesson in Scientific Review" and "Workshop: Lessons Learned in Shaping a Career" (Invited speaker). Brown University. Providence, RI.

Parker, Brenda. April 19, 2007. "NSF ADVANCE: Lessons for Geography Departments" (Panelist). American Association of Geographers Annual Meetings. San Francisco, CA.

Carnes, Molly and Jennifer Sheridan. April 11-12, 2007. "Overview of WISELI: Lessons Learned" and "Overview of WISELI: New Initiatives at UW-Madison" (Invited speakers). University of Minnesota. Minneapolis, MN.

Sheridan, Jennifer. March 27, 2007. "WISELI: Improve Departmental Climate for Women Faculty and Faculty of Color" (Poster). Showcase 2007. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. March 21-22, 2007. "Careers in Academic Medicine: Evaluation at Gatekeeping Junctures" (Medical Grand Rounds) and "Women Leaders in Academic Health Sciences: Institutional Transformation Required" (Invited speaker). University of Utah. Salt Lake City, UT.

Carnes, Molly. March 14, 2007. "Bias in Scientific Review: The Case of the NIH Directors Pioneer Award." Center for the Study of Cultural Diversity in Healthcare Training Seminar. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. February 22, 2007. "Words Matter: How Language Can Promote the Activation of Stereotypes" (Invited speaker). University of Illinois-Chicago. Chicago, IL.

Carnes, Molly. February 21, 2007. "Gender Bias in Scientific Review" (Invited speaker). Medical College of Wisconsin. Milwaukee, WI.

Sheridan, Jennifer. January 30, 2007. "Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering." Center for Demography & Ecology Training Seminar. University of Wisconsin-Madison. Madison, WI.

Sheridan, Jennifer. January 17, 2007. "Beyond Bias and Barriers." Zonta International. Madison, WI.

Handelsman, Jo. November 10, 2006. "Best Practices and Gender Equity in the Academy." University of Lethbridge. Lethbridge, Alberta, Canada.

Handelsman, Jo. November 3, 2006. "Beyond Bias and Barriers: A Call to Arms about Women in Science" (Keynote). Cabinet 99 Symposium. University of Wisconsin-Madison. Madison, WI.

Handelsman, Jo. October 29-30, 2006. "Diversity." Invited speaker, all-school assembly at Phillips Exeter Academy. Exeter, NH.

Handelsman, Jo. October 24, 2006. Briefing of NIH officials and the Women in Medicine committee on the "Beyond Bias" report. Bethesda, MD.

Sheridan, Jennifer. October 21, 2006. "Systemic and Institutional Barriers Women Face in Science and Engineering." "Encouraging Success in Science and Medicine" Symposium. University of Wisconsin-Madison. Madison, WI.

Handelsman, Jo. September 26-27, 2006. Briefing of Senators Kennedy and Murray's aides on "Beyond Bias and Barriers" report from the National Academies Committee on Maximizing the Potential of Women in Academic Science and Engineering. Washington, DC.

Sheridan, Jennifer. August 13, 2006. "Why Does ADVANCE Need Sociologists?" Annual Meeting of the American Sociological Association. Montréal, Canada.

Carnes, Molly. August 3, 2006. "Activation of Gender-Based Stereotypes: Can This Undermine Women's Academic Advancement?" (Keynote Plenary Address). Annual Meeting of the Association for Education in Journalism and Mass Communication. San Francisco, CA.

Handelsman, Jo. June 2006. Workshop on Diversity. National Academies Summer Institute on Undergraduate Education in Biology. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. June 19, 2006. "Gender Bias in Scientific Review: A Case Study of the NIH Pioneer Award." Annual meeting of the Graduate Women in Science. University of Wisconsin-Madison. Madison, WI.

Sheridan, Jennifer. May 24, 2006. "Searching for Excellence & Diversity: An Evidence-Based Approach to Training Search Committees." Wisconsin Association for Equal Opportunity's 29th Annual Spring Conference. Milwaukee, WI.

Carnes, Molly. May 19, 2006. "Institutionalization—Cross Site Findings of Institutionalization Workgroup" (Discussant). 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Pribbenow, Christine. May 19, 2006. "Using Evaluation Data to Affect Institutional Change." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 19, 2006. "Collection and Use of Climate Survey Data at the UW-Madison." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 18, 2006. "Engaging Senior Female Faculty" Roundtable (Chair). 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 18, 2006. "Vilas Life Cycle Professorship Program." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Fine, Eve. May 18, 2006. "Climate Workshops for Department Chairs." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Fine, Eve and Jennifer Sheridan. May 17, 2006. "Searching for Excellence & Diversity—Training Workshops for Search Committees" (Poster). 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 17, 2006. "Lessons Learned from ADVANCE at the UW-Madison: What We Wish We Had Known…." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 17, 2006. "Data Collection and Reporting: The NSF Indicators." 5th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Ford, Cecilia. May 15, 2006. "Methods and Challenges in the Study of Language in Interaction" (Invited speaker). Department of Linguistics. Stockholm University. Stockholm, Sweden.

Ford, Cecilia. May 11-14, 2006. "Studying Turn Taking in Workplace Meetings as 'Interdisciplinary/Applied' Conversation Analysis." International Conference on Conversation Analysis. Helsinki, Finland.

Carnes, Molly. April 22, 2006. "Gender Bias in Scientific Review: The Case of the NIH Pioneer Awards" (Keynote). Institute for Research and Education on Women and Gender, Graduate Student Conference. State University of New York-Buffalo. Buffalo, NY.

Sheridan, Jennifer. April 7, 2006. "Searching for Excellence & Diversity: An Evidence-Based Approach to Training Search Committees." 10th Annual Absence of Color Conference. Blackhawk Technical College. Janesville, WI.

Gunter, Ramona. April 3, 2006. "Men and Women Graduate Students' Experiences in Two Plant Science Laboratories." Fort Atkinson Branch of American Association of University Women Meeting. Fort Atkinson, WI.

Sheridan, Jennifer. March 17, 2006. "Climate and Institutional Change: ADVANCE Efforts to Improve Departmental Climate." Committee on Institutional Change-Women in Science and Engineering (CIC-WISE) Group Meeting. Chicago, IL.

Sheridan, Jennifer. March 14, 2006. "Searching for Excellence & Diversity: An Evidence-Based Approach to Training Search Committees." Wisconsin Technical College System Leadership Development Institute. Madison, WI.

Ford, Cecilia. March 8, 2006. "The Extraordinary Precision of Ordinary Talk: A Linguist's Perspective on Social Interaction." University Roundtable. University of Wisconsin-Madison. Madison, WI.

Handelsman, Jo. February 23, 2006. "Understanding Our Biases and Assumptions: Male and Female" (Invited speaker). Stanford University. Stanford, CA.

Sheridan, Jennifer. February 20, 2006. "Methodological Challenges in Measuring Institutional Transformation, Part II: The Limits of Quantitative Indicators." 2006 American Association for the Advancement of Science Annual Meeting. St. Louis, MO.

Handelsman, Jo. February 9, 2006. "Boosts and Barriers to Women in Science." Barnard College. New York, NY.

Handelsman, Jo. January 11, 2006. "More Women in Science." Madison Chapter of TEMPO. Madison, WI.

Handelsman, Jo; Molly Carnes; Jennifer Sheridan; Eve Fine; and Christine Pribbenow. December 9, 2005. "NSF ADVANCE at the UW-Madison: Three Success Stories" (Poster). National Academies' "Convocation on Maximizing the Potential of Women in Academic Science and Engineering." National Academies of Science. Washington, DC.

Handelsman, Jo. November 29, 2005. Roundtable discussion with faculty and administrators on women in science. Colorado State University. Ft. Collins, CO.

Carnes, Molly. October 21, 2005. "Women and Leadership: When Working Hard is Not Enough." Wisconsin Women's Health Foundation Rural Women's Health. Madison, WI.

Carnes, Molly. October 17, 2005. "Women in Academic Leadership: Institutional Transformation Required" and "Advice From a Few Mistakes I've Made & Some Things I've Done Right (workshop)." 8th Annual Professional Development Conference Focus on Health & Leadership for Women. University of Pennsylvania School of Medicine. Philadelphia, PA.

Ford, Cecilia and Teddy Weathersbee. July 25, 2005. "Women's Agency and Participation: Feminist Research for Institutional Change." Symposium on Gender in Public Settings: Approaches to Third Wave Feminist Analysis at the 14th World Congress of Applied Linguistics Conference. University of Wisconsin-Madison. Madison, WI.

Handelsman, Jo. July 11, 2005. "Diversity, Bias, and Change" (Invited speaker). Harvard Deans' Retreat. Harvard University. Cambridge, MA.

Ford, Cecilia and Barbara A. Fox. July 6-9, 2005. "Reference and Repair as Grammatical Practices in an Extended Turn" (Plenary address). 15th Annual Meeting of the Society for Text & Discourse. Amsterdam, Netherlands.

Ford, Cecilia. June 11-16, 2005. "'Can I Make a Brief Comment on That': Reference and Social Organization In and Around an Extended Turn" (Invited lecture). Symposium on Reference and Referential Form in Interactional Linguistics, organized by the Nordic Research Board. Helsinki, Finland.

Handelsman, Jo. June 9-10, 2005. "Sex and Science." Howard Hughes Medical Institute New Investigator Training. Howard Hughes Medical Institute. Chevy Chase, MD.

Zweibel, Ellen. June 2, 2005. "Dual Career Initiatives at U. Wisconsin." American Astronomical Society Annual Meeting. Minneapolis, MN.

Fine, Eve. May 20, 2005. "Working with Department Chairs: Enhancing Department Climate." 4th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Handelsman, Jo. May 20, 2005. "Affecting Climate/Culture Change — Using Multiple Points of Entry in the Department of Kumquat Science." 4th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 19, 2005. "Converting Academic Staff to the Tenure Track at the UW-Madison: A Viable Strategy?" 4th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 19, 2005. "Insights from Social Science Research on Achieving Academic Awards and Honors: A Local and a National Example." 4th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 19, 2005. "Indicators and Dissemination: Question 2. What are the Outcomes of Institutional Processes of Recruitment and Advancement for Men and Women?" NSF ADVANCE P.I. Meeting, National Science Foundation. Washington, DC.

Sheridan, Jennifer. May 19, 2005. "WISELI's Life Cycle Research Grant Program." 4th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 13, 2005. "Women in Academic Leadership: Has There Been Progress?" (Keynote). Women Against Lung Cancer Annual Meeting. Orlando, FL.

Carnes, Molly. May 9-10, 2005. "Incorporating Research on Biases and Assumptions into Search Committee Training;" "Women in the World of Academic Health Sciences: What's Holding Us Back?" "Women in Academic Leadership: Has There Been Progress?" (Invited Speaker). University of Minnesota. Minneapolis, MN.

Ford, Cecilia. May 2005. "Language and Heteronormativity." Workshop on Global Perspectives on Sexual Diversity and Gender Relations in a Changing World. Multicultural Student Center and International Student Services. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. April 26, 2005. "Women in Academic Leadership: Institutional Transformation Required" (Grand Rounds/Merritt Lecture). Indiana University School of Medicine. Indianapolis, IN.

Coppersmith, Sue. April 8, 2005. "NSF ADVANCE Institutional Transformation Award at UW-Madison." Mathematical and Physical Sciences (MPS) Advisory Committee Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. March 12, 2005. "Women Physicians and Leadership: The Issues, The Goals, The Process" (Keynote). Women's Physician Council of the American Medical Association. Washington, DC.

Carnes, Molly. March 4, 2005. "Women in the World of Medicine: What's Holding Us Back?" *Leadership Skills and Equity in the Workplace: Lessons Learned* Conference. Virginia Commonwealth University. Richmond, VA.

Handelsman, Jo. March 2, 2005. Informal workshop on bias and prejudice in academic evaluation. Oregon State University. Corvallis, OR.

Peercy, Paul. December 13, 2004. "NSF ADVANCE Institutional Transformation Award at UW-Madison." NSF ADVANCE Engineering Workshop. National Science Foundation. Washington, DC.

Carnes, Molly; Jo Handelsman; Lillian Tong; and Amy Wendt. December 8, 2004. "WISELI Update—Status of Our Efforts to Promote the Advancement of Women in Science and Engineering." WISELI Seminar. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. November 17, 2004. "The Impact of Unconscious Biases on Evaluation: Relevance to the NIH Director's Pioneer Awards" (Invited presenter). Office of Research on Women's Health Roundtable. National Institutes of Health. Bethesda, MD.

Brennan, Patricia; Molly Carnes; Bernice Durand; Jo Handelsman; and Jennifer Sheridan. November 10, 2004. "Discovering the Experiences of Senior Women in Academic Science & Engineering." WISELI Seminar. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. October 20, 2004. "Women in Academic Leadership: The Issues, the Goals, the Process" (Invited Speaker); "NSF ADVANCE Program at UW-Madison" (Invited Speaker). University of Illinois-Chicago. Chicago, IL.

Sheridan, Jennifer. October 14, 2004. "WISELI's Life Cycle Research Grant Program." Society of Women Engineers 2004 National Conference. Milwaukee, WI.

Carnes, Molly. October 13, 2004. "Searching for Excellence, Equity & Diversity: Unconscious Assumptions and Lessons From Smoking Cessation" (Invited Speaker). Virginia Commonwealth University. Richmond, VA.

Sheridan, Jennifer; Jo Handelsman; and Molly Carnes. August 14, 2004. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." Annual Meeting of the American Sociological Association. San Francisco, CA.

Ford, Cecilia. May 3, 2004. "'Having our ideas ignored': CA and a Feminist Project." American Association for Applied Linguistics Annual Conference. Colloquium entitled "CA as Applied Linguistics: Crossing Boundaries of Discipline and Practice." Portland, OR.

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Campus Visits/Dissemination of Programming:

"Implementing Workshops for Search Committees: A Train-the-Trainer Workshop for Campuses Wanting to Implement Training for Faculty Search Committees." June 24-25, 2008. University of Illinois-Urbana/Champaign. Urbana, IL.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. June 12, 2008. Edgewood College. Madison, WI.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. March 26-27, 2008. University of Alabama-Birmingham. Birmingham, AL.

 "Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. January 24-25, 2008. Wayne State University. Detroit, MI.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. January 15-16, 2008. University of Wisconsin-Eau Claire. Eau Claire, WI.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. September 20-21, 2007. University of Wisconsin-Whitewater. Whitewater, WI.

Meet for information re: implementing *Searching for Excellence & Diversity* workshops. September 7, 2007. Deborah Love (Vice President for Institutional Equity) and Anne McCall (Associate Professor of French and Associate Dean, School for Liberal Arts). Tulane University.

Meet for information re: ADVANCE. May 18, 2007. Catherine Duckett (Project Manager, Office for the Promotion of Women in Science, Engineering, and Mathematics). Rutgers University.

Meet for information re: ADVANCE institutionalization. May 29, 2007. Trish Kalbas-Schmidt (Program Leader, ADVANCE). Utah State University.

Meet for information re: ADVANCE. April 11-12, 2007. Molly Carnes and Jennifer Sheridan travel to Institute of Technology, hosted by Roberta Humphries (Professor of Astronomy and Associate Dean for Academic Affairs). University of Minnesota.

Participation in training for facilitators for *Enhancing Department Climate: A Chair's Role* workshop. April 19, July 19, and August 30, 2007. Linda Siebert Rapoport (Director, Women in Science & Engineering System Transformation). University of Illinois-Chicago.

"Implementing Workshops for Search Committees." A train-the-trainer workshop for campuses wanting to implement training for faculty search committee chairs. March 5-March 7, 2007. Medical School and Danforth Campus. Washington University in St. Louis.

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Meet for information re: ADVANCE and viewing of a *Searching for Excellence & Diversity* workshop. December 20, 2006. Catherine Mavriplis (Research Scientist: Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) and NOAA National Severe Storms Laboratory) and Sheena Murphy (Professor of Physics). University of Oklahoma.

Meet for information re: ADVANCE and viewing of a *Searching for Excellence & Diversity* workshop. September 27, 2006. Nancy Tarbell (Director: Pediatric Radiation Oncology and Center for Faculty Development) and Rebecca Starr (Administrative Director: Center for Faculty Development, Office for Women's Careers, and Office for Research Career Development). Massachusetts General Hospital.

"Implementing Workshops for Search Committees." A train-the-trainer workshop for campuses wanting to implement training for faculty search committee chairs. January 26, 2006. Wisconsin Technical College System. Technical college campuses represented: Blackhawk, Chippewa Valley, Fox Valley, Gateway, Lakeshore, Madison Area, Mid-

State, Milwaukee Area, Morraine Park, North Central, Northeast, Southwest, Waukesha County, Western Wisconsin, Wisconsin Indianhead.

"Implementing Workshops for Search Committees." A train-the-trainer workshop for campuses wanting to implement training for faculty search committee chairs. June 14, 2005. University of Wisconsin (UW) System. UW campuses represented: Eau Claire, Extension, Green Bay, La Crosse, Madison, Milwaukee, Oshkosh, Parkside, River Falls, Stevens Point, Stout, Whitewater.

WISELI in the Press:

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"Engineering at Illinois Leads Campus Gender Equity Effort." *Engineering at Illinois News*. June 26, 2008. http://engineering.illinois.edu/news/rss.php?xId=074108800728 .

"Researcher Finds that Women are Speaking Up." *University of Wisconsin Communications.* July 31, 2008. http://www.news.wisc.edu/15436.

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NIH Research on Causal Factors and Interventions that Promote and Support the Careers of Women in Biomedical and Behavioral Research program. "Advancement of Women in STEMM: A Multi-level Research and Action Project." PI: Molly Carnes. Co-PIs: Jennifer Sheridan, Patricia Devine, Cecilia Ford, Angela Byars-Winston, Linda Baier Manwell, Tara Becker, Marjorie Rosenberg. Submitted October 22, 2008. Funded.

NSF Innovation Through Institutional Integration (I^3) program. "Wisconsin Institute for Research and Evaluation on Diversity in STEM." PI: Patrick Farrell. Co-PIs: Molly

Carnes, Douglass Henderson, Jennifer Sheridan, Christine Pfund. Submitted April 9, 2008. Under Review.

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ADVANCE-Related Service

Sheridan, Jennifer. Advisory Committee Member, ADVANCE Portal Website. 2008-Present.

Sheridan, Jennifer. Advisory Board Member, University of Wisconsin-La Crosse ADVANCE START project. 2008-Present.

Carnes, Molly. External Advisor, University of Illinois-Chicago ADVANCE Institutional Transformation project, "Women in Science & Engineering System Transformation (WISEST)". 2006-2010.

Carnes, Molly. External Advisor, Brown University ADVANCE Institutional Transformation project. 2006-2010.

Presentations of WISELI Activities to Campus Groups

Deans' Council—9/4/2002, 12/10/2003, 4/27/2005, 10/26/2005, 5/24/2006, 5/9/2007, 4/23/2008

CALS Department Chairs/Deans—10/28/2002, 1/26/2004, 12/1/2005, 1/23/2006, 12/15/2008

ENGR Department Chairs and Deans—11/6/2002, 2/4/2004, 1/4/2006, 10/1/2008

SMPH Clinical Science Chairs—10/14/2002, 3/9/2004, 1/10/2006, 9/22/2008

SMPH Basic Science Chairs—10/8/2002, 9/22/2008

SMPH Retreat—3/12/2005

Pharmacy Division Heads and Deans—4/12/2004, 12/15/2005

SVM Department Chairs and Deans—12/17/2002, 2/5/2004, 11/15/2005

L&S Natural Science Chairs—11/18/2002, 9/20/2004, 12/19/2005

L&S (All) Department Chairs—12/19/2005

SoHE Department Chairs and Deans—2/23/2004

Education Department Chairs and Deans—3/3/2004

Biological Science Deans—12/16/2003

Graduate School Deans—9/30/2004, 8/31/2005

University Committee—2/14/2005, 8/20/2008

UW System AA/EEO Program Directors—2/21/2005

Wisconsin Technical Colleges AA/EEO Officers—10/14/2005

Council for Non-represented Classified Staff (CNCS)—2/13/2006

Department of Plant Pathology—12/4/2002

Women in Physical Sciences—5/2003, 2/23/2004

Women in Engineering—3/18/2004

University League—11/24/2003

College of Engineering (CoE) Academic Affairs—11/21/2003, 10/11/2007

CoE Equity & Diversity Committee—4/14/2004

CoE Committee on Academic Staff Issues—4/28/2004

Committee on Women in the University—2/18/2004, 1/12/2005, 11/9/2005, 12/13/2006, 5/14/2008

Women Faculty Mentoring Program—9/19/2003, 8/22/2008

Plan 2008 Campus Resource Fair/Diversity Forum—5/7/2002, 9/21/2006, 9/28/2007

Showcase—4/3/2002, 4/5/2004, 3/27/2007

Women Faculty in SMPH—3/11/2005

Academic Staff Executive Council—3/6/2003, 3/5/2004, 2/25/2005

Office of Human Resources—2/16/2005

WEMPEC—2/11/2005

UW System EEO Officers—4/13/2005
William S. Middleton Memorial VA Hospital—3/17/2005, 4/26/2005
CIRTL/DELTA—2/2/2005, 9/20/2005
UW Teaching & Learning Symposium—5/24/2005, 5/17/2006
UW Foundation—8/23/2005, 11/10/2005, 12/7/2005
WISELI Seminar—10/20/2003, 11/17/2003, 2/16/2004, 3/22/2004, 11/10/2004,
    12/8/2004, 3/9/2005, 9/22/2005, 11/10/2005
Provost Department Chair Training—8/31/2006, 11/3/2006, 8/31/2006,
    12/1/2006, 8/30/2007, 6/3/2008
L&S Equity & Diversity Committee—12/15/2006
Women's Philanthropy Council—4/26/2006
Bacteriology Teaching Institute—10/13/2006
Campus Diversity Plan Oversight Committee—2/8/2007
Wisconsin Institute for Discovery Program Committee—3/26/2007
SMPH Committee on Academic Staff Issues—5/15/2007

Annual Report

2008

Co-Directors, *University of Wisconsin-Madison*

Dr. Molly Carnes, Jean Manchester Biddick Professor of Medicine
Dr. Amy Wendt, Professor of Electrical and Computer Engineering and
co-Chair, Electrical and Computer Engineering
Dr. Jennifer Sheridan, WISELI

July, 2009

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I. Executive Summary: Major Accomplishments in Year 7

In 2008, WISELI maintained initiatives on campus and actively engaged in dissemination through workshops and participation as formal and informal external advisors on other institutions' ADVANCE programs. The continuity at WISELI was in contrast to the many changes occurring in the University as a whole. In 2008, the UW-Madison got a new Chancellor, and the Provost resigned in late 2008. A new Vice Provost for Diversity and Climate also started in 2008, and sadly, Steven Clark (Assistant Dean for Diversity Affairs in the College of Engineering) died unexpectedly, leaving a large hole in the Diversity infrastructure in the College of Engineering. In addition, severe recession in the economy meant that funds for new programming—or even existing programming—were drastically reduced.   WISELI continued to offer hiring workshops, chair workshops, PI workshops, Celebrating grants and Vilas Life Cycle grants. We continued to travel to other campuses to implement our *Searching for Excellence & Diversity* workshop, and we participated in several campus visits in 2008. We continued to collect gender equity data, and we continued with the Faculty Attrition Study. Although 2008 was generally a quiet year, some of the more exciting developments included:

- Development of an NIH proposal in response to the "Research on Causal Factors and Interventions that Promote and Support the Careers of Women in Biomedical and Behavioral Science and Engineering (R01)" solicitation.. If funded, this project would bring $1M over four years to WISELI in part to conduct a group randomized trial of "Bias Literacy Workshops" in departments.
- Nancy Hopkins visited Madison as the Denice D. Denton Distinguished speaker, a wonderful event that was highly attended.
- The Office of the Provost asked WISELI to extend the Faculty Attrition Study to retirees in 2008, greatly expanding the scope of the study.
- Cecilia Ford's book, *Women Speaking Up: Getting and Using Turns in Workplace Meeting,* was published.
- WISELI implemented the Project to Assess Climate in Engineering (PACE) study, the first time we have ventured into the arena of student climate.
- New course on Women and Leadership in Medicine, Science, and Engineering was launched and will be offered annually.
- New collaboration with Professor Patricia Devine, renown social psychologist who studies prejudice.

In 2008. Deveny Benting, who has worked with WISELI since 2002—first as a researcher with the LEAD Center, and then directly with WISELI as an evaluation assistant, webmaster, workshop assistant, and general go-to person—left to move closer to family in Iowa. She is greatly missed, as her work supported so much of what WISELI has accomplished.

We anticipate that 2009 will bring new initiatives and energy to the mission of promoting the participation and advancement of women in academic science and engineering. The funding of the NIH grant, in particular, will be a major focus of WISELI's efforts in 2009; we are looking forward to continuing to move the UW-Madison campus *forward* towards gender equity.

II. Activities: Status of WISELI Initiatives

A. Workshops

Searching for Excellence & Diversity: A Workshop for Search Committee Members

WISELI continued to implement the *Searching for Excellence & Diversity* workshops in 2008. We ran 5 workshops in 2008; three were college-based, and two were open to any faculty member on campus. Two of the college-based workshops were run in our preferred 2-session model. Fifty-four faculty and 27 staff attended at least one of these workshops in 2008. This level of activity is average for WISELI.

- The new Vice Provost for Diversity and Climate declined to offer support for campus-wide hiring workshops out of the Provosts Office in 2008. Thus, WISELI offered such workshops on a limited basis for only those in biological and physical science units. We ran two of these open workshops in 2008 (both using the two-session model.)

Enhancing Department Climate: A Chair's Role

The *Enhancing Department Climate: A Chair's Role* workshop returned to full implementation in 2008. We conducted two workshop series in 2008; one in spring and one in fall. The spring workshop included 3 chairs, 2 of them from biological and physical science departments. Two faculty members co-facilitated these workshops for the first time. In fall, 6 chairs participated (3 from biological/physical science departments), and yet another faculty member from our group of 6 trainees facilitated. Also in the fall, 2 departments that participated in the workshop in previous years re-surveyed their department members.

- One of the Fall 2008 participants was a department that is notorious on campus for having poor climate for women faculty. Former co-Director of WISELI, Jo Handelsman, spoke about the work she did with this department at an ADVANCE PI meeting in 2005 ("Affecting Climate/Culture Change — Using Multiple Points of Entry in the Department of Kumquat Science.") Having the "Department of Kumquat Science" voluntarily participate in our climate workshop for department chairs was a real sign of positive change in that department.
- The open-records lawsuit that was filed in 2007 was resolved in the UW-Madison's/WISELI's favor in 2008, and the faculty member was not allowed access to the departmental survey results. The final judgment was made on August 5th, 2008. Our procedures were therefore confirmed by the courts to be sound, and we carried on our workshops with full confidence.

Running a Great Lab: Workshops for Principal Investigators

WISELI offered the *Running a Great Lab* workshops for new PIs in 2008/09. An invitation was sent to 59 faculty members in the first three years of their assistant professor positions, and email announcements about the series were also sent to department chairs in biological and physical science departments. 18 individuals attended at least one PI session in

2008/09, with the average PI attending 3.6 out of the 8 sessions. The format and topics of the workshop series followed the 2007/08 pilot workshop closely.

- Ainslie Little left Dr. Jo Handelsman's lab in 2008, and therefore was unavailable to continue organizing the workshop series. Jennifer Sheridan took over the organization of the workshop in 2008/09.
- Allen Laughon continued to serve as facilitator, and Amy Charkowski agreed to co-facilitate this year as well. WISELI provided both facilitators with $1000 to spend on lab supplies and/or student salary, to thank them for their service.
- Session content is outlined in the 2008/09 workshop website: http://wiseli.engr.wisc.edu/pi/toolkit-0809.php . The most highly-attended session was "How the money works", and the least highly-attended session was "Project and data management, and ethics."
- The decision to run this workshop again in 2009/10 will be made depending on the numbers of new faculty hired at UW-Madison in 2008/09. Another possible change would be to run the 8 sessions only in fall semester, when attendance is highest.

B. Grant Programs

Vilas Life Cycle Professorship Program

- The *Vilas Life Cycle Grants* continued in 2008, funded by the Estate of William F. Vilas in the amount of $372,000. Three rounds of awards were considered. 19 faculty and staff members applied for the awards, and 15 awards were made.
- In spring of 2008, an evaluation report was presented to the Trustees of the Vilas Estate. Such a report will be continued annually to encourage the Trustees to continue funding the program. This report is available online at: http://wiseli.engr.wisc.edu/docs/EvalReport_VLCP_2009.pdf .

Celebrating Women in Science & Engineering Grant Program

- In 2008, the Nelson Institute for Environmental Studies began contributing to this program, increasing the annual budget to $12,750. The College of Engineering, the College of Letters & Sciences, the School of Veterinary Medicine, the School of Medicine & Public Health, the College of Agricultural & Life Sciences, and the School of Pharmacy continue to contribute $2,000 (each) annually.

- In 2008, 5 awards were made. One of these awards went to a first-time recipient of the funds.

C. Research & Evaluation Projects

Study of Faculty Worklife at UW-Madison

- Data from 2006 survey were made publicly available at: http://wiseli.engr.wisc.edu/facworklife.php .

Exit Interview Study

- Christine Maidl Pribbenow completed a report of faculty exit interviews and presented to Deans, Provost's Office staff, and a WISCAPE seminar in spring of 2008. The report is publicly available at: http://wiseli.engr.wisc.edu/fas.php .
- The Vice Provost for Faculty and Staff requested that the 2008/09 faculty exit interviews include retirees for the first time. That report will be available in Fall 2009.

Gender Equity Indicators at UW-Madison

- Jennifer Sheridan continues to collect the data formerly required by the National Science Foundation, in order to track the status of women at UW-Madison. Margaret Harrigan in the Office of Academic Planning and Analysis; Eden Inoway-Ronnie in the Office of the Provost, and Lori Hayward in the Office of the Secretary of the Faculty are instrumental in the collection and reporting of these data, presented annually in WISELI reports and on the WISELI website.
- Data from 2000 through 2008 are posted publicly at: http://wiseli.engr.wisc.edu/testsite/indicators.php . The Gender Equity Indicators page also includes a set of Powerpoint slides summarizing trends in these data over time. We have made these available so that any interested person could include these data in their own presentations and reports.

Project to Assess Climate in Engineering (PACE)

- At the request of the College of Engineering, WISELI collaborated with a team from the University of Washington to implement a climate survey for engineering students called PACE. The survey was implemented in spring 2008, and the resulting reports completed in December 2008. PACE results and presentations are posted at: http://wiseli.engr.wisc.edu/testsite/pace.php .

D. Networking Activities

Listserv

- The WISELI listserv has become a reliable way to communicate with our affiliates. Other organizations (e.g., the Provost's Office, the Wisconsin Women in Higher Education Leadership, CIRTL/DELTA, and others) have been asking us to post notices to our listserv to further inform our affiliates of events and opportunities. At the end of December, 2008, we have 279 affiliates on our listserv.

Website

- Traffic continues to remain high on the WISELI website in 2008. We received around 4,700 hits to our front page in 2008, which averages to almost 400 a month. Each month we receive approximately 2,800 hits anywhere on our site from unique visitors. Visitors to our site come mostly from the US (88.5%), but WISELI gets hits from across the globe. 2.9% of our hits come from Europe (especially Great Britain and Germany); 1.7% of our hits are from Asia (South Korea and China have the most); 1.3% from Canada; 1.2% from Australia and New Zealand; 0.5% from Africa (South Africa and Ethiopia are the top 2); 0.4% from the Middle East (especially Israel and Saudi Arabia);

0.2% are from Mexico and South America (Mexico and Brazil have the most); and 0.2% are from Eastern Europe (Turkey and Lithuania account for the most hits in Eastern Europe.) Hits from unknown countries are increasing—3.1% of our hits are from unknown countries, and an additional 0.6% are from unknown European countries.

- WISELI is planning a major re-design of the website in 2009. Updates in organization will be the primary goal, but additional enhancements will include upgrading the library (we are transferring our records to RefWorks for easier searching and updating), as well as uploading of all reports, presentations, and papers that we can possibly make public.

Denice D. Denton Distinguished Lecture Series

- Dr. Nancy Hopkins presented the 2008 Denice D. Denton Distinguished Lecture on September 12, 2008. Over 60 people attended the public lecture; details are available at: http://wiseli.engr.wisc.edu/denton/denton-lecture2008.php .
- Joan C. Williams will be the speaker on October 2, 2009.

Leadership Development for Women

- In 2008, WISELI began experimenting with an inexpensive approach to providing access to leadership development to women faculty, staff and students on our listserv. We purchased access to two audioconferences in 2008, with topics of interest to our women STEM leaders and future leaders. The audioconferences were:
  - o "Women's Leadership Series: 6 Critical Skills to Advance Your Career" (attended by 20 individuals)
  - o "Women Leaders in Higher Ed: Strategies to Advance Your Career" (attended by 13 individuals)
- In August 2008, the Women Faculty Mentoring Program (WFMP) held a workshop at which attendees (women faculty, WISELI representatives) brainstormed about the priorities for women faculty on campus. One such priority is leadership development for women. WISELI and the WFMP will be partnering to bring these opportunities to women at UW-Madison.

E. Dissemination Activities

Train the Trainers: *Implementing Training for Search Committees*

Interest in our *Implementing Workshops for Search Committees* workshop for campuses outside of UW-Madison is high, and is increasing over time. In 2008:
- We fielded 16 inquiries about the on-site workshop, either via phone or email:
  - o Edgewood College
  - o Harvard University
  - o Massachusetts General Hospital/Partners.org
  - o North Carolina State University
  - o North Park University
  - o Northern Kentucky University
  - o Northwestern University
  - o Purdue University
  - o Rush University Medical Center

- o Skidmore College
- o St. Francis Care/University of Connecticut
- o University of Colorado-Boulder
- o University of Illinois Urbana-Champaign
- o University of Iowa
- o University of Minnesota-Mankato
- o Yale University

- We implemented the training at five universities:
  - o University of Wisconsin-Eau Claire (January 2008)
  - o Wayne State University (January 2008)
  - o University of Alabama at Birmingham (March 2008)
  - o Edgewood College (June 2008)
  - o University of Illinois at Urbana-Champaign (June 2008)

- We visited one campus where we previously had run a train-the-trainer workshop, to observe their own presentation of the workshop and offer advice and feedback:
  - o Washington University in St. Louis-Danforth Campus (September 2008)

- We have scheduled three workshops on other campuses in spring semester of 2009:
  - o Purdue University (January 2009)
  - o University of Delaware (February 2009)
  - o Skidmore College/Union College (May 2009)

- The materials for these hiring workshops continues to be disseminated at institutions across the U.S. In 2008, we distributed our brochures and/or hiring guidebooks to 33 institutions, including:

Allegheny College ('07, '08)	Rice University ('08)	University of the Pacific ('08)
Boston University ('07, '08)	SUNY-Oneonta ('08)	University of Pennsylvania ('08)
Case Western Reserve Univ ('08)	University of Alabama-Birmingham ('08)	University of Texas-Southwestern ('08)
Eastern Washington University ('08)	University at Buffalo ('08)	University of Virginia ('08)
Edgewood College ('08)	University of Delhi ('08)	University of Washington ('08)
Hebrew University ('08)	University of Illinois-Urbana Champaign ('07, '08)	University of Wisconsin-Eau Claire ('07, '08)
Iowa State University ('08)	University of Iowa ('07, '08)	University of Wisconsin-La Crosse ('08)
Loyola Marymount University ('07, '08)	University of Michigan ('08)	University of Wisconsin-Stout ('07, '08)
North Carolina State University ('08)	University of Minnesota-Duluth ('08)	University of Wisconsin System ('08)
Northwestern University ('08)	University of Nebraska ('08)	Wayne State University ('08)

Purdue University ('07, '08)	University of North Carolina-Charlotte ('08)	Yale University ('08)

- We distributed many brochures and guidebooks via campus visits and invited talks:
  - o Jennifer Sheridan distributed brochures at the University of Minnesota-Duluth, where she gave an invited talk and met with faculty, staff and administrators. (February 2008).
  - o Jennifer Sheridan distributed brochures at the National Institutes of Health, where she gave an invited talk at the "Women in Biomedical Research: Best Practices for Sustaining Career Success" workshop. (March 2008).
  - o Molly Carnes gave brochures to faculty and administrators at the University of Virginia, where she presented two invited talks. (March 2008).
  - o Amy Wendt provided brochures to Engineering faculty at the University of Maryland-College Park, where she was an invited speaker. (May 2008).
  - o Eve Fine provided copies of our brochure and guidebook when participating on a faculty hiring panel at North Carolina State University. (October 2008).
  - o Molly Carnes distributed brochures to attendees at the West Virginia Higher Education Policy Commission's workshop entitled "Building Diversity in Higher Education: Strategies for Broadening Participation in the Sciences and Engineering." (October 2008).

- In addition to distributing our printed documents, many universities use our digital materials:
  - o 7 universities/organizations have taken our materials and added them directly into their own publications, websites, or presentations.
  - o 8 universities have a link to our materials from their websites, and/or cite one of our publications.

Train the Trainers: *Enhancing Department Climate: A Chair's Role*

- The Committee on Institutional Cooperation (CIC) asked WISELI to host a train-the-trainers workshop on the UW-Madison campus in 2009, as part of a CIC proposal to the National Science Foundation ADVANCE: PAID program. WISELI has agreed, and the workshop is scheduled for June 2, 2009. Details will be available at: http://wiseli.engr.wisc.edu//climate/implementing.php .

Course Development

- WISELI co-PI Molly Carnes, in collaboration with Dr. Sarah Pfatteicher (Engineering), Prof. Trina McMahon (Engineering), and Prof. Teri Balser (CALS) developed a new course, taught in spring semester 2008. Entitled "Women and Leadership in Medicine, Science, and Engineering", it explores the current scholarship on women's leadership in STEM fields. This course was cross-listed in Soil Science and Women's Studies. This course was approved by the requisite committees and will be offered annually in the spring semester.

Publications & Presentations

- In 2008, WISELI-affiliated researchers published 3 articles in peer-reviewed journals and published a book. See Section VIII for a detailed list of 2008 publications and presentations.
- In 2008, WISELI-affiliated researchers presented one peer-reviewed paper; see Section VIII for a detailed list.

Other Dissemination Activities

- **Invited Talks.** WISELI-affiliated personnel gave at least 16 invited talks in 2008 on WISELI-related research and/or topics related to women in science. Some talks were at national funding agencies (NSF, NIH); some were for professional societies (American Society for Microbiology, American Association for the Advancement of Science); and some were at other universities (Virginia, North Carolina State, Maryland, Minnesota-Duluth). A full list is available in Section VIII.
- **Participation on advisory boards.** Molly Carnes serves on the Advisory Board for the ADVANCE programs at University of Illinois-Chicago, and also on the Brown University ADVANCE advisory board. Jennifer Sheridan serves on the advisory board for the North Dakota State University ADVANCE program, the START-IT program at the University of Wisconsin-La Crosse, and the ADVANCE Portal Website.
- **Advice/materials to individuals.** Over 77 groups or institutions (including some of our fellow ADVANCE: IT institutions) contacted WISELI in 2008 for advice, to request materials, or for some other reason pertaining to institutional transformation. The most common reasons for contact include: Information re: a specific WISELI program or effort (e.g., climate surveys, hiring workshops, climate workshops, Life Cycle Grants), request for our brochures or guidebook, administrative help for another ADVANCE institution, invitations to give a talk, general information useful for women in science (e.g., where to find the Donna Nelson data, a request for a citation, questions about the NSF indicators), advice for building an ADVANCE/PAID/START proposal, permission to use our materials, and more.

III. Changes in WISELI From 2007 to 2008

A. Initiatives

- **Hiring workshops.** Hiring workshops were scaled back in 2008, likely due to the decrease in the ability of departments to hire new faculty. We did not offer all-campus workshops in 2008 as we had in 2007 out of the Provost's Office, and several schools that normally request a workshop for the College (e.g., Engineering) did not request one in 2008.
- **Climate workshops.** With the resolution of the open-records request in WISELI's favor, attendance at the climate workshops increased in 2008. In addition, a plan to offer a train-the-trainer style workshop to other campuses in order to fulfill the requirement of the NSF PAID grant to disseminate these workshops was created.
- **PI workshops.** WISELI continued to offer PI workshops in 2008, with some minor alterations as indicated by the formative evaluation from 2007. A new workshop

facilitator (Jennifer Sheridan) took over, and we offered our faculty workshop facilitators an honorarium for the first time.

- **Website.** The WISELI website was continually refined in 2008. Our new brochure, "Enhancing Department Climate: A Guide for Department Chairs" was added to the WISELI bookstore in 2008.
- **Denice D. Denton Distinguished Lecture Series.** The second DDD Distinguished Lecture was given by Nancy Hopkins in September, 2008.
- **Exit Interview Study.** The successful completion of the 2007 Faculty Attrition Study led to a request for exit interviews of retirees as well as those who took another position. The increased number of interviews will delay the release of the report until Fall 2009.

B. Personnel

- **Directors.** No changes: Drs. Molly Carnes and Amy Wendt remain co-Directors of WISELI.
- **Staff.** WISELI Research Specialist Deveny Benting left WISELI at the end of 2008. Her position was not replaced immediately; we will use the funds to pay for some clerical assistance, and also some time of a web developer to redesign the WISELI website. We will decide on replacement at a future date.

C. Funding Sources

- Funding sources did not change in 2008. However, a major NIH R01 proposal was submitted in Fall 2008. If funded, this would cover $1M in direct costs for four years. A submission to the NSF ADVANCE/PAID program is planned for early 2009.

IV. Changes in Status of Women at UW-Madison from 2007 to 2008

A. Hiring

- Hiring of women in STEM rebounded some in 2008, but not to the levels we might hope. We continue to track a negative relationship between hiring of women and participation in WISELI workshops.

Women as Percentage of New Hires
Biological and Physical Sciences

Percent Female, Assistant Professor New Hires
Biological & Physical Sciences
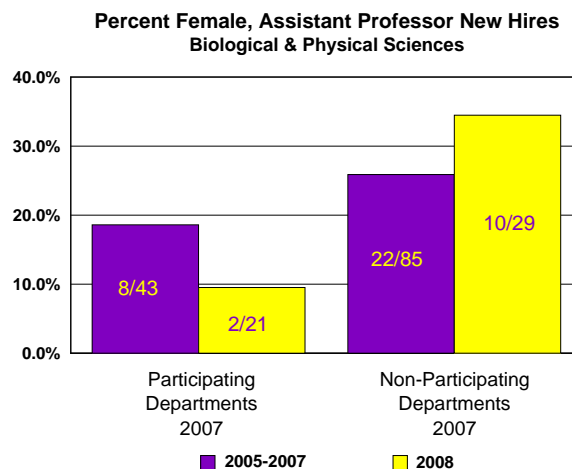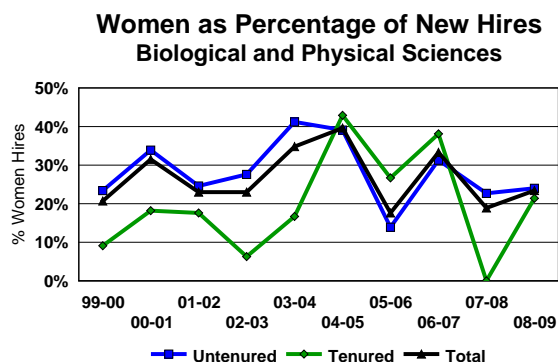
Because so many departments have participated in at least one workshop over the past several years, we looked at the hiring of women faculty by how many workshops a department has attended since 2004. Here, there does seem to be a very weak relationship between attending at least one workshop, and hiring women:

Percent Female, Assistant Professor New Hires
Biological & Physical Sciences
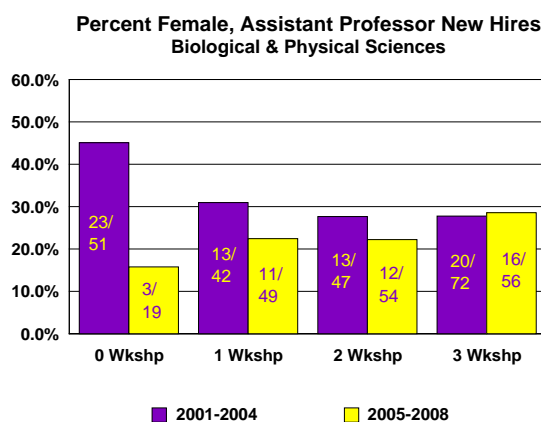
B. Tenure

- Tenure rates by cohort are equitable by gender in all divisions except Social Studies. These data have been provided to the Vice Provost for Faculty and Staff, who in 2008 convened an ad hoc committee to examine the tenure process at UW-Madison.

Tenure Outcomes, by Gender
Biological Sciences

Tenure Outcomes, by Gender
Physical Sciences

Tenure Outcomes, by Gender
Social Studies

Tenure Outcomes, by Gender
Arts & Humanities
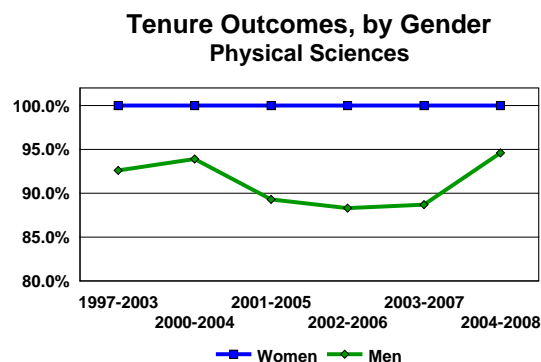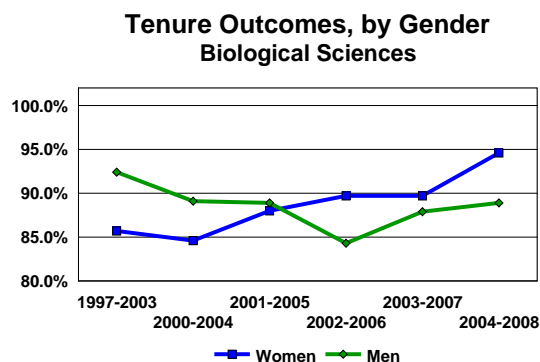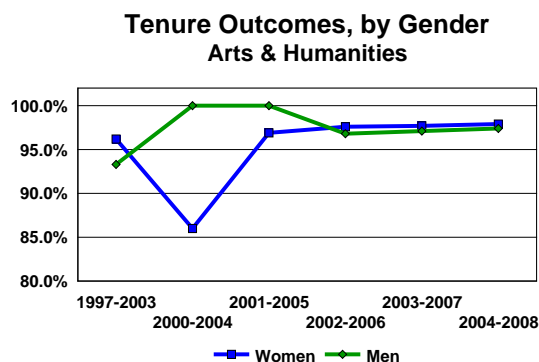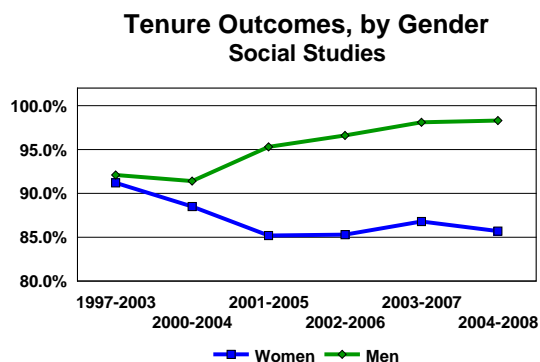
C. Awards and Honors

- The percentage of women earning a named professorship in 2008 is recovering from the steep drop in 2007, but it is still not to the levels that existed even a couple of years ago. The overall percentage of women with named professorships seems to have stagnated at about 20%, while the percentage of women earning major UW-Madison faculty awards is at its lowest level since 2001.

Women as Percentage of Named Professorship Recipients

Women as Percentage of New Named Professorship Recipients

% Female, Major UW-Madison Faculty Awards*
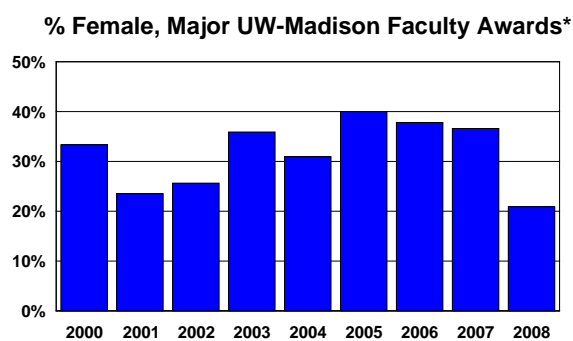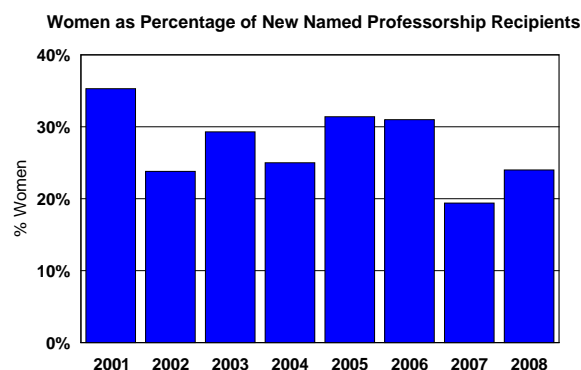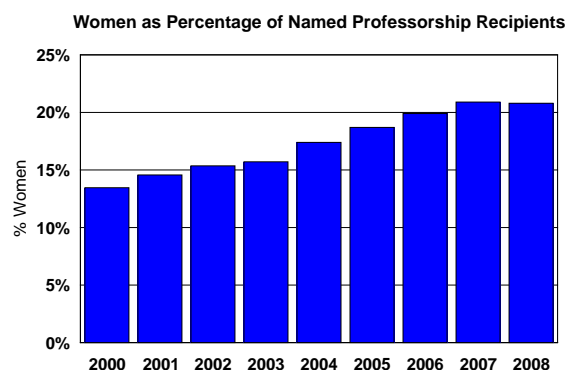
* Vilas Associate, Hilldale, Romnes, Kellett

D. Leadership

- The numbers and percentages of women department chairs in STEM appears to have plateaued; however, the percentage across the entire campus continues to rise..

% Women Department Chairs
Biological & Physical Sciences

% Women Department Chairs
All Divisions
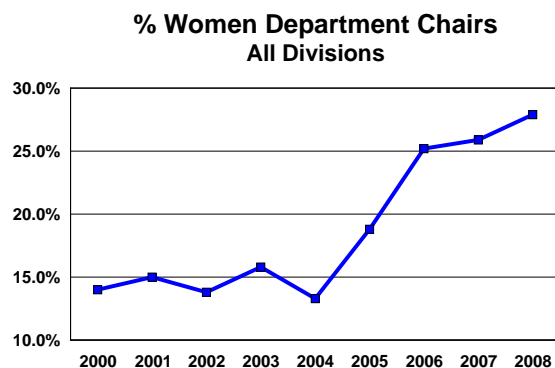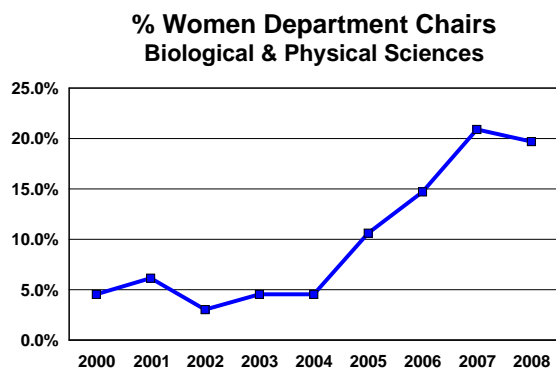
V. WISELI Management and Infrastructure

A. Funding Sources

- **Grants.**
    - The NSF PAID award began on 1/1/2007; however, spending was postponed until 7/1/2007. The funds from PAID primarily support Eve Fine, Deveny Benting, and provide some support for Molly Carnes, Jo Handelsman, and Amy Wendt.
    - One new grant was applied for in 2008 that would run through WISELI, and support new WISELI programming and research. An NIH R01 proposal was submitted in Fall 2008 with PI Molly Carnes. Senior personnel include: Patricia Devine, Cecilia Ford, Jennifer Sheridan, Angela Byars-Winston, Linda Baier Manwell, Tara Becker, and Margie Rosenberg.
- **Campus Support.**
    - The Office of the Provost is providing a large amount of funds to the WISELI program. Funds provide support for 100% of Jennifer Sheridan's salary. In addition, the campus provides $55,000 annually until 2009. These funds support Deveny Benting, Jessica Winchell, and miscellaneous travel and supply expenses.
    - The School of Medicine and Public Health is providing $70,000, renewable annually. These funds are used to pay the salary of Christine Pribbenow, and Molly Carnes. $2,000 of the funds are used to support the Celebrating Women in S&E grant program.
    - The College of Engineering is providing $33,922 annually (which includes 25% of the salary for WISELI grants administrator Carol Sobek), as well as providing WISELI with excellent space in the newly-remodeled Mechanical Engineering Building. These funds are used to pay for supplies and travel for WISELI employees, and $2,000 is set aside for the Celebrating Women in S&E grant program.
    - The College of Agricultural & Life Sciences, the College of Letters & Science, the School of Pharmacy, and the School of Veterinary Medicine all provide $2,000 per year in support of the Celebrating Women in S&E grant program.
    - The Nelson Institute for Environmental Studies is providing $750 per year in support of the Celebrating Women in S&E grant program.

- **Income-Generating Activities.**
  - o Sales of our brochures and guidebooks, and presentation of our hiring workshops to outside universities, have generated almost $50,000 in additional income for WISELI in 2008.

B. Personnel

Co-Directors: Molly Carnes and Amy Wendt
Executive & Research Director: Jennifer Sheridan
Evaluation Director: Christine Maidl Pribbenow
Researcher: Eve Fine
Research Specialist: Deveny Benting (Jan-Oct)
Grants & Contracts Specialist: Carol Sobek
Project Assistant: Jessica Winchell

VI. Financial Report

2008 Financial Report

			Account			Total
	101 190240-4	144-PW16 190240-4	150-E874 190240-4	233-JM60 190240-4	136 190240-4	
Income						
NSF		$445,164				$445,164
College of Engineering	$101,840		$10,000			$111,840
Office of the Provost	$209,702					$209,702
School of Medicine & Public Health	$70,000					$70,000
College of Agriculture & Life Sciences	$2,000					$2,000
School of Veterinary Medicine	$2,000					$2,000
College of Letters & Sciences	$2,000					$2,000
School of Pharmacy	$2,000					$2,000
Nelson Institute	$750					$750
Foundation Fund						$0
Income Generating Activities					$48,460	$48,460
Carryover from FY07 or FY08	$60,954			$2,631	$16,985	$80,571
Expenditures						
Salaries						
Faculty Directors	$156	$51,626			$5,752	$57,534
WISELI Staff	$128,800	$33,440		$430	$9,640	$172,310
Evaluation Staff	$39,626	$4,133			$103	$43,862
Fringe Benefits		$33,821		$161	$6,118	$40,101
Tuition Remission	$7,520	$480				$8,000
Travel	$285	$6,213	$1,787			$8,285
Supplies and Equipment	$13,729		$1,821		$208	$15,758
Initiatives						
Celebrating Grants	$10,684		$115			$10,799
Research & Evaluation Expenses	$5,130		$15		$100	$5,245
Library	$371		$358			$729
Denice D. Denton Distinguished Lecture Series				$3,304		$3,304
Professional Development Activities for Faculty, Staff & Students			$597		$897	$1,494
Workshop Expenses	$2,000	$431	$330			$2,761
Brochures, Booklets, & Other Publications	$628				$204	$832
Dissemination Activities		$30			$11,289	$11,319
Overhead		$60,956				$60,956
Total Income	$451,246	$445,164	$10,000	$2,631	$65,446	$974,487
Total Expenditures	$208,928	$191,130	$5,023	$3,895	$34,312	$443,288
Remaining Funds	$242,318	$254,034	$4,977	-$1,264	$31,133	$531,199

VII. Expected WISELI Directions for 2009

A. Initiatives

- *Searching for Excellence & Diversity* hiring workshops, *Enhancing Department Climate: A Chair's Role* climate workshops, *Running a Great Lab* PI workshops, *Vilas Life Cycle Professorships*, and *Celebrating Women* grants will continue as in the past.
- WISELI will continue to offer *Implementing Training for Hiring Committees* external workshops as time permits to disseminate knowledge and generate income.
- WISELI will offer *Implementing Climate Workshops for Department Chairs* to a national audience in June, 2009, in collaboration with the CIC.
- A new workshop, *Breaking the Prejudice Habit Through Bias Literacy*, will be developed.
- The campus is interested in possibly implementing a smaller *Study of Faculty Worklife* survey in early 2010; planning for this will commence in 2009.
- An evaluation for the *Celebrating Women in Science & Engineering* grant program will be conducted.
- Continued monitoring of institutional data.
- We expect to apply for at least one grant: NSF ADVANCE/PAID-Research grant in February 2009.
- We will continue to offer audioconferences relating to leadership development when the opportunities arise. In addition, we plan to work with the Women Faculty Mentoring Program to develop a more comprehensive approach to leadership development for women throughout 2009.

B. Personnel

- Carol Sobek will be leaving in 2009. We will work with the College of Engineering to secure budgeting, grant management, and financial help.

C. Funding

- Funding levels are expected to remain the same in 2009, unless we are awarded an NIH or NSF grant to develop the *Bias Literacy* workshops. We will likely raise our rates for outside workshops slightly to account for actual costs of providing these workshops.

VIII. WISELI Publications and Presentations, 2008

Papers Published:

Carnes, Molly; Claudia Morrissey; and Stacie E. Geller. 2008. "Women's Health and Women's Leadership in Academic Medicine: Hitting the Same Glass Ceiling?" *Journal of Women's Health.* 17(9): 1453-1462.

Ford, Cecilia E. 2008. *Women Speaking Up: Getting and Using Turns in Workplace Meetings.* New York: Palgrave Macmillan.

Ford, Cecilia. "Questioning in Meetings: Participation and Positioning." In *Why Do You Ask? The Function of Questions in Institutional Discourse* (Susan Erlich and Alice Freed, Eds.) Oxford University Press. In press.

Fine, Eve. 2008. "Response to Lawrence Summers' Remarks on Women in Science." In *The Blair Reader: Exploring Contemporary Issues,* 6th edition. Edited by Laurie G. Kirszner and Stephen R. Mandel. Prentice Hall. Originally published January 2005 on WISELI's website: (http://wiseli.engr.wisc.edu/news/LawrenceSummers_Response.pdf)

Working Papers:

Griffin, Lindsay; Carol A. Isaac; and Molly Carnes. 2008. "The Emergent Department Chair: Building Success One Individual at a Time." Working paper.

Sheridan, Jennifer; Eve Fine; Christine Maidl Pribbenow; Jo Handelsman; Molly Carnes. 2008. "Searching Excellence." Working paper.

Presentations:

Carnes, Molly. October 21, 2008. "Searching for Excellence & Diversity: An Evidence-Based Approach to Training Search Committees." Presented at the West Virginia Higher Education Policy Commission's workshop "Building Diversity in Higher Education: Strategies for Broadening Participation in the Sciences and Engineering." Charleston, West Virginia.

Fine, Eve. October 14, 2008. "Reviewing Applicants: Understanding and Minimizing the Potential Influence of Bias and Assumptions." North Carolina State University, "Forum on Recruiting Diverse Faculty." Raleigh, North Carolina.

Sheridan, Jennifer; Amy Wendt; Christine Maidl Pribbenow; Molly Carnes. October 10, 2008. "The Vilas Life Cycle Professorship Program at the UW-Madison." Poster presented at "The New Norm of Faculty Flexibility: Transforming the Culture in Science & Engineering" Conference. Ames, IA.

Handelsman, Jo. June 2, 2008. "Beyond Bias and Barriers." American Society for Microbiology Annual Meeting. Boston, MA.

Harrigan, Margaret N. May 28, 2008. "Evaluation of a Hiring Initiative: Recruitment and Retention of Faculty of Color, Dual Career Couples, and Women in Science." Association for Institutional Research Annual Forum. Seattle, WA.

Carnes, Molly. May 27, 2008. "University of Wisconsin-Madison ADVANCE Program: Did We Transform the Institution in 5 Years?" Invited speaker. Women in Science and Medicine Advisory Committee (WISMAC), UT Southwestern. Dallas, TX.

Neuwald, Anuschka. May 15, 2008. "Creating change: an open-dialogue about educational and institutional barriers in STEM education." University of Wisconsin System Women in Science Program Spring Advisory Board Meeting. Wisconsin Dells, WI.

Wendt, Amy. May 9, 2008. Discussion with women faculty in Engineering (invited speaker). University of Maryland. College Park, MD.

Sheridan, Jennifer. May 13, 2008. "Making Data Work FOR You." 7th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Carnes, Molly. May 12, 2008. "Promoting and Sustaining Institutional Change" (Moderator). 7th Annual NSF ADVANCE PI Meeting. National Science Foundation. Washington, DC.

Pribbenow, Christine Maidl. April 29, 2008. "Talking About Leaving: Why Faculty Leave UW-Madison and What We Can Do About It." Wisconsin Center for the Advancement of Postsecondary Education Brownbag. Madison, WI.

Sheridan, Jennifer and Eve Fine. April 22, 2008. "Searching for Excellence & Diversity." Invited Presentation to Waisman Center Faculty and Staff. Madison, WI.

Carnes, Molly. April 4, 2008. "Eliminating Bias in Scientific Review." From Cells to Society: A joint symposium hosted by the Center for Women's Health Research and the Endocrinology-Reproductive Physiology Program. University of Wisconsin-Madison. Madison, WI.

Carnes, Molly. March 29, 2008. "Language and Women's Academic Advancement" and "Careers in Academic Medicine: Evaluation at Gatekeeping Junctures." Women in Medicine Day. University of Virginia. Charlottesville, VA.

Sheridan, Jennifer. March 4, 2008. "Enhancing Departmental Climate to Promote the Development of Women Leaders in Academia." Invited speaker, "Women in Biomedical Research: Best Practices for Sustaining Career Success" workshop. National Institutes of Health. Bethesda, MD.

Sheridan, Jennifer. February 20, 2008. "More Women in Science: The Institutional Challenge." Invited speaker, University of Minnesota-Duluth. Duluth, MN.

Sheridan, Jennifer. February 2008. "So You Want to Run a Climate Survey?" Presented at the "Improving the climate for Your Science and Engineering Work Force" career workshop. American Association for the Advancement of Science (AAAS) Annual Meetings. Boston, MA.

Campus Visits/Dissemination of Programming:

"Implementing Workshops for Search Committees: A Train-the-Trainer Workshop for Campuses Wanting to Implement Training for Faculty Search Committees." June 24-25, 2008. University of Illinois-Urbana/Champaign. Urbana, IL.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. June 12, 2008. Edgewood College. Madison, WI.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. March 26-27, 2008. University of Alabama-Birmingham. Birmingham, AL.

 "Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. January 24-25, 2008. Wayne State University. Detroit, MI.

"Searching for Excellence & Diversity" workshop, and "Implementing Workshops for Search Committees" workshop. January 15-16, 2008. University of Wisconsin-Eau Claire. Eau Claire, WI.

WISELI in the Press:

"WVU Panel Urged to Consider Women, Minorities in Presidential Search." *Charleston Daily Mail*. October 27, 2008. http://www.dailymail.com/News/200810240247 .

"Engineering at Illinois Leads Campus Gender Equity Effort." *Engineering at Illinois News*. June 26, 2008. http://engineering.illinois.edu/news/rss.php?xId=074108800728 .

"Researcher Finds that Women are Speaking Up." *University of Wisconsin Communications.* July 31, 2008. http://www.news.wisc.edu/15436.

 "When Life Intervenes, One University Steps Up to Help." Bernice Durand. *CSWP Gazette*. Spring, 2008. 27(1): 1,10.

"Ask the Physics Mentor." Bernice Durand. *CSWP Gazette*. Spring, 2008. 27(1): 12.

 "Focus on Careers: Women in Science—Nurturing Women Scientists." Jill U. Adams. *Science*. February 8, 2008. 319(5864): 831–836.

Reports to Funding Agencies:

Sheridan, Jennifer; Molly Carnes, Jo Handelsman, and Amy Wendt. December 2008. "Partnerships for Adaptation, Implementation, and Dissemination Annual Report 2008."

Grant Proposals in Support of WISELI:

NIH Research on Causal Factors and Interventions that Promote and Support the Careers of Women in Biomedical and Behavioral Research program. "Advancement of Women in STEMM: A Multi-level Research and Action Project." PI: Molly Carnes. Co-PIs: Jennifer Sheridan, Patricia Devine, Cecilia Ford, Angela Byars-Winston, Linda Baier Manwell, Tara Becker, Marjorie Rosenberg. Submitted October 22, 2008. Funded.

Evaluation Reports:

Sheridan, Jennifer. December 9, 2008. "Results of PACE Survey of Engineering Undergraduates. University of Wisconsin-Madison College of Engineering. 2008."

Benting, Deveny. August 14, 2008. "Evaluation of 'Searching for Excellence & Diversity: A Workshop for Search Committees' Presented at Edgewood College on June 12, 2008."

Benting, Deveny. August 13, 2008. "Evaluation of the Workshop 'Searching for Excellence & Diversity: Implementing Training for Search Committees' Presented at the University of Illinois Urbana-Champaign on June 25, 2008."

Benting, Deveny. April 28, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to University of Alabama-Birmingham on March 26, 2008."

Pribbenow, Christine Maidl. April 2008. "Results of the 2006-07 Study of Faculty Attrition at the UW-Madison."

Benting, Deveny; Christien Maidl Pribbenow, and Jennifer Sheridan. April 2008. "Evaluation of the Vilas Life Cycle Professorships Program." http://wiseli.engr.wisc.edu/initiatives/lifecycle/VLCP_Report_2007_External.pdf .

Benting, Deveny. February 27, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to Wayne State University on January 25, 2008."

Benting, Deveny. February 15, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to UW-Eau Claire on January 16, 2008."

ADVANCE-Related Service

Sheridan, Jennifer. Advisory Committee Member, ADVANCE Portal Website. 2008-Present.

Sheridan, Jennifer. Advisory Board Member, University of Wisconsin-La Crosse ADVANCE START project. 2008-Present.

Carnes, Molly. External Advisor, University of Illinois-Chicago ADVANCE Institutional Transformation project, "Women in Science & Engineering System Transformation (WISEST)". 2006-2010.

Carnes, Molly. External Advisor, Brown University ADVANCE Institutional Transformation project. 2006-2010.

Presentations of WISELI Activities to Campus Groups

Deans' Council—4/23/2008
CALS Department Chairs/Deans—12/15/2008
ENGR Department Chairs and Deans—10/1/2008
SMPH Clinical Science Chairs—9/22/2008
SMPH Basic Science Chairs—9/22/2008
University Committee—8/20/2008
Committee on Women in the University—5/14/2008
Women Faculty Mentoring Program—8/22/2008
        Provost Department Chair Training—6/3/2008

Institutional Data, 2008

Table 1. Number and Percent of Women Faculty in Science/Engineering by Department, 2008

Division/Department	Women	Men	% Women
Physical Sciences	**58.50**	**389.35**	**13.1%**
Biological Systems Engineering	1.00	11.25	8.2%
Soil Science	3.50	15.00	18.9%
Chemical & Biological Engineering	2.00	17.00	10.5%
Civil & Environmental Engineering	3.00	23.75	11.2%
Electrical & Computer Engineering	5.00	36.50	12.0%
Biomedical Engineering	3.00	6.10	33.0%
Industrial Engineering	3.50	11.00	24.1%
Mechanical Engineering	3.00	30.75	8.9%
Materials Science & Engineering	3.00	11.00	21.4%
Engineering Physics	1.25	19.50	6.0%
Engineering Professional Development	0.00	6.00	0.0%
Astronomy	3.75	8.00	31.9%
Chemistry	3.50	33.00	9.6%
Computer Sciences	5.00	31.00	13.9%
Geology & Geophysics	5.00	16.00	23.8%
Mathematics	2.25	46.25	4.6%
Atmospheric & Oceanic Sciences	1.00	12.00	7.7%
Physics	6.25	44.75	12.3%
Statistics	3.50	10.50	25.0%
Biological Sciences	**196.31**	**575.25**	**25.4%**
Agronomy	2.50	15.00	14.3%
Animal Science	1.00	14.60	6.4%
Bacteriology	6.00	12.00	33.3%
Biochemistry	7.50	26.00	22.4%
Dairy Science	1.00	12.40	7.5%
Entomology	3.00	11.00	21.4%
Food Science	3.00	13.00	18.8%
Genetics	2.50	11.67	17.6%
Horticulture	2.00	11.50	14.8%
Nutritional Sciences	5.00	6.50	43.5%
Plant Pathology	5.50	8.00	40.7%
Forest & Wildlife Ecology	1.50	16.50	8.3%
Natural Resources - Wildlife Ecology	0.00	1.00	0.0%
Kinesiology	9.00	6.00	60.0%
Nelson Institute for Environmental Studies	3.50	6.25	35.9%
Botany	6.50	8.50	43.3%
Communicative Disorders	10.00	4.00	71.4%
Zoology	8.00	15.00	34.8%
Anatomy	5.00	13.50	27.0%
Anesthesiology	0.00	5.50	0.0%
Biostatistics & Medical Informatics	2.75	12.00	18.6%
Family Medicine	3.00	7.75	27.9%
Genetics	2.00	6.93	22.4%

Obstetrics & Gynecology	2.00	9.00	18.2%
Medical History & Bioethics	3.50	5.90	37.2%
Human Oncology	1.00	10.25	8.9%
Medicine	11.50	48.65	19.1%
Dermatology	0.00	7.00	0.0%
Medical Microbiology	6.20	8.50	42.2%
Medical Physics	2.00	13.95	12.5%
Neurology	1.00	9.50	9.5%
Neurological Surgery	2.00	8.00	20.0%
Oncology	6.50	11.90	35.3%
Ophthalmology & Visual Sciences	3.50	11.00	24.1%
Orthopedics & Rehabilitation	2.00	7.50	21.1%
Pathology & Laboratory Medicine	5.00	14.00	26.3%
Pediatrics	11.25	12.20	48.0%
Pharmacology	3.00	8.00	27.3%
Biomolecular Chemistry	2.80	7.75	26.5%
Physiology	5.00	14.00	26.3%
Population Health Sciences	10.30	13.00	44.2%
Psychiatry	6.51	8.60	43.1%
Radiology	2.50	14.95	14.3%
Surgery	1.00	19.00	5.0%
Urology	0.00	3.00	0.0%
School of Pharmacy	6.50	24.00	21.3%
Medical Sciences	4.00	8.00	33.3%
Pathobiological Sciences	1.00	17.00	5.6%
Comparative Biosciences	5.00	10.00	33.3%
Surgical Sciences	1.00	6.00	14.3%
Social Studies	**233.70**	**346.72**	**40.3%**
Agricultural & Applied Economics	2.00	19.90	9.1%
Life Sciences Communication	4.00	5.00	44.4%
Rural Sociology	4.00	7.00	36.4%
Natural Resources-Landscape Architecture	4.00	4.00	50.0%
Urban & Regional Planning	1.00	3.00	25.0%
School of Business	16.75	58.00	22.4%
Counseling Psychology	4.00	4.00	50.0%
Curriculum & Instruction	18.25	16.15	53.1%
Educational Leadership & Policy Analysis	5.00	11.00	31.3%
Educational Policy Studies	5.00	6.00	45.5%
Educational Psychology	7.00	11.00	38.9%
Rehabilitation Psychology & Special Education	4.00	5.00	44.4%
School of Human Ecology	22.50	13.00	63.4%
Law School	15.50	26.25	37.1%
Anthropology	9.00	13.00	40.9%
Afro-American Studies	5.50	2.25	71.0%
Communication Arts	10.00	12.00	45.5%
Economics	2.20	25.00	8.1%
Ethnic Studies	0.50	0.00	100.0%
Geography	3.00	12.00	20.0%
LaFollette School of Public Affairs	4.50	8.25	35.3%
School of Journalism & Mass Communication	6.00	8.50	41.4%

School of Library & Information Studies	8.00	1.50	84.2%
Political Science	8.00	26.25	23.4%
Psychology	16.00	15.00	51.6%
Social Work	10.50	4.00	72.4%
Sociology	15.00	22.92	39.6%
Urban & Regional Planning	0.00	4.75	0.0%
School of Nursing	20.50	0.00	100.0%
Professional Development & Applied Studies	2.00	2.00	50.0%
Humanities	**153.75**	**199.23**	**43.6%**
Art	9.00	19.00	32.1%
Dance	2.00	3.00	40.0%
African Languages & Literature	3.00	3.50	46.2%
Art History	9.00	4.75	65.5%
Classics	4.00	3.00	57.1%
Comparative Literature	1.00	2.25	30.8%
East Asian Languages & Literature	5.00	6.00	45.5%
English	23.20	20.30	53.3%
French & Italian	9.00	12.25	42.4%
German	6.50	8.35	43.8%
Hebrew & Semitic Studies	2.00	2.00	50.0%
History	18.00	27.00	40.0%
History of Science	2.00	4.50	30.8%
Linguistics	3.00	3.00	50.0%
School of Music	14.50	31.00	31.9%
Philosophy	3.00	14.00	17.6%
Scandinavian Studies	4.00	2.00	66.7%
Slavic Languages	3.00	5.00	37.5%
Languages & Cultures of Asia	5.00	6.33	44.1%
Spanish & Portuguese	11.00	13.00	45.8%
Theatre & Drama	7.75	7.00	52.5%
Women's Studies Program	5.00	0.00	100.0%
Social Sciences	0.00	1.00	0.0%
Liberal Studies & the Arts	3.80	1.00	79.2%

Table 2. Number and Percent of Women Faculty in Science/Engineering by Rank and Department, 2008

Division/Department	Women			Men			% Women		
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Associate	Assistant
Physical Sciences	**24.00**	**16.00**	**18.50**	**255.25**	**61.10**	**73.00**	**8.6%**	**20.8%**	**20.2%**
Biological Systems Engineering	0.00	0.00	1.00	9.25	1.00	1.00	0.0%	0.0%	50.0%
Soil Science	0.00	2.50	1.00	10.00	2.00	3.00	0.0%	55.6%	25.0%
Chemical & Biological Engineering	1.00	0.00	1.00	10.00	5.00	2.00	9.1%	0.0%	33.3%
Civil & Environmental Engineering	1.00	1.00	1.00	16.75	4.00	3.00	5.6%	20.0%	25.0%
Electrical & Computer Engineering	2.00	0.00	3.00	25.50	8.00	3.00	7.3%	0.0%	50.0%
Biomedical Engineering	0.00	1.00	2.00	3.50	0.60	2.00	0.0%	62.5%	50.0%
Industrial Engineering	3.50	0.00	0.00	4.00	5.00	2.00	46.7%	0.0%	0.0%
Mechanical Engineering	1.00	1.00	1.00	16.75	7.00	7.00	5.6%	12.5%	12.5%
Materials Science & Engineering	1.00	0.00	2.00	5.00	2.00	4.00	16.7%	0.0%	33.3%
Engineering Physics	0.25	1.00	0.00	14.50	3.00	2.00	1.7%	25.0%	0.0%
Engineering Professional Development	0.00	0.00	0.00	4.00	1.00	1.00	0.0%	0.0%	0.0%
Astronomy	1.75	1.00	1.00	4.00	1.00	3.00	30.4%	50.0%	25.0%
Chemistry	1.50	2.00	0.00	24.00	2.00	7.00	5.9%	50.0%	0.0%
Computer Sciences	2.00	2.00	1.00	16.00	7.00	8.00	11.1%	22.2%	11.1%
Geology & Geophysics	4.00	1.00	0.00	10.00	3.00	3.00	28.6%	25.0%	0.0%
Mathematics	0.75	1.00	0.50	35.50	4.00	6.75	2.1%	20.0%	6.9%
Atmospheric & Oceanic Sciences	0.00	0.00	1.00	8.00	1.00	3.00	0.0%	0.0%	25.0%
Physics	3.25	1.00	2.00	30.75	4.00	10.00	9.6%	20.0%	16.7%
Statistics	1.00	1.50	1.00	7.75	0.50	2.25	11.4%	75.0%	30.8%
Biological Sciences	**79.56**	**55.50**	**61.25**	**363.70**	**107.05**	**104.50**	**17.9%**	**34.1%**	**37.0%**
Agronomy	0.50	1.00	1.00	10.00	0.00	5.00	4.8%	100.0%	16.7%
Animal Science	0.00	0.00	1.00	9.60	2.00	3.00	0.0%	0.0%	25.0%
Bacteriology	3.00	3.00	0.00	8.00	3.00	1.00	27.3%	50.0%	0.0%
Biochemistry	6.00	0.00	1.50	21.00	3.00	2.00	22.2%	0.0%	42.9%
Dairy Science	1.00	0.00	0.00	6.40	4.00	2.00	13.5%	0.0%	0.0%
Entomology	1.00	1.00	1.00	8.00	1.00	2.00	11.1%	50.0%	33.3%
Food Science	0.00	2.00	1.00	10.00	2.00	1.00	0.0%	50.0%	50.0%
Genetics	0.50	1.00	1.00	11.17	0.50	0.00	4.3%	66.7%	100.0%
Horticulture	0.00	2.00	0.00	7.50	3.00	1.00	0.0%	40.0%	0.0%
Nutritional Sciences	3.00	2.00	0.00	4.50	1.00	1.00	40.0%	66.7%	0.0%
Plant Pathology	3.50	1.00	1.00	6.00	0.00	2.00	36.8%	100.0%	33.3%
Forest & Wildlife Ecology	0.50	0.00	1.00	9.00	5.00	2.50	5.3%	0.0%	28.6%
Natural Resources - Wildlife Ecology	0.00	0.00	0.00	1.00	0.00	0.00	0.0%	N/A	N/A
Kinesiology	1.00	3.00	5.00	1.00	3.00	2.00	50.0%	50.0%	71.4%
Nelson Institute for Environmental Studies	1.50	0.00	2.00	4.25	0.00	2.00	26.1%	N/A	50.0%
Botany	3.00	0.00	3.50	7.00	1.50	0.00	30.0%	0.0%	100.0%
Communicative Disorders	4.00	2.00	4.00	4.00	0.00	0.00	50.0%	100.0%	100.0%

Zoology	2.00	4.00	2.00	10.00	3.00	2.00	16.7%	57.1%	50.0%
Anatomy	3.00	2.00	0.00	10.50	1.00	2.00	22.2%	66.7%	0.0%
Anesthesiology	0.00	0.00	0.00	3.50	2.00	0.00	0.0%	0.0%	N/A
Biostatistics & Medical Informatics	1.25	1.00	0.50	3.75	3.00	5.25	25.0%	25.0%	8.7%
Family Medicine	2.00	1.00	0.00	3.10	1.65	3.00	39.2%	37.7%	0.0%
Genetics	0.00	0.00	2.00	2.43	0.50	4.00	0.0%	0.0%	33.3%
Obstetrics & Gynecology	1.00	1.00	0.00	5.00	2.00	2.00	16.7%	33.3%	0.0%
Medical History & Bioethics	2.00	1.50	0.00	1.90	3.00	1.00	51.3%	33.3%	0.0%
Human Oncology	0.00	1.00	0.00	7.05	1.00	2.20	0.0%	50.0%	0.0%
Medicine	2.50	3.00	6.00	24.90	12.75	11.00	9.1%	19.0%	35.3%
Dermatology	0.00	0.00	0.00	4.00	2.00	1.00	0.0%	0.0%	0.0%
Medical Microbiology	3.00	2.00	1.20	7.50	1.00	0.00	28.6%	66.7%	100.0%
Medical Physics	0.00	1.00	1.00	6.90	5.45	1.60	0.0%	15.5%	38.5%
Neurology	0.00	0.00	1.00	6.50	1.00	2.00	0.0%	0.0%	33.3%
Neurological Surgery	1.00	0.00	1.00	2.00	3.00	3.00	33.3%	0.0%	25.0%
Oncology	1.50	2.00	3.00	10.90	0.00	1.00	12.1%	100.0%	75.0%
Ophthalmology & Visual Sciences	3.50	0.00	0.00	8.00	2.00	1.00	30.4%	0.0%	0.0%
Orthopedics & Rehabilitation	1.00	0.00	1.00	3.50	2.00	2.00	22.2%	0.0%	33.3%
Pathology & Laboratory Medicine	4.00	1.00	0.00	8.00	3.00	3.00	33.3%	25.0%	0.0%
Pediatrics	3.50	2.00	5.75	9.20	1.00	2.00	27.6%	66.7%	74.2%
Pharmacology	1.00	1.00	1.00	6.00	2.00	0.00	14.3%	33.3%	100.0%
Biomolecular Chemistry	1.00	1.00	0.80	4.50	2.00	1.25	18.2%	33.3%	39.0%
Physiology	4.00	1.00	0.00	11.00	1.00	2.00	26.7%	50.0%	0.0%
Population Health Sciences	4.30	3.00	3.00	5.00	2.50	5.50	46.2%	54.5%	35.3%
Psychiatry	1.51	3.00	2.00	5.20	0.00	3.40	22.5%	100.0%	37.0%
Radiology	1.50	0.00	1.00	8.95	3.20	2.80	14.4%	0.0%	26.3%
Surgery	0.00	0.00	1.00	13.00	3.00	3.00	0.0%	0.0%	25.0%
Urology	0.00	0.00	0.00	3.00	0.00	0.00	0.0%	N/A	N/A
School of Pharmacy	2.50	2.00	2.00	14.00	4.00	6.00	15.2%	33.3%	25.0%
Medical Sciences	1.00	2.00	1.00	5.00	2.00	1.00	16.7%	50.0%	50.0%
Pathobiological Sciences	0.00	1.00	0.00	11.00	4.00	2.00	0.0%	20.0%	0.0%
Comparative Biosciences	3.00	0.00	2.00	6.00	2.00	2.00	33.3%	0.0%	50.0%
Surgical Sciences	0.00	1.00	0.00	4.00	2.00	0.00	0.0%	33.3%	N/A
Social Studies	**109.45**	**39.25**	**85.00**	**221.72**	**66.50**	**58.50**	**33.0%**	**37.1%**	**59.2%**
Agricultural & Applied Economics	0.00	0.00	2.00	13.90	4.00	2.00	0.0%	0.0%	50.0%
Life Sciences Communication	2.00	2.00	0.00	2.00	1.00	2.00	50.0%	66.7%	0.0%
Rural Sociology	2.00	0.00	2.00	6.00	0.00	1.00	25.0%	N/A	66.7%
Natural Resources-Landscape Architecture	1.00	1.00	2.00	2.00	0.00	2.00	33.3%	100.0%	50.0%
Urban & Regional Planning	0.00	0.00	1.00	1.00	0.00	2.00	0.0%	N/A	33.3%
School of Business	3.75	4.00	9.00	32.00	17.00	9.00	10.5%	19.0%	50.0%
Counseling Psychology	2.00	0.00	2.00	4.00	0.00	0.00	33.3%	N/A	100.0%
Curriculum & Instruction	7.00	3.25	8.00	10.15	3.00	3.00	40.8%	52.0%	72.7%
Educational Leadership & Policy Analysis	4.00	0.00	1.00	8.00	2.00	1.00	33.3%	0.0%	50.0%
Educational Policy Studies	2.00	0.00	3.00	4.00	1.00	1.00	33.3%	0.0%	75.0%

Educational Psychology	2.00	3.00	2.00	10.00	0.00	1.00	16.7%	100.0%	66.7%
Rehabilitation Psychology & Special Education	2.00	1.00	1.00	2.00	1.00	2.00	50.0%	50.0%	33.3%
School of Human Ecology	13.50	4.00	5.00	7.00	3.00	3.00	65.9%	57.1%	62.5%
Law School	8.50	1.00	6.00	18.25	4.00	4.00	31.8%	20.0%	60.0%
Anthropology	6.00	2.00	1.00	7.00	6.00	0.00	46.2%	25.0%	100.0%
Afro-American Studies	2.50	1.00	2.00	2.25	0.00	0.00	52.6%	100.0%	100.0%
Communication Arts	4.00	1.00	5.00	7.00	3.00	2.00	36.4%	25.0%	71.4%
Economics	0.20	0.00	2.00	13.00	2.00	10.00	1.5%	0.0%	16.7%
Ethnic Studies	0.50	0.00	0.00	0.00	0.00	0.00	100.0%	N/A	N/A
Geography	1.00	0.00	2.00	10.00	2.00	0.00	9.1%	0.0%	100.0%
LaFollette School of Public Affairs	2.50	0.00	2.00	5.00	2.50	0.75	33.3%	0.0%	72.7%
School of Journalism & Mass Communication	3.00	0.00	3.00	8.00	0.50	0.00	27.3%	0.0%	100.0%
School of Library & Information Studies	2.00	3.00	3.00	0.00	0.50	1.00	100.0%	85.7%	75.0%
Political Science	4.00	3.00	1.00	14.50	6.00	5.75	21.6%	33.3%	14.8%
Psychology	12.00	0.00	4.00	10.00	3.00	2.00	54.5%	0.0%	66.7%
Social Work	2.50	4.00	4.00	3.00	0.00	1.00	45.5%	100.0%	80.0%
Sociology	6.00	3.00	6.00	15.92	5.00	2.00	27.4%	37.5%	75.0%
Urban & Regional Planning	0.00	0.00	0.00	3.75	0.00	1.00	0.0%	N/A	0.0%
School of Nursing	11.50	3.00	6.00	0.00	0.00	0.00	100.0%	100.0%	100.0%
Professional Development & Applied Studies	2.00	0.00	0.00	2.00	0.00	0.00	50.0%	N/A	N/A
Humanities	**92.50**	**38.25**	**23.00**	**134.23**	**38.00**	**27.00**	**40.8%**	**50.2%**	**46.0%**
Art	5.00	3.00	1.00	9.00	6.00	4.00	35.7%	33.3%	20.0%
Dance	1.00	0.00	1.00	2.00	0.00	1.00	33.3%	N/A	50.0%
African Languages & Literature	2.00	1.00	0.00	2.50	0.00	1.00	44.4%	100.0%	0.0%
Art History	4.00	3.00	2.00	4.75	0.00	0.00	45.7%	100.0%	100.0%
Classics	4.00	0.00	0.00	1.00	1.00	1.00	80.0%	0.0%	0.0%
Comparative Literature	1.00	0.00	0.00	0.25	2.00	0.00	80.0%	0.0%	N/A
East Asian Languages & Literature	1.00	4.00	0.00	1.00	2.00	3.00	50.0%	66.7%	0.0%
English	15.20	5.00	3.00	13.30	4.00	3.00	53.3%	55.6%	50.0%
French & Italian	6.00	1.00	2.00	11.25	1.00	0.00	34.8%	50.0%	100.0%
German	4.50	2.00	0.00	6.35	2.00	0.00	41.5%	50.0%	N/A
Hebrew & Semitic Studies	2.00	0.00	0.00	1.00	0.00	1.00	66.7%	N/A	0.0%
History	11.00	4.00	3.00	19.00	6.00	2.00	36.7%	40.0%	60.0%
History of Science	1.00	0.00	1.00	1.50	3.00	0.00	40.0%	0.0%	100.0%
Linguistics	3.00	0.00	0.00	2.00	0.00	1.00	60.0%	N/A	0.0%
School of Music	9.50	3.00	2.00	26.00	3.00	2.00	26.8%	50.0%	50.0%
Philosophy	2.00	0.00	1.00	11.00	1.00	2.00	15.4%	0.0%	33.3%
Scandinavian Studies	2.00	1.00	1.00	2.00	0.00	0.00	50.0%	100.0%	100.0%
Slavic Languages	2.00	0.00	1.00	3.00	2.00	0.00	40.0%	0.0%	100.0%
Languages & Cultures of Asia	3.00	1.00	1.00	5.33	0.00	1.00	36.0%	100.0%	50.0%
Spanish & Portuguese	5.00	4.00	2.00	7.00	3.00	3.00	41.7%	57.1%	40.0%
Theatre & Drama	3.00	4.75	0.00	4.00	2.00	1.00	42.9%	70.4%	0.0%
Women's Studies Program	1.50	1.50	2.00	0.00	0.00	0.00	100.0%	100.0%	100.0%
Social Sciences	0.00	0.00	0.00	0.00	0.00	1.00	N/A	N/A	0.0%

Liberal Studies & the Arts	3.80	0.00	0.00	1.00	0.00	0.00	79.2%	N/A	N/A

2004 - 2008

Division/Department	Women			Men		
	Reviewed	Achieved	%	Reviewed	Achieved	%
Physical Sciences	14	14	100.0%	69	60	87.0%
Biological Sciences	37	35	94.6%	63	56	88.9%
Social Studies	35	30	85.7%	58	57	98.3%
Humanities	47	46	97.9%	39	38	97.4%

SOURCE: Office of the Secretary of the Faculty.

Table 3b. Tenure Promotion Outcomes by Gender, 2008

Physical Sciences

Entering Cohort	Women				Men			
	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured
1987-91	**17**	**0.0%**	**11.8%**	**88.2%**	**87**	**0.0%**	**24.1%**	**75.9%**
1991-95	**7**	**0.0%**	**57.1%**	**42.9%**	**35**	**0.0%**	**20.0%**	**80.0%**
1995-99	**10**	**0.0%**	**40.0%**	**60.0%**	**34**	**0.0%**	**11.8%**	**88.2%**
1999-03	**15**	6.7%	20.0%	73.3%	**75**	4.0%	21.3%	74.7%
2003-07	**20**	90.0%	5.0%	5.0%	**57**	84.2%	5.3%	10.5%
2007-11	3	100.0%	0.0%	0.0%	16	87.5%	0.0%	12.5%

Biological Sciences

Entering Cohort	Women				Men			
	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured
1987-91	**27**	**0.0%**	**40.7%**	**59.3%**	**103**	**0.0%**	**32.0%**	**68.0%**
1991-95	**26**	**0.0%**	**26.9%**	**73.1%**	**81**	**0.0%**	**24.7%**	**75.3%**
1995-99	**22**	**0.0%**	**22.7%**	**77.3%**	**47**	0.0%	25.5%	74.5%
1999-03	**44**	25.0%	13.6%	61.4%	**85**	11.8%	24.7%	63.5%
2003-07	**31**	93.5%	3.2%	3.2%	**57**	82.5%	7.0%	10.5%
2007-11	10	100.0%	0.0%	0.0%	20	100.0%	0.0%	0.0%

Social Studies

Entering Cohort	Women				Men			
	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured
1987-91	**72**	**0.0%**	**51.4%**	**48.6%**	**83**	**0.0%**	**54.2%**	**45.8%**
1991-95	**48**	2.1%	43.8%	54.2%	**50**	**0.0%**	**42.0%**	**58.0%**
1995-99	**41**	**0.0%**	**58.5%**	**41.5%**	**54**	1.9%	50.0%	48.1%
1999-03	**52**	11.5%	50.0%	38.5%	**79**	2.5%	34.2%	63.3%
2003-07	**63**	82.5%	11.1%	6.3%	**48**	75.0%	10.4%	14.6%
2007-11	14	92.9%	7.1%	0.0%	14	100.0%	0.0%	0.0%

Humanities

Entering Cohort	Women				Men			
	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured	Total Hired	% Still Probation	% Left w/o Tenure	% Tenured
1987-91	**44**	**0.0%**	**36.4%**	**63.6%**	**50**	**0.0%**	**36.0%**	**64.0%**
1991-95	**27**	**0.0%**	**22.2%**	**77.8%**	**25**	**0.0%**	**24.0%**	**76.0%**
1995-99	**23**	**0.0%**	**21.7%**	**78.3%**	**21**	**0.0%**	**14.3%**	**85.7%**
1999-03	**47**	4.3%	12.8%	83.0%	**43**	4.7%	20.9%	74.4%
2003-07	**25**	68.0%	12.0%	20.0%	**25**	76.0%	4.0%	20.0%
2007-11	10	100.0%	0.0%	0.0%	4	75.0%	0.0%	25.0%

SOURCE: UW Madison Tenure file and IADS appointment information system, Dec 2008
NOTE: Numbers in **BOLDFACE** are final; numbers in normal typeface are in flux and will change year-to-year as new faculty are hired, are tenured, and/or leave the UW without tenure.
NOTE: Probationary faculty only. Adjustments made for time on tenure clock outside UW; no adjustments for tenure clock extensions.
NOTE: 1987-91 cohort hired between June 1987 and May 1991; 1991-95 cohort hired between June 1991 and May 1995; 1995-99 cohort hired between June 1995 and May 1999; 1999-03 cohort hired between June 1999 and May 2003; 2003-07 cohort hired after May 15 2003.

Table 5a. Time at Institution (Median Numer of Years) by Gender and Rank, 2008

Division/Department	Women				Men				Women's Median as % of Men's			
	ALL	Full	Associate	Assistant	ALL	Full	Associate	Assistant	ALL	Full	Associate	Assistant
Physical Sciences	7.0	18.0	8.0	4.0	14.0	20.0	7.0	2.0	50.0%	90.0%	114.3%	200.0%
Biological Sciences	8.0	17.0	8.0	3.0	13.0	20.0	8.0	2.0	61.5%	85.0%	100.0%	150.0%
Social Studies	8.0	17.0	8.0	2.0	12.0	19.0	7.0	2.0	66.7%	89.5%	114.3%	100.0%
Humanities	11.0	19.0	8.0	3.0	16.0	19.0	8.0	3.0	68.8%	100.0%	100.0%	100.0%

SOURCE: October 2008 IADS Frozen slice
Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis

Table 5b. Attrition by Gender, 2007-2008

	FTEs			%		
			2007			
	Retired	Resigned	Total FTE	Retired	Resigned	Left UW
Total	75	57	2,172	3.5%	2.6%	6.1%
Women	11	15	636	1.7%	2.4%	4.1%
Men	64	42	1,536	4.2%	2.7%	6.9%
Physical Sciences						
Women	0	2	61	0.0%	3.3%	3.3%
Men	16	10	402	4.0%	2.5%	6.5%
Biological Sciences						
Women	2	2	182	1.1%	1.1%	2.2%
Men	25	9	576	4.3%	1.6%	5.9%
Social Studies						
Women	6	7	236	2.5%	3.0%	5.5%
Men	11	17	350	3.1%	4.9%	8.0%
Humanities						
Women	3	4	157	1.9%	2.5%	4.5%
Men	12	6	208	5.8%	2.9%	8.6%

SOURCE: IADS appointment system, Feb. 2008
NOTE:
Year is measured from July 1 through June 30.
Retired=all faculty who were age 55 or older at the time of termination.
Resigned=all faculty who were less than 55 years old at the time of termination.
Discipline is assigned based on appointment major department.
Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis

Table 7a. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2008

Division	Total Faculty (Full Profs.)			Department Chairs			% Women Chairs	% Men Chairs
	Women	Men	% Women	Women	Men	% Women		
Physical Sciences	26	281	**8.5%**	4	15	**21.1%**	*15.4%*	*5.3%*
Biological Sciences	71	338	**17.4%**	9	38	**19.1%**	*12.7%*	*11.2%*
Social Studies	102	221	**31.6%**	7	16	**30.4%**	*6.9%*	*7.2%*
Humanities	108	147	**42.4%**	11	11	**50.0%**	*10.2%*	*7.5%*
Total	307	987	**23.7%**	31	80	**27.9%**	*10.1%*	*8.1%*

SOURCE: IADS appointment system frozen slice, October 2008.
NOTE: Total faculty is a non-duplicating headcount of full professors. Faculty members are assigned to a discipline based on their tenure department (not divisional committee affiliation). Thus, all faculty in the department of Biochemistry are shown in the Biological Sciences area. The vast majority of department chairs also hold the rank of full professor. However, in any year, a small percentage of department chairs (e.g., 7chairs, or 6% of total in 2002) hold the rank of asociate professor.
Prepared by: Margaret Harrigan, Office of Academic Planning and Analysis

Table 7b. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2008

Division	Total Faculty (Full Profs.)			Deans (Faculty)			% Women Deans	% Men Deans
	Women	Men	% Women	Women	Men	% Women		
Physical Sciences	26	281	**8.5%**	1	8	**11.1%**	3.8%	2.8%
Biological Sciences	71	338	**17.4%**	5	10	**33.3%**	7.0%	3.0%
Social Studies	102	221	**31.6%**	13	16	**44.8%**	12.7%	7.2%
Humanities	108	147	**42.4%**	3	2	**60.0%**	2.8%	1.4%
Total	307	987	**23.7%**	22	36	**37.9%**	7.2%	3.6%

SOURCE: IADS Frozen Appointment Data view, October 2008.
NOTE: Includes both paid and zero-dollar deans, associate deans, and assistant deans. Faculty are assigned to a discipline based on the divisional committee responsible for approving their tenure. Each faculty member may choose only one affiliation. However, faculty in the same department may choose different affiliations. For example, about half of the faculty in Biochemistry are affiliated with the Biological Sciences Divisional Committee, and half are affiliated with the Physical Sciences Division. Only faculty report a divisional committee affiliation.
Prepared by: Margaret Harrigan, Office of Academic Planning and Analysis

Table 7c. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2008

Division	Total Faculty (Full Profs.)			Central Administration				
	Women	Men	% Women	Women	Men	% Women	% Women Admin.	% Men Admin.
Physical Sciences	26	281	**8.5%**	0	1	**0.0%**	*0.0%*	*0.4%*
Biological Sciences	71	338	**17.4%**	0	1	**0.0%**	*0.0%*	*0.3%*
Social Studies	102	221	**31.6%**	0	2	**0.0%**	*0.0%*	*0.9%*
Humanities	108	147	**42.4%**	1	1	**50.0%**	*0.9%*	*0.7%*
Total	307	987	**23.7%**	1	5	**16.7%**	*0.3%*	*0.5%*

SOURCE: IADS Frozen Appointment Data view, October 2008.
NOTE: Faculty are assigned to a discipline based on the divisional committee responsible for approving
their tenure. Each faculty member may choose only one affiliation. However, faculty in the same
department may choose different affiliations. For example, about half of the faculty in Biochemistry are
affiliated with the Biological Sciences Divisional Committee, and half are affiliated with the Physical
Sciences Division. Only faculty report a divisional committee affiliation.
Prepared by: Margaret Harrigan, Office of Academic Planning and Analysis

Table 7d. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2008

Division	Total Faculty (Full Profs.)			Large Center & Institute Directors				
	Women	Men	% Women	Women	Men	% Women	% Women Directors	% Men Directors
Physical Sciences	26	281	**8.5%**	0	12	**0.0%**	*0.0%*	*4.3%*
Biological Sciences	71	338	**17.4%**	0	14	**0.0%**	*0.0%*	*4.1%*
Social Studies	102	221	**31.6%**	8	13	**38.1%**	*7.8%*	*5.9%*
Humanities	108	147	**42.4%**	11	11	**50.0%**	*10.2%*	*7.5%*
Total	307	987	**23.7%**	19	50	**27.5%**	*6.2%*	*5.1%*

SOURCE: IADS appointment system frozen slice, October 2008.
NOTE: Total faculty is a non-duplicating headcount of full professors. Faculty are assigned to a discipline based on their divisional committee affiliation. Includes both paid and zero-dollar academic program directors and associate or assistant academic program directors. Excludes three male assistant academic program directors without faculty status.
Prepared by: Margaret Harrigan, Office of Academic Planning and Analysis

Table 8. Number of Women Science & Engineering Faculty in Endowed/Named Chairs Chairs, 2008

	Women	Men	% Female
Named Professorships			
Vilas Professors	4	11	26.7%
Hilldale Professors	3	9	25.0%
John Bascom Professors	1	3	25.0%
Evjue-Bascom Professors	4	5	44.4%
Named-Bascom Professors	18	37	32.7%
Steenbock Professors	1	7	12.5%
Wisconsin Distinguished Professors	0	9	0.0%
Other named professorships (incl. WARF)	47	228	17.1%
Holds two named professorships	7	38	15.6%
New named professorships	6	19	24.0%
Number holding named professorships	71	271	20.8%
Full Professors at UW-Madison	307	987	**23.7%**
Major Awards			
Vilas Associate Award	5	21	19.2%
Hilldale Award	1	3	25.0%
H. I. Romnes Faculty Fellowship	3	4	42.9%
WARF Kellett Mid-Career Award	0	6	0.0%
Tenured Professors at UW-Madison	**458**	**1265**	**26.6%**

SOURCE: Office of the Provost. Totals from IADS appointment system frozen slice October 2008.
NOTE: Counts of Full Professors are headcounts of active "Professor" appointments in October 2008; counts of Tenured Professors are headcounts of active "Professor" and "Associate Professor" appointments in October 2008.
Prepared by: Jennifer Sheridan, WISELI

Table 9. Number and Percent of Women Science & Engineering Faculty on Promotion and Tenure Committees, 2008

	Women	Men	% Female
Faculty Senate			
Physical Sciences	6	35	14.6%
Biological Sciences	14	61	18.7%
Social Studies	19	39	32.8%
Arts & Humanities	15	22	40.5%
Senators (total)	**54**	**157**	**25.6%**
Physical Sciences	5	26	16.1%
Biological Sciences	18	50	26.5%
Social Studies	21	27	43.8%
Arts & Humanities	10	13	43.5%
Alternates (Total)	**54**	**116**	**31.8%**
Athletic Board	5	18	21.7%
Campus Planning Committee	5	10	33.3%
Divisional Executive Committees*			
Physical Sciences	4	8	33.3%
Bio. Sciences, Curriculum Planning	4	5	44.4%
Bio. Sciences, Strategic Planning	4	5	44.4%
Bio. Sciences, Tenure	3	9	25.0%
Social Studies	4	8	33.3%
Arts & Humanities	7	4	63.6%
Faculty Compensation and Economic Benefits Commission*	3	6	33.3%
Faculty Rights and Responsibilities Committee*	3	6	33.3%
Library Committee*	6	7	46.2%
University Committee*	4	2	66.7%
University Academic Planning Council	5	10	33.3%
Graduate School Academic Planning Council	1	7	12.5%
Graduate School Executive Committee			
Physical Sciences	0	5	0.0%
Biological Sciences	3	2	60.0%
Social Studies	1	5	16.7%
Arts & Humanities	3	2	60.0%
Graduate School Research Committee			
Physical Sciences	4	7	36.4%
Biological Sciences	4	7	36.4%
Social Studies	5	5	50.0%
Arts & Humanities	6	4	60.0%
All Faculty	**648**	**1530**	**29.8%**
Physical Sciences	**64**	**428**	**13.0%**
Biological Sciences	**172**	**529**	**24.5%**
Social Studies	**228**	**351**	**39.4%**
Arts & Humanities	**184**	**221**	**45.4%**

* Members chosen by election of faculty.

Table 10a. Salary of Science & Engineering Faculty by Gender (Controlling for Department), 2008

Division/Department	Women, Median	Men, Median	Women's Median as % of Men's
Physical Sciences	**$88,661**	**$98,883**	**89.7%**
Biological Systems Engineering	63,189	89,824	70.3%
Soil Science	90,000	79,685	112.9%
Chemical & Biological Engineering	101,530	102,472	99.1%
Civil & Environmental Engineering	100,800	110,489	91.2%
Electrical & Computer Engineering	90,398	112,124	80.6%
Biomedical Engineering	84,837	99,841	85.0%
Industrial Engineering	132,990	105,938	125.5%
Mechanical Engineering	97,986	100,369	97.6%
Materials Science & Engineering	90,853	93,701	97.0%
Engineering Physics	101,363	122,284	82.9%
Engineering Professional Development	N/A	103,084	N/A
Astronomy	81,405	87,050	93.5%
Chemistry	81,063	103,649	78.2%
Computer Sciences	96,749	110,000	88.0%
Geology & Geophysics	78,065	82,491	94.6%
Mathematics	82,695	95,571	86.5%
Atmospheric & Oceanic Sciences	64,539	90,011	71.7%
Physics	99,122	92,896	106.7%
Statistics	86,610	99,570	87.0%
Biological Sciences	**$85,115**	**$93,849**	**90.7%**
Agronomy	69,458	77,931	89.1%
Animal Science	85,776	87,293	98.3%
Bacteriology	90,459	92,665	97.6%
Biochemistry	97,016	117,706	82.4%
Dairy Science	94,385	78,748	119.9%
Entomology	72,346	89,408	80.9%
Food Science	72,012	86,248	83.5%
Genetics	73,227	124,729	58.7%
Horticulture	70,724	83,917	84.3%
Nutritional Sciences	86,265	93,619	92.1%
Plant Pathology	75,918	94,060	80.7%
Forest & Wildlife Ecology	67,000	85,899	78.0%
Natural Resources - Wildlife Ecology	N/A	88,903	N/A
Kinesiology	62,848	68,993	91.1%
Nelson Institute for Environmental Studies	83,725	96,549	86.7%
Botany	65,590	97,830	67.0%
Communicative Disorders	79,157	88,566	89.4%
Zoology	72,456	84,590	85.7%
Anatomy	107,427	111,558	96.3%
Anesthesiology	N/A	98,652	N/A
Biostatistics & Medical Informatics	76,861	88,502	86.8%
Family Medicine	123,954	107,604	115.2%

Genetics	70,199	74,096	94.7%
Obstetrics & Gynecology	103,000	91,636	112.4%
Medical History & Bioethics	144,613	74,664	193.7%
Human Oncology	75,269	99,278	75.8%
Medicine	91,205	88,671	102.9%
Dermatology	N/A	99,551	N/A
Medical Microbiology	91,181	113,382	80.4%
Medical Physics	94,389	93,849	100.6%
Neurology	69,959	94,498	74.0%
Neurological Surgery	83,789	71,426	117.3%
Oncology	82,482	125,242	65.9%
Ophthalmology & Visual Sciences	107,468	116,833	92.0%
Orthopedics & Rehabilitation	77,489	73,132	106.0%
Pathology & Laboratory Medicine	99,879	92,820	107.6%
Pediatrics	92,966	116,724	79.6%
Pharmacology	84,476	110,070	76.7%
Biomolecular Chemistry	91,032	105,378	86.4%
Physiology	134,195	133,499	100.5%
Population Health Sciences	103,482	96,714	107.0%
Psychiatry	87,451	83,952	104.2%
Radiology	85,347	81,818	104.3%
Surgery	84,086	90,106	93.3%
Urology	N/A	75,634	N/A
School of Pharmacy	87,291	89,237	97.8%
Medical Sciences	92,893	99,060	93.8%
Pathobiological Sciences	72,635	110,851	65.5%
Comparative Biosciences	99,783	98,383	101.4%
Surgical Sciences	84,923	99,742	85.1%
Social Studies	**$83,704**	**$101,729**	**82.3%**
Agricultural & Applied Economics	79,626	97,902	81.3%
Life Sciences Communication	75,710	86,397	87.6%
Rural Sociology	84,224	79,380	106.1%
Natural Resources-Landscape Architecture	65,741	72,894	90.2%
Urban & Regional Planning	59,412	64,870	91.6%
School of Business	162,472	174,047	93.3%
Counseling Psychology	69,752	93,996	74.2%
Curriculum & Instruction	73,048	92,465	79.0%
Educational Leadership & Policy Analysis	81,049	105,378	76.9%
Educational Policy Studies	62,793	86,302	72.8%
Educational Psychology	68,128	97,458	69.9%
Rehabilitation Psychology & Special Education	75,575	74,785	101.1%
School of Human Ecology	82,305	81,888	100.5%
Law School	123,654	141,370	87.5%
Anthropology	76,888	74,745	102.9%
Afro-American Studies	83,882	110,900	75.6%
Communication Arts	75,205	81,335	92.5%
Economics	105,196	166,688	63.1%
Ethnic Studies	93,182	N/A	N/A
Geography	61,036	75,824	80.5%
LaFollette School of Public Affairs	95,880	102,850	93.2%

School of Journalism & Mass Communication	78,937	90,622	87.1%
School of Library & Information Studies	71,049	67,663	105.0%
Political Science	97,009	91,769	105.7%
Psychology	96,881	107,412	90.2%
Social Work	71,505	110,381	64.8%
Sociology	95,651	98,195	97.4%
Urban & Regional Planning	N/A	79,977	N/A
School of Nursing	88,750	N/A	N/A
Professional Development & Applied Studies	67,113	76,148	88.1%
Humanities	**$76,348**	**$78,985**	**96.7%**
Art	69,593	68,041	102.3%
Dance	62,703	66,365	94.5%
African Languages & Literature	86,838	80,765	107.5%
Art History	81,476	81,626	99.8%
Classics	90,502	80,397	112.6%
Comparative Literature	89,248	62,425	143.0%
East Asian Languages & Literature	67,868	57,648	117.7%
English	87,614	88,271	99.3%
French & Italian	73,370	87,801	83.6%
German	75,530	77,084	98.0%
Hebrew & Semitic Studies	79,203	80,603	98.3%
History	85,525	101,125	84.6%
History of Science	70,310	82,633	85.1%
Linguistics	81,216	75,733	107.2%
School of Music	75,710	79,308	95.5%
Philosophy	74,398	81,458	91.3%
Scandinavian Studies	71,303	83,169	85.7%
Slavic Languages	87,056	87,254	99.8%
Languages & Cultures of Asia	80,152	85,083	94.2%
Spanish & Portuguese	62,215	64,102	97.1%
Theatre & Drama	71,099	70,169	101.3%
Women's Studies Program	61,996	N/A	N/A
Social Sciences	N/A	72,932	N/A
Liberal Studies & the Arts	73,611	75,717	97.2%

SOURCE: October 2008 IADS Frozen slice
NOTE:
Salaries reported are for personnel paid within the department only; department members being paid as administrators, or who hold zero-dollar appointments, are not counted. Salary paid on 9-month basis.
Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis

Table 10b. Salary of Science & Engineering Faculty by Gender (Controlling for Department and Rank), 2008

Division/Department	Women's Median Salary			Men's Median Salary			Women's Median Salary as % of Men's		
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Associate	Assistant
Physical Sciences	**$121,963**	**$85,552**	**$82,842**	**$114,196**	**$91,374**	**$78,483**	**106.8%**	**93.6%**	**105.6%**
Biological Systems Engineering	N/A	N/A	63,189	90,708	72,299	67,061	N/A	N/A	94.2%
Soil Science	N/A	90,000	66,468	88,508	73,360	63,260	N/A	122.7%	105.1%
Chemical & Biological Engineering	118,225	N/A	84,834	137,623	89,338	84,358	85.9%	N/A	100.6%
Civil & Environmental Engineering	109,514	100,800	84,479	119,550	84,307	85,000	91.6%	119.6%	99.4%
Electrical & Computer Engineering	126,287	N/A	88,661	122,178	97,921	89,000	103.4%	N/A	99.6%
Biomedical Engineering	N/A	87,492	83,552	128,268	97,969	89,293	N/A	89.3%	93.6%
Industrial Engineering	132,990	N/A	N/A	147,311	103,859	85,968	90.3%	N/A	N/A
Mechanical Engineering	172,762	97,986	82,842	117,268	91,374	83,000	147.3%	107.2%	99.8%
Materials Science & Engineering	113,248	N/A	89,636	145,969	90,314	89,242	77.6%	N/A	100.4%
Engineering Physics	102,421	101,363	N/A	136,009	96,121	91,894	75.3%	105.5%	N/A
Engineering Professional Development	N/A	N/A	N/A	112,832	81,551	85,909	N/A	N/A	N/A
Astronomy	104,086	81,405	79,054	112,545	80,923	77,622	92.5%	100.6%	101.8%
Chemistry	97,097	78,157	N/A	117,553	91,976	71,338	82.6%	85.0%	N/A
Computer Sciences	136,733	90,085	88,417	139,433	96,884	89,553	98.1%	93.0%	98.7%
Geology & Geophysics	82,732	72,818	N/A	93,184	76,312	68,550	88.8%	95.4%	N/A
Mathematics	102,421	82,337	82,695	98,675	100,746	76,000	103.8%	81.7%	108.8%
Atmospheric & Oceanic Sciences	N/A	N/A	64,539	95,361	72,245	64,694	N/A	N/A	99.8%
Physics	127,398	84,494	71,688	103,843	82,184	72,992	122.7%	102.8%	98.2%
Statistics	160,049	86,610	69,031	113,003	77,382	75,574	141.6%	111.9%	91.3%
Biological Sciences	**$108,521**	**$80,705**	**$70,577**	**$109,120**	**$78,226**	**$69,959**	**99.5%**	**103.2%**	**100.9%**
Agronomy	N/A	71,930	66,985	80,172	N/A	65,765	N/A	N/A	101.9%
Animal Science	N/A	N/A	85,776	92,540	75,370	63,163	N/A	N/A	135.8%
Bacteriology	94,804	75,769	N/A	103,656	78,860	65,248	91.5%	96.1%	N/A
Biochemistry	101,216	N/A	67,832	123,962	84,352	82,688	81.7%	N/A	82.0%
Dairy Science	94,385	N/A	N/A	93,331	71,346	70,056	101.1%	N/A	N/A
Entomology	95,803	72,346	62,111	94,669	69,479	62,985	101.2%	104.1%	98.6%
Food Science	N/A	73,692	64,136	93,732	74,448	65,455	N/A	99.0%	98.0%
Genetics	N/A	74,718	69,980	124,729	74,096	N/A	N/A	100.8%	N/A
Horticulture	N/A	70,724	N/A	96,780	72,488	N/A	N/A	97.6%	N/A
Nutritional Sciences	96,711	71,604	N/A	102,842	78,226	75,668	94.0%	91.5%	N/A
Plant Pathology	77,992	67,293	67,000	95,861	N/A	56,723	81.4%	N/A	118.1%
Forest & Wildlife Ecology	81,798	N/A	67,000	105,659	71,754	65,276	77.4%	N/A	102.6%
Natural Resources - Wildlife Ecology	N/A	N/A	N/A	88,903	N/A	N/A	N/A	N/A	N/A
Kinesiology	104,103	67,923	60,366	117,403	70,370	59,802	88.7%	96.5%	100.9%
Nelson Institute for Environmental Studies	93,753	N/A	74,632	96,774	N/A	67,877	96.9%	N/A	110.0%
Botany	103,543	N/A	55,394	100,085	85,793	N/A	103.5%	N/A	N/A

Communicative Disorders	112,649	77,731	65,615	88,566	N/A	N/A	127.2%	N/A	N/A
Zoology	94,653	69,582	68,606	95,375	67,463	62,700	99.2%	103.1%	109.4%
Anatomy	119,822	87,181	N/A	130,909	85,115	72,596	91.5%	102.4%	N/A
Anesthesiology	N/A	N/A	N/A	109,576	78,980	N/A	N/A	N/A	N/A
Biostatistics & Medical Informatics	126,379	76,861	72,472	134,808	104,788	86,767	93.7%	73.3%	83.5%
Family Medicine	131,678	87,770	N/A	123,747	108,400	80,704	106.4%	81.0%	N/A
Genetics	N/A	N/A	70,199	102,621	74,096	68,636	N/A	N/A	102.3%
Obstetrics & Gynecology	132,217	73,782	N/A	107,541	83,450	63,405	122.9%	88.4%	N/A
Medical History & Bioethics	149,647	84,349	N/A	153,209	74,664	66,109	97.7%	113.0%	N/A
Human Oncology	N/A	75,269	N/A	100,078	62,246	67,091	N/A	120.9%	N/A
Medicine	131,514	94,642	76,496	109,713	79,947	71,979	119.9%	118.4%	106.3%
Dermatology	N/A	N/A	N/A	125,065	93,397	67,876	N/A	N/A	N/A
Medical Microbiology	121,425	83,692	71,131	113,382	87,891	N/A	107.1%	95.2%	N/A
Medical Physics	N/A	106,687	82,091	98,333	93,849	78,039	N/A	113.7%	105.2%
Neurology	N/A	N/A	69,959	104,548	94,498	68,906	N/A	N/A	101.5%
Neurological Surgery	98,461	N/A	69,117	98,391	48,392	70,194	100.1%	N/A	98.5%
Oncology	117,083	83,846	70,364	125,242	N/A	73,487	93.5%	N/A	95.7%
Ophthalmology & Visual Sciences	107,468	N/A	N/A	123,557	91,971	90,000	87.0%	N/A	N/A
Orthopedics & Rehabilitation	80,605	N/A	74,373	94,147	66,521	72,975	85.6%	N/A	101.9%
Pathology & Laboratory Medicine	97,441	112,636	N/A	111,672	57,486	54,250	87.3%	195.9%	N/A
Pediatrics	117,794	91,872	81,818	129,231	67,170	87,472	91.1%	136.8%	93.5%
Pharmacology	118,180	84,476	73,182	119,007	85,503	N/A	99.3%	98.8%	N/A
Biomolecular Chemistry	109,576	91,032	80,075	127,647	92,726	73,182	85.8%	98.2%	109.4%
Physiology	135,754	80,705	N/A	139,959	81,924	71,811	97.0%	98.5%	N/A
Population Health Sciences	110,254	82,783	75,860	127,313	121,033	78,918	86.6%	68.4%	96.1%
Psychiatry	140,068	87,330	75,978	102,621	N/A	66,628	136.5%	N/A	114.0%
Radiology	70,689	N/A	94,506	82,682	67,581	65,268	85.5%	N/A	144.8%
Surgery	N/A	N/A	84,086	93,472	59,972	37,800	N/A	N/A	222.5%
Urology	N/A	N/A	N/A	75,634	N/A	N/A	N/A	N/A	N/A
School of Pharmacy	95,161	89,398	69,713	110,259	84,782	69,988	86.3%	105.4%	99.6%
Medical Sciences	114,225	92,893	71,182	108,165	80,120	69,744	105.6%	115.9%	102.1%
Pathobiological Sciences	N/A	72,635	N/A	115,912	78,601	78,266	N/A	92.4%	N/A
Comparative Biosciences	107,701	N/A	80,289	106,522	70,432	71,133	101.1%	N/A	112.9%
Surgical Sciences	N/A	84,923	N/A	116,023	75,449	N/A	N/A	112.6%	N/A
Social Studies	**$97,406**	**$75,506**	**$65,521**	**$114,664**	**$84,000**	**$72,000**	**84.9%**	**89.9%**	**91.0%**
Agricultural & Applied Economics	N/A	N/A	79,626	114,877	89,879	80,438	N/A	N/A	99.0%
Life Sciences Communication	86,993	70,980	N/A	111,792	N/A	64,471	77.8%	N/A	N/A
Rural Sociology	106,576	N/A	66,255	80,017	N/A	65,799	133.2%	N/A	100.7%
Natural Resources-Landscape Architecture	102,741	71,824	59,532	89,092	N/A	63,080	115.3%	N/A	94.4%
Urban & Regional Planning	N/A	N/A	59,412	99,833	N/A	63,079	N/A	N/A	94.2%
School of Business	217,038	174,379	134,276	181,245	167,021	130,000	119.7%	104.4%	103.3%
Counseling Psychology	86,320	N/A	58,407	93,996	N/A	N/A	91.8%	N/A	N/A
Curriculum & Instruction	92,234	73,048	60,454	99,255	77,573	59,574	92.9%	94.2%	101.5%
Educational Leadership & Policy Analysis	82,628	N/A	57,645	114,972	75,674	62,443	71.9%	N/A	92.3%

Educational Policy Studies	88,344	N/A	59,576	90,640	69,348	71,944	97.5%	N/A	82.8%
Educational Psychology	97,673	68,128	58,128	101,667	N/A	58,879	96.1%	N/A	98.7%
Rehabilitation Psychology & Special Education	87,368	66,958	60,193	100,346	74,785	59,994	87.1%	89.5%	100.3%
School of Human Ecology	90,003	78,702	56,475	85,466	73,415	80,000	105.3%	107.2%	70.6%
Law School	144,662	123,654	101,277	146,143	122,375	103,000	99.0%	101.0%	98.3%
Anthropology	80,337	68,300	62,811	92,626	66,149	N/A	86.7%	103.3%	N/A
Afro-American Studies	105,695	65,787	73,383	110,900	N/A	N/A	95.3%	N/A	N/A
Communication Arts	86,013	81,078	60,298	91,064	68,801	60,670	94.5%	117.8%	99.4%
Economics	133,283	N/A	103,463	189,771	183,344	101,729	70.2%	N/A	101.7%
Ethnic Studies	93,182	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Geography	88,724	N/A	60,462	85,239	66,763	N/A	104.1%	N/A	N/A
LaFollette School of Public Affairs	161,217	N/A	85,190	129,015	97,144	75,621	125.0%	N/A	112.7%
School of Journalism & Mass Communication	104,418	N/A	62,695	91,062	73,143	N/A	114.7%	N/A	N/A
School of Library & Information Studies	88,563	72,278	62,878	N/A	73,143	67,663	N/A	98.8%	92.9%
Political Science	112,745	97,294	63,586	105,073	81,611	68,564	107.3%	119.2%	92.7%
Psychology	103,605	N/A	69,056	142,019	78,665	63,376	73.0%	N/A	109.0%
Social Work	85,872	76,638	66,274	111,052	N/A	67,820	77.3%	N/A	97.7%
Sociology	132,320	95,651	67,222	138,384	78,448	72,266	95.6%	121.9%	93.0%
Urban & Regional Planning	N/A	N/A	N/A	79,977	N/A	70,631	N/A	N/A	N/A
School of Nursing	110,362	75,506	69,097	N/A	N/A	N/A	N/A	N/A	N/A
Professional Development & Applied Studies	67,113	N/A	N/A	76,148	N/A	N/A	88.1%	N/A	N/A
Humanities	**$82,777**	**$64,497**	**$56,812**	**$86,781**	**$65,034**	**$54,506**	**95.4%**	**99.2%**	**104.2%**
Art	77,466	63,796	61,140	71,437	66,628	54,666	108.4%	95.8%	111.8%
Dance	75,406	N/A	50,000	70,143	N/A	53,000	107.5%	N/A	94.3%
African Languages & Literature	100,940	67,073	N/A	119,136	N/A	52,902	84.7%	N/A	N/A
Art History	83,670	71,809	66,475	81,626	N/A	N/A	102.5%	N/A	N/A
Classics	90,502	N/A	N/A	91,362	80,397	52,657	99.1%	N/A	N/A
Comparative Literature	89,248	N/A	N/A	105,225	58,778	N/A	84.8%	N/A	N/A
East Asian Languages & Literature	95,490	61,547	N/A	109,518	67,371	52,423	87.2%	91.4%	N/A
English	91,868	70,500	53,720	110,307	73,185	52,811	83.3%	96.3%	101.7%
French & Italian	76,770	63,659	57,191	87,801	59,671	N/A	87.4%	106.7%	N/A
German	78,244	67,961	N/A	83,733	61,953	N/A	93.4%	109.7%	N/A
Hebrew & Semitic Studies	79,203	N/A	N/A	106,205	N/A	55,000	74.6%	N/A	N/A
History	90,011	70,434	55,196	106,668	69,185	87,794	84.4%	101.8%	62.9%
History of Science	82,633	N/A	57,987	89,741	66,667	N/A	92.1%	N/A	N/A
Linguistics	81,216	N/A	N/A	85,617	N/A	54,759	94.9%	N/A	N/A
School of Music	79,903	58,969	58,567	80,575	72,994	57,328	99.2%	80.8%	102.2%
Philosophy	85,721	N/A	64,451	86,948	69,545	57,148	98.6%	N/A	112.8%
Scandinavian Studies	89,045	56,752	56,812	83,169	N/A	N/A	107.1%	N/A	N/A
Slavic Languages	110,970	N/A	55,000	93,816	60,847	N/A	118.3%	N/A	N/A
Languages & Cultures of Asia	82,038	78,000	54,844	85,083	N/A	59,260	96.4%	N/A	92.5%
Spanish & Portuguese	80,492	57,319	52,941	79,412	59,646	53,388	101.4%	96.1%	99.2%
Theatre & Drama	77,891	65,076	N/A	78,333	62,711	58,706	99.4%	103.8%	N/A
Women's Studies Program	73,038	60,602	59,612	N/A	N/A	N/A	N/A	N/A	N/A

Social Sciences	N/A	N/A	N/A	N/A	N/A	72,932	N/A	N/A	N/A
Liberal Studies & the Arts	73,611	N/A	N/A	75,717	N/A	N/A	97.2%	N/A	N/A

Table 12a. Offers Made, 2005-2008

| | Junior Offers Made | | | Junior Offers Accepted | | | |
| | | | | Women | | Men | |
Division/School	Women	Men	% Women	N	% Accept	N	% Accept
Physical Sciences	**28**	**95**	**22.8%**	**14**	**50.0%**	**61**	**64.2%**
College of Engineering*	17	30	36.2%	7	41.2%	21	70.0%
Letters & Sciences	10	59	14.5%	7	70.0%	37	62.7%
College of Agricultural & Life Sciences	1	6	14.3%	0	0.0%	3	50.0%
Biological Sciences	**42**	**86**	**32.8%**	**29**	**69.0%**	**72**	**83.7%**
Letters & Sciences	4	0	100.0%	4	100.0%	N/A	N/A
School of Veterinary Medicine	3	8	27.3%	2	66.7%	5	62.5%
School of Pharmacy	5	8	38.5%	2	40.0%	6	75.0%
Medical School	23	49	31.9%	17	73.9%	43	87.8%
College of Agricultural & Life Sciences	7	21	25.0%	4	57.1%	18	85.7%

| | Tenured** Offers Made | | | Tenured** Offers Accepted | | | |
| | | | | Women | | Men | |
Division/School	Women	Men	% Women	N	% Accept	N	% Accept
Physical Sciences	**4**	**17**	**19.0%**	**2**	**50.0%**	**11**	**64.7%**
College of Engineering	1	4	20.0%	0	0.0%	3	75.0%
Letters & Sciences*	2	13	13.3%	1	50.0%	8	61.5%
College of Agricultural & Life Sciences	1	0	100.0%	1	100.0%	N/A	N/A
Biological Sciences	**14**	**25**	**35.9%**	**10**	**71.4%**	**18**	**72.0%**
Letters & Sciences	2	3	40.0%	2	100.0%	3	100.0%
School of Veterinary Medicine*	2	2	50.0%	1	50.0%	2	100.0%
School of Pharmacy*	1	2	33.3%	0	0.0%	1	50.0%
Medical School	7	11	38.9%	5	71.4%	7	63.6%
College of Agricultural & Life Sciences	2	7	22.2%	2	100.0%	5	71.4%

* One or two offer decisions are pending.

** Associate Professor and Professor titles.

Table 12b. Base Salary (12 Month) Offers, 2005-2008

Division/School	Base Salary, Offers Made, Junior Faculty				Women's Median as % of Men's	Base Salary, Offers Accepted, Junior Faculty				Women's Median as % of Men's
	Women		Men			Women		Men		
	Median	Range (K)	Median	Range (K)		Median	Range (K)	Median	Range (K)	
Physical Sciences	**$100,222**	**$75 - $113**	**$94,417**	**$72 - $156**	**106.1%**	**$97,778**	**$84 - $109**	**$95,333**	**$72 - $156**	**102.6%**
College of Engineering	$100,222	$95 - $112	$103,889	$89 - $156	96.5%	$100,222	$95 - $109	$103,889	$89 - $156	96.5%
Letters & Sciences	$91,667	$84 - $113	$85,556	$73 - $111	107.1%	$90,444	$84 - $108	$85,556	$73 - $111	105.7%
College of Agricultural & Life Sciences	$74,500	$75	$79,444	$72 - $90	107.1%	N/A	N/A	$79,444	$72 - $85	N/A
Biological Sciences	**$81,889**	**$55 - $122**	**$82,000**	**$43 - $150**	**99.9%**	**$80,944**	**$55 - $122**	**$80,583**	**$43 - $150**	**100.4%**
Letters & Sciences	$75,167	$64 - $78	N/A	N/A	N/A	$75,167	$64 - $78	N/A	N/A	N/A
School of Veterinary Medicine	$92,000	$87 - $110	$103,889	$80 - $150	88.6%	$98,500	$87 - $110	$103,889	$80 - $150	94.8%
School of Pharmacy	$85,556	$82 - $88	$82,944	$76 - $90	103.1%	$84,444	$82 - $87	$81,889	$76 - $86	103.1%
Medical School	$81,500	$55 - $122	$82,500	$43 - $122	98.8%	$81,500	$55 - $122	$82,000	$43 - $122	99.4%
College of Agricultural & Life Sciences	$81,889	$71 - $105	$80,000	$68 - $101	102.4%	$81,889	$79 - $83	$79,444	$68 - $101	103.1%

Division/School	Base Salary, Offers Made, Tenured Faculty				Women's Median as % of Men's	Base Salary, Offers Made, Tenured Faculty				Women's Median as % of Men's
	Women		Men			Women		Men		
	Median	Range (K)	Median	Range (K)		Median	Range (K)	Median	Range (K)	
Physical Sciences	**$116,111**	**$98 - $183**	**$125,889**	**$92 - $298**	**92.2%**	**$103,889**	**$98 - $110**	**$122,222**	**$92 - $298**	**85.0%**
College of Engineering	$122,222	$122	$134,444	$120 - $165	90.9%	N/A	N/A	$128,333	$120 - $141	N/A
Letters & Sciences	$140,556	$98 - $183	$122,222	$92 - $298	115.0%	$97,778	$98	$116,111	$92 - $298	84.2%
College of Agricultural & Life Sciences	$110,000	$110	N/A	N/A	N/A	$110,000	$110	N/A	N/A	N/A
Biological Sciences	**$148,333**	**$83 - $214**	**$120,000**	**$70 - $306**	**123.6%**	**$136,111**	**$83 - $214**	**$120,000**	**$70 - $306**	**113.4%**
Letters & Sciences	$137,500	$122 - $153	$103,889	$92 - $116	132.4%	$137,500	$122 - $153	$103,889	$92 - $116	132.4%
School of Veterinary Medicine	$124,639	$97 - $153	$160,722	$156 - $165	77.5%	$96,500	$97	$160,722	$156 - $165	60.0%
School of Pharmacy	$146,667	$147	$143,611	$128 - $159	102.1%	N/A	N/A	$128,333	$128	N/A
Medical School	$152,889	$145 - $214	$136,889	$90 - $293	111.7%	$168,167	$150 - $214	$154,000	$90 - $293	109.2%
College of Agricultural & Life Sciences	$88,611	$86 - $92	$75,000	$70 - $306	118.1%	$88,611	$86 - $92	$75,000	$70 - $306	118.1%

Table 12c. Total Startup Package* Offers, 2005-2008

Division/School	Total Startup, Offers Made, Junior Faculty Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's	Total Startup, Offers Accepted, Junior Faculty Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's
Physical Sciences	**$243,000**	**$48 - $616**	**$242,198**	**$23 - $1127**	**100.3%**	**$281,628**	**$200 - $616**	**$256,500**	**$23 - $1127**	**109.8%**
College of Engineering	$243,000	$164 - $616	$300,000	$95 - $652	81.0%	$300,000	$200 - $616	$288,036	$95 - $652	104.2%
Letters & Sciences	$253,500	$48 - $504	$238,520	$23 -$1127	106.3%	$276,000	$204 - $504	$256,500	$23 -$1127	107.6%
College of Agricultural & Life Sciences	$140,000	$140	$220,000	$165 - $260	63.6%	N/A	N/A	$238,000	$165 - $260	N/A
Biological Sciences	**$245,000**	**$27 - $750**	**$240,000**	**$11 - $766**	**102.1%**	**$176,000**	**$29 - $484**	**$240,000**	**$60 - $766**	**73.3%**
Letters & Sciences	$92,750	$68 - $129	N/A	N/A	N/A	$92,750	$68 - $129	N/A	N/A	N/A
School of Veterinary Medicine	$351,204	$316 - $386	$165,000	$150 - $400	212.9%	$351,204	$316 - $386	$218,102	$150 - $400	161.0%
School of Pharmacy	$543,000	$100 - $745	$310,000	$11 - $745	175.2%	$100,000	$100	$310,000	$100 - $660	32.3%
Medical School	$355,000	$90 - $750	$300,000	$60 - $730	118.3%	$265,000	$90 - $468	$275,000	$60 - $730	96.4%
College of Agricultural & Life Sciences	$182,000	$129 - $700	$237,000	$133 -$766	76.8%	$179,000	$129 - $484	$237,000	$133 -$766	75.5%

Division/School	Total Startup, Offers Made, Tenured Faculty Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's	Total Startup, Offers Made, Tenured Faculty Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's
Physical Sciences	**$195,000**	**$52 - $1479**	**$248,600**	**$3 - $1306**	**78.4%**	**$60,750**	**$52 - $70**	**$261,900**	**$3 - $750**	**23.2%**
College of Engineering	$320,000	$320	$237,500	$130 - $750	134.7%	N/A	N/A	$265,000	$130 - $750	N/A
Letters & Sciences	$765,250	$52 - $1479	$248,600	$3 - $1306	307.8%	$51,500	$52	$255,250	$3 - $363	20.2%
College of Agricultural & Life Sciences	$70,000	$70	N/A	N/A	N/A	$70,000	$70	N/A	N/A	N/A
Biological Sciences	**$312,000**	**$0 - $1000**	**$232,918**	**$69 - $1993**	**134.0%**	**$312,000**	**$0 - $478**	**$240,836**	**$69 - $1993**	**129.5%**
Letters & Sciences	$232,750	$154 - $312	$169,500	$69 - $451	137.3%	$2,323,750	$154 - $312	$169,500	$69 - $451	1370.9%
School of Veterinary Medicine	$100,000	$0 - $200	$250,000	$225 - $275	40.0%	N/A	N/A	$250,000	$225 - $275	N/A
School of Pharmacy	$1,000,000	$1,000	$1,475,000	$1350-$1600	N/A	N/A	N/A	$1,600,000	$1,600	N/A
Medical School	$380,000	$102 - $400	$225,000	$120 - $450	168.9%	$400,000	$300 - $400	$230,000	$120 - $300	173.9%
College of Agricultural & Life Sciences	$444,690	$411 - $478	$220,504	$195 - $1193	201.7%	$444,690	$411 - $478	$240,836	$195 - $1193	184.6%

* Total Startup Package does not include Base Salary.

Table 13. New Hires, 2008

	2008-2009	
	Total Hires	Percent Women
Junior Hires		
Biological Sciences	36	33.3%
Physical Sciences	13	0.0%
Senior Hires		
Biological Sciences	12	33.3%
Physical Sciences	3	0.0%
Total Hires, Biological Sciences	48	33.3%
Total Hires, Physical Sciences	16	0.0%
Total Hires, Junior	49	24.5%
Total Hires, Senior	15	26.7%
TOTAL HIRES	**64**	**25.0%**

NOTE: Faculty hired as Assistant Professors are Junior Hires;
         Associate and (Full) Professors are Senior Hires.
SOURCE: October 2008 IADS Frozen slice.

WISELI Research/Evaluation Report:

Sheridan, Jennifer; Molly Carnes, Jo Handelsman, and Amy Wendt. December 2008. "Partnerships for Adaptation, Implementation, and Dissemination (PAID) Annual Report 2008."

Partnerships for Adaptation, Implementation, and Dissemination (PAID)

Annual Report, 2008

PI: Jennifer Sheridan
Co-PIs: Molly Carnes, Jo Handelsman, and Amy Wendt

The UW-Madison *Partnerships for Adaptation, Implementation, and Dissemination* (PAID) grant will (1) continue and disseminate the current search committee training and department chair workshops; and (2) develop and disseminate ten evidence-based brochures and booklets addressing unconscious biases and assumptions in specific areas that impede the advancement of women in academic science and engineering. Specifically, we proposed to:

1. Continue *Searching for Excellence & Diversity* hiring workshops on the UW-Madison campus, with the ultimate goal of achieving 40% female new assistant professors in Biological and Physical sciences by 2009.
2. Continue offering *Enhancing Department Climate: A Chair's Role* workshops at UW-Madison, with the goal of reaching 70% of all Biological and Physical science departments by 2009 (i.e., an additional 29 department chairs from Biological and Physical Science departments participate in a workshop in 2007-2009.)
3. Continue disseminating our *Searching for Excellence & Diversity* workshops to campuses beyond UW-Madison.
4. Create a dissemination plan for the *Enhancing Department Climate: A Chair's Role* workshops.
5. Create new publications/brochures for distribution to UW-Madison and other campuses to use for their own ADVANCE-related efforts. The specific items to be produced are:
   a. Reviewing Applicants: Research on Bias and Assumptions (Brochure)
   b. Guidebook for Faculty Search Committees (Booklet)
   c. Hiring Dual-Career Couples: Promises, Pitfalls, and Best Practices (Brochure)
   d. Benefits and Challenges of Diversity (Brochure)
   e. Best Practices: Tips for Chairs on Improving their Departmental Climate (Brochure)
   f. Best Practices: Tips for Faculty on Improving their Departmental Climate (Brochure)
   g. Ensuring Success of Women and Minority Faculty Members (Brochure)
   h. Evaluating Candidates for Tenure: Research on Bias and Assumptions (Brochure)
   i. Achieving Tenure: A guide for women and minorities (Brochure)
   j. Nominations for Major Awards and Honors (Brochure)
6. Disseminate the new brochures and booklets to other campuses. We will attend at least one annual meeting where these materials can reach a wide audience each year, and from 2007-2009 we expect to reach 100 different universities with our materials. We will also upgrade our online distribution of these materials to make it easier and more user-friendly to order them (at printing cost.)

In the following sections we report our progress on these six main objectives (including our timeline for project completion through 2009). We also include a financial report.

1. Continue *Searching for Excellence & Diversity* hiring workshops on the UW-Madison campus.

WISELI continued to offer *Searching for Excellence & Diversity* hiring workshops to the entire UW-Madison campus in 2008. We ran 5 workshops in 2008; three were college-based, and two were open to any faculty member on campus. Two of the college-based workshops were run in our preferred 2-session model. Fifty-four faculty and 27 staff attended at least one of these workshops in 2008. This level of activity is average for WISELI.

In our proposal, we set as a goal for UW-Madison STEM departments a 40% female class of new hires by 2009. Based on preliminary data from 2008, we continue to be far from reaching this goal. Of the 50 new assistant professors who joined the STEM faculty in 2008, only 12 (24.0%) are women. This is approximately the same percentage as last year. Of the 14 tenured faculty hired in biological or physical science departments, three are women (21.4%). Most problematic, not one woman joined a physical science department in 2008. Although some were hired, they will not begin until 2009, or started their positions in a non-tenure-track line (the Anna Julia Cooper program) and will switch to the tenure track in the future.

Women as Percentage of New Hires
Biological and Physical Sciences
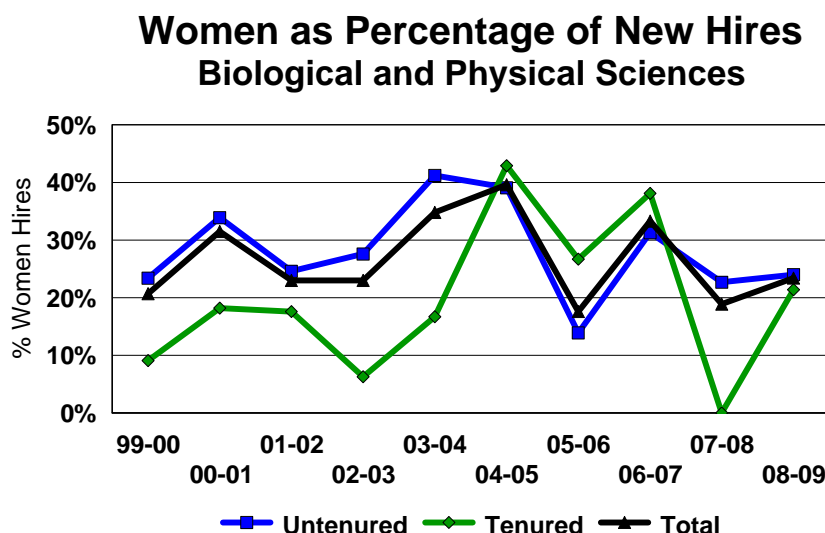
In 2008, we continue to see a negative relationship between hiring workshop attendance, and the percentage of women offers and new hires among assistant professors:

Percent Female, Offers to Assistant Professors
Biological & Physical Sciences

Percent Female, Assistant Professor New Hires
Biological & Physical Sciences
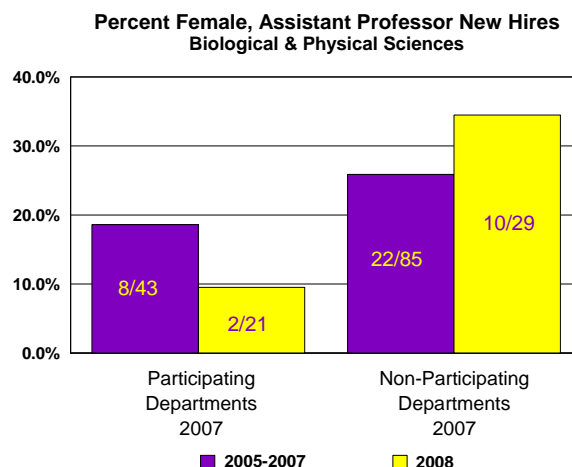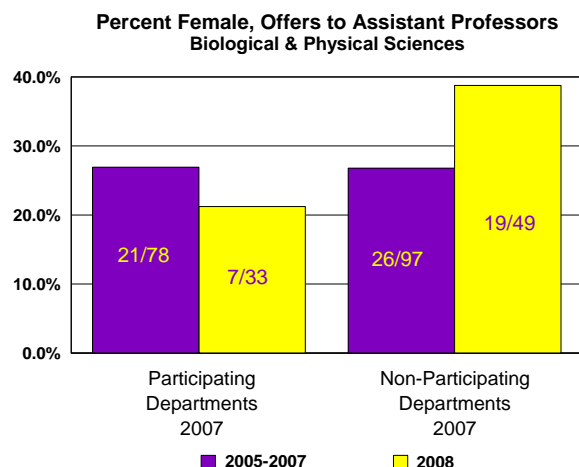
Many of the departments who participated in hiring workshops in 2007 have also participated in past years. Rather than looking at a point-in-time measure such as that above, we have begun looking for "dose-response" effects; that is, are departments who participate more often in our hiring workshops doing a better job of making offers to, and hiring, women faculty?

Percent Female, Offers to Assistant Professors
Biological & Physical Sciences

Percent Female, Assistant Professor New Hires
Biological & Physical Sciences
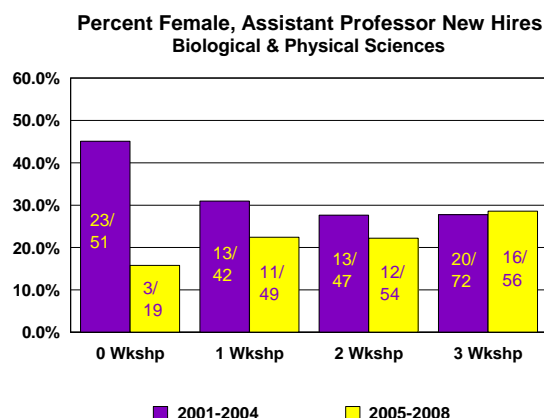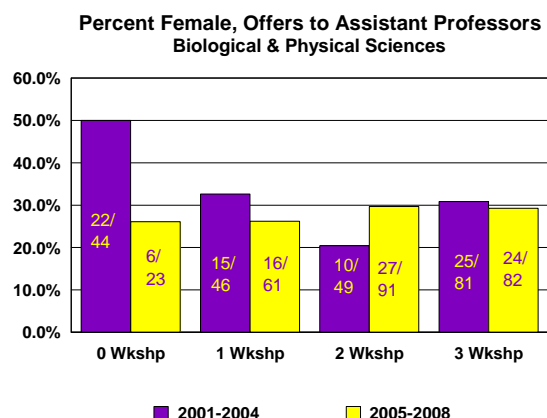
It does appear that we are having the most success with those departments who have participated in the *Searching for Excellence & Diversity* workshops for a number of years. These patterns are generally similar among all the STEM schools/colleges except Engineering, which shows no relationship. The School of Medicine & Public Health shows the most positive relationship between the number of workshops attended and increased hiring of women faculty. These findings emphasize the point that institutional change is a long process; it may take a number of years, and long-term exposure to the concepts of unconscious bias, proactive searching for women candidates, and accommodating interview processes, before real change can be achieved.

3

2. Continue offering *Enhancing Department Climate: A Chair's Role* workshops at UW-Madison

The *Enhancing Department Climate: A Chair's Role* workshop returned to full implementation in 2008. 2007 was a transition year, as we (1) trained six new faculty facilitators, and (2) successfully resolved a lawsuit regarding the workshop series. We did begin a workshop series in Fall 2007, but as noted in our last annual report, attendance was poor and several chairs refused to implement the climate survey, a central element of the workshop. We believe that the active lawsuit was partly responsible for this low participation in 2007.

In early 2007, a faculty member from a participating biological science department made an open records request of his chair to receive a copy of the confidential report of climate survey results created for the chair as a result of our workshop. The chair refused to provide the document, and the faculty member filed a formal lawsuit (June 2007), arguing that the report is subject to Wisconsin's open records law. With the help of Christine Maidl Pribbenow (WISELI's evaluation director, and the person who implements the individual departmental climate surveys and oversees the creation of the confidential reports), the UW-Madison legal services team was able to convince the court that the report falls under the purview of "research", covered by human subjects protections, and therefore is not an open record as defined by the State. The final judgment was made on August 5th, 2008. Our procedures were therefore confirmed by the courts to be sound, and we carried on our workshops with full confidence.

We implemented two *Enhancing Department Climate: A Chair's Role* series in 2008; one in spring and one in fall. The spring workshop included 3 chairs, 2 of them from biological and physical science departments. Two faculty members co-facilitated these workshops for the first time. In fall, 6 chairs participated (3 from biological/physical science departments), and yet another faculty member from our group of 6 trainees facilitated. Also in the fall, 2 departments that participated in the workshop in previous years re-surveyed their department members. Of note, one of the Fall 2008 participants was a department that is notorious on campus for having poor climate for women faculty. Former co-Director of WISELI, Jo Handelsman, spoke about the work she did with this department at an ADVANCE PI meeting in 2005 ("Affecting Climate/Culture Change — Using Multiple Points of Entry in the Department of Kumquat Science.") Having the "Department of Kumquat Science" voluntarily participate in our climate workshop for department chairs was a real sign of positive change in that department.

We are currently enlisting chairs for a new series to begin in early 2009; this workshop series appears to be back on track.

Counting the 4 new STEM chairs that participated in 2008 (one of the 5 STEM participants was from a department that had participated in the past), we have now have had 29 of the 69 chairs of biological and physical science departments participate in the workshop series at least once. (Two departments have participated twice.) This 42% of all biological and physical science chairs is far short of our goal of 70% by the end of 2009, although we have served 68% of the Physical Science departments and since we have at least one more Physical Science department confirmed for Spring of 2009, we will have reached our goal among those departments. There are 50 Biological science departments, and we have served 16 of them. Nineteen more

Biological Science departments must participate in the workshop in order for us to meet our 70% goal in that division, which is unlikely to occur by the end of 2009.

STEM Departments Served by Enhancing Department Climate workshops

	School/College	Total # Depts	# Participating	% Participating
Biological Science	(ALL)	50	16	32.0%
	CALS	14	5	35.7%
	L&S	3	0	0.0%
	SMPH	26	9	34.6%
	PHARM	1	1	100.0%
	VetMed	4	1	25.0%
	EDUC	1	0	0.0%
	IES	1	0	0.0%
Physical Science	(ALL)	19	13	68.4%
	CALS	2	1	50.0%
	L&S	8	4	50.0%
	ENGR	9	8	88.9%
Bio & Phys Science	(ALL)	69	29	42.0%

3. Continue disseminating our *Searching for Excellence & Diversity* workshops to campuses beyond UW-Madison.

Interest in our *Implementing Workshops for Search Committees* workshop for campuses outside of UW-Madison is high, and is increasing over time. In 2008:
- We fielded 16 inquiries about the on-site workshop, either via phone or email:
  - Edgewood College
  - Harvard University
  - Massachusetts General Hospital/Partners.org
  - North Carolina State University
  - North Park University
  - Northern Kentucky University
  - Northwestern University
  - Purdue University
  - Rush University Medical Center
  - Skidmore College
  - St. Francis Care/University of Connecticut
  - University of Colorado-Boulder
  - University of Illinois Urbana-Champaign
  - University of Iowa
  - University of Minnesota-Mankato
  - Yale University

- We implemented the training at five universities:
    - University of Wisconsin-Eau Claire (January 2008)
    - Wayne State University (January 2008)
    - University of Alabama at Birmingham (March 2008)
    - Edgewood College (June 2008)
    - University of Illinois at Urbana-Champaign (June 2008)

- We visited one campus where we previously had run a train-the-trainer workshop, to observe their own presentation of the workshop and offer advice and feedback:
    - Washington University in St. Louis-Danforth Campus (September 2008)

- We have scheduled three workshops on other campuses in spring semester of 2009:
    - Purdue University (January 2009)
    - University of Delaware (February 2009)
    - Skidmore College/Union College (May 2009)

Our website, http://wiseli.engr.wisc.edu/initiatives/hiring/OtherUniversities.htm, continues to be our main recruiting tool. Most inquiries we receive mention the website as being exceedingly helpful.

4. Create a dissemination plan for the *Enhancing Department Climate: A Chair's Role* workshops.

The *Enhancing Department Climate: A Chair's Role* workshops are a relationship-intensive approach to positively affecting departmental climate through transformation of the chair. In 2007 we created a 3-session mock workshop to train new UW-Madison faculty to facilitate these workshops. Throughout 2007 and 2008 we have successfully implemented new workshop series with these new trained facilitators, thereby showing the efficacy of the "train the facilitators" workshop we developed.

We began to think about condensing the 3-session workshop we implemented on our campus into a one-day workshop for potential facilitators outside the UW-Madison community. We proposed to include such a "train the facilitators" workshop as part of a PAID proposal submitted with the Committee on Institutional Cooperation Women in Science & Engineering (CIC-WISE) group in 2007. Although the proposal was not funded, the CIC has asked WISELI to offer this workshop to CIC institutions in Spring 2009.

WISELI has agreed to create and perform a "train the facilitator" workshop in order to disseminate our *Enhancing Department Climate: A Chair's Role* workshop series to other campuses. The workshop will take place in Madison, WI on either June 2 or June 3, 2009. We will invite CIC campuses to participate first, and then open registration to other interested institutions. We expect that an interested institution will send from 1-3 potential facilitators to this workshop, and we expect to charge participants $350 each. All of the faculty and staff who

have been involved with this program from UW-Madison have agreed to participate as presenters, panelists, and/or facilitators. These include:

- **Jo Handelsman**. Dr. Handelsman was co-PI of the original ADVANCE-IT grant at UW-Madison, and the idea for the *Enhancing Department Climate: A Chair's Role* workshop was hers. She served as the facilitator for this workshop series from 2005-2006, and she trained the new facilitators in 2007.
- **Julia Koza, Nancy Mathews, Denise Ney, Jeff Russell, and Amy Wendt**. These five faculty members all participated in the 2007 mock workshop sessions to train new facilitators, and will have all facilitated their own workshop series at least once before the June 2/3 workshop in Madison.
- **Eve Fine**. Dr. Fine has served as the resource person and as an additional facilitator at ALL climate workshop sessions held since 2005.
- **Christine Maidl Pribbenow**. Dr. Pribbenow is responsible for the web-based departmental climate surveys, and she and her staff produce the confidential reports to chairs that are included as an essential component of this workshop.

5. Create new publications/brochures for distribution to UW-Madison and other campuses to use for their own ADVANCE-related efforts.

The specific items to be produced are:

Reviewing Applicants: Research on Bias and Assumptions (Brochure)

This brochure, originally produced in 2003, was substantially revised in 2007 and is available at cost on our WISELI Online Bookstore (https://wisccharge.wisc.edu/wiseli/items.asp). We removed the UW-Madison logo to make the brochure more generic for use on other campuses. We replaced the stock-photo picture on the front cover with a photograph we commissioned. We chose a successful African American woman faculty member as our subject in order to provide counter-stereotyping (Dasgupta and Greenwald, 2001).

Guidebook for Faculty Search Committees (Booklet)

The *Searching for Excellence & Diversity Guide for Search Committee Chairs* is currently under revision. We are debating the best way to publish this guidebook for a more general audience. The RESOURCES sections are particularly problematic, as many of the resources we cite are websites, and links change faster than we can ever hope to revise the hard-copy guidebook. Currently, we intend to create an online resources website to accompany the Guidebook. We intend to publish the guidebook ourselves, through local printing presses, as we have in the past (rather than submitting our guidebook to a publisher.) The revision will include a combining of current chapters III and IV, and a new chapter we will call "closing the deal" or "maximizing the chances your chosen candidate will accept the position." The revised guidebook will be less-specific to UW-Madison as well.

The current version of the book is available at cost on the WISELI Online Bookstore (https://wisccharge.wisc.edu/wiseli/items.asp).

Hiring Dual-Career Couples: Promises, Pitfalls, and Best Practices (Brochure)

This new brochure is scheduled to be completed in 2009.

Benefits and Challenges of Diversity (Brochure)

This essay will not become a brochure, but rather a short booklet. Revisions and updates to the literature have begun; we expect this new booklet to be available in 2009. The current version of the essay is available on the WISELI website at: http://wiseli.engr.wisc.edu/initiatives/climate/Benefits_Challenges.pdf .

Best Practices: Tips for Chairs on Improving their Departmental Climate (Brochure)

This new piece aimed at department chairs, titled "Enhancing Department Climate," is based on research and advice literature, survey responses, and discussions from our *Enhancing Department Climate: A Chair's Role* workshops, was completed in 2008. The brochure contains such topics as:
- What is climate?

- Common concerns revealed in campus climate surveys—and suggestions for addressing them
    - Enhance basic manners—respect, consideration, and politeness
    - Improve communication
    - Build a sense of community
    - Engage everyone in the life of the department
    - Promote professional development
    - Recognize and value the work of department members
    - Build sensitivity
    - Enhance work/life balance
    - Counter language and behaviors that are demeaning, sexualizing, condescending, and/or illegal

The brochure is currently being added to the WISELI Online Bookstore. A free PDF is available on our website as well (http://wiseli.engr.wisc.edu/initiatives/climate/ClimateBrochure.pdf). Copies of the brochure have been sent to the Michigan team and the Washington team, for possible inclusion in their national workshops for department chairs.

Best Practices: Tips for Faculty on Improving their Departmental Climate (Brochure)

This piece is based on the essay "Sex and Science" currently available on the WISELI website at: http://wiseli.engr.wisc.edu/Products/Sex_and_Science.pdf . We expect to condense the material in that essay to a smaller brochure format for faculty. This new brochure is scheduled to be completed in 2009.

Ensuring Success of Women and Minority Faculty Members (Brochure)

This brochure is brand new, and is targeted to department chairs. The content will come from the Enhancing Department Climate: A Chair's Role workshops, as well as current research and advice literature. Some of the material may also be based on the essay "Advice to the Top: Top 10 Tips for Academic Leaders to Accelerate the Advancement of Women in Science and Engineering" currently available on the WISELI website at: http://wiseli.engr.wisc.edu/Products/top_10_tips.pdf . We expect this brochure to be completed in 2009.

Evaluating Candidates for Tenure: Research on Bias and Assumptions (Brochure)
and
Achieving Tenure: A guide for women and minorities (Brochure)

These brochures will be new WISELI products, as we turn our attention to the promotion and tenure process at UW-Madison. We plan to consult with Sue Rosser and colleagues at Georgia Tech, learn about their ADEPT tool and the PTAC group they formed at Georgia Tech to review their tenure policies. The literature review that accompanies this work will form the basis of these brochures—one aimed at faculty and staff on review

committees, and one aimed at underrepresented junior faculty. We expect this work to be completed in 2009, towards the end of the grant period.

Nominations for Major Awards and Honors (Brochure)

This brochure has been in distribution for several years; it just needs updating and generalizing beyond the UW-Madison campus. It is currently under revision and will be completed in early 2009.

6. Disseminate the new brochures and booklets to other campuses.

In the proposal, we suggested several ways we would distribute the brochures we develop to campuses beyond UW-Madison. By 2009, our goal is to reach 100 different campuses with our materials; to date, we know of 61 individual colleges or universities who have received one of our publications (hiring brochure, hiring guidebook, department chair climate brochure, etc.). More campuses than these have received our materials through distribution at meetings and conferences. In 2008, we discovered an additional mode of dissemination that we had not thought to document before now—monitoring the use and inclusion of our materials into materials produced on another campus, or a link to our materials directly from another university's website. We are including these documented instances of dissemination in our listing below, and will monitor such linkages annually.

(1) Distribute brochures/publications at national conferences.

We attended one national conference in 2008—the American Association for Engineering Education (ASEE), in which information about WISELI's workshops and publications were presented, and guidebooks and brochures were made available to attendees.

In addition, we distributed many brochures and guidebooks via campus visits and invited talks:
- Jennifer Sheridan distributed brochures at the University of Minnesota-Duluth, where she gave an invited talk and met with faculty, staff and administrators. (February 2008).
- Jennifer Sheridan distributed brochures at the National Institutes of Health, where she gave an invited talk at the "Women in Biomedical Research: Best Practices for Sustaining Career Success" workshop. (March 2008).
- Molly Carnes gave brochures to faculty and administrators at the University of Virginia, where she presented two invited talks. (March 2008).
- Amy Wendt provided brochures to Engineering faculty at the University of Maryland-College Park, where she was an invited speaker. (May 2008).
- Eve Fine provided copies of our brochure and guidebook when participating on a faculty hiring panel at North Carolina State University. (October 2008).
- Molly Carnes distributed brochures to attendees at the West Virginia Higher Education Policy Commission's workshop entitled "Building Diversity in Higher

Education: Strategies for Broadening Participation in the Sciences and Engineering." (October 2008).

We will attend the Keeping Our Faculties of Color V conference in Minneapolis in March 2009, as well as the WEPAN annual meetings in June 2009, and plan to distribute all of our materials in those forums.

(2) Update the WISELI website to include a user-friendly online ordering system for the products.

The WISELI website is one of our primary dissemination tools, and it has a high number of visitors. Despite mostly positive feedback on the site, we had received messages indicating that it was unclear how exactly to order our brochures and guidebooks. Thus, in 2007 we developed the "WISELI Online Bookstore." This secure website allows visitors to order our products either with a VISA or via an invoice. It is much clearer and also allows us to track with more precision exactly how many of our products are ordered by other campuses. This work was completed in 2007. The direct link to the "WISELI Online Bookstore" is https://wisccharge.wisc.edu/wiseli/items.asp , and a visitor can find it from the main WISELI website easily by clicking on this button:

This mechanism appears to work well. In 2008, we sold 2,725 hiring brochures, 61 hiring guidebooks, and 50 awards brochures via the "WISELI Online Bookstore".

(3) Work with the University of Michigan and the University of Washington to use the materials in their PAID-funded workshop activities.

Both the University of Michigan and the University of Washington, have received copies of the "Enhancing Department Climate" brochures completed in 2008. The University of Washington will use the new brochure in their upcoming LEAD workshop in Fayetteville, Arkansas (June 2009).

(4) Monitor the use of WISELI materials on websites and within materials produced by other universities.

- 7 universities/organizations have taken our materials and added them directly into their own publications, websites, or presentations.
- 8 universities have a link to our materials from their websites, and/or cite one of our publications.

The list of campuses that we know have received or used at least one of these brochures/ guidebooks in 2007 or 2008 include:

Allegheny College ('07, '08)	Onondaga Community College (NY) ('07)	University of Minnesota ('07)
Boston University ('07, '08)	Oregon Health and Science University ('07)	University of Minnesota-Duluth ('08)
Bristol Community College (MA) ('07)	Pennsylvania State University ('07)	University of Nebraska ('08)
Brown University ('07)	Purdue University ('07, '08)	University of North Carolina-Charlotte ('08)
Case Western Reserve Univ ('08)	Rice University ('08)	University of Oklahoma ('07)
Children's Hospital Boston ('07)	Rutgers University ('07)	University of the Pacific ('08)
Community College of Spokane (WA) ('07)	SUNY-Oneonta ('08)	University of Pennsylvania ('08)
Drexel University ('07)	Syracuse University ('07)	University of Texas-El Paso ('07)
Eastern Washington University ('08)	Tulane University ('07)	University of Texas-Southwestern ('08)
Edgewood College ('08)	University of Alabama-Birmingham ('08)	University of Virginia ('08)
Harper Community College (IL) ('07)	University at Buffalo ('08)	University of Washington ('08)
Hebrew University ('08)	University of California-Los Angeles ('07)	University of Wisconsin-Eau Claire ('07, '08)
Indiana University ('07)	University of Chicago ('07)	University of Wisconsin-La Crosse ('08)
Iowa State University ('08)	University of Delhi ('08)	University of Wisconsin-Stout ('07, '08)
Loyola Marymount University ('07, '08)	University of Illinois-Chicago ('07)	University of Wisconsin System ('08)
Marshall University ('07)	University of Illinois-Urbana Champaign ('07, '08)	Utah State University ('07)
Michigan State University ('07)	University of Iowa ('07, '08)	Virginia Tech ('07)
Mississippi State University ('07)	University of Lethbridge ('07)	Washington University in St. Louis ('07)
North Carolina State University ('08)	University of Maryland-Baltimore County ('07)	Wayne State University ('08)
Northwestern University ('08)	University of Michigan ('08)	Yale University ('08)
Ohio State University ('07)		

2008 PAID Financial Report

2008 Financial Report, PAID (prepared 12/22/2008)

	Budget	Actual 2007	Actual 2008*	Projected 2009	Projected 2010**	Total
Income						
NSF PAID	$499,991	$499,991	$0	$0	$0	$499,991
Salaries and Fringes						
Directors	$97,571	$7,801	$51,626	$27,126	$14,052	$100,605
WISELI Staff	$153,907	$18,594	$36,832	$45,005	$36,122	$136,553
Fringe Benefits	$85,502	$9,898	$33,157	$26,172	$14,449	$83,676
Travel	$3,150	$860	$6,213	$6,000	$0	$13,073
Supplies and Equipment	$0	$143	$461	$350	$0	$954
Overhead	$159,861	$17,530	$66,102	$49,187	$32,311	$165,130
Total Income	$499,991	$499,991	$0	$0	$0	$499,991
Total Expenditures	$499,991	$54,826	$194,391	$153,840	$96,934	$499,991

* 2008 expenditures are actual through November 30, 2008 and estimated from December 1-December 31, 2008.
** We expect to request a no-cost extension, as we did not begin spending on this grant until July 2007.

WISELI Publications 2008:

Ford, Cecilia E. 2008. *Women Speaking Up: Getting and Using Turns in Workplace Meetings.* New York: Palgrave Macmillan.

Women Speaking Up

Getting and Using Turns in Workplace Meetings

Cecilia E. Ford

Synopsis

While women are succeeding in historically male professions, stereotypes of their lack of competence persist as obstacles to their advancement, with popular media urging women to improve their language skills if they hope to advance in traditionally male professions.

In *Women Speaking Up: Getting and Using Turns in Workplace Meetings*, Cecilia E. Ford rejects popular notions of gender difference and even deficiency in women's language use. She uses careful analysis of interaction to counter negative myths, focusing on women's turns as exemplars skills required by men and women alike to contribute to workplace meetings. Based on videotaped meetings in a variety of settings the author offers new insights into vocal and non-vocal practices for getting and using turns in these common workplace events. The book introduces conversation analytic methods and presents new findings on turn taking, the use of questions to present challenges and open participation, and the interactional skills required to effectively raise issues that go counter to ideas of higher ranking co-workers. For any one who wants to understand meeting interaction, Women Speaking Up offers a wealth of well-grounded new perspectives, while celebrating women's demonstrated competence.

WISELI Publications 2008:

Carnes, Molly; Claudia Morrissey; and Stacie E. Geller. 2008. "Women's Health and Women's Leadership in Academic Medicine: Hitting the Same Glass Ceiling?" *Journal of Women's Health*. 17(9): 1453-1462.

Women's Health and Women's Leadership in Academic Medicine: Hitting the Same Glass Ceiling?

Molly Carnes, M.D., M.S.,[1,2,6] Claudia Morrissey, M.D., M.P.H.,[3,4,5] and Stacie E. Geller, Ph.D.[3,4]

Abstract

The term "glass ceiling" refers to women's lack of advancement into leadership positions despite no visible barriers. The term has been applied to academic medicine for over a decade but has not previously been applied to the advancement of women's health. This paper discusses (1) the historical linking of the advances in women's health with women's leadership in academic medicine, (2) the slow progress of women into leadership in academic medicine, and (3) indicators that the advancement of women's health has stalled. We make the case that deeply embedded unconscious gender-based biases and assumptions underpin the stalled advancement of women on both fronts. We conclude with recommendations to promote progress beyond the apparent glass ceiling that is preventing further advancement of women's health and women leaders. We emphasize the need to move beyond "fixing the women" to a systemic, institutional approach that acknowledges and addresses the impact of unconscious, gender-linked biases that devalue and marginalize women and issues associated with women, such as their health.

Glass Ceiling: The Inability of Organizations to Advance Women into Top Decision-Making Positions

The term "glass ceiling" gained traction as an apt metaphor for the widespread observation that despite entry of women into nearly all fields traditionally occupied primarily by men, women remain virtually nonexistent or present in token numbers in elite leadership positions. Its first use is variably attributed to Marilyn Loden, author of *Implementing Diversity*, in a speech delivered in 1977 to the Women's Action Alliance in describing invisible barriers to women's career advancement; Gay Bryant in an *Adweek* article; Carol Hymowitz and Timothy Schellhardt in the *Wall Street Journal*, or Alice Sargent in an interview about her book, *The Androgenous Manager*.[1]

Whatever its origins, the term "glass ceiling" became an established part of the career development lexicon when the Federal Glass Ceiling Commission was created by the Civil Rights Act of 1991 ((Public Law 102-166), with a mandate to identify barriers that have prevented the advancement of women and minorities in the labor force.[2]

The first use of "glass ceiling" in reference to the status of women in academic medicine was by Nickerson et al.[3] in a study demonstrating comparable promotion rates for women and men at Columbia College of Physicians and Surgeons. Leah Dickstein[4] cites numerous examples of both overt and subtle sexism in her own career advancement and decries the metaphorical ceiling preventing women from entering leadership in academic medicine as being made of Lexan, a material stronger and more difficult to shatter than glass. Tesch and Nattinger[5] surveyed male and female physicians who began their first faculty appointment at the same time. They proposed "sticky floor" as a supplemental metaphor for women in academic medicine because in addition to finding that fewer women than men had been promoted, they also found that women had been given fewer institutional resources at the start of their career—hence, the sticky floor. As a woman who found herself in a midlevel leadership position in academic medicine, Carnes built on the glass ceiling metaphor in a 1995 editorial noting that as she stood just beneath the glass ceiling and looked through it, she could see no appealing role models in her institution because of the gendered differences in behavioral norms and social roles both inside and outside academic medicine.[6]

To our knowledge, the term "glass ceiling" has not previously been applied to the advancement of women's health.

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[6]William S. Middleton, Veterans Hospital, Madison, Wisconsin.

In this paper, we discuss (1) the historical linking of the advances in women's health with women's leadership in academic medicine, (2) the slow pace of progress of women into leadership in academic medicine, and (3) indicators that the advancement of women's health has stalled. We posit that it is the deeply embedded unconscious gender-based biases and assumptions that underpin the stalled advancement of women on both fronts. We conclude with recommendations to promote progress beyond the apparent glass ceiling that is preventing further advancement of women's health and women leaders. We emphasize the need to move beyond "fixing the women"[7] to a systemic, institutional approach that acknowledges and addresses the impact of unconscious, gender-linked biases that devalue and marginalize women and issues associated with women, such as their health. The goal of such an approach is to create institutional environments that are able to use the talents of all faculty and a healthcare system responsive to the needs of all patients—men and women.

Women Leaders in Academic Medicine Linked to Advances in Women's Health

Women in academic medicine and women's health are linked in a number of ways. Perhaps the most striking evidence of the connection between the two is the consistent observation that when a lecture, conference, or seminar in an academic setting has "women's health" in the title, the organizers and attendees are overwhelmingly women. The appeal of participating in research to improve women's health for women physicians and scientists has, in fact, been strategically used to attract them to academic careers.[8,9]

Throughout U.S. history, many advances in women's health have been led by women. As reviewed by Carol Weisman,[10] past women's health movements initiated and sustained by women include (1) the Popular Health Movement in the early to mid-1800s (which included advocating corsetless clothing), (2) the post-Civil War women's medical movement, in which the first generation of female physicians were prominent participants advocating women's inherent health and vitality in opposition to the prevailing medical view of women as sickly and frail, (3) the Progressive Era in the early 1900s, during which the first birth control clinic was opened in Brooklyn by public health nurse and social activist Margaret Sanger, government-funded maternal and child health services were developed, and the Sheppard-Towner Maternity and Infancy Act of 1921 was passed (emblematic of the new political influence of women who gained the right to vote in 1920), and (4) the women's health movement of the 1960s and 1970s, a grassroots effort in which women's reproductive rights were viewed as essential to full gender equity, the prevailing assumptions and practices of mainstream medicine (controlled almost exclusively by male physicians) were challenged, and women's restricted admission to medical schools was effectively eliminated by enactment of Title IX of the Civil Rights Act in 1972. This set the stage for the most recent women's health movement occurring between approximately 1985 and 2000. (Before women were allowed entry into male-only medical schools, there were 16 women-only medical schools founded and run by women physicians. By 1910, all but 3 of these had closed or merged with traditional schools which led to a reduction in the number of women medical students from 6% in 1900 to 4% in 1930.[11])

Once admission restrictions were removed, the number of women enrolled in U.S. allopathic medical schools rose from about 10% in 1970 to approximately 50% today.[11,12] By the early 1980s, when the proportion of women medical students reached 30%, women physicians—who have consistently entered academic medicine in greater proportion than their male counterparts[13]—began to reach a critical mass in academic medicine. These women, many of whom came of age during the women's health movement of the 1960s and 1970s, realized that medical education, healthcare, and biomedical research excluded women's social and biological experiences, even pathologizing normal female life events, and that this androcentric approach was not only detrimental to the health of women but also socially unjust.[14–20]

Women leaders in academic medicine established the Society for the Advancement of Women's Health Research (now the Society for Women's Health Research)[21] in the early 1980s. This organization, through the bipartisan Congressional Caucus on Women's Issues, instigated the General Accounting Office (GAO) inquiry into allocation of research expenditures by the National Institutes of Health (NIH) according to gender. The GAO report, presented at Congressional hearings in 1990, found than only 13.5% of the NIH budget supported research on women's health issues and noted egregious examples of large, publicly funded studies entirely excluding women as subjects. These included the Baltimore Longitudinal Study of Normal Human Aging, which studied only men for 20 years,[22] and several large cardiovascular prevention trials.[23–25] The ensuing public outrage led to more than 20 separate bills introduced in Congress to improve women's research and healthcare. One direct result of these events was formation of the Office for Research on Women's Health (ORWH) at NIH in 1990, given statutory authority by Congress in the NIH Revitalization Act of 1993. Women physicians and scientists have been the leaders of this Office since its inception.

In its mission statement, ORWH openly acknowledged the inextricable link between the advancement of women's health and the advancement of women in academic medicine. ORWH would not only seek to advance research related to women's health and increased numbers of women participants in clinical research but also, through its programs, support the recruitment, retention, and advancement of women in biomedical research careers.[26]

In 1995, the Commission on Graduate Medical Education (COGME) in its Fifth Report, Women and Medicine: Physician Education in Women's Health and Women in the Physician Workforce,[11] stated that issues of equity in the status of women physicians and improvements in the quality of healthcare for women were so tightly bound that they could not be evaluated separately. The report reviewed evidence that women physicians have been agents of change in medical education, research, and practice and drew attention to the paucity of women in academic leadership positions. COGME recommended widespread examination of gender pay equity, efforts to increase women's participation in biomedical research, and "potent mechanisms for eliminating gender bias and sexual harassment" of women physicians.

The interconnectedness of women leaders in academic medicine and improvement in women's health was institutionalized with the establishment of the Department of Health and Human Services (DHHS) Office on Women's Health (OWH) in 1991. OWH issued 18 contracts to acade-

mic health centers between 1996 and 1998 to establish National Centers of Excellence (CoEs) in Women's Health. Each academic health center was required as part of the contract for advancing women's health to submit a plan for concurrently developing women leaders in academic medicine.[8,19] The relative investment per program was small ($1 million dollars of total costs spread over six sites in each year of funding), a fraction of the funds allocated for comparable NIH-funded centers of excellence, such as the cancer centers, Pepper centers, and minority health centers, with much the same charge. Nevertheless, the CoEs leveraged the OWH investment in many cases more than 1000-fold.[27] This unparalleled return on investment was attributed to the fact that conferring the CoE directors, 15 out of 18 of whom were women, with the title of Center Director, along with salary and administrative staff support, provided an opportunity for their talents to emerge and for them to command a voice in institutional leadership.[28,29] Many of the CoE Directors of these early programs have gone on to attain top leadership positions within their institutions, and/or in professional societies, and government. These leaders uniformly acknowledge the critical importance of their position as a director of a National Center of Excellence in opening the door for this advancement.

The high-profile activities outlined above brought numerous and wide-ranging responses, including a Congressional request to DHHS in 1993 for medical schools to examine the women's health content in their curricula, rescinding of restrictions by the Food and Drug Administration (FDA) regarding women's participation as subjects in clinical research,[30] and the Women's Health Initiative (WHI), an NIH-sponsored clinical study unprecedented in size and scope. WHI, which has transformed the clinical care of postmenopausal women, was launched during the tenure of the first and only woman director of NIH, Dr. Bernadine Healy, creating another example of the link between women academic leaders and women's health. Evidence for the link between women's health and women leaders is also seen in the correlation between the presence of a female dean and curricular offerings in women's health.[31] By 2000, evidence existed on many fronts that both women's health and women's leadership in academic medicine were priority areas for improving the health and healthcare of all populations of people in the United States.[10,21,32,33] There was a general sense that this auspicious beginning would lead institutions to address and redress the multiple, complex issues impeding the advancement of women's health in education, research, and clinical practice and also preventing the realization of women physicians full potential for leadership.

The Slow Progress of Women into Leadership Positions in Academic Medicine

There is much to celebrate in women's advancement in medicine. In 2005, 49% of medical school students and 42% of residents were women. Women represent 17% of tenured professors, 16% of full professors, 10% of department chairs, and 11% of medical school deans at U.S. academic medical centers (AMC).[34] Although this is clear evidence of progress, the rate of advancement of women into leadership positions in academic medicine is slower than would be predicted by their numbers in medicine for the past 35 years. Although 5 of the top 25 AMCs (ranked by NIH funding) have women

deans, none of these institutions has women chairs of Departments of Internal Medicine. Because internal medicine contains the largest number of women physicians and because service as a chair prior to becoming dean is almost a universal prerequisite, flow in the leadership pipeline is starkly uneven by gender.

Within academic medicine, where research-based faculty tracks alone lead to top leadership, women are more likely to be clinicians and educators[35,36] and to assume the tasks that have been referred to as "institutional housekeeping."[37] Although the issue is complex, women faculty consistently earn less than men with comparable productivity,[36,38,39] and gender-based and even frank sexual harassment is highly prevalent.[40,41] In-depth telephone interviews of 18 women faculty[42] revealed that 40% ranked gender discrimination first out of 11 possible choices for hindering their academic career—above limited time for professional work and lack of mentoring. Thirty percent of women faculty in one AMC perceived that they had been denigrated, and 25% observed other women denigrated by male faculty based on gender.[43]

Dealing with the competing time pressures of professional productivity and family care giving also disproportionately affects women faculty, who continue to bear primary responsibility for child care and housework. Institutional factors seem to exacerbate this bind. Carr et al.,[44] in a survey of nearly 2000 faculty from 24 academic medical centers, found that women faculty with children had less secretarial support and fewer institutional research dollars as well as lower career satisfaction than either male faculty or women faculty without children.

To succeed as a researcher, an academic physician must effectively compete for research grants. Although the peer-review process for making such awards is ostensibly objective, with the most meritorious research selected for funding, the case of the NIH Director's Pioneer Award is one prominent example of how subtle cues in the solicitation mechanism or review criteria may bias the review process against women scientists.[45,46] The first round, in which no women were selected, emphasized that NIH was looking for scientists who were willing to take risks, a behavior that is strongly associated with males.[47,48] Such semantic priming would favor male scientists in review.[49] NIH responded to public concern by making a number of changes, including elimination of the word "risk" from both the solicitation and review criteria.[46] Women scientists have been among the recipients in each subsequent year. We applaud the NIH for making these changes that are in concert with the findings from more than two decades of meticulous, rigorous, experimental social science research.

Another key position of power and influence within academic medicine is the principal investigator (PI) of a large center grant. The Clinical and Translational Science Award (CTSA) program emanating from the NIH Roadmap is one of the largest center grants in research history. Thus, CTSA PIs will wield tremendous power in academic medicine and in setting future research and health policy agendas. Although 25% of all R01 applications to NIH and 23% of all funded grants go to women investigators, only 3 (12.5%) of the first 24 CTSAs went to women.[50,51] Given the link between the advancement of women's health issues and women leaders, the underrepresentation of women physicians among the top leaders in what is touted as a transformative initiative for improving health is disquieting.

The NIH Institutional Mentored Scientist Development Awards (K12), which focus on building the research capacity in women's health,[52] offer considerably lower salaries than the K12 awards devoted to training future researchers in oncology,[53] aging,[54] drug abuse,[55] and clinical research.[56] This strikes a double blow to women because it signals that women's health research is less worthy a pursuit than other areas of research, and as more women will be drawn to research in women's health,[8] it perpetuates the gender discrepancy in physician salary.[36,57,58]

The picture remains the same for other areas that exert significant influence over the practice of medicine, national biomedical and behavioral research, and health policy agendas. The NIH itself is vulnerable to charges of perpetuating the glass ceiling, given the gender makeup of and financial support for key leadership. In 2006, only 20% of NIH Institutes were headed by women, and those units with women leaders received smaller budget increases, on average, than male-headed units.[59] The editorial boards of three prestigious medical journals—the *Journal of the American Medical Association*, the *New England Journal of Medicine* and the *Annals of Internal Medicine*—have few women at 6%, 19%, and 19%, respectively. Even journals representing specialties where women have nearly achieved parity, *Obstetrics & Gynecology* and the *Journal of Pediatrics*, do not have commensurate representation of women on their editorial boards. In addition, there is a gender gap in the authorship of the papers accepted by academic medical journals.[60]

The American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) are two organizations that wield considerable power in the U.S. medical system. The AMA Board of Trustees has 19% female representation with 4 women and 17 men. In its 130-year history, the AAMC has never had a woman president. The American Gynecological and Obstetrical Society, the most prestigious research organization in that field, had its first woman president (Gloria Sarto, M.D., Ph.D.) in 2004, over 20 years since it was established.

Traditional justification for the absence of women physicians in academic leadership has rested on three main premises: (1) women have not been in the field long enough to have reached leadership (pipeline argument), (2) women do not compete for leadership positions for family reasons, and (3) women lack the requisite leadership skills. These explanations are inadequate. Although women have only recently achieved parity in medical student classes, even in such fields as pediatrics and psychiatry where women have comprised at least 50% of the field for the past 25 years, women are underrepresented in leadership positions, hovering at or below 10% of department chairs for over a decade.[61,62] It may be true that given their social roles beyond the workplace women are more likely than men to "choose" not to pursue leadership positions in academic medicine; however, those who do desire to advance are often not given the opportunity.[36] Regarding leadership ability, several studies of effective leaders have found that, if anything, women leaders are more effective than men.[63,64] There is considerable evidence suggests that the failure of academic medical centers to advance women is in large measure due to the systematic disadvantage women experience daily and at each evaluation point in an academic career.[42,44,65,66]

Evidence of Progress and Indicators That the Advancement of Women's Health has Stalled

Traditionally, women's health was thought of as maternal health and focused on pregnancy and reproduction. Nonreproductive biomedical research was rooted in the male model, with the belief that results could merely be extrapolated to the female, an approach sustained by the absence of women as participants in clinical research. In the 1980s and 1990s, largely through the efforts noted above, women's health moved beyond reproduction to include health across the life span. In 1985, the U.S. Public Health Service (PHS) first defined women's health as "diseases or conditions that are unique to or more prevalent or serious in women or have different outcomes or interventions."[67] Although this was a major step forward in establishing that women's health was more than reproductive health, it also implicitly reaffirmed men's health as the norm from which women's health exists only as a comparator. In 1994, the National Academy in Women's Health Medical Education (NAWHME) expanded the PHS definition to include wellness and prevention, the interdisciplinary and holistic nature of women's health, the importance of gender differences, and changes in women's health needs across the life course.[68] With this expanded definition, women were no longer viewed through the lens of reproductive activities but with recognition of a host of health events across puberty, midlife, and aging. The Institute of Medicine (IOM) has since stressed the importance of research that acknowledges sex differences, describing sex categorization as a "basic human variable" and that sex influences human health not only through biology but through gender-related differences in behaviors, perceptions, environmental exposures, socioeconomic status, and public policy.[69]

This growing emphasis on the biology of sex and gender differences stimulated much laboratory and clinical investigation. Increased dollars were allocated in the 1990s to study women's health across the life span and to include women in clinical trials. The NIH Revitalization Act of 1993 required that NIH-funded clinical trials include women and minorities as subjects in approximately equal numbers of both sexes[70]; other federal agencies adopted similar guidelines. Following this act and policy changes at FDA,[30] women of childbearing potential could no longer be routinely excluded from clinical research.

In spite of the public attention that followed the 1990 GAO report indicating that only a small percent of the NIH funding for clinical research was addressing conditions that occur uniquely or predominantly in women,[21] examples of the invisibility of women in clinical research continue to be published routinely in the highest-impact medical journals. For example, despite the far greater prevalence of depression among women, the only acknowledged gender differences in a *New England Journal of Medicine* review paper on depression were that men are more successful than women in their suicide attempts and that older men are at high risk of suicide.[71,72] The review made no mention of postpartum depression, which affects approximately 15% of all women who give birth,[73] depression following miscarriage, the safety of antidepressants during pregnancy or lactation, or how to counsel women taking antidepressants who wish to become pregnant. Neither was there mention of some of the most potent risk factors for depression in women, including child-

hood sexual abuse,[74] intimate partner violence,[75,76] or sexual and gender-based harassment in the workplace.[77–79]

Additionally, little progress has been made in the inclusion of women in clinical trials, and clear statements of the limits of generalizability of male-only studies are routinely absent, in disregard of the rules of good science.[80,81] An analysis of findings from randomized, controlled trials published in nine influential medical journals in 2004 showed that women were generally underrepresented, comprising on average 37% of the sample and only 24% of participants in drug trials. Eighty-seven percent of the studies did not report any outcomes by sex or include sex as a covariate in modeling, illustrating inadequate compliance with the NIH guidelines.[81] For example, the results of a randomized clinical trial of coronary artery revascularization before elective vascular surgery in a sample of 98% men are generalized to all patients in the abstract, conclusion, accompanying editorial, and subsequent research summary.[82–84] One has to question whether the identical study on a sample of 98% women would pass editorial review without including an acknowledgment of the study's limitations with the caveat that the results may not be generalizable to the men.

Even when women are included as subjects, the results in male subjects may take precedence in being generalized to the entire population. For example, Wing et al.[85] published the results of a randomized, controlled trial comparing diuretics with angiotensin-converting enzyme (ACE) inhibitors for treatment of hypertension in older patients. Although ACE inhibitors showed a benefit for men in reducing the combined primary end point of cardiovascular events and all cause mortality, no difference was found for women, the group not only more likely to have hypertension but also the majority of the patient population in the age group studied. The wording of the results hid the absence of benefit of ACE inhibitors for women through misleading language extrapolating the results to "older patients, particularly men" in the abstract. The overreaching lead statement in the paper's discussion notes that "outcomes are better when hypertension in the elderly is treated with an ACE inhibitor. . . . " This continuation of gender bias in scientific reporting is scientifically unsound, potentially detrimental to the health of women, and antithetical to the emphasis on evidence-based practice promulgated in medical education.

Other goals of an expanded view of women's health were to broaden the inclusion of women's health topics in medical school curricula and establish clinical programs that promote comprehensive, interdisciplinary, integrated health services across the life span. OWH addressed this by moving beyond academic health centers, promoting five innovative national model programs at 48 different sites to advance (1) comprehensive, integrated, interdisciplinary, and coordinated women's healthcare, (2) healthcare professional and public education, (3) research on women's health, including sex and gender differences, (4) academic-community partnerships, and (5) leadership development for women.[86] The five model programs include academic centers, community centers, and demonstration and rural health centers located across the United States. The hope was that the successes of these five models would encourage others to adapt a paradigm of comprehensive, multidisciplinary, integrated women's healthcare. Unfortunately, after 10 years of success and the development of a strong network of 48 sites across

the United States, the CoE model has been defunded, with a number of sites in the middle of their contracts.

The progress of women's health content in medical school curricula was examined by Henrich.[87] In support of stalled momentum in women's health, she found an increase in educational initiatives at the medical student and graduate training levels from 1995 to 2000 but no subsequent growth. Funding for women's health research has continually declined over the last 6 years. Federal funding from FY2004–2007 for NIH overall showed an increase of 0.5% and a zero dollar increase from 2006 to 2007. Similar trends have been seen for women's health research and other health programs, which either declined or saw a zero percent increase, failing to keep pace with inflation.[88] When the percentage of NIH dollars given for the study of sex differences is analyzed, the grants awarded represent a very small percentage of the total number of grants allocated. Between 2000 and 2003, with the exception of a very few NIH centers where the percentage remained constant, the other centers and institutes showed a decrease of 1.5%–2% in the proportion of grants awarded that included a sex/gender comparison. The NIH institutes that fund the largest number of grants award a smaller percentage of those grants for the study of sex and gender differences.[89]

Women's health has also taken other unwanted steps backward, often as the result of a political agenda that has promulgated ideology over evidence. In 2005, the FDA decided not to allow emergency contraception (Plan B),[90] often referred to as the "morning after pill," to be available as an over-the-counter (OTC) product after two independent scientific panels recommended they do so. After 28 months of debate, the FDA indefinitely postponed its ruling on whether women should be allowed to buy emergency contraception without a prescription, opting instead to embark on a new regulation-writing process. After continued pressure from women's health activists and some members of Congress, in August of 2006, the FDA approved Plan B as an OTC option for women aged ≥18.[91–93] The approval is a tribute to the efforts of reproductive rights and women's health advocates as well as the scientific community and policymakers who have fought to improve women's access to comprehensive healthcare. The triumph was only a partial victory, however, because young women <18 years of age still do not have easy access to emergency contraception. For these women, the drug still requires a prescription, a restriction unsupported by medical or scientific evidence. Requiring women <18 years of age to obtain a prescription delays access to an effective medication and makes intervention less effective.

Women on active duty in the military serve as another example of the setbacks in women's health. The 350,000 women currently serving in the U.S. military have limited to no access to emergency contraception at their military-based pharmacy and no access to elective termination of unwanted pregnancy care at their military health facility. In 2002, the Department of Defense approved Plan B to be stocked at military medical facilities, and Congress was to vote on a bill known as the "The Compassionate Care for Servicewomen Act" that would have added Plan B to the list of medications that must be stocked at every military health facility. The proposal never came to a vote.[94] It has been acknowledged by all branches of the military and the Department of Veterans Affairs that women on active duty are at high risk of

military sexual trauma. In the event that a woman soldier is raped, however, she is currently not guaranteed access to Plan B.

The attack in recent years on reproductive rights goes beyond access to safe and evidence-based contraception. Variations on bans to elective termination of pregnancy designed as a direct challenge to *Roe v. Wade* were proposed in 12 states in 2006 alone. South Dakota became the first state in 15 years to pass a law making all elective termination of pregnancy illegal (a felony for the physician) unless the woman's life is endangered.[95] Fortunately, a petition put forth to the South Dakota voters in November 2006 soundly defeated the ban.[96] Similar laws were adopted in Louisiana and Utah in 1991 but were struck down in federal court. A federal ban on intact dilation and evacuation (the Partial-Birth Abortion Ban Act) was first enacted in 2003 and blocked from taking effect by three separate federal district court rulings, each upheld by a federal appeals court, as being unconstitutional, largely because of the absence of an exception to protect the health of the pregnant woman. In 2007, the U.S. Supreme Court issued a decision to uphold the federal ban. The setback to women's health is heralded by Justice Ginsburg, who wrote that the "decision is alarming. . . . It tolerates, indeed applauds, federal intervention to ban nationwide a procedure found necessary and proper in certain cases by the American College of Obstetricians and Gynecologists (ACOG). It blurs the line, firmly drawn in *Casey*, between previability and postviability abortions. And, for the first time since *Roe*, the Court blesses a prohibition with no exception safeguarding a woman's health."[97]

Many of the setbacks to women's health will impose real economic, physical, and emotional costs on women and their families. Decisions about funding women's health research and access to information, products, and services should not be made on political or ideological grounds but, to the extent possible, on sound medical evidence. To ensure that we have a body of scientific evidence on which to base such decisions, the sex-specific results of clinical research need to be reported and the limitation in generalizability must be acknowledged if research is done only in men.

The Root Cause: Gender-Linked Assumptions That Undervalue and Marginalize Women

Walton et al.[98] detail how Western biomedical theory has consistently supported the idea of human female inferiority. In ancient Greece, the belief was that the female with internal genitalia is a defect of nature compared to the perfect male form with external genitalia. These ideas moved with little modification into the Renaissance and formed the foundation of early medical textbooks. The 70-kg white man remains the standard for teaching medicine up to the present day, with physiological formulas adjusted for female bodies[99] and male illustrations outnumbering female illustrations in medical textbooks.[20] Institutional confirmation of the lower societal value placed on women compared with men is found in lower Medicare relative value units (RVUs) placed on surgical procedures performed on women in contrast to identical and even technically less difficult procedures performed on men[15,100,101] With such irrefutable, objective evidence of the lower value placed on women's bodies, is it any wonder that progress in women's health has stalled?

A large body of social psychology research confirms that apart from explicit biases (frank sexism), we all have unconscious biases and assumptions about the traits and behaviors of men and women. These implicit biases form prescriptive gender norms and are easily activated and applied in decision-making settings.[102,103] These prescriptive norms emanate from the social roles historically occupied by men and women but have little to do with the actual knowledge and abilities of an individual man and woman. Unconscious assumptions about gender as a social category are tenacious and even prevail in the face of objective evidence to the contrary.[50,65,104] As confirmed repeatedly, women are viewed as having more communal traits, which include being dependent, nurturing, and submissive, whereas men are viewed as having more agentic traits, which include being strong, action oriented, and independent.[47,102] All indicators in society affirm that greater value is placed on agentic traits. For example, fields in which women predominate and where communal behaviors are essential (e.g., child care, social work, nursing) have lower salaries and less prestige than fields in which men predominate and where technical prowess is required (e.g., plumbing, engineering, surgery). For centuries, much of the work performed by women has been unpaid labor. Myerson and Fletcher,[7] who study organizational change, emphasize that the roots of gender inequity lie in the fact that organizations have been created by and for men and are based on traditional male life experiences. The National Science Foundation (NSF) has acknowledged the need for a systems approach to increase the participation and advancement of women in academic science and engineering and has invested in the ADVANCE Institutional Transformation Award program since 2001.[105] Although the NSF program does not focus on academic medicine and few sites include medical schools, the approaches are relevant. Some of the most successful efforts promoting institutional, cultural change involve educating nonsocial scientists and engineers about social science research on biases and assumptions.

So openly acknowledged is the link between the value that society places on a profession and its gender composition that Lyon,[106] in an editorial in *Obstetrics and Gynecology*, cautions against the predicted loss in salary and prestige as women physicians increasingly dominate this field, affirming that "professions created by or predominantly filled by women . . . are uniformly under-respected and under-represented in terms of political clout."[106] Perhaps most telling regarding the relative value placed on the gender composition of a profession is the noticeable absence of the same exuberant concern for the overrepresentation of men among cardiologists or surgeons. In short, the ubiquitous and deeply embedded devaluation of women and the work performed by women is at the root of the subtle and overt gender discrimination repeatedly documented in all aspects of academic medicine. This same devaluation of women allows funding to be siphoned away from programs to promote women's health and enables political ideologues to wrest control of women's bodies from women.

Conclusions and Recommendations

We conclude that as long as women faculty in academic medical centers and issues associated with caring for women are marginalized and devalued, women's health will con-

tinue to reside below a glass ceiling, never reaching the lofty goals envisioned over a decade ago or realizing the full human potential resident in both providers and patients. We put forth the following recommendations for academic medical centers, organizations that support biomedical and behavioral research, and individuals within these institutions to promote progress beyond the apparent glass ceiling that is preventing further advancement of women's health and women leaders. With each recommendation, we include some specific actions.

Recommendation 1: Recognize the impact of socialized gender differences

- Educate members of the academic medicine community about the impact of socialized gender differences on the teaching and practice of medicine.
- Include relevant social science research in the medical school curriculum and familiarize institutional leaders with the National Academies Report on Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering.[107]
- Require training of key gatekeepers (e.g., admissions, search, and tenure committee members and those assuming leadership positions) regarding the existence of unconscious gender assumptions and provide evidence-based strategies to mitigate their influence on the evaluation of individuals (e.g., reduce time pressure and divided attention during evaluation; acknowledge the ubiquity of gender bias and instruct evaluators to consciously try to avoid its influence in evaluating individuals)
- Undertake and evaluate organizational interventions to promote gender equity and disseminate the results of successful programs, in keeping with the spirit of type 2 translational research.[108]

Recommendation 2: Systemic change needed for advancement of women

- Institutionalize mechanisms to monitor and, if necessary, redress gender pay inequities.
- Implement policies that promote institutional support for programs with diverse representation (e.g., grand rounds speakers, conference programs).
- Examine institutional processes for selecting leaders and recipients of institutional awards and eliminate known activators of bias favoring men (e.g., evaluating "potential" rather than specific performance criteria; using language that emphasizes stereotypical male qualities, such as strength, over gender-neutral or stereotypical female qualities, such as mentoring and collaboration).

Recommendation 3: Make support for professional and personal work/life balance an institutional priority

- Undertake an institutional needs assessment to understand the current status of women faculty, identify barriers to their advancement, and propose systemic solutions.
- Increase the flexibility of tenure track positions to enable scholarship and work/life balance (e.g., part-time positions with prorated tenure clocks; flexible tenure time-

lines; on-site infant, toddler, child care facilities and breastfeeding rooms).
- Create a central administration funding pool to cover hiring supplementary staff (e.g., graduate research or teaching assistants or postdoctoral fellows) for up to 1 year for faculty who have/are experiencing a major care giving-event: childbirth, adoption, elder care, serious personal or partner illness.
- Create a central administration funding pool to cover up to 12 weeks at full salary for both men and women after childbirth or adoption.

Recommendation 4: Reinforce the link between women's health and women's leadership at NIH and other federal agencies

- Capitalize on the link between women's health and women's leadership in academic medicine by incorporating research on sex and gender differences across a wide spectrum of scientific inquiry.
- Establish an extramural program position responsible for reviewing requests for applications (RFA) and program announcements (PA) to determine if sex differences should be the focus of the announcement.
- Issue RFAs and PAs that have hypothesis-driven sex differences and offer grant supplements to investigators to add exploration of sex differences.
- Track publications reporting on sex differences.
- Expand budget of ORWH to increase cooperation and coordination within NIH for sex differences research.
- Provide ORWH with direct grant-making authority with specific direction to Centers for Women's Health Research (including the study of sex and gender differences) at the same level as other comprehensive NIH Centers (e.g., cancer centers, minority health centers).
- Fund organizational and educational research on gender issues in academic medicine, particularly related to institutional transformation and leadership effectiveness (e.g., NIH could fund for academic medical centers a program analogous to the NSF ADVANCE Institutional Transformation Award).
- Mandate that for large center grants or institutional awards, investigators include a description of the process by which the PIs were selected and be explicit about opportunities for women to apply.
- Require applicant organizations to include an accounting of the gender and ethnic/racial composition of its faculty along with a description of institutional programs to develop women and ethnic/racial minority leaders.
- Require that all research mentors who are part of federally supported training grants participate in training regarding gender issues in academic medicine, including social psychology research on evaluation bias.
- Remove any requirement on career development awards that limits access to applicants who are beyond a limited number of years of training to facilitate the reentry of women following childbearing.
- Raise the salary cap on the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Awards to the level of other K12 awards.
- Continue to monitor and report on the gender composition of NIH grant awardees.

Women's health and women in academic medicine are linked. Despite real gains throughout the 1990s, progress has stalled in both areas. Further advances will require widespread recognition that women have been and continue to be devalued in our society in general and within medicine in particular and acceptance of the necessity of system changes to achieve equity. To break through the glass ceiling, all stakeholders must first acknowledge its existence and agree that allowing it to remain in place erodes our nation's competitive edge in biomedical research, wastes considerable human capital, and prevents realization of optimal health and healthcare for everyone.

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WISELI In the Press

Nurturing Women Scientists

Nationwide and institution-sized surveys show a leaky pipeline partially patched, but the reservoir still far from full. **By Jill U. Adams**

When the US National Institutes of Health (NIH) surveyed its postdoctoral fellows in 2003, more than 1,300 of them answered questions ranging from marital and family status to their views on the value of a good salary, flexible hours, and other workplace issues. One result was particularly worrying. While women and men both felt equally well trained for a career in academic science, women were less confident about their chances to land a position, much less achieve tenure.

Elisabeth Martinez, who was a postdoc at the time and helped design the above survey, expected preparedness and career outlook to be in alignment. With her task force colleagues, Martinez, now an instructor at the University of Texas Southwestern Medical Center, predicted that women might feel less ready—but they didn't. "By and large women felt equally well prepared, and yet there was still a bit of a confidence issue," she said.

This finding bodes poorly for efforts to close the gender gap in representation at higher levels of the academic ladder. And yet, those involved in such efforts—in academia, government, and industry—continue to move forward, casting a wider net for hiring, pushing family-friendly initiatives, and increasing the emphasis on mentoring.

"It is reasonable to assume that those women who have assessed the situation carefully recognize that they're going to have more problems than men," says **Phoebe Leboy,** the president-elect of the Association of Women in Science (AWIS). "So you can call it lack of confidence or you can call it an accurate perception of the situation."

One reason women might have grounds for less confidence in their careers than men has to do with the pressures of raising a family, says Leboy. But even putting family issues aside, she says, "Women are going to have a harder time than men succeeding" at every stage of the tenure-track academic career.

Leboy points to data made available by the NIH that showed women lagging behind men in terms of grants per investigator, dollars per grant, success in getting grants renewed, and responsibility for big budget center grants. And because success is so closely tied to funding, particularly in academic health centers, says Leboy, all of these things mean that women are having a harder time achieving tenure than men.

Add all this to what Leboy calls "the escalating rat race in academia" and it paints a bleak picture.

Looking Past the Numbers

It's no longer a pipeline issue, says **Nancy Nielsen,** president-elect of the American Medical Association. She cites the National Academy of Sciences (NAS) report from last year which showed that although women have earned more than half of the Bachelor's degrees awarded in science and engineering since the year 2000, their representation on university faculties remains woefully low. Indeed, for those with Ph.D.s in engineering and science, four times more men than women hold full-time faculty positions. And minority women with doctorates are less likely than white women, or men of any racial or ethnic group, to be in tenure positions.

It's a problem of numbers, but as is so often the case, numbers do not tell the whole story. A survey of faculty at Princeton five years ago looked at promotion, compensation, and retention by gender. "The major finding was that we have made progress in attracting and retaining women faculty," said **Joan Girgus,** a psychology professor who serves as a special assistant to the dean of faculty, a post that was created as a direct recommendation of the survey's task force. "But, we still found that continued »

Elisabeth Martinez

" By and large women felt equally well prepared and yet there was still a bit of a confidence issue. "

Phoebe Leboy

UPCOMING FEATURES

Postdoctoral Scientists 1—February 22

Careers in Preclinical Drug Discovery and Development (online only)—March 7

Focus on Asia—March 21

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Women in Science

> "We put programs into place, not just to have a program, but so it will actually benefit employees. We do these things because we believe it's right."
> —Lisa Zanetto

women were underrepresented."

When the Princeton survey team looked beyond the quantitative data, one thing they found was that women were less likely to request extensions of tenure for childbirth than were men. "Now this is really odd, right?" Girgus said. "When we asked people to comment, they said things like: we don't know if it's okay to ask for it, we're afraid we'll be seen as less serious, we're afraid we'll be penalized in the tenure consideration."

Princeton's response? Make the extension of the tenure clock automatic. When a tenure-track faculty member, male or female, brings a new child home, the dean of faculty sends a letter with a new tenure date and a book for the baby, said Girgus.

In addition to the postdoc study run by Martinez, the NIH conducted an extensive survey of its tenure-track and tenured scientists (as well as other staffers) to examine gender issues. In general, "women do not perceive the NIH as a female-friendly environment," said **Joan Schwartz,** an Assistant Director in the Office of Intramural Research. "But to tell you the truth we don't know how exactly to define that because we didn't ask them what they meant by it."

Schwartz is presently conducting followup focus groups on the same populations to try to get at specifics. "We need to understand what the issues are so we can work on coming up with solutions," she said. "That's the ultimate goal—to develop practical solutions."

Beyond Education and Training

Obviously, progress has been made. One success story found in the NAS report is the number of women getting Ph.D.s in science and engineering. In biomedical science, some 45 percent of postdoctoral fellows are women. As the problem—women leaving science or their careers stalling—moves to a later juncture on the career path, the solutions must be tailored to a different set of circumstances.

Put a different way, the problem of equal representation of women has moved from the education and training realm to the employment realm. Academic science might look no further than corporate America to find expertise in the practices of hiring, career development, and family-friendly policies.

"Attention to career development and advancement is more part of the culture of industry than it is in academia," says **Gail Cassell,** who is vice president of scientific affairs at Eli Lilly and Company and was previously a department chair in microbiology at University of Alabama Schools of Medicine and Dentistry at Birmingham. "Lilly certainly invests a lot of time and resources in nurturing the careers of females in both technical and management positions."

Employees at Eli Lilly undergo evaluations twice a year and, in addition to being evaluated by their bosses, those in supervisory positions receive performance reviews from peers and the people they manage. With multiple inputs going into an employee's review, the process is more objective than the opinion of a single person, like one's boss. This continual feedback "improves the individual, improves the system, and builds a better relationship between employee and employer," says Cassell.

From an employer's perspective, evaluations help identify talent and hold onto it. "So you don't turn around and they're being courted by one of your competitors. Succession planning is a very important part of human resources here. I'm not so sure that's the case at universities, particularly with administrative positions."

Kourtney Davis, senior director of worldwide epidemiology at GlaxoSmithKline, can speak to her company's helping her meet her objectives. Earlier this year, she co-chaired a women in science program that pulled together women across the whole R&D organization to offer networking and mentoring. Davis says it was a great chance to promote opportunities for women. "It was also on my development plan, because I want to work on leadership outside of my department." She credits the company's human resources team for trying to find opportunities for women scientists to increase their leadership skills.

With regard to family-friendly policies, both GlaxoSmithKline and Eli Lilly were recognized by *Working Mother* magazine as two of the top 100 companies in America, based on measures of work force, compensation, child care, leave policies, and the like.

Davis jokes that she's a poster child for the company's family-friendly programs. With each of her two children, Davis took advantage of extended leave—time beyond paid maternity leave—and then came back at reduced hours for another three to six months. "I also telecommute one day a week," she says. "My supervisor has been incredibly supportive."

The biotech firm Genencor has gone so far as to provide a lactation room and the services of a lactation consultant, says **Lisa Zanetto,** director of human resources for R&D. Employees at

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American Medical Association
www.ama-assn.org

Association of Women in Science (AWIS)
www.awis.org

Eli Lilly and Company
www.lilly.com

Genencor
www.genencor.com

GlaxoSmithKline
www.gsk.com

National Institutes of Health (NIH)
www.nih.gov

National Science Foundation
www.nsf.gov

Princeton University
www.princeton.edu

Rensselaer Polytechnic Institute
www.rpi.edu

University of Alabama, Birmingham
www.uab.edu

University at Buffalo School of Medicine and Biomedical Sciences
www.smbs.buffalo.edu

University of Texas Southwestern Medical Center
www.utsouthwestern.edu

Women in Science

the company also take advantage of flextime schedules, backup day care, and using sick days to take care of sick children.

Zanetto notes that men use family-friendly policies too, like the single dad who works a reduced-hour schedule. The philosophy behind these programs is based on the belief that employees are the company's greatest asset. "We put programs into place, not just to have a program, but so it will actually benefit employees," she says. "We do these things because we believe it's right."

Eli Lilly's commitment to diversity has led the company to create a new position, a vice president of diversity. The company also helped fund the NAS report on academic science and has encouraged the academy to do a followup study on women scientists and engineers in industry.

"With our scientific talent pool being what it is today around the globe, you want that diversity to ensure success," Cassell says. "You have to have it."

Changing Culture

Industry differs from academia in how achievement is measured. "In industry, as in much of corporate America, rewards are considered for the team, for how the team does," says Nielsen, which affects not only how science is done, but how scientists are judged.

By contrast, the emphasis in academia is on individual achievement. That works against women, says Nielsen, who adds that for all the talk about partners sharing home and family duties, "the reality is women still do the brunt of that."

Nielsen, who is senior associate dean for medical education at the University at Buffalo School of Medicine and Biomedical Sciences, illustrates the contrast with a change she's witnessed in clinical medicine. Thirty years ago obstetrics and gynecology was dominated by men, but now the majority of residents in any OB/GYN program are women, she says. "I think it was because the life of an OB/GYN being on call all the time was very difficult. In the old days solo practice was the model." Now group practice is more common and allows doctors in a large group to have a very reasonable call schedule. "They can have a life," says Nielsen. "And those are issues for my medical students, male and female. They want a reasonable life balance."

Several universities have launched initiatives to change the culture of academic science and to increase the representation of women on the faculty at the highest ranks. The National Science Foundation has been funding many of these efforts through its ADVANCE program. One of the first awardees was the University of Wisconsin at Madison. "The unique thing about these awards is they're really working on the institution level," says **Jennifer Sheridan,** who directs UW-Madison's Women in Science and Engineering Leadership Institute. "This kind of money has never been put at the top, at

"You cannot presume to have tapped the best talent if you do not tap the complete talent pool."
—Shirley Ann Jackson, right

a system level before. It's always been a 'fix-the-women' approach."

One of UW-Madison's approaches is to educate faculty—those who serve on hiring and tenure committees—about research-based evidence on unconscious bias. Studies have shown that identical resumes are perceived differently depending on the gender of the name at the top. "We use the research as a way in," says Sheridan, to persuade science faculty that if they're not paying attention, these biases can emerge. "It takes the blame off men," she says, "because women do it, too."

The hiring workshops have been effective at Wisconsin, says Sheridan, who has measured a positive correlation between departmental participation in hiring workshops and more women hired. In addition, responses on climate surveys showed that new hires were more satisfied with the hiring process. "The workshops talk a lot about the interview process and treating candidates respectfully," she says.

Another NSF grantee is Rensselaer Polytechnic Institute, which has created a program called RAMP-UP (Reforming Advancement Processes through University Professions). Rensselaer President **Shirley Ann Jackson** said the program is focused on two things: "We are working to improve career progression for women from the junior faculty ranks to the senior ranks, and to expand recruitment of accomplished women at the senior level."

Startup packages and access to resources will be looked at more carefully. In addition, the institute is expanding its mentoring and coaching services to better guide women faculty through the advancement process.

"It starts at the departmental level, because that is where hiring starts and where the promotion and tenure process occurs," Jackson said. In addition, the "tone at the top" is important, she says. "It is essential to set clear expectations. I am very focused on the need to ensure that the processes affecting the progression of women faculty—and of all people in their careers here at Rensselaer—are fair and consistent."

To fill looming gaps in the science, technology, engineering and mathematics (STEM) work force, Jackson says the United States must engage more women and minorities. "Demographics are changing. Women and minorities now constitute one-half to two-thirds of the population, yet they have traditionally been underrepresented in the STEM fields. If we are to sustain our capacity for innovation, it must be an all-in proposition. You cannot presume to have tapped the best talent if you do not tap the complete talent pool."

Jill U. Adams is a freelance writer living in upstate New York.

GUEST EDITORIAL: *When Life Intervenes, One University Steps Up to Help*

By Bernice Durand, University of Wisconsin–Madison

Bernice Durand

She's making good progress toward tenure. Wham! Her young child is diagnosed with cancer. The child's oncologist says the prognosis is good with immediate and repeated chemotherapy. Her big grant renewal proposal is due in two months.

He's enjoying mid-career national prominence. Wham! He has a heart attack. His cardiologist says he needs bypass surgery — soon! His big grant renewal proposal is due in two months. A lot of people's livelihoods and careers depend on those grants.

Health and family crises are often career crises, and they can be ruinous. Overnight your career can be in serious jeopardy. Although men and women experience these kinds of events, for women they may tend to occur earlier in the career (e.g., prior to the tenure

decision) when it is more difficult to recover from a setback. At the University of Wisconsin—Madison (UW-Madison), we are privileged to have Vilas Life Cycle Professorships, as a safety net against such crises (1). These grants, limited to $30,000 (not to be used for the salary of the recipient), are available to UW-Madison tenure-track and tenured faculty and permanent principle investigators (PI's), regardless of discipline or gender, who "are at critical junctures in their professional careers and whose research productivity has been directly affected by personal life events (e.g., illness of a dependent, parent, spouse/partner, or oneself; complications from childbirth; combination of major life events)" (1).

Where did the Life Cycle grants come from? From 2002 to 2006, we had one of the first NSF five-year ADVANCE Institutional Transformation grants (2). The grant was named WISELI (3), for Women in Science and Engineering Leadership Institute. The two PI's and Co-Directors were Molly Carnes (4) and Jo

Balancing Career and Family: Suggestions

By Andrea Liu, University of Pennsylvania

At the 2007 APS March Meeting, CSWP sponsored a panel discussion on the topic, "Women in academic science: balancing career and family." The panel members were Susan Coppersmith (University of Wisconsin, Madison), Marija Drndic (University of Pennsylvania), Ka Yee Lee (University of Chicago), Nadya Mason (University of Illinois, Urbana-Champaign), and Katharina Vollmayr-Lee (Bucknell College). The panel was chaired by Andrea Liu (University of Pennsylvania).

The challenge of balancing career with family is listed by many women as the primary reason for leaving academic science. The panel discussion had three aims. One aim was to provide the audience with an "existence proof" by gathering several women faculty

members who have young children as well as highly successful scientific careers. The second aim was to collect practical strategies for balancing career and family from the panelists. The final aim was to compile a list of recommendations for departments, academic institutions, funding agencies and professional societies. Several female graduate students in the audience commented that they came from departments with no women faculty and that it was inspiring merely to see the panelists gathered together as a group.

Each panelist presented a list of recommendations that she felt would make a real and immediate difference to women academic scientists. As several panelists pointed out, many of the recommendations

When Life Intervenes, continued from page 1

Handelsman (5), and they hired Jennifer Sheridan (6) as the Executive Director and Research Director, who later became a co-PI as well. The idea for the Life Cycle grant program came from Drs. Carnes and Handelsman, and Dr. Sheridan implemented the program, aided by two senior faculty members who served as a review committee for proposals at the beginning.

Part of the original WISELI grant proposal (7), the Life Cycle Research Grants (LCRG) program started in Fall 2002 with starter funds from the AD-VANCE grant and extender funds from the UW-Madison Graduate School to extend the grants to men and more awardees. In the first two years, five women and one man benefited. During their funding year, the recipients used their money for whatever would help most, for example, to hire a manager, data collector, graduate student, postdoc, or lab technician. The faculty were freed up to write papers, give talks and write grant proposals (that had the potential to bring back to the university ten times the LCRG investment).

Early recipients identified some key themes: the LCRG was the only grant of its kind on campus; came at a critical juncture in their personal and professional lives; provided psychological support; had an impact on others' lives as well; and was an investment in the grantees' futures and the University's. Some memorable phrases: "… validated personal lives … recognized suffering can impact professional lives," "emotionally important … justifying my request based on health-related issues," "It's not a huge amount of money … but it really reverses the psychological effect of the life event."

In Spring 2005 the trustees of the William F. Vilas estate granted $310,000 to WISELI's LCRG, and it became the Vilas Life Cycle Professorships (VLCP) program. The Vilas funds enabled the pilot LCRG program to expand beyond the biological and physical sciences, to faculty in all disciplines. The Vilas grant was renewed in 2006, and in 2007 the Trustees increased the allotment to $372,000. From 2005 through 2007, 36 women and 10 men received grants.

In May 2006, the VLCP Program was selected as a recipient of the Alfred P. Sloan Award for Faculty Career Flexibility, funded by the American Council on Education (ACE) and the Sloan Foundation. The VLCP program was recognized for its "innovation in career flexibility for tenured and tenure-track faculty." The $25,000 award was used in support of WISELI's administration of the program. As the award letter states:

"The Vilas Life Cycle Professorship Program exemplifies a true model of innovation in career flexibility for tenured and tenure-track faculty. This outstanding program provides financial support and personal attention to faculty who encounter critical junctures in their careers that affect both their research and personal lives. It demonstrates your university's commitment to changing the structure of the traditional academic career path in ways that both improve the lives of the faculty and contribute to the retention of valued faculty at the University of Wisconsin-Madison."

In the most recent (April 17, 2007) report (1, under reports), the evaluators concluded about the VLCP that it enables continued success, it decreases attrition in the faculty, its effects extend beyond the recipients, and it is an example of the university at its best.

Due to the success of this program and others, WISELI soon had impact on the campus beyond women in science and engineering, and now lives on beyond the original NSF ADVANCE grant. WISELI is embedded in the institution and is continuing its most successful programs at UW-Madison as well as developing new programs with a positive impact on the climate campus-wide. WISELI also disseminates its work to other campuses that are ready to transform their institutions for women in academic science and engineering.

Two other ADVANCE programs have similar grants: the University of Washington Transitional Support Program (8), and the University of Michigan Elizabeth C. Crosby Research Fund (9); there may be others.

Thank you to Dr. Sheridan for reading and augmenting this article. If you would like to learn more than is on the web sites, contact Bernice Durand bdurand@wisc.edu or Jennifer Sheridan sheridan@engr.wisc.edu.

(1) http://wiseli.engr.wisc.edu/initiatives/lifecycle/LifeCycleGrants.htm

(2) http://www.nsf.gov/crssprgm/advance/itwebsites.jsp

(3) http://wiseli.engr.wisc.edu/

(4) http://wiseli.engr.wisc.edu/people/bios/carnes.html

(5) http://wiseli.engr.wisc.edu/people/bios/handelsman.html

(6) http://wiseli.engr.wisc.edu/people/bios/sheridan.html

(7) http://wiseli.engr.wisc.edu/mission/grantapp.html

(8) http://www.engr.washington.edu/advance/tsp.html

(9) http://sitemaker.umich.edu/advance/grants

> During their funding year, the recipients used their money for whatever would help most, for example, to hire a manager, data collector, graduate student, postdoc, or lab technician.

Have you moved? Changed jobs? Changed fields?

Take a moment to update your name/address/qualifications on the Roster of Women in Physics.

ASK THE PHYSICS MENTOR

Bernice Durand, University of Wisconsin-Madison, is the Physics Mentor for this issue

I am a senior physicist, recently turned 50. Maybe that has made me too contemplative: I have no idea what I should do with my next 15 to 20 years! I have done well: I have a good grant, lead a research group, achieved tenure in five years, and was a full professor four years later. My husband is a scientist in another field, also doing very well; and we have one child in college and another about to finish high school. So why am I full of uncertainty?

I now realize how much the chair who hired me kept things moving for my promotions. He retired eight years ago, and my two chairs since then haven't paid any attention to my (well-regarded) research or (highly-rated) teaching. I see my male colleagues, and my husband in his department, being nominated for and receiving honors and invitations, and I've been left behind. I am active in my APS division and am appreciated there. I'm not even sure I care about my department any more. This makes me pretty sad.

Answer: You aren't alone; your questions are common among senior women scientists. How do I plan for and achieve what I want to accomplish for the next five, ten, or fifteen years? Do I want to keep building my research group or do more in education or administration? Do I want my service time to be spent locally or nationally? And why hasn't anybody recognized the good things I do?

You probably are a good mentor to students and junior colleagues in your department. Now it's your turn; our need for mentors never ends. Get together with other senior women scientists on campus. Meet over lunch to share stories. Be sure not to "whine" of blame anyone, and to honor any confidences. You will learn how some of them reached their decisions whether to concentrate on national service, take a lead in campus groups dedicated to teaching and learning, or stay in the lab, ever more driven by their science. Some will be just where you are, needing a sounding board for their long-range planning. Some of us just aren't horn-tooters for ourselves, so it's time to help each other out.

Start an email list of senior women. Get together to list all the honors, professorships, tenure and other key committees on campus, and work on getting each other nominated. If some have consistently gone to men only, point that out to the campus awards or nominating committees. If a nomination must come from within the department, ask a colleague (even nationally) to broach the subject with your chair. In your department, be sure there's a committee assigned to nominate colleagues for local and national honors, and volunteer to be on it. You may meet some kindred spirits.

Meantime, go for it in your APS division and see if this is really what works best for you. For ideas and reassurance, visit the same website featured in the guest editorial, http://wiseli.engr.wisc.edu/initiatives/seniorwomen/seniorwomen_main.htm .

Do you have a question for the Physics Mentor? Send it to women@aps.org. A member of the Committee on the Status of Women in Physics will offer suggestions in the next issue of the Gazette. *No name, institution or other identifying feature will be attached to your question.*

Katherine Weimer Award Recognizes Women in Plasma Physics
By Catherine Fiore, MIT

The Division of Plasma Physics established the Katherine Weimer Award in 2002 to recognize and encourage outstanding achievement in plasma science research by a woman physicist in the early years of her career. The nominee's Ph.D. must have been received within the ten-year period prior to the nomination deadline, April 1, 2008. The nomination guidelines are similar to the standard APS guidelines. Complete details at http://www.apsdpp.org/weimer_award.html.

The Katherine Weimer Award is presented once every three years to a woman of outstanding achievement for work done during the first ten years following receipt of her doctoral degree. The award honors the life and work of Dr. Katherine Weimer, a pioneering, research physicist at the Princeton Plasma Physics Laboratory (PPPL) at Princeton University who made many important contributions to research advancements in magnetohydrodynamic equilibrium and stability theory for magnetically confined plasmas.

Nominations for the 2008 award should be sent to the chair, Catherine Fiore fiore@psfc.mit.edu. Deadline for receipt of nominations is April 1, 2008.

NEWS

Engineering at Illinois leads campus gender equity effort

Menah Pratt-Clarke, assistant provost and associate director of the Office of Equal Opportunity and Access talked about the university's commitment to the diversity process.

"The search process plays a vital role in shaping our faculty and thus provides the best opportunity for diversifying our workforce," stated Ilesanmi Adesida, dean of the College of Engineering. "The college is committed to removing barriers to gender-equitable recruiting practices and to directly addressing important contemporary issues of excellence and diversity."

"Searching for Excellence & Diversity: Implementing Training for Search Committees," the first "train-the-trainer" workshop, was held on June 25 at the Alice Campbell Alumni Center on campus. It is one component of the college's plan to improve the recruitment and retention of excellent women faculty at all tenure ranks, as recommended in the 2006 report by the college's Planning Committee for Enhancing Diversity.

"Our primary goal is to promote the development of core expertise for in-house training of search committees on campus for gender-equitable hiring," explained Assistant Dean Normand Paquin, one of the co-authors of the college's proposal to the campus Council on Gender Equity this past spring. The workshop was presented by the Women in Science & Engineering Leadership Institute (WISELI), an NSF-funded ADVANCE Institutional Transformation project at the University of Wisconsin-Madison.

According to Susan Larson, assistant dean in the College of Engineering, and director of Women in Engineering, WISELI has developed and implemented workshops that provide search committees with the best practices, practical tips and general advice for running efficient and effective gender-equitable searches, recruiting excellent and diverse applicants, and conducting fair and thorough reviews of candidates.

"The original proposal was aimed primarily at training search committee members within the College of Engineering," Larson remarked. "However, some of the same challenges exist across campus, so we offered to open the workshop to all of the units." A total of 45 individuals attended this "train-the-trainer" workshop, about half representing the College of Engineering.

WISELI Co-director Amy Wendt (standing) served as one of the workshop facilitators.

The workshop will complement two additional activities the College of Engineering will be undertaking during the summer to gather expert knowledge in this area.

"We plan to send up to two individuals to the comprehensive two-day LEAP Annual workshop hosted by the University of Washington in July," Paquin said. "Secondly, we plan to invite the University of Michigan ADVANCE STRIDE team to deliver a diversity workshop at Illinois targeted at deans, department and unit heads, and invited search committee chairs." This workshop will educate these administrators on various aspects of gender equity best practices and provide a survey of current observations on problems such as unintentional biases.

Underrepresentation of Women Faculty in Technical Fields

As several major reports on gender equity have demonstrated, a national problem exists with regard to the low numbers of female faculty in math, science, and engineering in the United States. Schools of engineering across the country are among the worst when it comes to the percentage of women in the faculty ranks, particularly in the case of tenured faculty and

high-level administrative positions. According to a 2006 study by the American Society for Engineering Education (ASEE), the overall representation of women engineering faculty at the tenured and tenure-track level is 11.3%.

While reasons for women's under-representation in engineering faculty are varied, a National Academy of Science report (2007) identifies "unintentional biases and outmoded institutional structures that are hindering the access and advancement of women." By learning about these biases and harmful structures, administrators, search committee chairs, and faculty can help recruit and retain more women faculty.

According to Adesida, increasing the diversity of faculty and students is one of its five major strategic goals specified by the college's strategic plan. In 2006, the Planning Committee for Enhancing Diversity, led by Dale Van Harlingen, head of the Physics Department, submitted a report entitled, "A Strategic Plan for Enhancing Diversity in the College of Engineering." The report, which builds on several previous studies, recommended making the following two points the college's initial and highest priorities:

The vigorous education of the faculty, staff, and administrators in the College of Engineering on the value of diversity in our programs, on the biases and the barriers that impede it, and on the strategies and best practices for achieving it.

Strengthening the recruiting, retention, and quality of the experience for underrepresented (including women) science and engineering faculty at Illinois so that they can serve as role models and agents for bootstrapping increased diversity in scientific fields.

Physics professor Nigel Goldenfeld makes his point during a small group discussion session.

According to ASEE 2006 data, the University of Illinois ranked eighth out of 333 schools in number of women engineering faculty and are tied for eighth in number of Hispanic engineering faculty. The college's long-term goal is to equal or exceed the average percentage of women faculty of its strategic peers.

This is a tremendous challenge requiring hiring at above "pipeline" levels, Paquin explained. "The average percentage of women graduating with an engineering PhD in 2006 was approximately 22.5% according to ASEE data. However, we believe that our college has the reputation and the opportunities to attract outstanding women faculty."

"As the numbers indicate, we must proactively pursue the very best practices in recruiting and retention if we are to be successful," Larson added. "It thus becomes imperative to educate our faculty on these practices and to foster a welcoming climate. We believe that diversity workshops which have been shown effective in other institutions need to be implemented here."

Establishing an environment that allows gender equity to thrive is also a priority for Engineering at Illinois. The recent College of Engineering administration reorganization put in place the first woman Associate Dean in the college-- Aerospace engineering professor Victoria Coverstone was recently named the college's Interim Associate Dean for Graduate & Professional Education. At the same time, the administration is addressing other potential obstacles of gender equity--dual-career issues, mentoring and networking, family and career balance and services, and college and campus policies in support of family (such as tenure clock roll-back).

The College of Engineering has sought to supplement campus' family-friendly policies and activities. A proposal to Elsevier Foundation New Scholars Program entitled, "Encouraging Diversity and Work/Life Balance in Engineering Faculty," was successful and will permit the college to advance its agenda in this regard. The networking practices developed under the Elsevier award will help develop community among new faculty members, providing both social and professional support.

"As the first step in improving the search process, the workshop was a great success," Paquin added. "We had an excellent group of leaders from across campus, and especially from our

college. I think the full value of this event will be realized in the months and years to come."

Contact: Normand Paquin, assistant dean, College of Engineering, 217/244-7985.

Writer: Rick Kubetz, Engineering Communications office, 217/244-7716.

Photos by Charles Hannon and Rick Kubetz.

(posted 26 Jun 2008)

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Researcher finds that women are speaking up

July 31, 2008
by Jenny Price

There's a whole industry of books and seminars that hinge on the premise that women somehow need to be "fixed" when it comes to communication and must change the way they talk and behave to advance their career.

Cecilia Ford, a University of Wisconsin-Madison professor of English language and linguistics, found just the opposite when she used her expertise in conversation analysis to document the experience of women in professional meetings in fields including science and engineering, where women have been traditionally underrepresented.

> Ultimately, Ford says women don't need to "improve" their ways of speaking because they are already strong participants. "What needs to be challenged are preconceptions and biased evaluations of women and other groups newer to the professional workplace," she says.

"What I was impressed with, really, was how effective the women in these meetings were," says Ford, who conducted the work in her role as a member of UW-Madison's Women in Science and Engineering Leadership Institute, funded by the National Science Foundation. The institute is working toward eliminating obstacles to women's academic advancement and raising awareness about the concerns of female scientists and engineers.

Ford, winner of a UW-Madison Chancellor's Distinguished Teaching Award in 2005, outlines the results of that research in her new book, "Women Speaking Up: Getting and Using Turns in Workplace Meetings." Ford studied meetings involving women in science, engineering and medicine, as well as management and administration, including academic departments, industry and nonprofit organizations. She used videotape and detailed transcriptions to look not only at what people in meetings say, but also observed nonverbal cues such as gesture, gaze and body position.

Ford says she knows the videotapes don't tell the whole story — women commonly report experiences where their ideas were rejected, only to hear them praised when men raised them later on — but she found substantive evidence of women getting and using their turns to speak. She decided that the original goal of pursuing the question of "how are women's ideas ignored?" would reinforce rather than challenge stereotypes.

Ford

"Given that I could see that women were doing a good job and ... it made more sense to me to use my skills to show, 'OK, here's how people get and use the floor,'" Ford says. "I'm not seeing that women are significantly different from

men."

One of Ford's most striking findings was that women regularly used questions to gain the floor in meetings, a direct contrast to previous studies that identified women's use of questioning as a sign of weakness. Ford says that earlier research on women's language as distinct from men's observed that "women questioned more, rather than saying things for certain, so it was a reflection of women's uncertainty or insecurity."

But when Ford looked at the conversation that followed women asking questions in meetings, she found that the person who answered the question would then give the questioner a moment to affirm if her question was answered. The women Ford observed used that opportunity to take back the floor and make a major contribution to the meeting.

"(What) I found remarkable, given the research that's been done on women and language over the last three decades, was the power that I could see that questions had for getting someone the chance to speak, perhaps even at length," Ford says.

Some of the women Ford interviewed and observed indicated they would only speak up in meetings "when they really had something to say they thought was going to make a difference." But Ford says that deliberate silence was treated by colleagues as something purposeful and important to watch, with one woman reporting that when she did speak up, the reaction was "Oh ... she has something to say."

Ford says her book is as much about how people — both men and women — effectively participate in meetings than it is about just women. When she came across a conversation example that might reinforce stereotypes about women, she soon found examples of men doing the same thing.

"For instance, saying something like 'This may be stating the obvious,' ... prefacing what you say by a little bit of a downplaying," she says. "It's actually an effective thing to do. It probably disarms people. Men do it and women do it."

Ultimately, Ford says women don't need to "improve" their ways of speaking because they are already strong participants.

"What needs to be challenged are preconceptions and biased evaluations of women and other groups newer to the professional workplace," she says.

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NEWS

Friday October 24, 2008

WVU panel urged to consider women, minorities in presidential search

by **Ry Rivard**
Daily Mail staff

CHARLESTON, W.Va. -- The committee searching for the next president of West Virginia University is being asked to keep an eye out for female and minority candidates.

The state's largest university has never had a black or female president and has sometimes struggled to find diverse candidates for faculty positions.

The administration is somewhat diverse already. The head of its board of governors is a woman, and women or minorities fill several of the key positions in the president's office. The head of WVU's recently separated branch campus at Parkersburg is a black woman.

But the presidential search committee was asked this week to make sure it is proceeding in a way that ensures inclusion.

"They are being asked to be very mindful of our goals to hire people from underrepresented groups," said E. Jane Martin, the university's interim provost.

A representative from the university's office for social justice told the search committee that its search should be conducted in a way that encourages a diverse, qualified applicant pool to apply.

But there is a "huge, tenacious bias" that leaders are going to be males, said Molly Carnes, a professor and co-director of Women In Science & Engineering Leadership Institute at the University of Wisconsin-Madison.

Speaking at a higher education diversity conference this week in Charleston, Carnes and other experts from around the country said bias tends to creep into search processes unconsciously and needs to be directly addressed to be averted.

"If we expect somebody to change what they do, you need to give them the tools to do it," Carnes said. "If not, you'll still get the same result."

One study by researchers at Yale shows how easily bias can seep into decision making.

In the study, participants were asked to decide between a male and a female candidate for a police chief job. One candidate was streetwise. The other was formally educated. But no matter what, the participants favored whichever qualifications the male had.

In other words, if the male was said to be streetwise and the female educated, they would say that being streetwise was the best qualification. If the man was educated and the woman streetwise, they would say education was the best qualification.

Carnes said an effective way to cut down this type of bias is to set out clearly at the beginning of the decision-making process what is the most important qualification: Is it being streetwise or is it being educated?

Another is to have a diverse applicant pool in a room. If minorities are at the table, people are more likely to check even their unconscious bias.

Since her appointment this summer, Martin has taken a special interest in promoting diverse hires among faculty.

She said things have gotten better at the university over the years.

"Even though the results don't always suggest it, I think there is certainly more awareness of it and certainly more intent," she said.

In its last presidential search, one black man was among the three finalists, but he dropped out before the committee made a final decision.

And WVU has had problems finding diverse faculty in certain departments.

The university's nanotechnology program has been unable to attract many female and minority candidates, said Curt Peterson, the president of the WVU Research Corp. He said only about three women are associated with the 20-person program.

Now the department is "planning to search for female and underrepresented minorities for those positions first," Peterson said.

Two things the program is trying to do is make the search committees smaller, which means minority representation is greater, and the other is to help accommodate candidate's spouses.

One challenge administrators outside of major cities face is the issue of spouses who also need jobs. WVU, like other universities, has begun trying to accommodate spouses by opening up new positions for them.

This means that the provost's office can free up money to hire the spouse if there is a general need.

"We have money here in the provost's office that is very specifically identified for minority hires, and I can tell you that we will do everything we can to spend that money," Martin said.

But officials emphasize they don't hire candidates just because they are women or minorities.

"They will not pick on those reason, they will pick the best person," Martin. But it's "all the better" if the person is female or a minority.

Hiring diverse faculty has a trickle-down effect. If there are diverse faculty, it is more likely the university will be able to attract diverse students and graduate students, which means a larger applicant pool of qualified applicants to choose from.

Contact writer Ry Rivard at ry.riv...@dailymail.com or 304-348-1796.

9 Comments on "WVU panel urged to consider women, minorities in presidential search"
Post a comment

Posted By: **Sen. Byrd** (10:14pm 10-27-2008)   ⚠Report Abuse

I say Ann Barth for WVU president ! Shes is a good neighbor of labor unions. She could be instrumental in helping unions get more members in these unions ! God knows they are loseing members every year !

Yes, I am for Ann Barth to , (Chuckles Manchin)

Posted By: **M.Garrison** (10:08pm 10-27-2008)   ⚠Report Abuse

WVU panel urged to consider women, minorities in presidential search ?

With that criteria you may be looking for a long time. IMO I would say that WVU needs to seek out a WISE person, that has no political connections, especially with STATE GOVERMENT !

Posted By: **Whatever** (10:44pm 10-26-2008)   ⚠Report Abuse

Diversity = Perversity

Posted By: **Gov Manchin** (2:00pm 10-24-2008)   ⚠Report Abuse

The selection committee should chose Heather Bresch for the next Pres of WVU.

More Comments »

WISELI Products and Resources

"Enhancing Department Climate: A Guide for Department Chairs."

Enhancing Department Climate

A Guide for Department Chairs

Campus Climate: Behaviors within a workplace or learning environment, ranging from subtle to cumulative to dramatic, that can influence whether an individual feels personally safe, listened to, valued, and treated fairly and with respect.[1]

Climate: The atmosphere or ambience of an organization as perceived by its members. An organization's climate is reflected in its structures, policies, and practices; the demographics of its membership; the attitudes and values of its members and leaders; and the quality of personal interactions.[2]

What is Climate? Why Does it Matter?

There is no simple definition of departmental climate, yet research shows that "climate" plays an important role in people's satisfaction, effectiveness, productivity, engagement, and decisions to remain in or leave a department or area of study. A recent survey of 4,500 tenure-track faculty at 51 colleges and universities found that faculty place great value on departmental climate, culture, and collegiality and that these qualities are critical to faculty retention.[3]

Discussions with and surveys of university faculty, staff, and students reveal 8 common concerns about department climate:
• Lack of respect/consideration/politeness
• Insufficient sense of community or belonging
• Lack of recognition/visibility/value
• Ineffective communication
• Lack of support/inequitable access to professional development opportunities
• Difficulties achieving balance between work and family or personal life
• Illegal behaviors and demeaning, sexualizing, or condescending language and behaviors
• Retention/tenure of women and minority faculty, staff, and students

For each of these areas, this document provides practical advice department chairs can use to foster climates in which everyone feels welcome, respected, and valued.

When addressing these concerns, remember that though issues of climate may be common to all departmental members, the solutions or remedies for specific groups may differ. It is also important to recognize that though members of various minority groups may experience less welcoming climates than their majority peers, particular concerns may be of greater or lesser salience to specific groups. Efforts to improve climate must take into account both the nature of the department and the uniqueness of its members' concerns.

Promote Basic Manners—Respect/Consideration/Politeness

☐ Issue a policy statement establishing the expectation that all members of the department should treat each other with dignity and respect and that inequitable treatment will not be tolerated.

☐ Promote these policies by personal example. Be sure to include the following:
  ☐ Greet faculty, staff, and students pleasantly in the hallways or in other chance encounters.
  ☐ Make requests politely and thank faculty and staff for work performed—even when it is part of their job expectations.
  ☐ Address individuals by their appropriate titles. Program Administrators or Managers, for example, may prefer that you not refer to them as secretaries.

"Hostility and rudeness of one or more faculty within the department detract most from [my] satisfaction at [work]." [4]

☐ Hold department members accountable for violating basic standards of respect, consideration, and politeness by assessing these factors during annual performance evaluations and by relying on these assessments when making committee assignments, recommendations for awards and honors, etc.

Build an Inclusive Community

☐ Include all groups in department governance. In addition to faculty, include representatives of staff, postdoctoral scholars, and graduate students in departmental meetings and give them voting rights when possible.

☐ Examine departmental committees and ensure that leadership and membership are diverse with respect to age, gender, nationality, race and ethnicity, etc. Assess whether departmental teaching assignments are appropriately and equitably distributed. Consider creating a worksheet or rubric to track committee and teaching assignments and ensure equity.

- ☐ Examine departmental events such as seminar series and sponsored conferences and make sure that they include presenters of various ages, genders, nationalities, races, and ethnicities.
- ☐ Establish the expectation that all faculty, graduate students, and postdoctoral students attend departmental seminars/colloquia (those delivered by guests and by colleagues) and that they show respect to speakers by not engaging in other tasks such as grading papers, reading, and responding to e-mail, etc.
- ☐ At departmental meetings, ensure that everyone has a chance to voice opinions or concerns. Acknowledge and attribute ideas, suggestions, and comments accurately. Women and minority department members often report that their remarks are ignored or unheard.

"I have noticed that sometimes after I speak there is a small pause and the conversation just picks up again as if I had not said anything. I don't notice this happening to men." [5]

- ☐ Promote inclusive language by example. Avoid using only male pronouns when referring to groups composed of both sexes. Avoid language that makes assumptions about marital status and/or sexual orientation, i.e., consider using "partner" rather than "spouse."
- ☐ Encourage faculty and staff to welcome and collaborate with new department members.
- ☐ Personally introduce new faculty and staff to department members with shared interests. Encourage new faculty to seek out colleagues in other departments and offer to make introductions.
- ☐ Host regular social events and ensure that they are open to all departmental members when appropriate.
- ☐ Create a communal space—coffee room/ lunch room.

Recognize and Value the Work of Departmental Members

❏ Publicly recognize and praise faculty, staff, and students who perform work on behalf of the department. Be sure to attribute credit accurately.

"The professor I work for … is always careful to acknowledge the contributions that I make and to thank me for the work that I do. It is amazing how these small comments make a difference in my day." [6]

❏ Make public announcements regarding awards/recognition departmental members (faculty, staff, postdocs, or students) have received. Evaluate departmental recommendations for honors and awards and ensure that bias is not inadvertently playing a role.

❏ Develop and enforce departmental standards regarding authorship, or enforce standards established by your academic discipline.

❏ Encourage respect for varied research methodologies, for interdisciplinary research, for mainstream and "non-mainstream" research. One method of doing so is to ensure that invited guest lecturers and seminar/colloquium speakers represent a wide range of research areas and/or methodologies.

❏ Encourage all faculty and students to become aware of the academic contributions of their colleagues in the department and the university and, when relevant, to cite these contributions in their publications and presentations.

❏ Conduct regular pay equity reviews to ensure that women and minorities receive fair compensation.

Communicate Effectively

- ❏ Clearly and honestly communicate departmental values, intentions, expectations—and act in accordance with them.
- ❏ Clearly communicate departmental policies and procedures, in written form.
- ❏ Provide written clarification of conditions of employment to all departmental employees.
- ❏ Provide informational documents to students that specify all aspects of their graduate education. Distribute written announcements about position openings, fellowships, awards, etc. to all students—don't rely on word of mouth announcements that may only reach certain students.
- ❏ Clearly define qualifications and application processes for all faculty and staff position openings and promotions.
- ❏ Provide new faculty with clearly written guidelines and standards for achieving tenure in your department. Provide information on both departmental and university-wide standards.
- ❏ Ensure that all departmental members—faculty, staff, and student employees—receive annual performance evaluations.
- ❏ Provide open and honest communication about how you and your department make decisions and allocate resources.
- ❏ In communicating, consciously solicit perspectives from diverse groups of people.
- ❏ Become aware of cultural and gendered differences in styles of communication, and about culturally conditioned expectations regarding styles of communication.

Promote Professional Development

- ❏ Consider giving faculty, academic staff, and classified staff time to attend courses/workshops/national meetings.
- ❏ Consider providing financial support for faculty, staff, postdocs, and graduate students to attend or present at workshops/courses/national meetings.
- ❏ Encourage faculty to invite staff/students to present lectures in their areas of expertise.

□ Ensure that new faculty and staff have at least one mentor in the department and encourage them to seek mentors outside the department as well.

□ Recognize the importance of providing new faculty members with a mentor who does not also serve as an evaluator who will play a role in decisions about tenure and promotion. Encourage new faculty to take advantage of formal mentoring programs that your campus may offer.

Encourage Balance between Work and Family/Personal Responsibilities

□ Foster inclusiveness in scheduling departmental meetings and events. Recognize that parents may not be able to attend early morning or late afternoon meetings and events.

□ Develop creative and flexible solutions to accommodate family and personal responsibilities. Invite faculty and staff to suggest solutions and find out about accommodations other departments have made. Consult with relevant campus offices and/or individuals.

□ Budget for lecturers and other staff members needed for family and/or medical leave.

Develop Sensitivity

□ Do not rely solely on your own perception of department climate. Rather, become aware of others' perspectives.

The climate for women in my department is good [7]

% Agree Strongly or Somewhat
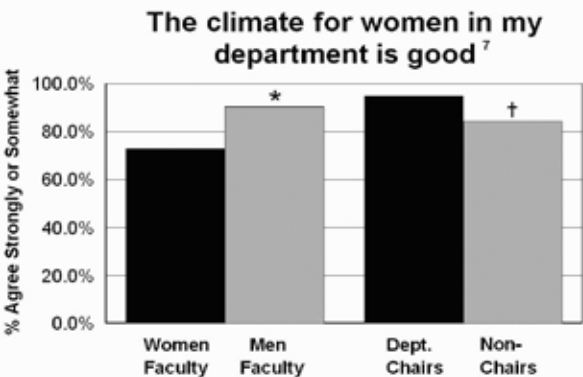
* Significant t-test between women and men faculty at $p<.01$.

† Significant t-test between dept. chairs and all other faculty at $p<.05$.

- ☐ Become aware of how unconscious biases and assumptions can influence interactions between departmental members.
- ☐ Listen respectfully to complaints and concerns about treatment or policies in the department. If the complaint concerns another member of the department, hold a separate meeting with that individual to address the issue and, when possible, avoid identifying any individual/s who complained. In your discussions with both parties, focus on solutions and means of improving the situation instead of dwelling on blame and ill treatment.
- ☐ If the complaint regards harassment or other illegal behavior, your response will have to differ—refer to the section below on "**Respond to Illegal Behaviors."**

Respond to Illegal Behaviors and Complaints about Demeaning, Sexualizing, or Condescending Language and Behavior

- ☐ Develop and clearly state a zero tolerance policy for discrimination, harassment, and unreported instances of conflict of interest in a consensual romantic or sexual relationship.
- ☐ Learn about your campus' policies and procedures for responding to and reporting complaints about such behavior.
- ☐ If approached with a complaint of such behavior do not dismiss the complaint. Rather, immediately recognize the complaint, acknowledge the courage needed to approach you, and quickly determine what the individual approaching you wants. Respect his/her decisions and avoid imposing what you think you would do in the same circumstances.
- ☐ Consult early and often with campus personnel knowledgeable in the area of responding to complaints about sexual harassment.
- ☐ If the complaint requires action, act swiftly and fairly. Be prepared to deal not only with the principals involved, but also with the influence any actions may have throughout the department.

Retention/Tenure of Women and Minority Faculty, Staff, and Students

Numerous surveys and studies conducted in colleges and universities across the nation show that individuals who are members of a minority group—whether the minority status derives from race, ethnicity, sex, gender, sexual orientation, religion, physical ability, or even area of research specialization—feel less welcome, respected, and valued than their majority peers.[8] Working to enhance departmental climate can help retain women and minorities and increase the tenure success of women and minority faculty. To retain women and minority faculty members and to ensure that they achieve tenure, be aware of the following:

❏ Ensure that the isolation and alienation that many women and minority faculty members experience is not mistaken or criticized as "not being collegial" or "not being a team player," particularly when they are evaluated for tenure by departmental colleagues.[9]

❏ Ensure that women and minority faculty members are not subject to higher expectations for number and quality of publications than men and majority faculty members. Be aware that inadvertent biases and assumptions may influence the evaluation of women and minority faculty members.[10]

Concluding Advice

Rely on resources your campus provides to help you in your efforts to enhance department climate. These may include experts and services provided by your Office of Equal Opportunity; Office for Equity and Diversity; Chief Diversity Officer; Office of Human Resources; Office of Quality Improvement; Employee Assistance Programs; Work/Life Programs; and various organizations and committees for women and/or minority groups.

RECOMMENDED READING

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For more readings see: http://wiseli.engr.wisc.edu/office_library/Climate.htm

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[1] UW–Madison Campus Climate Network Group, 2002.
[2] UW–Madison Committee on Women in the University, Work Group on Climate, 2002.
[3] Aguirre, 2000; Allen, 2002; Callister, 2006; COACHE Tenure-Track Faculty Job Satisfaction Survey, 2006; Harper & Hurtado, 2007; and more.
[4] Study of Faculty Worklife at the University of Wisconsin–Madison, 2006.
[5] UW–Madison Committee on Women in the University, Climate Vignettes, 2002.
[6] Ibid.
[7] Study of Faculty Worklife at the University of Wisconsin–Madison, 2003.
[8] COACHE Tenure-track Faculty Job Satisfaction Survey, 2006, 2007; Study of Faculty Worklife at the University of Wisconsin–Madison, 2003; and more.
[9] Haag, 2005.
[10] WISELI, Benefits and Challenges of Diversity, 2004.

For full references see: http://wiseli.engr.wisc.edu/initiatives/climate/BrochureRefs.pdf

⊗ WISELI

Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

http://wiseli.engr.wisc.edu

Prepared for WISELI by Eve Fine and Jennifer Sheridan.

To order printed copies of this brochure, please see:
https://wisccharge.wisc.edu/wiseli/items.asp

WISELI Research/Evaluation Report:

Benting, Deveny. February 15, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to UW-Eau Claire on January 16, 2008."

SEARCHING FOR EXCELLENCE AND DIVERSITY: EVALUATION OF THE WORKSHOP PRESENTED TO UW-EAU CLAIRE ON JANUARY 16, 2008

Submitted to:

Eve Fine
Researcher and Workshop Coordinator, WISELI

Jennifer Sheridan
Executive Director and Workshop Coordinator, WISELI

Workshop Coordinators at UW-Eau Claire

Submitted by:

Deveny Benting
Evaluator, WISELI

February 15, 2008

Table of Contents

I. DEMOGRAPHICS OF SURVEY RESPONDENTS

Out of 54 invitees, 25 people responded to this survey for a response rate of 46%.

Title/Role on campus	%*
Director/Coordinator	32%
Department Chair	24%
Administrator	24%
Professor	20%
Staff	8%

*Percentages do not add up to 100 because some respondents reported having more than one role

Sixty-eight percent of respondents were either currently serving on a search committee or expected to be doing so within the next year. Their roles or expected roles are listed in the following table:

Role on Search Committee	%*
Member	59%
Chair	41%
Advisor	18%
Other	12%

* Percentages do not add up to 100 because some respondents reported having different roles on several committees.

The source that informed them of the workshop offering	%
Affirmative Action Office	23%
Dean	23%
Chancellor/Provost's Office	23%
General announcement/advertisement	23%
Other	9%

II. RATINGS AND COMMENTS ON WORKSHOP CONTENT
(Note: Written comments in this document are verbatim responses from workshop participants, altered in some cases to remove identifying information.)

Overall rating of workshop	%
Not at all Useful	0%
Somewhat Useful	32%
Very Useful	68%

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Introduction	0%	72%	28%	0%

- I like [the idea] that we are the largest employer in the area and we can make a difference in the complexity of Eau Claire if we are intentional about diversity hiring.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Running an Effective and Efficient Search Committee	4%	40%	52%	4%

- Need more oomph. Comes off sort of drab and blasé.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Actively Recruiting an Excellent and Diverse Pool of Candidates	0%	24%	72%	4%

- Love the research and practical ideas.
- I would not be actively involved in this, except to perhaps inform my colleagues of a potential opening.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Evaluating the Pool of Applicants: Raising Awareness of Unconscious Assumptions and their Influence	0%	24%	76%	0%

No comments

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Ensuring a Fair and Thorough Review of Candidates	0%	28%	72%	0%

- I found the presentation of research on biases and assumptions was most helpful. I worry, however, that some of the women and minorities there found the information discouraging, and I hope you'll present some good news along with the bad in the future.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Developing and Implementing an Effective Interview Process	4%	32%	64%	0%

- I appreciated the conversation about the interview having a long-term effect on the university's reputation. Being kind, even if it is not the candidate you intend to invite to the position.
- Review, but a good review.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Successfully Hiring Your Selected Candidate	4%	44%	48%	4%

- Most search committee members have NO involvement in closing the deal. We often don't even know which candidate has received an offer.

III. OUTCOMES: GAINED KNOWLEDGE AND RESOURCES THAT PARTICIPANTS WILL APPLY IN THEIR ROLE ON A SEARCH COMMITTEE

The majority of responses addressing gains from the workshop had to do with knowledge about specific procedures for running a good search workshop. Within this group of responses about procedural issues, respondents addressed five major themes: 1) Strategies for running an effective and efficient search committee; 2) Strategies for recruiting and diversifying the pool of applicants; 3) Talking about diversity within a search committee; 4) Interacting with visiting

candidates; and 5) Knowledge of policies and legalities surrounding the search process. Besides procedural issues, respondents also talked about the literature on unconscious biases.

A. Search committee procedures *(35 responses)*

1. **Strategies for running an effective and efficient search committee** *(17 responses)*
- Inclusion vs. exclusion.
- Set the ground rules early and be consistent.
- Setting expectations up front.
- Discuss the process with everyone before the search begins.
- It would be worthwhile for a member of the Affirmative Action office to meet with every search committee to discuss process/bias issues before a search begins.
- Tips regarding how to represent the open position and the campus most honestly and favorably to candidates.
- To organize and set parameters before the actual work begins.
- To separate duties and involve all members equally.
- Reinforced need for ground rules to be set in advance.
- I learned and put into practice the concept of choosing candidates to "include" rather than "exclude." [Soon after] we used this construct to guide our committee as we went through [numerous] resumes and cover letters.
- Using the technique of deciding who stays in the pool rather than who is excluded.
- Including rather than excluding candidates at each level of the search.
- The need to establish operating "rules" at the beginning of the process, rather than in the middle.
- The need to move more quickly than many of our searches move, especially after interviews, so as not to lose good candidates.
- Screen as an inclusive, not an exclusive process.
- The benefits of a diverse search committee.
- The need for clear ground rules for the committee.

2. **Recruitment strategies and diversifying the pool** *(8 responses)*
- Talk to people about positions that are available. Don't assume that they know that you want to work with them.
- Being more mindful of bias when setting up qualifications and reviewing credentials for bias.
- Tips on who should be on search committees in order to raise the probability of hiring diverse faculty.
- Sufficient pool of diverse candidates.
- More aggressive advertising of the position.
- Best not to screen applicants through a diversity lens.
- Cast the net widely and advertise in a plethora of diverse media.
- Listservs and other electronic ads may be more advantageous than print ads.

3. **How to talk about diversity within the search committee** *(4 responses)*
- To have a training session about hidden biases we all may have.

- Learned language to use when someone says, "Why would they come here?"
- Tips on dealing with biases, and when bias is most likely to enter into the search/screen process.
- Doing some consciousness-raising up front with the committee (information on bias).

4. Interview procedures for visiting candidates *(3 responses)*
- Remember that all the people you interview come away with an impression of your institution that they will share with others.
- Examples of things to do or to avoid in interview process.
- The reminder that we are being interviewed too.

5. Policies and legalities *(3 responses)*
- More information about the importance of confidentiality.
- Great info on the Open Meetings Law.
- That closed session need not be put on pinks.

B. Unconscious biases *(8 responses)*
- Identifying biases and assumptions.
- Reminder about the research on women.
- Greater understanding of research base for unconscious bias; strategies for overcoming bias.
- How much our socialization influences.
- It helped me identify underlying myths that I believed that might influence my evaluations of candidates.
- Biases held by people carrying out searches.
- The myth that there are few or no minority candidates available.
- The clear documented impact of unconscious assumptions on the recruitment process.

C. Other *(3 responses)*
- I thought the workshop was excellent and actually gained a great deal of helpful information.
- Thanks for providing booklet to take with us.
- Did not really learn anything new. Raised level of attention to some issues.

IV. SUGGESTIONS AND RECOMMENDATIONS GIVEN BY SURVEY RESPONDENTS

A. Improving the workshop experience *(19 responses)*

Respondents addressed two major categories: 1) Workshop content; and 2) Workshop format.

1. Comments about format of workshop *(10 responses)*
- It used the time well and was a good mix of large and small group discussions.

- I was a facilitator, and I thought I could have performed my duties as well without the pre-workshop orientation. As a busy as I am, those two hours felt like an unnecessary sacrifice.
- Shorter with less group discussions.
- The workshop was well run in my opinion.
- Too rushed. Good information was hardly touched. More interactive sessions where you show us what not to do and we say do it this way. Use of role plays, for example; or videotaped exercises.
- Table talk was not helpful at all.
- All was great. May be have more sharing out time after the small group discussions.
- More interactive—more didactic than led to believe.
- Need to decide if this is to be an informational workshop or discussion. Trying to bridge the two (present information, follow with small group discussion) results in too little information, and too little time for meaningful discussion. The whole session had the feel of going through the motions, need to stay on schedule.
- More time to discuss things in groups – the "timing" was too pressure packed.

2. **Comments about content of workshop** *(6 responses)*
- I really enjoyed the review of literature on hiring women and would have appreciated more time for also examining racial bias/hiring racial minorities.
- Maybe identifying an "action plan or next steps" for the campus including such things as the establishment of a resource area for "best practices" that have been successful for recruiting quality and diversity in personnel. Too often we have these types of workshops and once they end or people change the information is forgotten or shelved.
- It needed to be made very clear that, even when talking about general search and screen practices, you all were talking about ways that will increase our chances for increasing diversity at UW Eau Claire.
- The most interesting things were case studies and other anecdotes, as well as the data on bias.
- It was unclear to me what the goal of the workshop was from the description. It turned out to focus more on carrying out an effective search, and how to better include diversity in the process. The workshop description started with diversity and mentioned searches. In short, the description and the reality were inverted – consider recasting how to advertise. Were you to "lead" more strongly with searches and how to better include a diverse pool, I think the workshop would draw a larger group.
- A more clear emphasis on improving the likelihood of attracting a diverse pool; more support from our affirmative action office to ensure that we cast a wide net and use more than routine mailings/advertisements to attract better pools.

3. **No suggestions/good workshop** *(3 responses)*
- The conference was excellent.
- None come to mind.
- Excellent job.

- More UWEC-specific information would have been good.
- Actual concrete advice.
- More from Teresa O'Halloran and/or Caitlin Lee would have been very good.
- Use a lab so that people can take the bias tests and then they will see that as much as they think they are bias-free, they do have implicit biases. This should really kick off the discussion. This would be a day-long workshop, but it would be time well spent. The tests are amazing!
- Screening applications, But then I learned that this was not a practice that you all endorsed.
- None come to mind – it was quite comprehensive and thoroughly done. I wish there was more time to read the materials provided. I know I can read it now, but it would have been more helpful to read it in advance. The Smith article was rather interesting and should be included in the reading. You might consider giving participants some time to just read some supporting documentation. I know that this requires time, but some references, like the Smith article, are worth the investment (especially since you rely on it heavily in the workshop).
- Not enough time to discuss potential solutions—identified problems and used up what little time was available.
- More concrete specifics on legal, procedural processes and requirements.
- None.
- Nothing; but more time on all the topics.
- None – there wasn't enough time to discuss the topics that we did discuss.
- None come to mind.
- The conference was excellent.
- It was a great workshop. Thanks!

C. Would you recommend this workshop to others?

Ninety-two percent of survey respondents reported they would recommend the workshop to others. Their comments regarding this question follow:
- It was a useful overview of the entire hiring process. Well organized and presented in a listener-friendly fashion.
- The research on biases and assumptions and the interaction with my on-campus colleagues were very valuable to me.
- Research based, practical, well presented and engaging.
- I believe that every search committee would benefit from attending such a workshop.
- The content was evidence-based and well-presented.
- Very useful and important information.
- It was good to hear everything again...one more time doesn't hurt.
- Thinking about hidden biases and acceptance of "myth" was very helpful.
- This is something that we could all afford to spend some time on. The fact that you can point to measurable changes in search outcomes is remarkable and a strong selling point.

- It was an excellent, informative workshop. I recommended that the 2 1/2 [hour] version that was mentioned be offered/required for new search committee members. I think more training in this aspect of our work would increase our abilities in conducting effective searches.
- I have been involved in many searches. I think this workshop is particularly important for newer faculty and/or those who really need to think about their processes and have not done so with particular attention to really wanting to open up opportunities for all.

Eight percent said they would *not* recommend this workshop to others, with one of the respondents giving the following explanation:
- Unless they have little to no experience on search committees, there was very little here that was new.

V. GENERAL COMMENTS

- Excellent work!
- Thanks for coming to UW-EC.
- Keep up the good work.
- The speakers were great. Clearly had a wealth of knowledge to share with us.
- When it turned out there were twice as many small group facilitators as needed, could have offered to let half of them attend as participants and skip the facilitator training session the afternoon before.
- You should audio tape yourselves sometime and then listen to the number of times that you say, or simply imply, that white males are at fault for things. Is it possible that in your effort to give examples and explain how bias can be subtle, you actually do that very thing? It's a real challenge to listen to several hours of male bashing. I'd rather there be some recognition that not all men are biased.
- Well done.

Searching for Excellence and Diversity: A Workshop for Search Committees Presented at UW-Eau Claire

1

Your title or role on your campus:

[   ]

2

Are you currently serving on a search committee, or do you expect to be doing so within the next year?

[YES] [NO]

If you answered yes, please tell us what your role is, or what you expect it to be.

[   ]

3

Please rate the value of each of the following aspects of the workshop using the scale from 1-3. Also, feel free to include additional comments about the presentation or small-group discussions:

1	2	3	
Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend

Introduction (With remarks by Brian Levin-Stankevich and Molly Carnes)

[1]   [2]   [3]   [   ]

Comments:

[   ]

Element #1: Running an Effective and Efficient Search Committee
(Presented by Eve Fine and Teresa O'Halloran)

[1]   [2]   [3]   [   ]

8

Comments:

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Element #2: Actively Recruiting an Excellent and Diverse Pool of Candidates (Presented by Molly Carnes, Eve Fine, and Teresa O'Halloran)

[1]   [2]   [3]   [ ]

Comments:

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Element #3: Evaluating the Pool of Applicants (Presented by Molly Carnes)

[1]   [2]   [3]   [ ]

Comments:

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Element #4: Ensuring a Fair and Thorough Review of Candidates (Presented by Molly Carnes and Eve Fine)

[1]   [2]   [3]   [ ]

Comments:

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Element #5: Developing and Implementing an Effective Interview Process (Presented by Eve Fine)

[1]   [2]   [3]   [ ]

Comments:

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Element #6: Closing the Deal (Presented by Eve Fine)

[1]   [2]   [3]   [ ]

Comments:

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4

Please identify up to three things that you gained at this workshop and will apply in your role as Chair or as a member of a search committee:

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5

Please provide us with ideas or suggestions that would have improved your experience in this workshop:

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6

What topics did you hope would be covered in this workshop, yet were not?

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7

Please provide an overall rating for this session.

Not at all Useful   Somewhat Useful   Very Useful

1   **2**   **3**

8

How did you hear about this workshop?

9

Would you recommend this workshop to others?

YES   NO

Why or why not?

10

Any other comments?

WISELI Research/Evaluation Report:

Benting, Deveny. February 27, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to Wayne State University on January 25, 2008."

SEARCHING FOR EXCELLENCE AND DIVERSITY:
EVALUATION OF THE WORKSHOP PRESENTED TO
WAYNE STATE UNIVERSITY ON JANUARY 25, 2008

Submitted to:

Eve Fine
Researcher and Workshop Coordinator, WISELI

Jennifer Sheridan
Executive Director and Workshop Coordinator, WISELI

Workshop Coordinators at Wayne State University

Submitted by:

Deveny Benting
Evaluator, WISELI

February 27, 2008

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I. DEMOGRAPHICS OF SURVEY RESPONDENTS

Out of 30 invitees, 11 people responded to this survey for a response rate of 37%.

Title/Role on campus	%
Professor	73%
Department Chair	19%
Other	9%

Sixty-four percent of respondents were either currently serving on a search committee or expected to be doing so within the next year as active participants. No one reported that they currently are or would in the near future be acting as committee chair.

The source that informed them of the workshop offering	%
ESCALATE	43%
E-mail announcement	29%
Other	29%

II. RATINGS AND COMMENTS ON WORKSHOP CONTENT
(Note: Written comments in this document are verbatim responses from workshop participants, altered in some cases to remove identifying information.)

Overall rating of workshop	%
Not at all Useful	0%
Somewhat Useful	27%
Very Useful	73%

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Introduction	0%	36%	55%	9%

- Both are respected, articulate academics with significant administrative responsibilities.
- The intros were excellent.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Running an Effective and Efficient Search Committee	0%	55%	45%	0%

- I think we already do most if not all of these things.
- Amy and Bob's remarks kept the tone of the meeting trusting and sharing, rather than preachy.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Actively Recruiting an Excellent and Diverse Pool of Candidates	0%	45%	55%	0%

- The "hard work" theme was important.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Evaluating the Pool of Applicants: Raising Awareness of Unconscious Assumptions and their Influence	0%	36%	55%	9%

- The focus on women candidates was important, but people really wanted to talk about issues involving recruiting faculty from Asia.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Ensuring a Fair and Thorough Review of Candidates	0%	36%	55%	9%

No comments.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Developing and Implementing an Effective Interview Process	0%	36%	45%	18%

- I think we already have this pretty well sorted out.
- Our interview process is much different (not committee-based).
- An energetic presentation.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Successfully Hiring Your Selected Candidate	0%	64%	18%	18%

- Interesting presentation, could have said a bit more about the importance of compensation, support, set-up budgets in successful hiring.
- We've been pretty successful in this regard. I don't really understand why someone would try to "squeeze" their candidates by giving them a minimal start-up package. Perhaps things are different at Wisconsin-Madison, but here most of the money comes from outside the department. And, we are interested in seeing our candidates succeed, so why would we want to give them insufficient start-up packages?

III. OUTCOMES: GAINED KNOWLEDGE AND RESOURCES THAT PARTICIPANTS WILL APPLY IN THEIR ROLE ON A SEARCH COMMITTEE

- Websites with lists of Ph.D./Scholars with focus on minorities.
- We generally get a lot of applications in our field, but I can see the value in also being proactive to solicit applications.
- Affirmative action recruiting needs to be active recruiting.
- Women candidates may be subjected to unconscious, unfair presumptions.
- Let committee members know what is expected of them and establish ground rules.
- Discuss research on assumptions and biases and minimize their influence on evaluation of candidates.

- Ensure that every candidate interviewed in camps is respected and treated well during their visit.
- Effective process.
- No pre-judgment/stereotyping on race/gender.
- No double standards in any assessment.
- Giving due credit for candidate research accomplishments on merit.

IV. SUGGESTIONS AND RECOMMENDATIONS GIVEN BY SURVEY RESPONDENTS ABOUT THE WORKSHOP

A. Improving the workshop experience (5 responses)

- Scheduling interviews for the candidates.
- The booklet from Wisconsin is useful, but I think it would have been better to also spend more time before the workshop to understand the difference between how things work here and there. For instance, the open meetings laws are obviously quite different.
- The discussion of legal issues was also interesting. It should have been included in the survey.
- Could have been a little shorter.
- In our case attendance would have been better if the workshop was on campus. It was much too long for most of the people, and some thought it could be condensed to 2 – 2 1/2 hours.

B. Topics that participants hoped would be covered in the workshop, yet were not (3 responses)

- The booming population of Asian-born new Ph.D.s coming through doctoral programs in engineering and the sciences.
- There wasn't anything left out.
- Can't think of anything at the moment.

C. Would you recommend this workshop to others?

Ninety-one percent of survey respondents reported they would recommend the workshop to others. Their comments regarding this question follow:
- I think it is more appropriate for Search Committee Chairs rather than the whole search committee.
- Reviewed scientific studies in a collegial atmosphere.
- I truly learned and enjoyed the workshop. Organizers were very well prepared, respectful and caring!
- Most people will benefit from its clarity and relevance.
- It really was useful.

Nine percent said they would *not* recommend this workshop to others.
No comments.

V. SUGGESTIONS FOR ONGOING IMPROVEMENT OF HIRING PRACTICES AT WAYNE STATE UNIVERSITY

A. Suggestions for improving the effectiveness of efforts to recruit and hire a diverse and excellent faculty (5 responses)

- Work hard to insure that women and members of other underrepresented groups presently on the faculty succeed in their careers at WSU.
- We have to think of out-of-the-box approaches. Many traditional fields are stuck in rigid approaches.
- Get all that would be involved in searches to at least see a video of this course.
- Use some of the available resources for recruiting in addition to advertisements in appropriate journals.
- Actively go after identified excellent individuals.

B. Recommendations for providing ongoing training and education to search committee members (4 responses)

- Get women (and African-Americans where possible) on the search committees.
- Workshops such as this one should be offered in every College of the University.
- Those of us from [a specific] department hope to run a workshop for our "people."
- ESCALATE has in mind to organize a workshop for the Engineering and one for CLAS people.

VI. GENERAL COMMENTS

- I wasn't really sure what to expect. It was much better than I thought it might be. Sometimes these workshops get to be a bit strange. I'm glad that this workshop focused on giving us useful information and not on assuming we are not all on the same page already. I think that is more constructive, but I think you also already know that.
- I found the Workshop useful and feel that many faculty should be exposed to these initiatives.

Searching for Excellence and Diversity: A Workshop for Search Committees
Presented at Wayne State University

1

Your title or role on your campus:

2

Are you currently serving on a search committee, or do you expect to be doing so within the next year?

[YES] [NO]

If you answered yes, please tell us what your role is, or what you expect it to be.

3

Please rate the value of each of the following aspects of the workshop using the scale from 1-3. Also, feel free to include additional comments about the presentation or small-group discussions:

1	2	3	
Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend

Introduction (With remarks by Steve Calkins and Amy Wendt)

[1]   [2]   [3]   [ ]

Comments:

Element #1: Running an Effective and Efficient Search Committee
(Presented by Amy Wendt, Sean Fitzgerald, and Bob Arking)

|1| |2| |3| | |

Comments:

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[                                    ▲]
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Element #2: Actively Recruiting an Excellent and Diverse Pool of Candidates (Presented by Eve Fine and Jeannie Jackson)

|1| |2| |3| | |

Comments:

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Element #3: Evaluating the Pool of Applicants (Presented by Amy Wendt)

|1| |2| |3| | |

Comments:

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Element #4: Ensuring a Fair and Thorough Review of Candidates (Presented by Eve Fine)

|1| |2| |3| | |

Comments:

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[                                    ▲]
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Element #5: Developing and Implementing an Effective Interview Process (Presented by Eve Fine)

|1| |2| |3| | |

Comments:

[ ]

Element #6: Successfully Hiring Your Selected Candidate
(Presented by Amy Wendt)

[1]   [2]   [3]   [ ]

Comments:

[ ]

4

Please identify up to three things that you gained at this workshop and will apply in your role as Chair or as a member of a search committee:

[ ]

5

Please provide us with ideas or suggestions that would have improved your experience in this workshop:

[ ]

6

What topics did you hope would be covered in this workshop, yet were not?

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7

Please provide an overall rating for this session.

Not at all Useful	Somewhat Useful	Very Useful
1	**2**	**3**

8

How did you hear about this workshop?

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└──────────────────────────────┘
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9
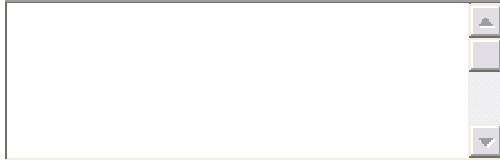
Would you recommend this workshop to others?

YES　**NO**

Why or why not?

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10

Do you have any suggestions regarding how Wayne State University could improve the effectiveness of their efforts to recruit and hire a diverse and excellent faculty?

[   ]

11

Do you have any advice or recommendations for providing ongoing training and education to Wayne State University search committee members?

[   ]

12

Any other comments?

[   ]

Please click on the "SUBMIT" arrow below. You will know that your results have been recorded if you see WISELI's website on *Training for Hiring Committees*. Feel free to browse through these resources. Thank you for completing this survey!

SUBMIT

WISELI Research/Evaluation Report:

Benting, Deveny; Christien Maidl Pribbenow, and Jennifer Sheridan. April 2008. "Evaluation of the Vilas Life Cycle Professorships Program."

Evaluation of the Vilas Life Cycle Professorships Program
Deveny Benting, Jennifer Sheridan, and Christine Maidl Pribbenow
April 14, 2008

This report details the process and outcomes for the Vilas Life Cycle Professorship (VLCP) program at the University of Wisconsin-Madison, funded by the Estate of William F. Vilas. The report is presented in three sections to the Vilas Trustees and the Office of the Provost:

> **Section I:** Administrative details of the program.
> **Section II:** The experiences of the recipients of Vilas Life Cycle Professorships.
> **Section III:** Research progress of the recipients (2006/07 and 2007/08 cohorts).

The public will have access to only Sections I and II.

Section I: Administrative Details

The Vilas Life Cycle Professorship (VLCP) program is administered by the Women in Science & Engineering Leadership Institute (WISELI), as authorized by the Office of the Provost. The Vilas Trustees generously awarded $372,000 for the program in 2007, a 20% increase over the 2006 funding level. All faculty and permanent principal investigators, regardless of divisional affiliation, are eligible for these funds. Per the stipulations of the Estate, no Vilas funds are to be used for the recipient's salary and individual awards are not to exceed $30,000. In addition, all awardees are vetted with the Office of the Provost prior to establishing an award in order to ensure that each recipient is in good standing with the University.

WISELI has enlisted the following faculty/staff to read applications and make funding decisions:

- **Jennifer Sheridan**. An assistant scientist and a sociologist by training, Dr. Sheridan represents the social studies division. Dr. Sheridan has administered the original Life Cycle Research Grant (LCRG) program since its inception, as well as serving on the review panel from the beginning.
- **Amy Wendt**. A professor in the Electrical and Computer Engineering Department, Dr. Wendt represents the physical sciences division. Dr. Wendt has served on the review panel of the former LCRG program since its inception.
- **Jane Zuengler**. Dr. Zuengler is a professor of English, and represents the arts & humanities division. Dr. Zuengler replaced Dr. Cecilia Ford on the review panel.
- **Nancy Mathews**. Dr. Mathews is an Associate Professor in the Gaylord Nelson Institute for Environmental Studies, and represents the biological sciences division. Dr. Mathews is herself a former recipient of the original LCRG program.

Because flexibility is of utmost importance to faculty who are experiencing life crises, we established three deadlines for applications for the Vilas Life Cycle Professorship program for 2007/08. Due to the urgent nature of the proposals we received in Rounds 1 and 2, we canceled the 3rd (December) round of awards, as the funds were all allocated.

- **Round 1.** Deadline June 1, 2007. Applications received: 9. Total amount requested: $248,500. Applications funded: 6. Total amount awarded: $125,643.
- **Round 2.** Deadline September 28, 2007. Applications received: 10. Total amount requested: $236,316. Applications funded: 5 (with 2 applications deferred to next year). Total amount awarded: $115,561 ($43,990 of this sum will be spent in the 2008/09 academic year should the Estate fund another year of awards).

- **SUMMARY, 2007/08:** Applications received: 19. Total amount requested: $484,816. Applications funded: 11. Total amount awarded: $241,204 ($43,990 of this sum will be spent in the 2008/09 academic year should the Estate fund another year of awards).

Demographically, Vilas Life Cycle Professorship applicants and recipients are very diverse:

	Applicants	**Recipients**
Gender		
Female	15	10
Male	4	1
Race/Ethnicity*		
Faculty of Color	6	4
Majority Faculty	13	7
Title		
Assistant Professor	9	6
Associate Professor	4	3
Professor	6	2
Permanent PI/Academic Staff	0	0
Division		
Biological Sciences	8	5
Physical Sciences	1	0
Social Studies	6	6
Arts & Humanities	4	0

* Faculty of Color are those whose "heritage code" is listed as Black, Asian, Native American, or Hispanic in University records. Majority Faculty are listed as "Other".

New Issues Arising in 2007. The large number of funded applications from 2006/07 depleted this year's funds faster than we anticipated. Thus, we were unable to fund all of the worthy applications in 2007/08, and in addition we canceled the December round of competition. These actions should allow us to stay on budget for 2008/09, as very little of the 2008/09 budget was allocated due to the December cancellation. If the number of faculty in need causes us to spend faster than expected again in 2008, we may have to permanently cancel the December round of awards, or request another budget increase.

Section II: Experiences of Vilas Life Cycle Professors

Vilas Life Cycle Professorship (VLCP) recipients were very positive about the program and grateful to receive support during a difficult and critical time in their lives. They came from a wide variety of fields of study, and had a range of complicated events that negatively affected their personal and professional lives. Receiving a Vilas Life Cycle Professorship significantly improved their various situations, and most reported a positive outcome that would not have been possible without the extra funds the grant provided. This evaluation highlights the recipients' experiences with the Vilas Life Cycle Professorship program.

The VLCP program helps people maintain career success and productivity
The most commonly reported outcome of receiving a Vilas Life Cycle Professorship was its effect on the recipients' career trajectories. Particularly, it allowed them to keep up productivity or "get back on track" when a personal crisis threatened to derail their careers.

James[1] explains his situation:

> The program was very helpful to me. It allowed for me to continue my research while I did not have the time and will to write grant proposals. Eventually, I got more grant funding from NSF.

Margaret describes a similar experience:

> The grant supported some [research activities] that I would not otherwise have been able to accomplish. I feel that my research trajectory is back on track.

Richard also benefited greatly from the VLCP support and the continued operation of his lab:

> Because of the grant, we were able to continue functioning, which allowed us to continue publishing at a crucial time in the research program of our laboratory. . . Being able to maintain our research program allowed us to have sufficient preliminary data to submit competitive grant applications, which led to [two major] NIH [grants].

Respondents often mentioned that had they not received the funding, they would have suffered a series of setbacks in a sort of "snowball effect," damaging their careers, and their students', tremendously. Richard comments:

> The events occurred at a crucial time in which our research investment was starting to pay off. Having to seriously reduce my research operations at that time would have resulted in a significant loss of our research potential. Without the grant we would have had to dismiss a PhD student, which would have seriously hurt her career in biomedical research, seriously affected the lab morale, and jeopardized our ability to continue functioning to produce scientific reports and obtain additional funding. . . . I was also at the time coming up for tenure and having to dismiss PhD students because of lack of funding could have potentially triggered a series of perceptions where I may have not been offered tenure (I did get tenure).

Margaret and Linda explain what would have happened to their programs had they not received funding:

> Certainly, my research would have fallen even farther behind than it already was. I doubt I would have been able to complete enough new data collection to produce the 5+ manuscripts that have already been published/accepted for publication, and I certainly would not have felt the intellectual freedom to explore new theoretical paths.

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> I probably would not have been able to get much done beyond teaching my courses. I would not have received the additional funding from [funding institution], not been able to return to my [research] project, and not compiled data for [a different] project.

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[1] Names have been changed to protect individuals' identities.

Some respondents were in danger of leaving UW-Madison. Patricia explains that in the absence of VLCP support, she might have moved out-of-state:

> Without the extra help made possible by this grant, I would probably have explored possibilities for either an unpaid leave of absence or a move to a job closer to my [family] in [another state]. The latter option was really starting to look like the best thing for me to do at the time, even though it would have almost definitely meant a downward move in my career trajectory.

Linda describes how she might have lost her job:

> Without the ability to return to research I would have lost my job because I am an untenured assistant professor. The funds helped me to return to research, which is the only possible way that I could hope to ever keep my job.

As described above, the Vilas Life Cycle Professorship program provided support to faculty at critical junctures in their career – times when they were untenured or between major grants and were unsure about what the future held for their research programs. Happily, the extra support sometimes did even more than keeping them afloat; some respondents mentioned that the grant enabled them to explore new areas of research that significantly *advanced* their careers. Patricia, Margaret, and Linda relate their experiences:

> During the time I had a PA funded by this program, a colleague offered me the opportunity to take on a completely new research project, using a not-yet-released public dataset, and complete with assistance from one of his graduate students. I would never have even considered taking this on were it not for having the Project Assistant supported by the Vilas Award helping me with my primary research agenda during this period. With a semblance of balance restored to my personal/professional life, I agreed to take the new project on. It was a great opportunity to pursue a new line of research that capitalized on my previous research experience while allowing me to explore a new direction for my research program.

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> I was able to train a new cohort of graduate and undergraduate students to work on another and radically different lab project and appreciably expand data collection and analysis, which has already resulted in two papers in edited volumes, three forthcoming in edited volumes, and will lead to papers in peer-reviewed journals and a comprehensive monograph. Surprising to me, the work accomplished during the time of the Vilas Life Cycle laid the foundation of a new theoretical framework to my research that I am now pursuing.

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> These funds and [help from my research assistant] allowed me to establish/reestablish three projects. I worked on a new research agenda . . . an area of research in which I have become more interested [recently], and which I had not worked on since graduate school. It is also an area that is more likely to receive funding from external agencies in the future.

Many summed up the VLCP as providing a short-term boost that created a long-term outcome. Patricia's comment regarding this phenomenon follows:

I think this program represents precisely the kind of institutional response to a major life event that is most needed-- enough support to make sure that faculty can get through the acute phase of distress without sustaining major collateral damage to their longer-term career trajectories.

And Elizabeth provides a clear example:

With the support of the Vilas Life Cycle Grant I was able to fund one student for one year, during which time she obtained data that clinched an NIH grant that will support my lab for five years.

The Vilas Life Cycle Professorship program benefits others, too. As seen in the comments above, one very common way to use the VLCP funds was to hire a research assistant. They often performed basic research tasks that the award recipients were unable to do because of what was happening in their personal lives. In this arrangement, VLCP recipients got the help they needed, while the research assistants gained valuable skills and knowledge to advance them in their own careers. Some respondents provided examples of the VLCP award's direct influence. Michael and Elizabeth explain:

[The VLCP] also helps one of my students to focus on his research to finish his PhD thesis.

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If I had not received the [VLCP] grant, this student would probably have TAed (again!), which would have severely limited her productivity and possibly not enabled her to collect the data that she did.

The Vilas Life Cycle Professorship program is very valuable
All respondents commented that the VLCP was a very valuable program. Some of their comments follow:

➢ The best.
➢ I appreciate this program a lot.
➢ Extremely high [value].
➢ Very high [value] . . . it fills a need that is not filled by other grants.
➢ Everyone I have spoken to thinks it is a great idea.
➢ Only positive [outcomes].

Many talked about it in relation to other major programs on campus that provide valuable support. Linda, Patricia, and Elizabeth provide the following comments:

I think this program may be even more valuable than the graduate school research competitions.

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I would put it on the top of any list. Certainly rivaling the Graduate School Fall Competition, which has been the other major program that has made a tremendous difference for my trajectory since arriving on campus.

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I think it's a fantastic opportunity for those of us facing life cycle-related challenges to get a break. Stoppage of the tenure clock for women giving birth is nice but it doesn't support students, fund the lab, get more papers out or do any of the things that actually help one achieve tenure. Financial

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support can do all those things and thus can have a much larger impact on career success and satisfaction, which are necessary for retention.

Margaret talks about the program's value to the campus in more general terms:

> I think the value of the Vilas Life Cycle program is higher than almost any other campus-based research support. All of the campus-based research support programs of which I am aware are, including the Vilas Life Cycle, highly competitive. However, with the other programs, a gap in productivity might negatively impact the evaluation of the application, or a proposal to complete a project that was already funded through internal sources is likely to be turned down. The Vilas Life Cycle program provides an invaluable service for people whose productivity and ability to complete projects in a timely fashion have been negatively affected by life experiences outside the norm.

Some respondents mentioned how personal issues and work activities intertwine, and that the grant greatly improved both aspects of their lives. Patricia and Elizabeth explain:

> The award enabled me to hire a graduate student research assistant, which made it possible for me to continue advancing in my research while keeping up with daily obligations and coping with the acute sources of distress at home. As a result, when the home situation improved, I was able to quickly get back into stride and get papers written and submitted to journals. . . The funds alleviated the sense of immediate crisis enough to give me a better perspective on my situation.

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> It enabled me to enjoy my time at home . . . and not be resentful of work.

As a result of receiving the Vilas Life Cycle Professorship support, Patricia talked about getting a sense that UW-Madison really cares about her as a person, and in turn she feels a renewed sense of commitment to the institution:

> This program generates a feeling of commitment to this institution, and a desire and willingness to give back, to help ensure that others benefit from similar institutional support in the future. . . I have told others about the grant in the context of explaining why I think UW-Madison is such an exceptional institution. For example, I have mentioned it to job candidates as an illustration of how this institution takes seriously life cycle issues and is genuinely humane and supportive in not just accommodating but actively supporting faculty through periods where personal and professional life pressures may be unnaturally intense or exacerbated by unforeseen health issues. The distinction between "accommodation" and "support" that is embodied in this program is crucial, and it really sets it apart from the kinds of institutional responses to life cycle issues that are the current norm in American universities (not to mention other kinds of workplaces).

The process of applying for and receiving the grant was a positive experience
Most respondents who discussed the process of applying for and receiving the grant reported that it was simple. Their various comments follow:

➢ The application is extremely flexible so that it can handle a wide variety of life events as well as the wide variety in disciplines and research areas.
➢ Easy, and absolutely the best administrators I have ever come across in my three years in the university.
➢ It is quite good. Jennifer Sheridan is really helpful.
➢ The notification process was prompt, respectful, and flexible.

The exception to the mostly positive comments came when respondents mentioned some difficulty related to the "statement of need," due to that aspect of the process being wholly different than the typical approach to requesting research funds, as well as the sensitive and deeply personal nature of the situations that caused the need for funds. Margaret provides the following comment, with a positive note toward the end:

> The application process was straightforward, but very painful and difficult to complete because it involved writing about hurtful and difficult personal experiences, and forced me to objectively confront and evaluate the negative impact on my career of [my situation]. Although difficult to write, I found that the process helped me to realize that I wasn't a victim, and that I could jump start my research program again. I also knew that the proposal would be read and evaluated in the strictest confidence.

Patricia discusses how she had difficulty requesting funds based on need, especially when she had some doubt about whether she actually "deserved" the help. She explains that, looking back, applying for the VLCP was unquestionably the right decision:

> Were it not for the extenuating circumstances of my situation, I would not have had the nerve to apply for this award. I barely had the nerve to apply as it was – I felt I was not deserving of help . . . and that even the extenuating circumstances my situation were not unusual enough to warrant asking for help. Even after writing the statement of need, I struggled until the last minute over whether to submit the application. I almost didn't submit it. In retrospect, I can see that I really did need help, and that without it I would have made (and rationalized) poor decisions about my career.

Suggestions

Finally, respondents gave suggestions for improving the VLCP program in the following areas:

1. Improve the usefulness of the funds
   - The funds were useful, but they were also designed solely for research. It would be helpful to acknowledge and figure out a way to also have some of the funds used for travel grants for minor children and/or their caretaker. The cost of finding care for my [child], and for arranging travel around his/her care, was really difficult. I wish I could have used some of my travel money to either bring him/her with me, and care for him/her myself, or towards funding care for him/her while I continued my research.
   - This grant is a great way to help faculty get back to research during major life events. It would be great to reduce their teaching/research load without financial penalty.
   - First, flexibility in work assignment is hugely beneficial. For example, because of the nature of my [life event], it was very difficult for me to lecture . . . for about a year.

2. Publicize the VLCP's existence to more people in need
   - Grants such as these are excellent means to help people. Increased awareness for these possibilities amongst departmental chairs and heads of faculty mentoring committees would help.

3. Provide more help for "routine" childbirth/adoption
   - While understanding that limited resources must make a higher threshold for application for a Life Cycle Award necessary, ideally "routine" childbirth/adoption would also make one eligible for support. I suspect that many junior faculty who undergo the transition to parenthood would benefit tremendously from even limited support, but would not have the nerve to ask for it. If the threshold for applying were lowered to include "routine"

pregnancies and adoptions before tenure, or if this program could be linked in some way to the UW's institutional response to routine childbirth or adoption before tenure, it would be a tremendous accomplishment for this university.

➢ It should provide paid leave for childbirth and adoption for the primary caregivers.

Section III: Research Progress of Vilas Life Cycle Professors

Section III has been removed to protect the confidentiality of the VLCP recipients.

WISELI Research/Evaluation Report:

Pribbenow, Christine Maidl. April 2008. "Results of the 2006-07 Study of Faculty Attrition at the UW-Madison."

EXECUTIVE SUMMARY

Results of the 2006-2007
Study of Faculty Attrition at UW-Madison

Christine Maidl Pribbenow, Ph.D.
WISELI, UW-Madison
April 17, 2008

BACKGROUND

In the spring semester of 2007, Vice Provost Laurie Beth Clark approached the WISELI staff about conducting a research study of faculty attrition at UW-Madison. This request came on the heels of a report disseminated in 2006 about why female faculty in scientific and engineering fields leave campus.[i] Using similar methodology, the following describes a study of both female and male faculty members from across campus who left between the fall of 2006 and summer of 2007.

METHODOLOGY

The names of 48 faculty members who left UW-Madison between 9/1/06 and 8/31/07 were provided to me in the fall of 2007. From these names, 42 former faculty were eligible[ii] for participation in the study; contact information was found for 35 of them. An email invitation, which described the study and included a link to the Provost's memo about the study,[iii] was sent to 31 former faculty members; mailed invitations were sent to the other four faculty. From these invitations 16 individuals agreed to be interviewed for a participation rate of 46%.

Each participant was sent or emailed an Informed Consent[iv] form that they signed and returned. I conducted all interviews between November 19, 2007 and February 14, 2008 using a standardized interview protocol.[v] All participants agreed to be audiotaped. The taped interviews were transcribed, resulting in an electronic version of the text, which was inserted into ATLAS.ti—a software program used to organize, sort and code qualitative data. The interview data was then analyzed using traditional qualitative methods—portions of the text were coded, aggregated, and summarized into overarching themes. I also mapped out each individual's path at UW-Madison and noted the reasons why they left, weighting these reasons based on their relative importance to each interviewee (e.g., primary reason, secondary reason). This process of investigation allowed me to identify crucial themes and underlying areas of concern in faculty's decisions to leave.

FINDINGS

It is impossible to capture all that was discussed in the approximately twelve hours spent with the faculty participants and the corresponding analyses of the data. Not surprisingly, each participant's situation was different, yet a number of themes emerged to provide a greater understanding of the factors that affect faculty members' decisions to leave UW-Madison. Once identified, the themes were categorized and weighted based on whether they were primary reasons or secondary factors for the participants. Underlying categories were used to explicate the overarching themes. From this process, the following emerged as critical areas of concern:

➢ **Issues with Research and Tenure,** *as reflected in*
  o Research not Supported or Understood
  o Positions Misaligned with Tenure Criteria
  o Ineffective Mentoring

➢ **Economic Issues,** *as reflected in*
  o The Financial Relationship between the State and the University
  o Effects on Faculty, Staff and Students
  o Lack of Raises and Salary Compression

- ➢ **University and Departmental Climate Issues,** *as reflected in*
  - o Experiencing Discrimination, Harassment and other Behaviors
  - o Lack of Recognition and Overall Morale

- ➢ **Balancing Professional and Personal Lives,** *as reflected in*
  - o Respecting the Needs of Family
  - o Consideration of the Faculty Lifestyle

RECOMMENDATIONS

Not every faculty member felt that 100% retention should be the goal of UW-Madison administration. Four of the sixteen participants (25%) described how the perfect combination of opportunity and dissatisfaction caused them to leave, and had no regrets about doing so. The other twelve cited a myriad of personal and professional circumstances that led to their attrition. Despite any individual differences seen among these faculty members, general suggestions from the participants themselves are essential for a dialogue about changing the traditions, practices and policies at the UW-Madison to retain a greater number of faculty members.

- ➢ **Provide Assistant Professors with an environment that encourages them and leads to their success.**
  - o Delineate the criteria by which Assistant Professors will be evaluated for tenure.
  - o Make sure that new faculty's job positions are aligned with the criteria that will be used to evaluate them, especially when given responsibilities outside the norm or when they have joint appointments/departments.
  - o Ensure that new faculty's research agenda at the time of hire will lead to tenure.
  - o Provide new faculty with mentors and committees that are going to enhance their progress, not impede it.
  - o Decrease their teaching and service responsibilities as a means to jumpstart and sustain their research progress at critical points in their pre-tenure years.
  - o Communicate with divisional committees about cutting-edge research, methodologies, and areas of study to inform members of changes and growth in disciplines.

- ➢ **Provide Associate and Full Professors with an environment that encourages their retention and success.**
  - o Develop and put into practice creative incentives to support faculty, such as: nominating faculty for awards, providing course buy-outs, providing extra TA or RA support during critical times, recognizing them publicly, allowing them a sabbatical leave, decreasing service or other departmental responsibilities.
  - o Provide raises to ensure salary equity within departments and as a preventive attrition measure.
  - o Treat faculty work equally, despite differences in research, teaching, service and outreach/extension responsibilities.
  - o Highlight the local, national, and international success of faculty.

➢ **Address University and Department Climate Issues**
  o Ensure that sexual harassment and discrimination are handled appropriately and quickly. Provide a safe environment for the victims.
  o Understand the essential role that department chairs play in creating successful environments for faculty. Ensure that department chairs are capable of performing this critical position and are effective once in the position.

➢ **Understand the Important Need for Balance in the Professional and Personal Lives of Faculty**
  o Create and communicate dual-career programs that are available to new and continuing faculty.
  o Identify conventions, practices and policies that privilege traditional family norms and values within the University or departments. Ensure that no faculty members are isolated or excluded due to these practices.

Fourteen of the participants in this study knew they were unhappy or were considering leaving for at least a year before doing so. On average, the length between consideration and leaving was 2.35 years with a range from one to four years. The individuals who agreed to participate hoped that their stories would initiate change and perhaps help faculty who are considering leaving. The recommendations above could easily be implemented during any of those critical years for current or future faculty who are considering an exodus, which is what the participants hope for.

ENDNOTES

[i] O'Connell, K., Pribbenow, C.M., & Benting, D. (2006). *The climate at the University of Wisconsin – Madison: Begins sunny and warm, ends chilly.* Madison, WI: The Women in Science and Engineering Leadership Institute.
[ii] Six faculty were not contacted at the request of the Provost's office.
[iii] http://www.provost.wisc.edu/memos/exit.html
[iv] This study was approved by the Social & Behavioral Sciences Institutional Review Board, **SE-2007-0242.**
[v] Interview protocol found here: http://www.provost.wisc.edu/docs/fac_exit_attach.pdf

Results of the 2006-2007
Study of Faculty Attrition at UW-Madison

Christine Maidl Pribbenow, Ph.D.
WISELI, UW-Madison
April 17, 2008

**Report Prepared for the Provost's Office
at UW-Madison**

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Population and Sample

Approximately 3% of all UW-Madison faculty members resigned (excludes retirements) between September 1, 2006 and August 31, 2007. The characteristics of this group of "leavers" was broadly similar to those of the study participants (Table 1). Both the gender and ethnic/racial compositions and the mix of tenured and untenured faculty were quite similar in both groups. The group of study participants included more associate professors than the leaver group overall. Also the group of participants did not include any physical sciences faculty.

Both the leaver and participant groups differ somewhat from the UW-Madison faculty population overall. As depicted in Table 1,the group of faculty who left the UW-Madison during the 2006-2007 academic year included somewhat more women, ethnic/racial minorities, and junior faculty than the faculty population overall.

		Study Participants	All Who Resigned	All UW Faculty[vi]
Gender	**Male**	9 (56%)	31 (65%)	1603 (72%)
	Female	7 (44%)	17 (35%)	617 (28%)

Racial/Ethnic Distinctions	Faculty of Color	4 (25%)	11 (23%)	335 (15%)
Tenured at UW-Madison	Yes	9 (56%)	23 (48%)	1692 (76%)
	No	7 (44%)	25 (52%)	528 (24%)
Rank	Assistant Professor	7 (44%)	25 (52%)	528 (24%)
	Associate Professor	6 (38%)	11 (23%)	357 (16%)
	Full Professor	3 (19%)	12 (25%)	1335 (60%)
Division[vii]	Biological	7 (44%)	16 (33%)	766 (35%)
	Physical	0 (0%)	5 (10%)	460 (21%)
	Social	8 (50%)	23 (48%)	590 (27%)
	Humanities	1 (6%)	4 (8%)	370 (17%)

Table 1: Demographics of participants and all faculty who left the university (2006-2007) as compared to all UW-Madison faculty (2005-2006).

More detailed information on the career progression of the study participants and the group of "leavers" was also collected. Comparing the two groups, one should note that the study participants tended to include fewer advanced faculty (those with senior standing, those with very large amounts of grant resources) than the group of leavers overall (Table 2). Also, the group of study participants included more faculty who had left academe entirely than the group of leavers overall.

The data presented in Table 2 is also revealing of the career trajectories of faculty who left the UW-Madison. The vast majority of faculty who left the university in 2006-2007 had earned their doctoral or other terminal degree at major research universities, or UW-Madison "peers." Most then joined the faculty at UW-Madison shortly after completing their degree and went on to bring in substantial amounts of extramural support to fund their research activities. More often than not, faculty who left UW-Madison did so to take a tenured or tenure-track position at another major research university. Again, the universities faculty moved to were often considered to be peer institutions.

		Study Participants	All Who Resigned
Years at UW-Madison	Mean	6.94	8.34
	Standard deviation	*0.89*	*0.78*
Extramural support ($ per year)[viii]	Mean	$44,504	$68,761[ix]
	Standard deviation	*$58,940*	*$90,360*
Year terminal degree earned	Mean	1996	1995
	Standard deviation	*1.5*	*1.0*
Carnegie classification[x] of graduate institution	Research U/ Very High	13 (81%)	35 (73%)

	Research U/ High	1 (6%)	5 (10%)
	Specialty/Medical	2 (13%)	2 (4%)
	Not Classified[xi]	0 (0%)	6 (13%)
Remain on tenure track?	Yes	9 (56%)	28 (70%)
	No	7 (44%)	12 (30%)
Current title or position	Assistant Professor	2 (13%)	8 (17%)
	Associate Professor	3 (19%)	7 (15%)
	Full Professor	4 (25%)	13 (27%)
	Academic Staff	2 (13%)	2 (4%)
	Government	2 (13%)	2 (4%)
	Industry/ Private Practice	3 (19%)	5 (10%)
	Unknown	0 (0%)	8 (17%)
Carnegie classification of current institution[xii]	Research U/ Very High	9 (90%)	19 (83%)
	Doctoral Research University	0 (0%)	2 (9%)
	Specialty/Medical	1 (10%)	1 (4%)
	Baccalaureate/ Arts & Sciences	0 (0%)	1 (4%)

Table 2: Career progression of study participants and all faculty who left UW-Madison (2006-2007).

FINDINGS

It is impossible to capture all that was discussed in the approximately twelve hours spent with the faculty participants and the corresponding analyses of the data. Not surprisingly, each participant's situation was different, yet a number of themes emerged to provide a greater understanding of the factors that affect faculty members' decisions to leave UW-Madison. Once identified, the themes were categorized and weighted based on whether they were primary reasons or secondary factors for the participants. Underlying categories were used to explicate the overarching themes. From this process, the following emerged as critical areas of concern:

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    - o Research not Supported or Understood
    - o Positions Misaligned with Tenure Criteria
    - o Ineffective Mentoring

- ➢ **Economic Issues,** *as reflected in*
  - o The Financial Relationship between the State and the University
  - o Effects on Faculty, Staff and Students
  - o Lack of Raises and Salary Compression

- ➢ **University and Departmental Climate Issues,** *as reflected in*
  - o Experiencing Discrimination, Harassment and other Behaviors
  - o Lack of Recognition and Overall Morale

- ➢ **Balancing Professional and Personal Lives,** *as reflected in*
  - o Respecting the Needs of Family
  - o Consideration of the Faculty Lifestyle

Issues with Research and Tenure

Half of the participants identified issues with their research program and/or issues with tenure as primary reasons or secondary factors in their decisions to leave (five identified this as a primary factor; two as secondary). This theme, not surprisingly, dominated the discussions of a majority of the faculty who were assistant professors during their time at UW (two were immediately tenured when moving to their new institutions). On average, the assistant professors who left the university due to tenure issues were on campus for approximately six years.

Once again, each of the participant's stories is different. Paul[xiii] overheard his mentoring committee discuss him at a meeting during his first year, in which they said that he was not going to get tenure. A number of issues plagued him (as described below) and he indeed was not tenured. He chose to leave in his sixth year before going up for review. Both Erik and Cathy had heavy teaching loads and were directors of undergraduate programs, which affected the amount of research they were able to conduct in 6+ years. In the first meeting of Maria's mentoring committee, a member said that she would not get tenure with the research she conducted. She found this perplexing given that she had presented this research during the hiring process. She explained this meeting:

> *At my first mentoring committee meeting, I was told that my research is not valuable. And [this type of research] is not something that they would encourage me to do because it wouldn't lead to my tenure at the university.*
> Interviewer: So they hired you knowing …
> *That I did this type of research before I came [here]?! [laughing]*
> Interviewer: So you came here with the understanding that you would continue this research?
> *Yeah!*

Commonalities found between these stories and the ones described next, include research not being supported and often misunderstood, tenure criteria that were misaligned with position descriptions, and ineffective mentors and mentoring committees.

Paul, Carolyn and Luke described how their *research was generally not supported* during their years at the University, which for them, created feelings of professional isolation. Paul was one of two tenure-track faculty members in his department conducting "basic science" research amongst fifteen other departmental members who were mostly clinical faculty. Paul described his experience

I did get initial financial support from the department in terms of start-up funding, but after that, support was mostly limited to faculty that were in [practitioner research]… it didn't seem like they quite understood some of the challenges that researchers face, the types of support that I needed. Not necessarily the monetary support, although that's important. But there's a concern about lack of focus on the basic science aspect of the department. So, at times I felt isolated…I just didn't have the type of colleagues that I could relate to in terms of the type of work I was doing.

Carolyn felt that her research, which she described as "mainstream," was different enough to warrant seeking support outside of campus:

And you know the big [reason I left] was that I didn't have the support for my research that I needed as a junior faculty person… I couldn't find mentorship for grants. I couldn't find co-investigators on grants. I had to search outside the university [for mentorship and collaborators] and that's something, particularly junior faculty members, shouldn't be doing.

Luke reported that his feelings of isolation grew when he recognized that his research methodology was beginning to look "different" as compared to others in the department:

I found the department getting less appealing…I was increasingly aware that there was no way that I would be hired in the department right now doing the type of work I do. If I were coming out of grad school, there's no way they would even look at my application just because I don't do the right type of work. And that sort of depressed me.

For faculty with heavy teaching loads, no teaching opportunities, or extensive outreach activities, they found that their *positions and standards for tenure were misaligned.* Erik explained his experience when his service to the State came in conflict with criteria used for tenure in his department:

At almost every other campus in the country where someone's doing this, that person is getting credit towards their extension duties. [The tenure process and criteria] are not rewarding the things that [the University and department] are actually wanting…They didn't even want to acknowledge that maybe they just have a different standard. They just insisted that this was the way the university was. I just kept saying, 'How is that possible?' People get tenure who do very different things, that don't do analytical research whatsoever and they're going to get tenure for scholarly contributions – the metrics are based upon what people say the metrics should be…it's defined by the people in that field. And at some point, the divisional committee wants to know that and be educated about that. They're not, they don't just want to say, we only believe in one model. They want to understand what it is that someone should be contributing in a program area and if they're doing that at a level of excellence then that should be rewarded.

He continued:

But I think there was this real big disconnect with the tenure system in general…The people that are sitting there on divisional committees now for example, got tenure with 2 or 3 journal articles in the same time they're expecting us in the same journals to have 12 or 13…And that's a pretty big disconnect. Because this isn't like inflation. It hasn't gotten necessarily any easier to make good contributions. I'm not saying we should have only had 2 or 3 papers. You know, technology changed our product. I get that, that's fine. But it was really kind of this you know, holier than thou attitude that was quite offensive…. This idea that you

have to do something that we couldn't necessarily do ourselves, because we couldn't even run the stats packages that you're running today.

Paul, who was discussed earlier, had ample time to conduct his research but was not offered teaching opportunities through his department. Yet, he was told that for tenure, he would be evaluated on his teaching.

> *In terms of the university, it would have been helpful to know how the teaching aspect works for people who are not part of an academic department, a basic science department. For those who are not part of a basic science department, we need to know how to meet our teaching requirements or at least provide means for which we'll be successful at our teaching requirement. I was told I was 100% research and so most of my focus was on research. And then I find out later that the teaching activities that I had were not sufficient. Somebody should have told me…this is the way you need to go about making sure that you have enough teaching activity.*

For most of these cases, an *ineffective mentor or mentoring* committees was at the crux of the problem. Paul reflects back on how the negative statement he heard affected him:

> *These are the people that are supposed to mentor me to make tenure in 6 or 7 years. Well for one of them to make a comment that I wasn't going to make tenure… I took that into consideration but it wasn't a driving reason why I did not make tenure….But I thought that was pretty early for someone to start making such comments.*
> Interviewer: So from that point on, that was in the back of your mind?
> *Always been there… I mean I looked at my abilities and not to say that I am self-serving, but I'm a good scientist…I do things and make sure that what I do, I do it well.*

Carolyn's committee quickly dissolved due to a faculty member who caused dissension among the group:

> *They had a mentoring committee for me, which was one of the very appealing aspects when I took the job, that there was this mentoring committee. But then there was somebody on the mentoring committee that should not have been on the mentoring committee. And nobody wanted to…not only should they have protected me against this person, which they didn't, but then they stuck him on my mentoring committee because he basically forced his way on and nobody would stand up to him. And then the mentoring committee completely broke down because nobody wanted to deal with him, nobody wanted to meet with him. So it went from trying to schedule mentoring meetings to when he couldn't make the meetings to finally just not having meetings.*

Lack of effective mentoring also proved to be detrimental to junior faculty who were not receiving the kind of support they needed to be successful:
> *[Leaving] is very much a direct result of the lack of support. So I think it was really both what I perceived as personal grievances with me, which really kind of questioned if I would get a fair shake for tenure. And then mismanagement of junior faculty to the point of incompetence from the chair. To really set us all up for failure….[The department] would keep pushing us to see just how much we could bleed for the department and still get tenure. We all felt that way at various times. That they are going to keep pushing us and piling more on until we just what? Break?*

Sam also described being "used up" and feeling tired all of the time with the amount of service work he was required to do. He noted that no one took any action to help him when he pointed this out.

For these faculty members, the natural "breaking point" to end the cycle was when they chose to leave.

Economic Issues

Almost half of the participants discussed the recent financial state of the University and the negative effects that this has had on them professionally and personally. Six cited one or more of the following categories as their primary reason for leaving; one cited this as a secondary factor.

The *financial relationship between the state and the University* was cited as a critical factor for almost half of the participants when making their decision to leave. Ben, described how the "constant budget crisis" had caused a decline in morale for both himself and his department. Cathy noted, "constant budget frustrations…and it seemed like the last probably 5 years [she] was there, it was more on the forefront." Mark concurs and described how his spouse was, "completely set against Madison and just constantly worrying about the financial crises" and how he just got, "really tired of it." Mark noted that he chose to leave for a privately funded institution intentionally to decrease this anxiety.

The faculty participants were acutely aware of the many ways in which scarcity of resources affected others at the University. For example, a few discussed how staff members, both classified and unclassified, were bearing a greater burden of departmental work. In various offices and departments, people were "let go," which meant that staff members had other responsibilities added to their positions. Similar to faculty, they too were not receiving raises.

A few of the participants discussed the inability to attract or retain graduate students as a critical issue. Mark noted:

> *That was one of my biggest complaints about the university. Was that I needed to build a graduate program because that's what the department does. But there was virtually no money to do so… I ended up with a strategy of trying to find diamonds in the rough.*

The faculty who found this to be a concern sought out positions where graduate students and others were supported at an appropriate level and for their full graduate careers.

Brad reflected on how the University has handled the lack of funding and delayed passage of the state budget. He described how these situations affect faculty, especially in regards to salaries:

> *I think Madison as a university has done an extraordinary job with the resources that they've been given… I realize that they were under deep structural constraints in the state, but when I was there they had, I think there was only one year of merit increases. And there were either two years of a freeze and one year of [raises] just across the board. So, by the time I was put up for tenure, my salary was not at all competitive with what new people were getting on the junior faculty market.*

Besides Brad, *lack of salary raises* and in particular, *salary compression* was identified as another concern for many other participants in this study. Salary compression "exists when employees with more organizational seniority and experience receive lower salaries relative to new hires.""[xiv] Several study participants described demoralizing effect of these compensation practices. Brad continues:

> *My starting salary at Wisconsin was $50 even. My salary the year before I was tenured was $54-something. The letter that I got after getting tenured put my salary at $60-something and that same year they made an offer to a new*

assistant professor without competing offers at I think $69 or maybe $70 right. I mean that's 15% less than what you're giving to somebody who's a new Associate. I understand the need to match other people's offers, but when you start giving offers like that to people who don't have competing offers, you're not going to create a particularly favorable attitude among those faculty members who feel like they would have options elsewhere.

Luke had a similar experience:

My department voted to hire new people, they basically had to follow market logic, but of course there was tremendous salary compression for people that had already been hired. So, by the time I came up for tenure, I was already being paid substantially less than some of the first-year, incoming assistant professors…[the department chair] took me in his office and said, 'I want to talk about salary with you.' What's there to talk about? I know what the university's going to do… it's going to give me the minimum possible raise for tenure.

Figure 1, which depicts the average salaries of study participants, all faculty "leavers," and UW-Madison faculty overall, suggests the perception of compression in associate professors' salaries is warranted.
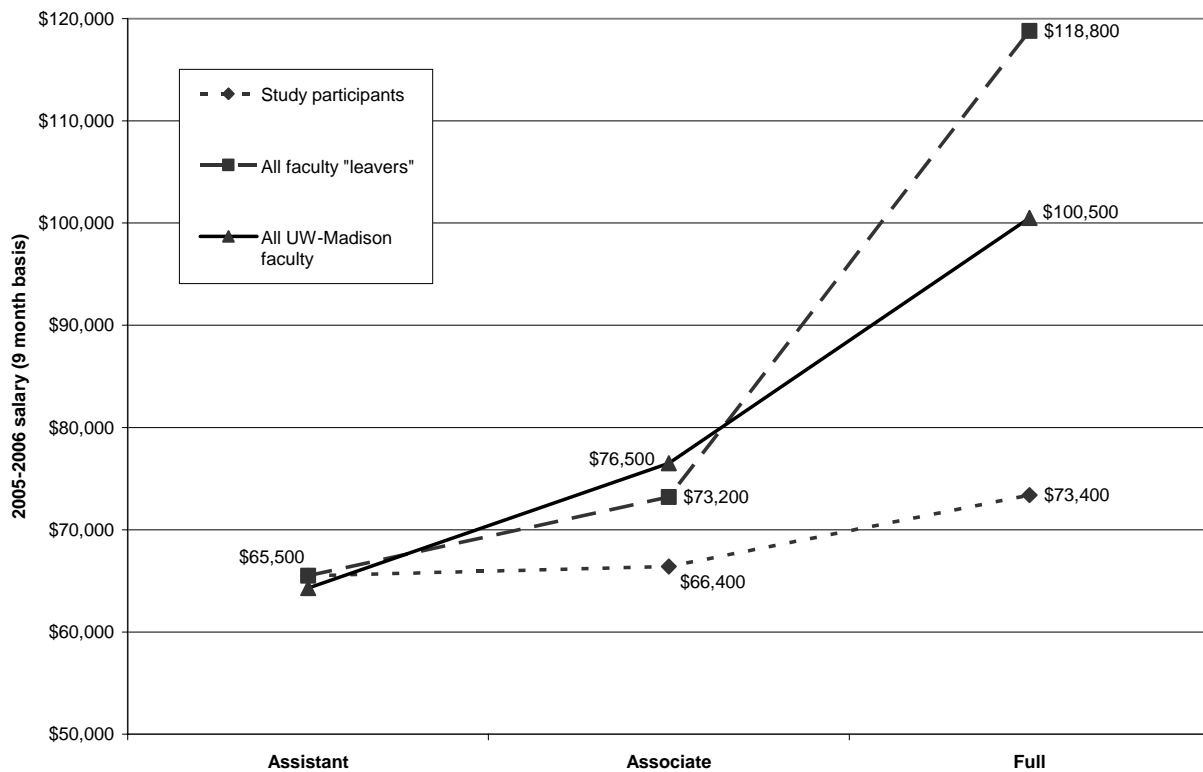
Figure 1: Salary compression among UW-Madison faculty.

Study participants discussed their efforts to address these salary disparities. They consistently reported that their department chair or "common knowledge" within the department informed them that seeking outside offers was *the* means to redress salary compression. Mark built his career at UW-Madison with this in mind:

I realized this less than six months into my time at Wisconsin….The only way to get a market salary after you've been hired, is to get an outside offer….So that I knew, I had a plan quite honestly. That I would take the third year off to finish my book. I would finish my book, get my tenure. And then I would work my damndest to get an outside offer, even before I was ready to leave….It had nothing to do with leaving at the time. And I know there are some departments that actually encourage this…it's encouraged by the way the entire system is set up.

Interviewer: You knew that at some point you were going to do that but at that third year, you weren't interested in leaving?

No.

Interviewer: You were happy?

Yes, before I was truly interested in leaving…And that I was going to have to [seek outside offers] and of course once you do that, the risk of leaving increases even if you didn't think about it.

Brad felt like he was "dared" to apply for other positions:

I don't know what the solution is given Madison's resource problems….you essentially feel like you're dared to go out on the job market. And I think that that's a hard position to dare people to go out on the job market and then not expect them to be enamored of the places where they go interview.

Dawn approached her department after marrying another faculty member. She described what happened when asking for help:

He said there was nothing he could do for me. [My chair] actually told me to go on the market before they could make a retention package for me or a partner hire package for my husband.

Interviewer: He said to go out and get other offers and then he could help you?

Yes, exactly.

Interviewer: And you went and did that and then…

Then the other offers were much better!

She goes on to explain her thoughts when after applying for other positions:

Since I went to Madison, half of my friends left. They could not afford to stay, the lack of raises was awful. The fact that you knew to get a raise you'd have to go on the market meant that when you go on the market you're going to have to sell yourself, which means you're halfway imagining yourself somewhere else anyway. So, the fact there was no such thing as preemptive retention really hurts UW. I know many people would have stayed if they just could have gotten some money. Like, the cost of living's going up a certain amount and your salary is not going up at all…And that's when I got five outside offers. And that's when it was pretty clear I was going to leave.

One faculty member called the policy of seeking outside offers "perverse" and was appalled that it was an accepted practice at the University.

In general, salary issues appear to be of most concern to the associate or full professors who were interviewed, as opposed to the assistant faculty, whose concerns were more likely to be research and tenure-focused. The final two areas described next, *University and Departmental Climate Issues* and *Balancing Professional and Personal Lives*, cut across all faculty levels.

University and Departmental Climate Issues
Half of the participants identified climate issues as either their primary reason for leaving (n=2) or a secondary factor in their decision (n=6). When asked if they would recommend others to apply to their department, half said "No." Similar results were found when they were asked if they would recommend others to apply to UW-Madison—approximately half said, "No." When asked, "In your opinion, is there anything about you personally that may have been a factor in your experience at or decision to leave the UW?" Table 4 shows that for a few, personal attributes did influence their experience negatively.

	Yes
a. Age	3
b. Gender	3
c. Sexual orientation	-
d. Marital status	2
e. Family status/responsibilities	2
f. Race	2
g. Ethnicity	3
h. Disability: Health	1
i. Religion	-
j. Other:	-

Table 3: Number of responses in each category to question regarding personal attributes.

Experiencing discrimination, harassment, and other behaviors was identified by six of the participants as they described behaviors by departmental members or others that made them feel uncomfortable and in extreme cases, in "unsafe" and "stressful" environments. Two faculty listed this as the primary reason that they left the UW. The following quotations explain a number of ways in which negative climate can play a critical role in retention.

Erik, who was located in a primarily female department, described how he and his male colleagues heard male-bashing jokes. Erik also noted that his mentor said she, "did not know how to mentor a male." As seen in previous discussions, lack of quality mentoring did affect his chances for tenure. Once he was told to "get the hell out" of the department, he made his decision to leave. Other male colleagues followed. According to Erik, another faculty said, "that he didn't want to be the only man left."

Dawn provided her perceptions of how women of color feel on campus:

> *Madison is kind of known as a place where if you're a woman of color, you're not going to do well. And it's a terrible thing, but the way they put is that, 'Oh, you know, women of color leave a lot. You should look at some numbers, a lot of them leave.' And usually the department says, 'Oh they weren't happy here." What they mean is that Madison isn't a great town. People don't want to live here because it's so white. But that's not really true.*
> Interviewer: What is the truth?
> *I think some of the departments are very racist. So, take [department name] for example. A friend of mine wrote a really great book from a wonderful press and her department didn't give her tenure because they didn't like the book. And it was on race, ethnicity, and feminism…She went to [another institution] and got tenure there. This happened a lot. I mean a lot of people I know, women of color I knew didn't get tenure, had a hard time at Madison and went out and got jobs at better places.*

Two other faculty members felt that their ethnicity and race played a part in how people treated them. Both were born in other countries but had been in the United States for many years. They provided examples of how they perceived both racism and ageism due to their appearance. They did not file any legal suits but wondered if people treated them differently because of the way they looked and their accents.

Other examples of discrimination were cases of sexual harassment as observed and described by some of the participants. Besides experiencing this directly in the department, they explained how they were very disappointed in campus administration's handling of the situation. For them, both the departmental and the University climates were perceived as negative. When asked about the most favorable and least favorable aspects of her department, Maya responded:

> *Um, not so favorable…no women in positions of power. The men in positions of power would bad-mouth some of the women who were higher-up. Call them names in front of people…There was no support system for the women, young women. Good things? Hmm, this place sucked.*

She goes on to explain the effects of a person who had been harassing her and other women:

> *He created a work environment that was very uncomfortable. Ultimately when I started going to people, asking what to do, it was basically, 'Don't talk about it. Just suck it up and act like everything's fine.' And that was what my chair said, and mentoring committee and everyone just said, 'You know, we can't change this person. You just need to learn how to deal with environments that aren't always going to be great.'*

Thomas, who was in a department where a harassment suit had been brought against one of his colleagues, spent a majority of the time explaining how he was disappointed in the Dean of his college/school and other UW administrators at how they handled the situation. He noted:

> *I would never have believed that they would convene a panel, not tell us who was interviewed, come up with factually incorrect information, not give us a chance to even look it over before the dean accepted it. And I would not have ever believed everybody would fall in line and say now we support this report without ever hearing the other side of the story. It was an unbelievable sequence of events... Ultimately a settlement was reached. Ultimately I left. Ultimately the other faculty member left. But it was the most bizarre sequence of events I've ever seen. I would never have believed that somebody accused of sexual harassment would be placed in charge of somebody they were accused of harassing.*

Ultimately he left, but not without feeling that the University was "schizophrenic" due to the contradiction in the values they espoused and in their practice. He admits he had an "idealistic" view of the University and reports that he will never return to academe because of his experience at UW-Madison.

As mentioned previously, climate issues were listed as a secondary factor for six of the respondents. For these participants, there was a critical incident, a series of events, or some other primary factor that caused them to think about leaving. This next section provides examples of some of the climate factors that intensified faculty member' desires to leave.

Elliott, a full professor who had been at the UW-Madison for over a decade, explained that being nationally known served to be a detriment for him in his department. Once he was established as an

"expert" in his field, he was sought out both in the country and internationally for his cutting edge research. Yet, he failed to receive any local recognition for the strides and contributions he had made in his field. His department chair, who was also senior, was unable to support him, nor did Elliot feel that he tried to. Elliot admits he did not consider leaving until he was offered with an endowed chair position and his salary was doubled.

For Luke, the "mass exodus" of his colleagues caused him to think about his department, and his place in it, in the future:

> *What worries me is, I don't think [the University] could have done much at that point to keep me. And, so I don't want to lie about it and suggest that these are the things that determined it. They were just things that made me feel a lot more sour about it… so many of my friends were leaving from my department…there was a good chance that they were going to go made the whole idea of my staying even less appealing. And it seems like the people who weren't likely to leave because they had great contracts, good salaries, good positions in my department were exactly the people I didn't necessarily want to stick around for. Whereas the people who I could see that were likely to go on the market in the next few years were the ones I really do like a lot. And I just thought, this department may become a very lonely place for me five years from now.*

Luke not only chose to leave UW-Madison for this reason, but also wanted to be closer to family, as described in this next section.

Balancing Professional and Personal Lives

Half of the faculty participants talked about the need to balance their personal and professional lives, which caused them to make choices based on their family's needs or their own. Two participants cited this area as a primary reason for leaving; six considered family as a secondary factor when making their decisions.

Both Ben and Mark explained the importance of *respecting the needs of family* and in particular, their wives. Ben's wife felt isolated in Madison and wanted to be closer to her family. This, along with the financial state of the University, provided him with ample justification to seek another job. Mark's wife was also unhappy in Madison and was unable to find meaningful work. She was originally from another country and he noted that she never felt comfortable in Madison. He looked for a position on one of the coasts and he and his wife are extremely happy there.

Both Carolyn and Cathy looked for other positions due to employment needs of their spouses. Carolyn's husband had been looking for work in his field for a number of years. Approximately a year and a half before leaving, Carolyn approached her department chair and told him that she would look for another job if her husband was unable to find work in Madison. Our discussion of this follows:

> *I mean I really thought the University could have supported me more and they didn't…I realize there are difficulties with two faculty member families. But it wasn't a faculty job.*
> Interviewer: So can you tell me about how was it handled? About the negotiations, how did it come up?
> *So when I was interviewing for the job, I was told that there is no program to help spouses find jobs. After I got [to UW-Madison] I was told a different story. And then I was told it was too late because I was already there and he didn't qualify for these programs…I felt like the chair and the talks with the Dean or over at the [college/school] really didn't take me seriously because, a year and a half before I left I said, 'My husband*

can't find a job and I will leave if he cannot find a job.' I've really kept my chair very informed of this throughout the entire year and a half.
Interviewer: Um, hmm.
And then when I gave my notice, everybody acted surprised! They said, 'What can we do for you?' I said, 'I've been begging you. I've been in your office once a month begging for something to happen.' So I just felt like there was just no support there.

Cathy's husband had his own business for the majority of the time she was at UW-Madison, but when he received an offer somewhere else, she started looking. The job she chose was not a faculty position. After fifteen years, she decided that the *faculty lifestyle* is not what she wanted. Now in her current position, she appreciates the hours and the lack of stress in her life around financial issues and continuing her lab:

> *There were some frustrations with budget cuts and every time you write a grant they tax more and more of it to try and pay for every thing else. So those things start to add up as being frustrations. [My current job] offers a lot more money, and it was kind of like, hmm, 'I could work an 8 to 5 job, get paid a lot more and not have the, as much as I like doing research, not have the headache of waking up everyday and hoping I'm going to have the grants funded to pay for the people to work in my lab.'*

Having her husband find work and not being in academe was an ideal situation for her.

Elizabeth, after being at the UW-Madison for six years, questioned:

> *I wasn't really sure I wanted to be a tenured faculty member at UW-Madison or anywhere for that matter. Given what I had seen, given the department that I was in... I wasn't sure I wanted to be a tenured faculty member in that [school/college] in that [department].*

For her, the ideal position did come along and she left before trying to obtain tenure.

Both Luke and Elizabeth thought that Madison is *family-friendly*, but not single friendly. Luke explains:

> *I was always aware that I wasn't alone in being a single person, a single faculty member who struggled to meet people in Madison. What amazed me about it is that the university never seems to notice this. And it's not that I wanted the university to set-up singles meetings or something that, but rather that I felt that the university's focus on family issues was so completely pervasive that it made a bad situation worse… The pressure – when they're trying to recruit you as a junior faculty member, one of the first things they tell you is, 'Oh it's a great place to raise a family.' And of course the sort of sub-text that no one says is, 'It's a crappy place to start one but if you've got one, you're in great shape.' But I just felt, as a single faculty member, not only did I feel isolated and alone, but I also felt that the university was basically once again reasserting domestic norms of the region that made me feel once again like a bit more of a freak.*

Elizabeth concurs:

> *And Madison, even though it doesn't seem like it should be a tough place, it is. And it's a very, it's a great town. It's a wonderful Midwestern town, but it's also a very family-oriented town. And that becomes very difficult for faculty who are still single. Because it's just tough...All of your colleagues are married and most of them have kids. So they've got their own thing going on. So there's really very little opportunity for you to*

interact with colleagues your own age outside of the office socially because they have families…I mean they have other responsibilities. That can be tough. And maybe that is something that really, that should be brought up as well. If the UW can do anything about that, I mean clearly. But for me, I think that that is a factor.

Although these previous sections highlight many negatives, the participants did cite many positive attributes about UW-Madison as an institution, and its faculty, staff and students in particular. Some noted that they miss the high quality research, phenomenal students, and the "intellectual playmates" they had there.

To triangulate the qualitative data, the responses to the question, "How satisfied were you with the following aspects of UW-Madison?" are found in Table 4.

	Very Satisfied	Somewhat satisfied	Not at all satisfied	Doesn't Apply
Orientation to UW-Madison	4	11	2	-
Orientation to your department	8	6	2	-
Tenure & promotion mentoring committee	5	6	5	-
Evaluations from mentoring committee	7	1	5	3
Collegiality of others in department	10	5	1	-
Your department chair	6	7	3	-
Benefits	12	2	2	-
Salary	5	6	5	-
Treatment of you (fairly, equitably)	2	10	4	-
Support of your research interests/field	3	5	7	-
Informal mentoring and guidance	5	7	2	1
Resources to perform your job	5	9	2	-
Connectedness to others (isolated?)	4	7	4	1
Balance between work and home	5	6	4	-
Opportunities for spouse/partner	2	-	5	6

Table 4: Responses to question regarding satisfaction with various aspects of UW-Madison.

Indeed, a number of the highlighted themes came out as the areas in which the participants were the least satisfied.

DISCUSSION

Not every faculty member felt that 100% retention should be the goal of UW administration. Four of the sixteen participants (25%) described how the perfect combination of opportunity and dissatisfaction caused them to leave, and had no regrets about doing so. The other twelve cited a myriad of personal and professional circumstances that led to their attrition. Despite any individual differences seen among these faculty members, general suggestions from the participants themselves are essential for a dialogue about changing the traditions, practices and policies at the UW to retain a greater number of faculty members.

- ➤ **Provide Assistant Professors with an environment that encourages them and leads to their success.**
    - o Delineate the criteria by which Assistant Professors will be evaluated for tenure.
    - o Make sure that new faculty's job positions are aligned with the criteria that will be used to evaluate them, especially when given responsibilities outside the norm or when they have joint appointments/departments.
    - o Ensure that new faculty's research agenda at the time of hire will lead to tenure.
    - o Provide new faculty with mentors and committees that are going to enhance their progress, not impede it.
    - o Decrease their teaching and service responsibilities as a means to jumpstart and sustain their research progress at critical points in their pre-tenure years.
    - o Communicate with divisional committees about cutting-edge research, methodologies, and areas of study to inform members of changes and growth in disciplines.

- ➤ **Provide Associate and Full Professors with an environment that encourages their retention and success.**
    - o Develop and put into practice creative incentives to support faculty, such as: nominating faculty for awards, providing course buy-outs, providing extra TA or RA support during critical times, recognizing them publicly, allowing them a sabbatical leave, decreasing service or other departmental responsibilities.
    - o Provide raises to ensure salary equity within departments and as a preventive attrition measure.
    - o Treat faculty work equally, despite differences in research, teaching, service and outreach/extension responsibilities.
    - o Highlight the local, national, and international success of faculty.

- ➤ **Address University and Department Climate Issues**
    - o Ensure that sexual harassment and discrimination are handled appropriately and quickly. Provide a safe environment for the victims.
    - o Understand the essential role that department chairs play in creating successful environments for faculty. Ensure that department chairs are capable of performing this critical position and are effective once in the position.

- ➤ **Understand the Important Need for Balance in the Professional and Personal Lives of Faculty**
    - o Create and communicate dual-career programs that are available to new and continuing faculty.
    - o Identify conventions, practices and policies that privilege traditional family norms and values within the University or departments. Ensure that no faculty members are isolated or excluded due to these practices.

Fourteen of the participants in this study knew they were unhappy or were considering leaving for at least a year before doing so. On average, the length between consideration and leaving was 2.35 years with a range from one to four years. The individuals who agreed to participate hoped that their stories would initiate change and perhaps help faculty who are considering leaving. The

recommendations above could easily be implemented during any of those critical years for current or future faculty who are considering an exodus, which is what the participants hope for.

ENDNOTES

[i] O'Connell, K., Pribbenow, C.M., & Benting, D. (2006). *The climate at the University of Wisconsin – Madison: Begins sunny and warm, ends chilly*. Madison, WI: The Women in Science and Engineering Leadership Institute.

[ii] Six faculty were not contacted at the request of the Provost's office.

[iii] http://www.provost.wisc.edu/memos/exit.html

[iv] This study was approved by the Social & Behavioral Sciences Institutional Review Board, **SE-2007-0242.**

[v] Interview protocol found here: http://www.provost.wisc.edu/docs/fac_exit_attach.pdf

[vi] Unless otherwise noted, presented as headcounts; data from *2006-2007 Data Digest*.

[vii] Rounded FTE equivalents – not directly comparable to the headcounts of participants and faculty who left the UW; data from the *Final Report of ADVANCE Program for University of Wisconsin – Madison* (2006).

[viii] Total grant dollars awarded during each faculty member's employment at UW-Madison divided by the number of years each faculty member was employed by UW-Madison. Data from UW-Madison Research & Sponsored Programs historical grants database.

[ix] Total extramural funds obtained by the group of faculty who resigned between 9/1/06 and 8/31/07 is approximately $30 million.

[x] Carnegie Classification of Institutions of Higher Education and Carnegie Classification are registered trademarks of the Carnegie Foundation for the Advancement of Teaching.

[xi] Each of the unclassified institutions can be described as a prestigious European university, most of which are in the UK.

[xii] Includes only faculty who remain on the tenure-track.

[xiii] Pseudonyms are used to protect participants' anonymity.

[xiv] Mooney, C.J. (1991). Eight professors at FIU file age-bias grievance to protest 'salary-compression' practice. *The Chronicle of Higher Education, 37*(27), p. A17.

WISELI Research/Evaluation Report:

Benting, Deveny. April 28, 2008. "Searching for Excellence and Diversity: Evaluation of the Workshop Presented to University of Alabama-Birmingham on March 26, 2008."

SEARCHING FOR EXCELLENCE AND DIVERSITY:
EVALUATION OF THE WORKSHOP PRESENTED TO
UNIVERSITY OF ALABAMA-BIRMINGHAM
ON MARCH 26, 2008

Submitted to:

Eve Fine
Researcher and Workshop Coordinator, WISELI

Jennifer Sheridan
Executive Director and Workshop Coordinator, WISELI

Workshop Coordinators at University of Alabama-Birmingham

Submitted by:

Deveny Benting
Evaluator, WISELI

April 28, 2008

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I. DEMOGRAPHICS OF SURVEY RESPONDENTS

Out of 94 invitees, 53 people responded to this survey for a response rate of 56%.

Title/Role on campus	%*
Professor	52%
Program director	15%
Dean/Administrator	15%
Affirmative Action Officer	13%
Staff member	12%
Department chair	10%

* Percentages do not add up to 100 because some respondents reported having multiple titles/roles.

Sixty-four percent of respondents were either currently serving on a search committee or expected to be doing so within the next year as active participants. The types of roles they serve/will serve on those committees are detailed in the following table:

Role on Search Committee	%*
Member	62%
Chair	26%
Affirmative Action Officer	21%

* Percentages do not add up to 100 because some respondents reported having different roles on different committees.

The source that informed them of the workshop offering	%*
Email from Provost/Dean's Office	48%
Email from ADVANCE program	25%
Department chair/supervisor	18%
Office for Equity and Diversity	9%
Faculty Bulletin	5%
Other	7%

* Percentages do not add up to 100 because some respondents reported hearing about the workshop from multiple sources.

II. RATINGS AND COMMENTS ON WORKSHOP CONTENT
(Note: Written comments in this document are verbatim responses from workshop participants, altered in some cases to remove identifying information.)

Overall rating of workshop	%
Not at all Useful	6%
Somewhat Useful	26%
Very Useful	68%

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Introduction	8%	38%	43%	11%

- This enforced the Administration's support of the process.
- Valuable comments that demonstrated the seriousness with which UAB takes hiring issues.

- I really didn't listen, I was leafing through the agenda and the spiral-bound "Searching for Excellence and Diversity."
- I felt their remarks set the stage for the workshop.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Running an Effective and Efficient Search Committee	6%	23%	68%	4%

- Well-spoken and knowledgeable.
- Excellent content—set the stage well for the rest of the day.
- Mr. Daniel's perspective was useful.
- The issue of confidentiality is not taken seriously. I thought that was a good point.
- Good comments and instruction, albeit information that many already know.
- Unfortunately, effective and efficient were considered only as relating to diversity.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Actively Recruiting an Excellent and Diverse Pool of Candidates	8%	26%	64%	2%

- The UAB portion could have been presented in a more organized way—not just "go to the web site."
- Good comments, but many of us are aware of these tactics. Nevertheless, it was good confirmation that many of us are at least on the right track.
- The social psychology research on implicit biases was impressive!

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Evaluating the Pool of Applicants: Raising Awareness of Unconscious Assumptions and their Influence	6%	21%	67%	6%

- Good information, with data.
- Unfortunately, evaluation was narrowly defined as relating only to diversity.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Ensuring a Fair and Thorough Review of Candidates	6%	19%	67%	8%

- The specific suggestions on how to counter implicit racism/sexism/etc. were particularly useful.
- Good information.
- Some relevant information was presented.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Developing and Implementing an Effective Interview Process	8%	19%	67%	6%

- Lots of helpful ideas, both in the presentation and in the table discussion.
- Good information, with guides of "dos" and "don'ts."

- Unfortunately, effective was narrowly defined as relating to diversity.

Workshop Component	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Successfully Hiring Your Selected Candidate	6%	37%	50%	8%

- Good information, but each hiring might present specific issues. At a public university, money is a big issue and it is something many departments have little control over (i.e., we have to follow administration budget lines).

III. OUTCOMES: GAINED KNOWLEDGE AND RESOURCES THAT PARTICIPANTS WILL APPLY IN THEIR ROLE ON A SEARCH COMMITTEE

The majority of responses addressing gains from the workshop had to do with knowledge about specific practical procedures for running a good search committee. Comments about gains not directly related to search committee procedures were less numerous and addressed three themes: attitudes about diversity, resources and data, and interaction with colleagues. Respondents' comments are listed below.

A. Search committee procedures (62 responses)

1. **Procedures for setting up and running an effective and efficient search committee**
   (29 responses)
- Tips on how to develop a more diverse committee: including students and relevant members of the community in addition to staff and faculty from other schools.
- The importance of the role of the search committee to facilitate a search and not just be a committee that reviews applications.
- The importance of the role of the search committee to meet prior to initiating a search to identify needs, goals and establish rules.
- How to organize a search.
- Ideas for organizing an efficient and equitable search.
- Good strategies for search committee meetings.
- The preparation of the committee at the onset.
- Tips on managing search committee interactions.
- How to prepare for the search committee.
- Ground rules.
- Composition of the search committee.
- How to better manage a search committee.
- The emphasis on having plans and guidelines before beginning a search.
- Setting the expectations and procedures clearly from the beginning.
- Time to review applications.
- Setting ground rules.
- Have an early meeting of the committee before recruitment begins.
- How to run an effective search committee.
- Define selection criteria during initial meetings.

- Running an Effective and Efficient Search Committee.
- Ensuring a Fair and Thorough Review of Candidates.
- Better understanding of faculty search process.
- The importance of planning ahead.
- Detailed plan for search committee activities.
- Understand the goal of the committee.
- Set up and remain focused on the protocol for the committee meetings.
- Establish the qualifications sought in a candidate/applicant and don't change them later to fit a particular candidate/applicant.
- Providing specific directions and protocol at start of search.
- Using a "rubric" to evaluate candidates.

2. **Recruitment strategies and diversifying the pool** *(12 responses)*
- Selling Birmingham as a factor in recruiting.
- Specifics on attracting a diverse pool of applicants.
- Become proactive in recruiting diverse faculty.
- Expanding the pool of candidates.
- Some additional publications to advertise for positions.
- Recruitment for positions should begin before there is an opening available.
- Search committee members must engage in proactive recruitment (contacting potential candidates and soliciting recommendations) in order to increase the diversity of the candidate pool.
- Consider inviting potential candidates in advance as consultants/guest speakers in order for them to get a look at Birmingham.
- Additional outlets for position ads.
- I knew this but have a better understanding of the importance of being active in cultivating a diverse pool of applications.
- Developing a recruitment plan.
- Venues for advertising.

3. **Interview procedures for visiting candidates** *(10 responses)*
- Interview techniques.
- Questions to ask.
- What to say/what not to say to candidates.
- The successful interview process.
- What not to say in interview.
- Bring up benefits more in interview.
- Structuring the interview.
- Set boundaries regarding the types of questions that are appropriate.
- It is good to be reminded about the psychology behind interviewing - that we tend to look favorably at those who are like us. Spreading the job of search committee member around to multiple people can keep the process more fair and hopefully diverse.
- Various ways to ask questions.

4. **Policies and legalities** *(3 responses)*
- Understanding of settlement in Knight case.
- Search committees not open meetings.
- Not much, I'm afraid. All information was very familiar to me already. Slightly useful was legal perspective and information about the Knight case.

5. **How to talk about diversity within the search committee** *(2 responses)*
- Ways to counter statements filled with implicit racist/sexist/etc. Comments often heard in search committee meetings.
- Remind committee members of internal biases.

6. **General/Other** *(6 responses)*
- Importance of what is said in all documentation/letters.
- Don't forget the spouses.
- Better understanding of the role of Affirmative Action officers.
- General knowledge.
- The value of effective communication.
- Best practices.

B. Attitudes about diversity *(10 responses)*

- Avoiding stereotypes.
- Information of implicit biases.
- Ways to decrease bias in search process.
- An understanding of bias in the review of applications.
- That we all have innate prejudice.
- Sensitivity to diversity.
- New research on bias.
- Look inside yourself to accept any innate biases and move past them for a successful search.
- Be aware that everyone defines diversity in different ways.
- There are many, many types of diversity besides what is normally seen in the south.

C. Resources and data *(7 responses)*

- A good reference document.
- It will add background material that I will use when I charge future search committees at their initial meeting.
- The spiral-bound notebook, "Searching for Excellence and Diversity" is very useful.
- Statistics about PhDs earned and percentage of minorities and women in our faculty.
- Resources available.
- Resources available at UAB for recruiting.
- Printed materials to provide faculty.

D. Interactions with colleagues _(3 responses)_
- Insight across UAB.
- As usual at events like this, I met a diverse group of really impressive people at my table.
- Met several interesting people.

E. Other _(6 responses)_

- There was considerable overlap between this workshop and the ADVANCE fall workshop, which had [NAME] from AAAS, where she also covered similar points. I realize that other faculty on search committee did not hear fall ADVANCE workshops, but most chairs did. Some repetition is helpful.
- I found most of the information presented to be quite common sense and hence already known to me.
- I didn't gain anything from this workshop. I've served on 13 search committees and frankly I think I had more insights in to the process than were presented at the workshop.
- Show local region.
- A better understanding of the need for more training.
- The need to revise the materials provided to search committees.

IV. RESPONDENTS' SUGGESTIONS AND RECOMMENDATIONS REGARDING THE WORKSHOP

A. Improving the workshop experience _(40 responses)_

Respondents addressed three major categories: 1) Workshop format; 2) Workshop content; and 3) Logistical issues.

1. **Comments about format of workshop** _(19 responses)_
- More time for small group discussions.
- I liked the info but thought it a bit long; a 3 hour versus 4 hour would have been preferable.
- Perhaps if the workshop had fewer participants, small group discussions/learning could have been shared.
- Additional time for small group discussions.
- Hand the notebook out a week early!!! It would really have helped to have read it in advance.
- Make the event shorter. We are intelligent people who also are very busy. Couldn't this have been done in a couple of hours?
- Report some of the main points raised in the small groups back to the large group.
- More discussion with the larger group to share strategies that work.
- More time for discussion about "local" resources and best practices.
- More time for small group discussions.
- More time to have table discussions.
- The afternoon session was not exactly what I expected. I hoped it would give me the ability to go out and train others on campus, but I don't feel prepared to do so. It would

have been beneficial for a key person at UAB to be actively involved in the afternoon session to talk about how to implement training for others on campus.

- Do not ask for input from individuals in front of the whole big group. It did not work well.
- More time for group discussion.
- The afternoon session should have been interactive. I enjoyed the small group sessions in the a.m.
- Seems the small group discussion was valuable, more time for that might be useful.
- I think an ultimate goal of a funded project like ADVANCE is to institutionalize and broaden ADANCE goals to include more generally scope of diversity. Then, all faculty will receive multiple levels of exposure, such as, as new faculty are hired...during both teaching and research compliance topics are discussed, then diversity issues would be part of training. Then, it moves down to departmental standard operating procedures. I think more effort needs to be put on internalizing these goals and expand scope of training rather than train same group multiple times.
- More discussion time in the small groups.
- I understand the 4 hour limitation on this campus, but I would have liked more time.

2. **Comments about content of workshop** *(9 responses)*
- At times, the table discussions would have been more useful if we had more targeted directions—especially with the short time we had to hear from so many people.
- Two topics we cannot ask about are religion and sexual orientation. The former can sometimes be identified by attire or surname. The latter comes out, no pun intended, when an applicant asked about domestic partner benefits. Given that these two characteristics become known, I think the training should have included them.
- I think global diversity was not handled well. We need to go beyond gender and racial diversity. Cultural diversity is less understood in academia. Private sector has handled that well.
- More case scenarios.
- It was a good workshop with good information, much of which was important because it confirmed our existing practices. Perhaps some examples specific to UAB would have helped, though confidentiality issues might preclude this.
- Technique regarding gathering information during interviews.
- Get UAB to produce a UAB version [of the handbook].
- Alabama has an open meetings law, but I'm sure it isn't the same as Wisconsin's so we need information that is accurate for Alabama.
- The scope was too narrow. The scope needs to be more diverse.

3. **Logistical issues** *(7 responses)*
- Have someone teach my classes for me so I could attend the whole time.
- All deans should have been encouraged to attend.
- Training is necessary for new hires as well as old hands.
- Warmer environs (the coldness of the room distracted from the content).
- Table facilitator at my table wasn't very good; thus, I don't think my table got as much out of the discussions as some other tables.

- A slightly more intimate room or seating arrangement might have helped the morning session. The smaller afternoon session was personable and more conducive to discussion.
- Having the workshop in late March when recruiting committees are winding down is bad timing – this should have been done in Fall.

4. **No suggestions/good workshop** *(5 responses)*
- None.
- Great seminar. I liked the mix of small group discussions and presentations.
- Nothing -- it was great!
- It was very well done just as it is.
- I found the workshop very helpful. It made me aware of the need for additional training for search committees.

B. Topics that participants hoped would be covered in the workshop, yet were not *(21 responses)*

- None. *(8 responses)*
- The focus was solely on faculty and we have many administrative and leadership searches. It would have been helpful to discuss these as well.
- How to deal with awkward faculty members.
- Can a department or university offer more salary to an underrepresented minority or female candidate than to a non-minority male candidate? Some universities do this, and it can lead to dissension. Or can such practice be justified as a way to bring more women and under-represented minorities into the department?
- More on details of the entire hiring process and paperwork involved.
- Microclimate issues that may discourage women and minorities to select UAB or remain at UAB.
- I'd like to know more about UAB policy regarding spouse/partner hires.
- More best practices.
- How to actually make the hire.
- Topics not focused on diversity.
- How to deal with internal candidates, which can be very divisive. I would devote at least 15 minutes to this specific topic.
- A good topic to add to this workshop is how to adjust departmental hiring priorities with respect to sub-disciplinary focus when increasing diversity can be achieved.
- How to deal with the very dicey questions of equity involved in a diversity hire.
- Assessment of the search committee's effectiveness at the end of the process (by the dean? provost?).

C. Would you recommend this workshop to others?

Eighty-eight percent of survey respondents reported they would recommend the workshop to others. Their comments regarding this question follow:

- It is a great resource and it really broadens your perspectives on what your role might be on a search committee. It also makes you more understanding when looking at an applicant's CV or resume.
- It's a great way to hear the recruiting efforts of other schools and incorporate good ideas into your school's recruitment process.
- It was an interactive workshop—very engaging!
- Why not?
- It was incredibly enlightening (and I have taught Multicultural Education courses for years!) and filled with practical things.
- Very beneficial and informative.
- It will improve the understanding of the search process.
- Yes, because some faculty and staff may still need to be reminded of hiring practices and new faculty and staff need this type of workshop.
- Valuable to search committees.
- The materials need to be handed out in advance and the workshop needs to be shorter.
- This workshop was a good way to look at alternative ways to run a search and discuss ideas for implementation at UAB.
- It's good to review best practices in recruiting a diverse faculty.
- The workshop addressed the topic in a comprehensive, yet "down-to-earth" fashion.
- It was very informative.
- Excellent information. Information may serve as a catalyst for better/more successful searches.
- Beneficial to anyone who might be involved in a search committee process.
- Great reminder about interview process.
- Excellent speakers; round table format good.
- I would recommend people who make decisions regarding hiring...chairmen and deans should be required to attend.
- Filled with very useful information about the recruiting process; awareness of diversity in recruiting.
- I think people need to be sensitized to these issues on a regular basis.
- All junior faculty need to know this information as they are mentored and promoted to senior levels in their discipline.
- All chairs should attend, and anyone who expects to serve on a search committee, particularly potential committee chairs.
- It is useful to see some of the pitfalls recruiting might have, even if we should already be aware of those things.

Twelve percent said they would *not* recommend this workshop to others, giving the following explanations:
- Too much time; too little value.
- Doesn't seem necessary for most people; the people who would benefit probably would not bother to go anyway.
- Not sure it helped me a lot. If it was formatted differently I might recommend it.
- It is a huge time investment to gain very little that we didn't already know.

VI. RESPONDENTS' SUGGESTIONS FOR ONGOING IMPROVEMENT OF HIRING PRACTICES AT UNIVERSITY OF ALABAMA-BIRMINGHAM

A. Suggestions for improving the effectiveness of efforts to recruit and hire a diverse and excellent faculty (33 responses)

- As affirmative action officers we must ensure an equitable and fair search and be supported by the Administration in applying policy.
- Have departments/search committees document their efforts for recruiting diverse candidates.
- Have the appropriate Affirmative Action Officer actually be a part of every Search Committee (not just be sent forms to sign off on—which has been my experience as an Affirmative Action Officer).
- It's always challenging, but I believe we do reasonably well, especially in my department, and our numbers support that assertion. One idea is being willing to hire one's own graduates who are strong candidates.
- Use your personal connections to find good candidates.
- We may want to consider renaming our school- and department-based "affirmative action officers" to "diversity advocates." There is a significant difference between the role and purpose of the affirmative action plan and our goals for diversity and excellence.
- Provide domestic partner benefits to same-sex and unmarried opposite sex employees.
- Implement some of these strategies.
- Raise salaries for faculty.
- All departments should have a diversity policy. Our graduate program does because it is required by our accreditation agency.
- Retention is the problem; not recruitment.
- It comes down to money. Money for salary (at least in the social sciences and humanities) and money for additional faculty in certain departments.
- Versions of this workshop should be brought to others within Schools/Departments.
- Provide financial incentives to minority faculty applicants and units that recruit underrepresented faculty.
- Make available upon request listings of women and minority recent PhD graduates or faculty at other institutions for targeted recruitment.
- True family-friendly policies that address paid maternity leave issues, child-care needs, and dual career issues.
- There should be more standardization of recruitment practices across the campus or, at the very least, within the same schools.
- There are few women chairs on campus. Efforts to recruit need to consider what it means to women candidates to look around and not see women department heads. An excellent female candidate may reach the conclusion there is little room for professional advancement beyond the lab.
- More competitive packages (better tuition program for children of faculty).

- UAB needs to develop follow-up materials—primarily a list of runes and practices (assembled in one place), best practices, and resources available to recruit and "seal the deal."
- Do not make committees defend the selection of white males as if it was a failed effort.
- Provide more start-up funds and increase salaries across schools.
- We already have a diverse faculty. No need for continued emphasis, which has become a detraction.
- Pursue other sources of information instead of historical advertising methods.
- Actively search for a candidate instead of "advertising a vacancy."
- HR may be able to help with some of these efforts. Fully utilize on-campus resources (i.e., HR, Alumni Network, etc.).
- Train more people to be effective committee members. As stated in the presentation, just because you are a great faculty person and revered in your field, doesn't mean you can step into this role without training.
- Search committees should be required to attend.
- Provide extra resources to hire additional faculty.
- A barrier to increasing diversity relates to sub-disciplinary needs of programs.
- Simply to always be fair.
- Continued training of search committees, deans and chairs, and affirmative action/diversity officers to ensure all are aware of the mandate and best practices.
- Where there is extreme under-representation, the university should be able to provide more resources to departments (e.g., if the department is recruiting for one position and the second-ranked candidate is from an underrepresented group, the university should facilitate the hiring of that second person in addition to the first).

B. Recommendations for providing ongoing training and education to search committee members (20 responses)

- Implement some of the excellent suggestions provided during the afternoon session.
- Don't believe it is necessary.
- Would be helpful to deliver such training to deans and vice presidents first.
- Have this information available on the website.
- This program should be required for all faculty.
- Whenever a search is about to begin, the department doing the search should receive something like a "Good Practices" and/or "Dos and Don'ts" booklet.
- Provide a module for on-line training.
- It would be worthwhile to repeat a workshop like this every two years, but only if next time the materials are specific to UAB and Alabama law.
- Providing a condensed version of the workshop (such as Molly's presentation) to a school faculty meeting once or twice a year for all faculty members to gain exposure to the issues.
- Establish an online search committee newsletter or update for the campus to share ideas and best practices.
- Uniform and consistent participation by Affirmative Action officers at each stage of recruitment.

- On-line course.
- Should require all search committee members to participate in training. Online would be reasonable.
- Continue to offer this workshop.
- The only training received is on diversity. Surely this is not the only problem we face.
- Need to develop our own class and require folks to go.
- Detailed discussion of recruiting activities following an excellent source such as the WISELI guide.
- Do workshops such as this every 2-3 years.
- Provide sessions like this one at least quarterly, if not bi-monthly. Evaluate the outcomes, and directly challenge units that are not hiring women and minorities.
- Do this in early Fall, not late Spring.

V. GENERAL COMMENTS

- Very informative workshop.
- Thank you.
- Thank you for doing a great job!
- We face a real risk by putting blinders on and succumbing to political agendas such as that represented by this session.
- Thanks—it was a valuable exercise.
- Overall, an excellent experience.
- I applaud the women who started this initiative.
- Extremely informative and interesting workshop! Presenters are to be commended.
- It was better than what I expected.
- Very detailed and complete.

Searching for Excellence and Diversity: A Workshop for Search Committees
Presented at the University of Alabama at Birmingham

1

Your title or role on your campus:

_____

2

Are you currently serving on a search committee, or do you expect to be doing so within the next year?

YES   NO

If you answered yes, please tell us what your role is, or what you expect it to be.

_____

3

Please rate the value of each of the following aspects of the workshop using the scale from 1-3. Also, feel free to include additional comments about the presentation or small-group discussions:

1	2	3	
Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend

Introduction (With remarks by Claire Peel, Eli Capilouto, and Molly Carnes)

1   **2**   **3**

Comments:

_____

Element #1: Running an Effective and Efficient Search Committee
(Presented by Eve Fine and John Daniel)

13

[1]   [2]   [3]   [   ]
Comments:

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Element #2: Actively Recruiting an Excellent and Diverse Pool of Candidates (Presented by Molly Carnes, Eve Fine, and Louis Dale)

[1]   [2]   [3]   [   ]
Comments:

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Element #3: Evaluating the Pool of Applicants (Presented by Molly Carnes)

[1]   [2]   [3]   [   ]
Comments:

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Element #4: Ensuring a Fair and Thorough Review of Candidates (Presented by Molly Carnes and Eve Fine)

[1]   [2]   [3]   [   ]
Comments:

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Element #5: Developing and Implementing an Effective Interview Process (Presented by Eve Fined and Cheryl Locke)

[1]   [2]   [3]   [   ]
Comments:

14

[text box]

Element #6: Successfully Hiring Your Selected Candidate
(Presented by Eve Fine)

[1]   [2]   [3]   [   ]
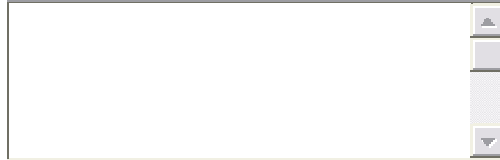
Comments:

[text box]

4

Please identify up to three things that you gained at this workshop and
will apply in your role as Chair or as a member of a search committee:

[text box]

5

Please provide us with ideas or suggestions that would have improved
your experience in this workshop:

[text box]

6

What topics did you hope would be covered in this workshop, yet were
not?

[text input box]

7

Please provide an overall rating for this session.

Not at all Useful	Somewhat Useful	Very Useful
1	2	3

8

How did you hear about this workshop?

[text input box]

9

Would you recommend this workshop to others?

YES   NO

Why or why not?

[text input box]

10

Do you have any suggestions regarding how your institution could improve the effectiveness of their efforts to recruit and hire a diverse and excellent faculty?

[text input box]

11

Do you have any advice or recommendations for providing ongoing training and education to your institution's search committee members?

[text input box]

12

Any other comments?

[text input box]

Please click on the "SUBMIT" arrow below. You will know that your results have been recorded if you see WISELI's website on *Training for Hiring Committees*. Feel free to browse through these resources. Thank you for completing this survey!

SUBMIT

WISELI Research/Evaluation Report:

Benting, Deveny. August 13, 2008. "Evaluation of the Workshop 'Searching for Excellence & Diversity: Implementing Training for Search Committees' Presented at the University of Illinois Urbana-Champaign on June 25, 2008."

EVALUATION OF THE WORKSHOP "SEARCHING FOR EXCELLENCE & DIVERSITY:
IMPLEMENTING TRAINING FOR SEARCH COMMITTEES"
PRESENTED AT THE UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN ON JUNE 25, 2008

BY DEVENY BENTING, WISELI EVALUATOR
AUGUST 13, 2008

Introduction and Attendee Data

The WISELI workshop "Searching for Excellence & Diversity: Implementing Training for Search Committees," was presented at the University of Illinois Urbana-Champaign on June 25, 2008. An online workshop evaluation survey was deployed to participants on June 26, 2008, and a reminder was sent on July 1, 2008. Nineteen out of 47 people completed the survey for a response rate of 40%. The majority of respondents reported that they were faculty members.

Title or Position	%
Faculty	68%
Staff	21%
Administration	11%

Value of Workshop

Rating	%
Not at all Useful	5%
Somewhat Useful	47%
Very Useful	47%

Almost all respondents reported that the workshop was of some value, and were evenly split between saying it was "very useful" versus "somewhat useful." Only 5% said it was "not at all useful."

Respondents reported that the most valuable component of the workshop was the "Searching for Excellence & Diversity" guide book, followed by the workshop presenters. The ratings for all workshop components are detailed in the following table:

Workshop components	Not at all valuable	Somewhat valuable	Extremely valuable
The presenters	6%	33%	61%
Your table facilitator	11%	32%	58%
Small group/table discussions	11%	32%	58%
"Searching for Excellence & Diversity" guide book	0	26%	74%
Research article activity	11%	42%	47%
Large group discussions	11%	42%	47%

Respondents explained their ratings of the workshop components:
(All respondent comments listed in this document are verbatim, and have been altered in some cases to remove identifying information.)

- I am not sure what role I will be in for the future, so don't really know how to evaluate this.
- Lots of good information from the presenters and the guidebook. The discussions were hit and miss. Reading the research article was very interesting.
- It would be valuable for people to have time to share what has worked in their units. I think unless it is a specific question many people will not share. Also, it would be interesting to have folks outline the challenges they face so those could be specifically addressed.

- Observing inputs during discussions very revealing. You could ask how valuable were discussions during breaks.
- I felt that the workshop was based on an incorrect premise: lack of diversity is because of the search processes. Based on my experience, the lack of diversity is primarily because of lack of qualified candidates. This issue was discussed very briefly in the beginning and then the assumption was made that diversity will increase if the pool of candidates is widened. This is a wrong assumption. You want to increase the pool of qualified faculty candidates by graduating more minority students. Thus, I did not feel that I got much from this workshop, how much so ever well-intended it might be. I would have liked a workshop where the discussion would focus on how to attract more minority students, and how to keep them enthused about research, how to enhance our cultural sensitivities (as Provost Katehi correctly alluded to in her opening speech), and create an atmosphere where minorities feel welcome. Such a graduate recruitment workshop will have a much more organic, wholesome, and long-term impact. Starting at the search committee level is takes a symptomatic view of the problem.
- Amy was very difficult to follow. She seemed somewhat razzled during the presentation. All the other facilitators were excellent.
- The research article activity was OK, but would probably be better after having digested more of the information – maybe at a follow-up meeting.
- I got much more out of the small group/table discussion than the presentations. I thought the presentations were dry, unfocused and unorganized and therefore not effective – especially considering that the audience was composed primarily of engineering professors! Because of delay in the schedule, we were not able to go over the case study as a group; this is unfortunate as I believe this would have been a helpful activity.
- I have not looked at everything carefully, but at first glance it looks very helpful.
- I found the entire day to be extremely useful. It was well-organized and the facilitators were knowledgeable and well-prepared.
- The research article activity was not valuable because the article my group was assigned to read was scientifically flawed.

Respondents were asked to rate the workshop's effect on their skill level in certain areas. The table below contains their responses. Major points of interest include: 1) Both using and teaching others about open meetings and records laws were rated as "skills that remained unchanged" much more often than any other area; 2) In most areas, the skills to *teach* the topic were more often reported as "increased to a great extent" than the skills to simply perform the task itself; and 3) With the exception of the open meetings and records laws topic, in all other areas respondents most often reported that the skill "increased somewhat."

Workshop topics	This skill remained unchanged	This skill increased somewhat	This skill increased to a great extent
Running an effective search committee	17%	67%	17%
Teaching others to run an effective search committee	17%	61%	22%
Recruiting a diverse pool of candidates	16%	68%	16%
Teaching others how to recruit a diverse pool of candidates	17%	50%	33%

Using the Open Meetings & Records Laws	62%	25%	12%
Teaching others about the Open Meetings & Records Laws	71%	24%	6%
Applying the research about unconscious biases and assumptions in the search process	16%	63%	21%
Teaching others about social science research to improve a search process	17%	56%	28%
Thoroughly reviewing candidates	26%	68%	5%
Teaching others how to thoroughly review candidates	17%	67%	17%
Implementing an effective interview process	22%	61%	17%
Teaching others to implement an effective interview process	22%	61%	17%

A few comments regarding these topics indicate that skills did not more frequently "increase a great deal" because respondents were already familiar with the content/research. Other comments indicate that some respondents actively disagreed with the content presented, specifically regarding recruiting and diversifying candidate pools. These and other comments are listed below:

- I take the search process very seriously and have always given a lot of thought to the issue of qualification and judgment when it comes to evaluating candidates. Thus, all the issues that were brought during the workshop were issues that I had already thought about and agreed with. This is the reason for my ratings. This is no reflection on the quality of the material presented.
- I thought that the information on the social science research was valuable, but the workshop didn't really instruct us on how to teach a search committee.
- Most of the above is not applicable, as I have never run a search committee, don't do much official recruiting, or teaching of others on these topics.
- We already do much of this. We have a two step process and no one can be interviewed until the selection process is approved by our college committee. If women or underrepresented members applied for a position and are not being interviewed that decision needs to be explained prior to moving the search forward.
- Discussion on open meetings and records laws for UIUC will require review of materials provided by UIUC. Key improvement would be to review and update papers referenced. Age of Smith study in particular was challenged and poses problem in convincing faculty from a top-5 college about underrepresented candidate availability.
- Having only just been a part of this workshop, I am not sure that I could effectively teach the concepts, but all concepts were extremely interesting and with some discussion on how to proceed within the college and campus, these tools will hopefully be very useful.
- I knew most of the work on stereotyping and prejudice, and subtle biases. Very good for others to learn it, but I think it would be most effective if workshop participants could complete a test (IAT or some-such) that would demonstrate their own non-conscious biases. Workshop participants seemed doubtful that they could be implicitly prejudiced, that these subtle biases would influence them. Classic third-person effects: I could practically hear people thinking, "Other people may be susceptible to these problems, but not me."

- Our main problem is lack of an adequate pool of underrepresented candidates. I believe that our search committees and faculty exercise conscious bias in favor of such individuals, at least at the early stages of the search process.
- In my field, the recruitment of a diverse pool of candidates is the limiting step. I learned nothing new from the workshop about how to do this.

Implementation
Respondents were invited to describe how they plan to use workshop materials at UIUC, and whom they would target. Their comments follow:

- I'm not sure! I'm glad I had a chance to learn about the research on gender bias, but I don't really know what to do with it, other than to engage my search committee colleagues in conversation about these topics.
- Don't know! I need advice with this! In the meantime, I am on some different committees regarding mentoring and promotion, which I have already seen can benefit from the knowledge I gained from this seminar, and I am using.
- Work with our department search committees/committee members.
- Short presentation to the entire faculty, more detailed information for search committees.
- Present it to our college EEO committee and get their input.
- We will debrief in a week or so and meet with engineering faculty participants over the coming months. We plan to adapt materials to UIUC and adjust arguments accordingly. Facilitators are likely to become presenters and participants facilitators in the fall. Search committee chairs and members will be initial target.
- At the minimum, to inform my own participation on search committees. I would not take the initiative on this unless instructed by my Dean or Department Chair.
- I will hand it to our Search Committee Chair, who should have been in attendance but was not. I plan to remind the search committee to ask of itself if the lack of diversity is due to the search process, and if so, to make requisite changes. I am much more motivated now to think of ways to increase minority graduate student representation in our programs. This is the best way for me to have an impact.
- I plan on discussing the information with others in the Office and at the campus level to see how this could be implemented at the U of I. I would like to start using the bias information with search committees right now and see how it works.
- I believe my department has a job search this Fall. These materials will be very helpful.
- Plan meeting with search committees when they are formed to share my thoughts and the materials provided.
- I would like to speak with future search committee members and better use the EEO and AA officers within the college. Speak at faculty meetings. Attend the first meeting of search committees.
- Try harder to reach a larger pool of underrepresented candidates. Make use of additional advertising sources.
- I intend to make a short version of all the documents that I can pass out to all search committees when I meet with them for the first time. I will meet with each search committee before they begin and go through the material with all of them.

- I will share the information with the Administration at the [unit], our Human Resources Office, and Training Coordinator. I will work with [unit] and other groups to make sure the [unit] is part of future discussions and training sessions planned on our campus. I would like to have several of our [unit] faculty participate in any training the Urbana campus does.
- I will recommend to my department head that each departmental search committee have a short briefing on the key points raised by the workshop.

Respondents listed many obstacles to implementing what they learned in the workshop, ranging from time constraints, to individual resistance, to adaptability of materials. A few said they did not expect any challenges to implementation. Respondents comments' regarding anticipated implementation challenges are listed below:

- Too many to list.
- Don't know! I need advice with this!
- Do not feel as though I have a solid base of knowledge and experiences.
- The standard problem we face when we introduce any new material to the faculty. Many of the older faculty know how they've done it for decades and won't be interested in changing.
- Time.
- Arrogance.
- The biggest challenge will be updating the materials and fine-tuning the arguments to challenge conventional thinking. This will also not happen overnight.
- Getting the faculty to attend workshops to discuss these ideas. This is where the Dean's and Provost's support is strongly needed.
- I am not expecting challenges.
- I don't foresee any.
- Paring down the time spent in giving the message.
- People not being able to attend the first meeting.
- Lack of time.
- Resistance from some faculty that this is not needed.
- No significant ones anticipated.

Most respondents (68%) felt only "somewhat equipped" to provide the training to colleagues, while about one-quarter (26%) felt "very well equipped" to give this sort of training. Only 5% said they were "not at all equipped" to do this. Respondents went on to explain what types of resources and/or follow-up they might need for implementing what they learned in the workshop:

How well equipped do you feel to provide this sort of training to your colleagues?	%
Very well equipped	26%
Somewhat equipped	68%
Not at all equipped	5%

- I'd like to have more training materials to work with, and more guidance on what I might be expected to do with it.
- Training organization in general. A specific plan for what length of meeting and group to talk to, etc.

- More examples and experiences.
- It would be helpful to have summary slides to show in a short presentation to faculty.
- Commitment on the part of central campus that this is important.
- Would want to team-teach. Would require coordination support and administrative back-up.
- More information on research in the area with statistics to back up what we are asking them to do.
- The materials and discussion appeared to be sufficient.
- More opportunities for faculty to attend this type of training activity.
- I do not believe in the plan as stated. I prefer to focus on our graduate recruitment policies.
- More training at the local level.

Feedback for Workshop Developers

Respondents listed the source through which they heard about the workshop offering. Their responses fell into the three categories in the table to the right:

Source	%
Dean of College/ Department Head	53%
Campus email/invitation	32%
Office of Equal Opportunity and Access	16%

Expectations met?	%
Yes	78%
No	22%

Seventy-eight percent of respondents said the workshop met their expectations. A few of these respondents provided the following explanations:

- I had little expectations going in, and was pleasantly surprised.
- I was hoping to learn more about diversity issues and I did.
- I did not really know what to expect, but I was pleasantly surprised at how interesting the material was and how well it was presented.
- It was OK. Because I was involved in many search committees, significant parts of the presentation were familiar.
- I had no expectations, and was pleasantly surprised.
- Good discussion and dialog – bringing out differences in roles and unrealized biases we all have.

Twenty-two percent of respondents said the workshop did *not* meet their expectations. Their comments follow:

- I came with an expectation that there will be an open and honest discussion regarding the reasons for the lack of diversity in our faculty. Instead, we were given a premise, which in my opinion is incorrect, to start with. As I do not agree with the premise, I did not feel I got anything out of the workshop.
- I was a little disappointed on the workshop. The first hour or so seemed very unfocused. I did not feel that the objectives were made clear enough. And I don't think that the focus was really on training us to train our search committees.

Recommend to others?	%
Yes	78%
No	22%

Seventy-eight percent of respondents said they would recommend the workshop to others, giving the following explanations:

- Helpful information for people on search committees!
- Good information on diversity and also very useful information on running searches in general.
- Most definitely think this should be a requirement for ALL search committee chairs and where possible, all members of a search committee.
- Yes, but with reservations. The density of information (information transfer per unit time) was very low.
- The information on bias was very interesting and I think would be useful to all who serve on search committees.
- Especially the ones with no experience.
- I appreciate the application of social psych research!
- But only if improvements to the format are made.

Twenty-two percent of respondents said they would *not* recommend the workshop to others. They gave the following reasons:

- I think the workshop is well-intentioned, well-executed logistically speaking, but is based on a weak foundation. I would not want my colleagues to spend valuable time at such workshops.
- While I think that there was some very important information presented, and I believe strongly that it's important for this information to be in the hands of a search committee, I don't feel that the training was as effective as it could have been.
- It was too long. I think the key points could have been presented in 1/4 the time.

Respondents were then given the opportunity to suggest other topics that they felt should have been addressed during the workshop. Their responses are listed below:

- More specific strategies to deal with the problems facing departments where there are real shortages of diversity candidates.
- I think it is somewhat irresponsible to divorce retention from recruitment. While retention was mentioned it was an afterthought. We have areas where we have tenured faculty who have stayed too long and have a narrow view of women. It is their specialty so even if we select a woman faculty for this area we would knowingly be putting her in harm's way.
- Discussing the "whys" is more important than discussing the "hows?" Why is there a lack of diversity? Ask this first, honestly. Then ask, how do we fix it.
- I think the presenters were very good, what I would like to see added is something from the U of I: A follow-up email from the U of I OEOA should be sent to all participants with information on how the campus can help implement this at the U of I. I believe this type of workshop would be very useful for all individuals at the U of I and would be more effective if a campus committee was formed to help disseminate this information around campus. Individuals who are energetic and accomplished public speakers should

be giving these talks – if the presenters are interesting, the material will be interesting. If the presenters are not energetic or interesting, the workshop will fail.

- Other biases. Women were targeted with this workshop. There are numerous other areas – global racial groups, obesity, etc.
- More focus on recruiting/finding potential candidates.

Respondents also provided the following suggestions for improving the workshop:

- Such a workshop will not have much impact at top-ranked institutions where attracting candidates, both minority and non-minority, has never been a problem. By definition, minority implies small in number. Multiply that by the small percentage of any population who qualifies to be a faculty in such an institution, you will see that the pool of candidates qualified to work at such institutions is necessarily small. Please think about teaching faculty how to increase diversity in our graduate student population, how to educate female and underrepresented groups, how to guide them into their Ph.D., etc. These would be much more useful. It is possible that the workshop in its current form may be useful for 2nd or 3rd tier universities, but I can't be sure of it.
- If this workshop is offered to engineering and physical sciences faculty, it should have content that is more relevant and sensitive to faculty in these areas. For example, some of the implications of the tremendous lack diversity among faculty seemed to be missed. How can we have a diverse search committee when we have no diversity in the department? How can we do so without overburdening the few underrepresented faculty we have, which will make their successful retention even more problematic? Other issues were missed, too. For example, it was never mentioned that women engineers and scientists are more likely than their male colleagues to be in dual-career situations. This is VERY important to address directly for recruiting and retention. Another point relating to the current lack of diversity in our departments is that many faculty may need training in effectively engaging their colleagues to solicit applications from underrepresented candidates. Most faculty would agree that this is important, but many don't know how to do it effectively. Providing some materials for trainers to use would be most helpful. I felt that the best content delivered at the workshop was on the social science research in the area of gender bias. But we need some guidance on how to use this in training our search committees.
- Idea for justifying affirmative action to people who are reluctant: Think of taking on a diversity problem the same way that a shortage in a particular subject area might be tackled.
- It seemed like we could have covered all of the material in one or two hours less.
- Maintain focus on academic search. The equal opportunity people from our campus were not a useful component to include.
- Having so many engineers at the workshop left the discussion a bit lop-sided. I would have liked to see individuals from other disciplines, but then the workshop would have been too large.
- Adjust the format to better suit the audience comprised of engineering professors.
- White and gender bias is not the only bias to exist in group settings, yet only white bias was addressed. Discussing bias in a broad context and not just as a function of white and/or male would make the conversation more multicultural.

- Please give a thought to providing continuing workshops of this nature.
- Shorten it substantially.
- The Dean of my college should have been present.
- The workshop made assumptions that were not valid, and this limited its usefulness. The main one was that there is only one type of search. In my College there are at least three types of search: (i) Searches for senior administrators; (ii) Open searches; (iii) Target of opportunity and diversity hires. The workshop really only addressed (ii). However, searches in category (iii) also need to be properly run, and I have seen such searches run disastrously, with harmful effects to a department and candidate.
- One of the exercises was to look at original research, but this backfired because the paper my group examined was found to contain flaws, and our group considered a key part to be scientifically invalid. The paper was also written in a way that seemed biased, and so this weakened the scientific evidence presented at the workshop.

WISELI Research/Evaluation Report:

Benting, Deveny. August 14, 2008. "Evaluation of 'Searching for Excellence & Diversity: A Workshop for Search Committees' Presented at Edgewood College on June 12, 2008."

EVALUATION OF "SEARCHING FOR EXCELLENCE & DIVERSITY: A WORKSHOP FOR SEARCH COMMITTEES" PRESENTED AT EDGEWOOD COLLEGE ON JUNE 12, 2008

BY DEVENY BENTING, WISELI EVALUATOR
AUGUST 14, 2008

Eight out of 37 people responded to the evaluation survey for a response rate of 22%. The following table details respondents' reported title/role on campus:

Title/role	%*
Program/Unit director	50%
Faculty	38%
Administration	38%

*Percentages do not add up to 100 because some respondents reported having more than one title/role.

Only 38% of respondents said they were currently serving on a search committee or expected to be doing so within the next year.

The overall rating for the workshop was positive, with the majority of respondents noting it was "very useful":

Rating	%
Not at all useful	0
Somewhat useful	38%
Very useful	62%

One hundred percent of respondents said they would recommend the workshop to others, giving the following explanations:

- The content of the search is critical and this [workshop] provided the detail within a search committee.
- It's a good resource and reminder for those going through search processes.
- Even though I had heard a lot of the information before, in other contexts, it is valuable to listen, learn, and discuss with people from the same institution since things are often very place-dependent.

Respondents' ratings of individual workshop components appear in the following table:

Workshop element	Not at all Valuable	Somewhat Valuable	Very Valuable	Didn't Attend
Introduction	0	50%	38%	12%
Element #1: Running an Effective and Efficient Search Committee	0	38%	62%	0
Element #2: Actively Recruiting an Excellent and Diverse Pool of Candidates	0	38%	62%	0
Element #3: Evaluating the Pool of Applicants	0	38%	62%	0
Element #4: Ensuring a Fair and Thorough Review of Candidates	0	29%	71%	0

Element #5: Developing and Implementing an Effective Interview Process	0	25%	75%	0
Element #6: Successfully Hiring Your Selected Candidate	0	50%	50%	0

Respondents listed learning gains in five major categories that they will apply in their role on a search committee: 1) Confronting unconscious bias; 2) Search committee procedures; 3) Recruitment efforts; 4) Resources; and 5) Interview process. Verbatim comments are listed below:

Category	Comment
Confronting unconscious bias	- Understanding biases. - Bias. - Open dialogue regarding diversity. - Being aware of potential biases in the process. - Everyone has bias, so an open honest discussion is the best approach to recognizing and prioritizing the role of diversity to the search committee. - Understanding of elements of our culture that encourage or discourage discussions around diversity. - Research associated with bias in evaluating candidates.
Search committee procedures	- Running meetings more effectively. - Ways to deal with resistance. - A better understanding of the full search process and the detailed steps involved. The importance of focusing on a good process. - Ways to legitimately seek feedback from others the broader campus community.
Recruitment efforts	- Resources to recruit. - Being purposeful in attracting diverse candidates. - Ideas for where to recruit and advertise.
Resources	- Cultural organizations in the Madison area. - A tremendous collection of resources to refer to (in the booklet). - The web resources.
Interview process	- Being conscious of special needs for candidates. - The concept of a search having two parts – your institution interviewing the candidate and the candidate interviewing the individual. I think I/we neglect the second point quite often.
Other	- Re-emphasized what I already knew. - Colleague sharing.

Respondents gave suggestions for improving the workshop experience:

- Go through each section in more detail.
- Readings to be done in advance of the workshop for all participants.
- Try to draw more questions/examples/cases from the participants.
- Consider using more case study examples.
- I thought all of the presenters did a very solid job.
- The quality of the experience now is dependent upon the follow-up and integration of this training into the process as it plays out on campus.

They also suggested additional topics that the workshop should address:

- Retaining diverse members.
- It was covered some, but perhaps more focus on dealing with difficult committee members.
- I would have liked a bit more on working with internal candidates.
- Still no magic bullet.
- I would like to hear suggestions and practices specific to the different kinds of searches that happen on campus – faculty vs. staff vs. administration.
- When might it be good practice to promote/hire from within? When from the outside? Are there cases when doing a full-blown national search may not be the best practice?

Respondents gave suggestions for what their own institution could do to improve the effectiveness of its efforts to recruit and hire a diverse and excellent faculty:

- Administration needs to understand the value of diversity on a deep not superficial level.
- Yes, we will be doing more active recruiting and reach out to the list of sources provided at the workshop.
- Provide managers and search directors the tools and resources about how to attract diverse candidates.
- Train all search committees.
- This workshop was a great start. I think there needs to be a clear and consistent message from the campus leadership about how each search needs to focus on a high quality process and diverse pool. Then, there needs to be clear accountability measures.
- Consistency across areas of the College.
- Administration needs to hold departments more accountable for diversity efforts.
- Beginning searches in a timely fashion.
- More active recruiting and recruiting in less-traditional places.

They also listed recommendations for providing ongoing training and education to the institution's search committee members:

- I think you should develop workshops specifically for administration with relevant case studies. If the administration does not follow through it doesn't matter how well trained the committee is.
- We will need to continue the momentum and have another session. We would also like to invite our attorney to another session to field legal questions.
- Find faculty and staff presenters to prepare and deliver on-campus training.
- I think it would be useful to have a follow-up meeting with just the Deans and the President's Leadership Team about how to improve our hiring processes from a more systemic perspective, and how to build in accountability.
- I think it would be valuable to do training with specific people as they are in the process of doing a search.

When asked to provide any additional comments, one respondent said the following:

- Great job. Very organized. We can easily adapt the program for our trainers because of the thoroughness of the program outlines.

WISELI Research/Evaluation Report:

Sheridan, Jennifer. December 9, 2008. "Results of PACE Survey of Engineering Undergraduates. University of Wisconsin-Madison College of Engineering. 2008."

Results of PACE Survey of Engineering Undergraduates University of Wisconsin-Madison College of Engineering 2008

Prepared for the College of Engineering at UW-Madison
By Jennifer Sheridan
Women in Science & Engineering Leadership Institute (WISELI)
December 9, 2008

PACE Survey Results

Introduction

<u>Purpose of PACE study</u>

In Summer 2007, Dr. Suzanne Brainard and colleagues from the University of Washington contacted the UW-Madison College of Engineering (CoE) to explore UW-Madison's participation in the Project to Assess Climate in Engineering (PACE). Funded primarily by The Alfred P. Sloan Foundation with a supplemental grant from The Engineering Information Foundation, PACE is a multi-site research project intended to identify issues that affect persistence rates among Engineering undergraduates. PACE is headquartered at the Center for Workforce Development at the University of Washington and pays specific attention to the intersection of race, gender and academic experience[1]. The core activity of PACE is to conduct a climate survey of undergraduate students at Engineering schools around the U.S., in order to assess student attitudes overall, as well as to provide select peer comparisons for participating schools.

Because CoE's curriculum is a two-tiered program, it was determined that CoE was not eligible to participate in PACE. The survey instrument was initially designed for those programs which admitted students into departments immediately in their freshman year. UW-Madison is among a handful of programs that requires students to wait at least one year to take basic science and math courses before applying to departments within the CoE. The University of Washington (UWash) is also a two-tiered program. Ironically, UWash also was not eligible to participate in PACE even though the project was administered from the UWash campus. Dr. Brainard and Dr. Sheridan—colleagues from the National Science Foundation's ADVANCE Institutional Transformation award cohort one—agreed to conduct a pilot study with the UW-Madison and UWash Engineering schools. Both UW-Madison and UWash would administer the PACE survey, but neither school would make their data available for comparison with the 22 other colleges in the study. Neither would UW-Madison be required to participate in the other facets of the PACE study—follow up interviews and a requirement to create a plan to improve climate based on the survey results. This pilot would simply be a test of the applicability of the instrument to a two-tier Engineering program. In return for sending the PACE team data from UW-Madison, UW-Madison will receive a report from PACE comparing our data to selected peers.

<u>Overview of Survey Instrument and Administration</u>

Dr. Jennifer Sheridan from the Women in Science & Engineering Leadership Institute (WISELI) worked with CoE leadership and PACE leadership to develop the web-based instrument. Dr. Sheridan consulted with several persons within the CoE to determine whether the instrument was appropriate for CoE undergraduates and also asked key

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[1] http://depts.washington.edu/paceteam/ .

persons to review the instrument and make suggestions for additional survey items that might be useful to the College. Some of the units given the opportunity to review the instrument include: Engineering General Resources (EGR), Diversity Affairs Office (DAO), Transfer Services, Engineering Career Services (ECS), Student Leadership Center (SLC), and Engineering Learning Center (ELC). Ultimately, the only changes/additions made to the instrument were to expand the section on student organization membership, and an item inquiring about whether student had enrolled in particular courses, to ascertain which survey respondents might have taken a CoE2010 course. The survey items are reproduced in Appendix 1.

As a climate survey, the items concern mostly the attitudes and feelings of respondents with regards to their experiences within the CoE. Most of the survey is devoted to exploring their academic experiences—quality of teaching; interactions with professors, TAs, and other students; experiences in labs; and satisfaction with the resources offered in the CoE. Some of the other items include additional questions for transfer students about their experiences compared to their initial institution; assessment of a student's confidence; and general items about attitudes towards Engineering as a discipline. Finally, many demographic variables are included in order to assess differences in attitudes between and among groups.

The survey was designed by the PACE team to be a web-based survey. Dr. Sheridan chose the option of administering the survey using WISELI resources, so that all original data could be retained by WISELI for future analyses. The survey was administered as an anonymous survey; Dr. Sheridan retained no ability to link the responses of an individual to his or her student records, or to future survey responses. Deveny Benting at WISELI coded the survey in Zoomerang and oversaw the administration of the survey and the email communication with respondents. Gene Masters in CoE Academic Affairs provided the sample list, and also provided demographic characteristics of the sample (see Table 1.)

Institutional Review Board (IRB) approval for the project was obtained on April 2, 2008, and the survey went into the field on April 10, 2008. The initial invitation to participate in the survey was sent by CoE Dean Paul Peercy via email to 3,000 students; each email contained an individualized link to the survey instrument. Between April 10, 2008 and May 12, 2008, 3 reminder emails were sent to students. A reward of $100 was offered to students who completed the survey, and was awarded to one student on May 30, 2008. (Student entries into the drawing were not connected to their survey responses, thus retaining the anonymity of the students' data.)

Response Rates and Characteristics of Sample

Of the 3,000 students who received a link to the survey, 1,101 students responded. Nineteen of those respondents indicated that they had never taken a course in the CoE; therefore, they were ineligible for this study and did not complete the rest of the items. As ineligible respondents, they are removed from the initial sample pool. The overall response rate to the survey was 36.3%:

Initial Sample: 3,000
Ineligible: 19
Responded: 1,082

Response Rate: 36.3%

The sample is reasonably representative of the CoE student population as a whole. As is common in most surveys, women students were more likely to respond than men. Targeted minority students (African American, American Indian, Hispanic, and Southeast Asian) responded at lower levels than their presence in the CoE student body, and international students were also less likely to respond. Respondents to the survey more often left the race/ethnicity item blank than they do in our student databases. Freshmen were more likely to reply, while seniors (or above) were less likely to reply. Students with high GPAs (3.5 or above) were more likely to reply than other students.

Table 1. Characteristics of PACE Sample, UW-Madison

	PACE Respondents		All CoE Students	
	N	%	N	%
ALL	1082	100.0%	3005	100.0%
Gender				
Female	237	24.4%	526	17.5%
Male	733	75.6%	2476	82.5%
Race/Ethnicity				
African American/Black	14	1.3%	54	1.8%
American Indian/Alaska Native/Native Hawaiian/Pacific Islander	12	1.1%	20	0.7%
Asian American/Asian	41	3.8%	188	6.3%
Hispanic/Latino	17	1.6%	72	2.4%
White/Caucasian	817	75.5%	2357	78.5%
Other/Unknown	129	11.9%	95	3.2%
International Student	52	4.8%	216	7.2%
Targeted Minority	*46*	*4.8%*	*192*	*6.4%*
Rank				
Freshman	229	23.3%	311	10.4%
Sophomore	225	22.9%	656	21.9%
Junior	209	21.3%	743	24.8%
Senior+	318	32.4%	1231	41.0%
Mean GPA		2.83		3.11
High GPA*	344	37.0%	1095	36.4%
Transfer Student	108	10.9%	339	11.3%
Student Works	633	58.5%	Unknown	Unknown
Financial Need	143	14.9%	Unknown	Unknown
CoE Student Organization	438	40.2%	Unknown	Unknown

* A High GPA is defined as 3.5 or higher.

<u>Analysis Plan</u>

To uncover general trends and see where differences between and among different groups of students emerge, t-tests were performed on the means of most variables (those that used a 5-point Lickert scale for measurement), looking for differences among the following groups who may be having differential experiences based on their membership in the group:

Group of Interest	Comparison
Women	Men
Targeted Minority[2]	Asian (non-SE Asian)/White/Other
Freshman/Sophomore	Junior/Senior/Super Senior
High GPA	GPA Less Than 3.5
Engineering Student Organization[3]	Not a CoE Student Org Member
Student Works	No Full- or Part-time Work
Financial Need[4]	No Need-Based Scholarship
Transfer Student	Not a Transfer

Table 1 indicates the percentages of PACE respondents in each category. Some interactions occur within these groups. Women students tend to be over-represented in CoE student organizations (59.9% vs. 38.2%). Under-represented minority students are less likely to have high GPAs (19.6% vs. 37.7%) and are more likely to belong to student organizations (58.7% vs. 42.7%). Asian students (all ethnicities) are less likely to belong to CoE student organizations (31.1% vs. 44.8%), and are less likely to have financial need. Freshman and sophomores are more likely to have high GPAs (41.5% vs. 33.3%), less likely to work (49.1% vs. 77.8%), less likely to be transfer students (3.3% vs. 16.9%), and less likely to belong to CoE student organizations (36.6% vs. 49.7%). CoE students with High GPAs (greater than 3.5) are more likely to belong to CoE Student Organizations (50.9% vs. 40.3%), and are less likely to work (59.9% vs. 68.9%) or to have financial need (52.2% vs. 32.4%). They are also less likely to be transfer students (6.7% vs. 13.1%). Students who work have higher financial need. Transfer students more often work compared to other students (12.3% vs. 8.3%), and transfer students have more financial need than other students.

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[2] A student is coded as a "targeted minority" student if they checked the African American/Black, American Indian/Alaska Native, Hispanic/Latino, Native Hawaiian/Pacific Islander, or Southeast Asian responses on item 80, regardless of which other items they may have checked, AND if they indicated in item 72 that they are a U.S. citizen or permanent resident. International students are not considered "targeted minorities" regardless of the race/ethnicity response. The definition of "targeted minority" used by the PACE staff is slightly different, as Southeast Asians were not considered "targeted minorities" in those data; all Asians were considered non-targeted in the PACE report (Appendix 3).

[3] A student is considered to belong to an "Engineering Student Organization" if s/he selected any one of the official CoE student organizations listed in items 25, 27, 29, or 31.

[4] For this analysis, a student is considered to have "Financial Need" if s/he selected Need-based scholoarships (d), Private loans (e), Federal loans (g), or Grants (i) in item 74.

Items are divided into five main areas of inquiry:
- Academic Experiences are items related to satisfaction with teaching (q4), professors (q6-q7), TAs (q10-q12), labs (q15-q16), and CoE resources (q18-q19).
- Interpersonal Experiences are items related to the quality of interactions with persons in the CoE not related to teaching. These include interactions among students (q21) and interactions based solely on gender or racial/ethnic status (q55).
- Intrapersonal Experiences are those feelings and attitudes that are internal to the student, and include confidence (q22, q53) and career goals within Engineering (q48-q49, q51).
- Perceptions of Engineering (q46-q47).
- Experiences of Transfer Students. In addition to assessing differences between transfer students and others in all of the areas noted above, several items assessing climate issues common to transfer students were asked of transfer students only (q62, q64).

In addition to the comparisons between groups within the UW-Madison CoE (see Appendix 2 for full tables), CoE students can be compared to three peer Engineering colleges. Assoc. Dean Steve Cramer selected the University of Michigan, Pennsylvania State University, and Purdue University's Engineering programs as peers. Two of these three universities had a response rate on their PACE survey that was similar to the CoE's (33% and 35%), while one program had a much lower response rate (23%). Mean results were reported for UW-Madison and the three peers, although the identity of each peer program was masked. Without standard deviations it is difficult to determine when differences are significant. As a rough guide, a difference of plus-or-minus 0.2 between the CoE mean and the other means was considered meaningful/significant, and if such a difference occurred between UW-Madison and two or more other programs, then the difference will be reported below. In addition to overall mean scores, mean scores for underrepresented groups in Engineering were provided by the PACE program (women, specific racial/ethnic groups, and all "targeted minorities" as a whole.) See Appendix 3 for the results provided by the PACE program.

Some additional analyses were performed to elucidate findings for individual racial/ethnic groups. In these analyses, all Asian ethnicities (Asian, Asian Indian, Southeast Asian) are combined. Thus, when results for "Asians" are reported, they do include Southeast Asian students as well as other Asian ethnicities.

There are two exceptions to the analysis plan noted above. First, item 55 is coded slightly differently than all other items. Because it has a "yes/no" response scale, we calculate and compare "% yes", and differences between peer schools that we noted as large were plus-or-minus one percent. Second, for the two items that only transfer students answer (items 62 and 64), a larger margin is used to determine significant differences between CoE and peer schools, due to the much smaller sample size of respondents answering those items compared to all the others. A window of plus-or-minus 0.8 is used for these two items.

Section I: Academic Experiences (Teaching, Professors, TAs, Labs, Resources)

CoE students rate their educational experiences in Engineering quite high, especially compared to other courses outside of Engineering (Science, Math, and Humanities/Social Science.) The quality of Math courses, in particular, are rated quite low both compared to other courses taken by CoE students, and also compared to students at our peer institutions. Students wrote in comments about poor teaching in their Science and especially in Math courses twice as often as they wrote about poor teaching in Engineering. For example,

> *"Engineering courses are great with many tools to help students succeed. The math and physics departments are the two worst departments on campus. The math department goes out of their way to make the material harder than it has to be, and the physics department doesn't seem to care about teaching at all. My experiences in humanities have been both good and bad." (RID=273)*

Figure 1. Quality of Teaching
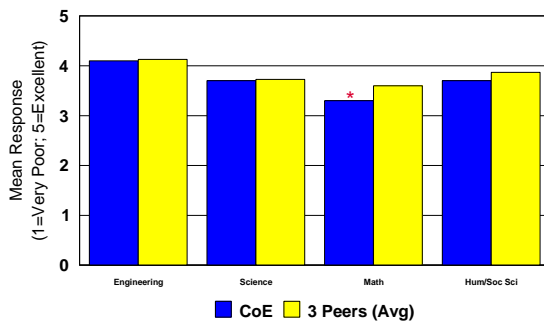
* CoE significantly different from Big-10 peers (see text)

Figure 2. Student Contact with Professors
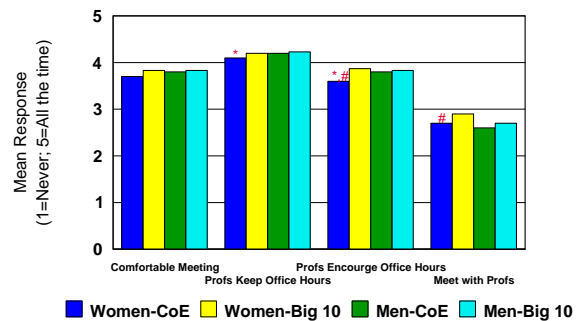
* CoE women significantly different from CoE men (*p*<.05)
# CoE women significantly different from Big-10 women (see text)

Relationships with professors could use some work, as CoE students do not feel that professors write helpful comments on their work, and they do not tend to meet with their professors for extra help. In fact, CoE is low compared to peer programs in % of students who meet regularly with professors. As some students note:

> *"Overall I feel that professors are far more concerned with their professional development than my own. Many times I have been shoved off on to TAs by professors who feel that FIRST you talk to the TAs, THEN if you still have questions, talk to the professors." (RID=106)*

> *"Each professor is different but on the whole, IN class they want to help and answer questions. Outside of lecture, I am less comfortable asking them anything as they seem to be busy with research and won't have time for me. If I do have a question outside of lecture, I will more than likely go to my TA and only if my TA suggests it will I go to my professor." (RID=351)*

At the same time, CoE students do not feel professors move through material too quickly, nor do they feel overwhelmed by the amount of work they have. Students from peer institutions feel more overwhelmed than UW-Madison CoE students. Also, students at UW-Madison do not feel that professors' accents are a problem. Most of the write-in comments were positive about professors, and very few noted that workload was too high, or that professors' accents were a hindrance to learning. For example:

> *"Most professors are great, there are only a few who don't really want to be teaching. Also, the amount of homework in each class is reasonable, the challenge comes in the number of classes that must be taken at any given time."* *(RID=474)*

CoE students are happy with TAs, and they rated their TAs as more knowledgeable than students at our peer institutions rated their TAs. Further, CoE students were unlikely to cite "cultural differences" as a reason not to meet with a TA, and are more comfortable meeting with TAs for extra help compared to peers. Most of the negative comments about TAs were directed at TAs in the Math or Science departments. Comments about TAs in CoE were generally positive, such as:

> *"I find a good TA is very helpful for learning course material. If I have a good TA I may skip lectures to study topics on my own because professors usually don't go very far beyond the material in a book. TAs are usually more approachable and willing to answer what may be regarded to as "dumb" questions. Discussions provide more interactive/personal learning environment. Also, since they are also students they understand how students learn material, while many professors seem to think just reading off the text will help us learn."* *(RID=145)*

Figure 3. Student Contact with TAs
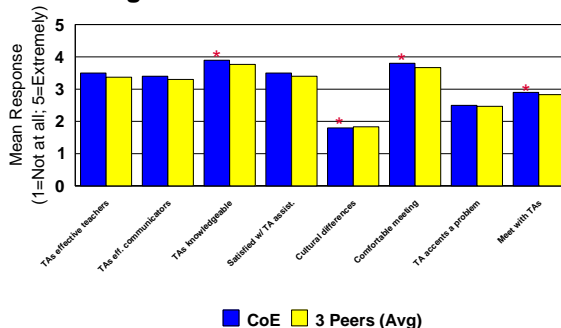
* CoE significantly different from Big-10 peers (see text)

Figure 4. CoE Resources
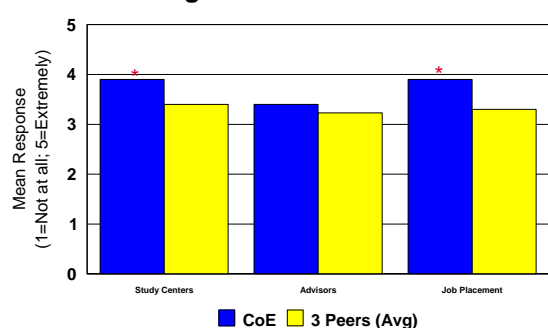
* CoE significantly different from Big-10 peers (see text)

CoE undergrads are more satisfied with training they receive in technical writing compared to peers at other Big-10 institutions, and CoE undergrads are happy with CoE resources. Study centers and job placement (Engineering Career Services/ECS) help are rated higher than similar services at peer organizations:

> *"The ECS is awesome at Madison. Our career fair was a great experience and I received an excellent internship because of it."* (RID=351)

> *"Walk-in help at Wendt saved my GPA. The tutors there are amazing."* (RID=544)

Advising received much less praise. While ECS received two positive comments for every one negative one, it was the opposite for advising in the CoE:

> *"I always felt like I knew more than my CoE advisors. They were never helpful, they always told me to go ask someone else because they didn't know the answer to my questions. I can't say anything about my department's advisors because I haven't met with them yet."*

Other suggestions written by students regarding CoE resources include: put more electrical outlets in study centers for laptops; provide whiteboards so that students can work together more easily; provide more space; and keep the Engineering buildings open longer and on the weekends.

Gender Differences

Some significant differences between CoE women and men appeared with regard to academic experiences in the CoE. CoE women were less likely to indicate that professors write helpful comments on assignments than men; are less able to understand course materials; and are less comfortable asking questions in class. They are less likely to say that their professors inspire them to study Engineering. CoE women indicate less often that professors keep their office hours, and less often that professors encourage them to attend office hours. Women rate quality of Humanities/Social Science courses higher than men rate them. Finally, women more often say they meet with TAs for extra help, compared to men.

Some differences also appeared for CoE women compared to women students at peer institutions. CoE women students are the least likely to say their professors encourage them to attend office hours, compared to their female peers in the Big-10, and they are more likely to say that their professors think they have a lower ability than they actually have.

Racial/Ethnic Differences

Minority students in the CoE are significantly less likely to say they understand course material compared to majority/international students, and compared to other under-represented minority (URM) students in Big-10 Engineering programs. Compared to URM students in other Engineering programs, UW-Madison URM students say that professors encourage them to attend office hours less often. At the same time, CoE URM students are more likely than URM students at other campuses to say that course syllabi

are clear, they understand what their professors expect of them, professors keep the office hours they set, and that professors do not move through the material too quickly.

URM students are happier with their TAs than are URM students at other Big-10 programs, and also compared to their majority peers here at UW-Madison. CoE URM students more often say that TAs are effective communicators, and they also say this more than URM students at other universities. Compared to URM students in other Engineering programs, UW-Madison URM students say that their TAs are effective teachers.

URM students at UW-Madison indicate that their lab experiments are explained clearly prior to labs more often than their majority counterparts at UW-Madison, and more often than their URM counterparts at peer Engineering programs. They say that lab work is divided equally among lab group members more often at UW-Madison than at other institutions. This finding is especially interesting (and note above that women students also do not report that lab work is divided unfairly.) This is contrary to previous studies of women and minorities in STEM; prior studies have shown that women especially report that they are often assigned the "housekeeping" roles in a group or are not allowed to participate at all, while minorities report similar experiences. This does not appear to be the case at UW-Madison.

Although UW-Madison students rated labs more highly than their Big-10 peers, most of the write-in comments were negative. Most negative comments were about outdated lab experiments, and/or outdated or broken lab equipment.

Figure 5. How often is lab work divided equally among lab group?
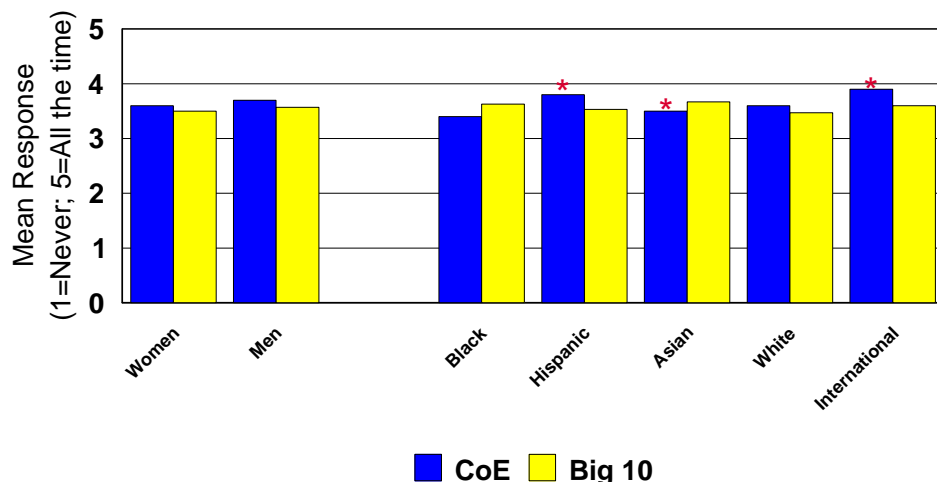
* CoE significantly different from Big-10 peers (see text)

URM students at UW-Madison are more satisfied with the size of their Engineering classes compared to URM students at peer institutions. Finally, URM students at UW-

Madison are much happier with advisors in the CoE, compared to URM students at our peer institutions in the Big-10.

Asian students of all ethnicities are generally different than other non-white students with regards to their satisfaction with academic experiences in the CoE, and are more like international students. Asian students are generally less-satisfied with their experiences at UW-Madison than other students. They are less likely to say professors care about whether they learn course material; less likely to say they understand course material; less likely to say they understand what professors expect of them; more likely to say professors move through course material too quickly; and more likely to feel overwhelmed by the amount of homework they have. Asian students are dissatisfied with the size of their Engineering courses, with CoE study centers, and with CoE job placement help, compared to other students. On the other hand, Asian students are more likely to say they meet with professors for extra help.

Asian students and Black students are very happy with TAs, and very comfortable meeting with them compared to other CoE students. Hispanic students are especially pleased with advising in the CoE.

Other Differences within CoE

Younger students (freshmen/sophomores) rate non-Engineering courses higher than older students. They are generally less comfortable with professors than are older students— less comfortable asking questions in class, less comfortable meeting with professors for extra help, and less likely to actually meet with professors for help. At the same time, freshmen/sophomores give professors more positive ratings than upperclassmen in some cases—they are more likely to say professors treat them with respect, more likely to say course syllabi are clear, and are less likely to say that professors concentrate more on research than teaching. Younger students are more satisfied with TAs than older students, and yet are less comfortable meeting with TAs and actually do meet with TAs less often than upperclass students. Younger students indicate that they aren't getting enough training in technical writing. Younger students say that labwork is explained clearly and that work is divided up equally more often than upperclassmen say these things. Younger students are less satisfied with the size of their Engineering classes than are older students. Freshmen/sophomores are especially likely to say that CoE advisors are helpful.

Students with high GPAs rate Math courses significantly higher than students with under a 3.5. The higher the GPA, the more highly-rated are the Math and Science courses outside CoE. Students with high GPAs are happier with professors (not surprisingly.) They say professors care about whether they learn course material; professors treat them with respect; they are able to understand course material; they are comfortable asking questions in class; professors grade their work fairly; and they are comfortable meeting with professors for help; they understand what professors expect of them; and that professors inspire them to study Engineering. High-GPA students are less likely to say that professors think they have a lower ability than they actually have, that professors

move through course material too quickly, that they feel overwhelmed by the amount of homework they have, or that professors accents make it difficult to understand course material. High-GPA students are more comfortable meeting with TAs than lower-GPA students. The only item rated more negatively for the high-GPA students is that high-GPA students indicate lab work is divided unfairly more often than other students.

Students who participate in CoE student organizations are similar to the high-GPA students, with higher scores on many of the items rating professors and TAs. Students participating in Engineering student organizations rate Engineering courses higher than other students, and other courses lower (especially Humanities/Social Science courses.) Those in CoE student organizations are especially likely to say that CoE job placement help is helpful.

Students with financial need (they work, or have scholarships or loans) rate almost all items lower than students without need. They say more often that professors do not treat them with respect, and think they have a lower ability than they actually have. They also say that syllabi are not clear, professors move through material too quickly, they feel overwhelmed by the amount of work, and that professors' accents make it difficult to understand course material. Students with some financial need indicate more often that TAs' accents make it difficult to understand course material, and also indicate more often that lab work is not divided equally, compared to those with no need. Finally, students who work are less-satisfied with CoE advisors than other students.

Overall, transfer students are less satisfied with their academic experiences than are other students. They are less satisfied with quality of teaching in all categories (Engineering, Science, Math, Humanities/Social Science) compared to other CoE students, although like other CoE students they rate the Engineering teaching the highest among all categories. Transfer students are more likely to say that professors don't care whether they learn course material; that professors place more emphasis on their research than their teaching; and that professors think they have a lower ability level than they actually have. Transfer students often feel overwhelmed by the amount of homework they have, compared to other CoE students. But at the same time transfer students meet with their professors for extra help more often than other students, and they find the CoE study centers especially useful.

Section II: Interpersonal Experiences (Student interaction, Personal experiences)

Student interaction among CoE undergraduates appears to be unremarkable; there are few differences between CoE students and other Big-10 Engineering students with regards to feeling like part of an Engineering community, participating in study groups, competition between students, students taking each other seriously, etc. However, high percentages of students indicate they have been singled out due to gender, and/or have heard Engineering faculty express stereotypes about men and women. These responses are primarily driven by the reports of CoE women students, and will be reported below.

Gender Differences

CoE women experience good student interactions in some areas. They more often say they like studying with other students in a group, and that they are involved with student study groups, compared to CoE men students.

However, about a quarter (23.8%) of CoE women undergraduates indicate that they have been singled out unfairly in class because of their gender. About the same amount (23.7%) said that they have heard CoE faculty express sexist stereotypes. These rates are higher than those reported by our peer institutions, where the average is in the 16-19% range.

Figure 6. Singled Out Due To Gender
Women respondents only
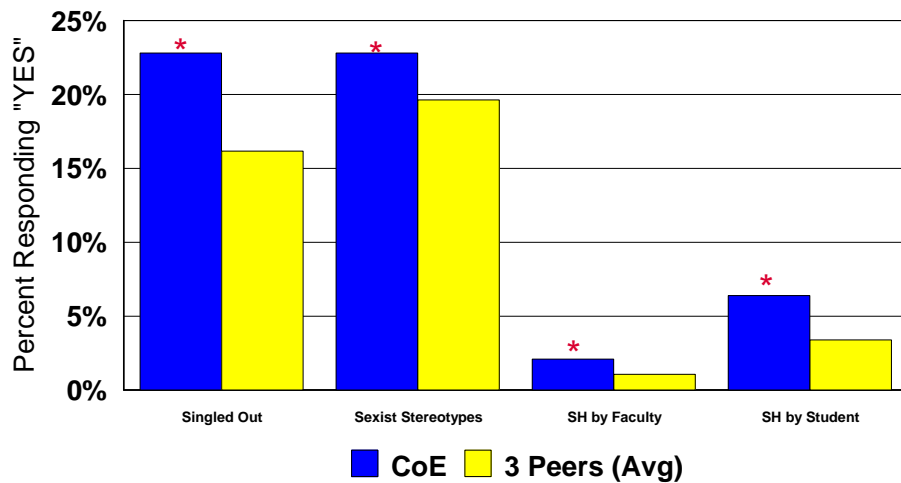
* CoE significantly different from Big-10 peers (see text)
NOTE: SH=sexually harassed

Very few students wrote in comments to this section. Those who did usually said that the behavior they witnessed was from students and not faculty, as in this quote:

> *"I think it's very commonplace for Engineering students to joke about women, and how few of them there are in Engineering. The jokes seem harmless to us (men), but I'm sure their [sic] not to those few women actually in the field." (RID=243)*

Further analysis reveals that it is much more often the junior/senior women reporting these events, and women who participate in student organizations in the CoE are especially likely to report these instances.

Table 2. Women's Negative Experiences in the CoE, Logistic Regression Analysis

| | In class, I have been singled out unfairly because of my gender | | | | | | | | In class, I have heard engineering faculty express stereotypes about men and women | | | | | | | |
| | Model 1 | | | | Model 2 | | | | Model 1 | | | | Model 2 | | | |
	Est.	S.E.	O.R.	p	Est.	S.E.	O.R.	p	Est.	S.E.	O.R.	p	Est.	S.E.	O.R.	p
Intercept	-1.08 *	0.32		0.0007	-1.13 *	0.28		<.0001	-1.30 *	0.32		<.0001	-1.42 *	0.29		<.0001
Freshman/Sophomore	-1.37 *	0.36	0.25	0.0001	-1.35 *	0.37	0.26	0.0003	-1.19 *	0.35	0.30	0.0006	-1.20 *	0.37	0.30	0.0012
Student Org	0.69	0.36	2.00	0.0535					0.94 *	0.36	2.57	0.0091				
Honor Society					0.31	0.66	1.37	0.6362					-0.61	0.85	0.54	0.475
Professional Society					0.74	0.68	2.10	0.2743					0.67	0.80	1.95	0.4062
Engineering Projects					1.16 *	0.45	3.18	0.0094					0.96 *	0.45	2.60	0.0341
Associations					0.24	0.38	1.27	0.5316					0.84 *	0.37	2.32	0.0241
SWE					-0.38	0.69	0.69	0.588					0.01	0.81	1.01	0.9916
N	227				227				228				228			
-2 Log L	227.559				219.58				228.951				214.323			
df	2				6				2				6			

* indicates significance at $p < .05$.

As for more extreme behaviors, CoE women students say they have been sexually harassed by a faculty member and/or by other students more often than women at other Big-10 Engineering colleges, and CoE women students report hearing CoE faculty express racial/ethnic stereotypes less often than women at other universities.

Racial/Ethnic Differences

Targeted minority students at UW-Madison appear to be having better interpersonal experiences than are URM students at our peer institutions. URM students at UW-Madison find group projects more valuable than majority/international students in CoE, and they also rate them higher than URM students at other Engineering programs. Asian students (all ethnicities) also find group projects very valuable. URM students at UW-Madison are less likely than their peers at other universities to indicate they have been singled out because of race/ethnicity. Within the CoE, URM students are less likely than their majority counterparts in CoE to indicate that they have heard Engineering faculty express sexist stereotypes.

Although finding group projects very valuable, Asian students of all ethnicities are less happy with interpersonal interactions in the CoE compared to other CoE students. Asian students are less likely than others to say that Engineering students help each other succeed in class, and that other students take their comments/suggestions seriously. Finally, Asian students in CoE are much more likely than others to say that they have been singled out because of race, about 10% of Asian students say "yes" to this item. One student wrote:

> *"I had a professor who said nice n easy japanezy then half way through the semester started saying nice and easy lemon squezy... it was hilarious!"*
> *(RID=157)*

Figure 7. Singled Out Due To Race/Ethnicity
Asian students only
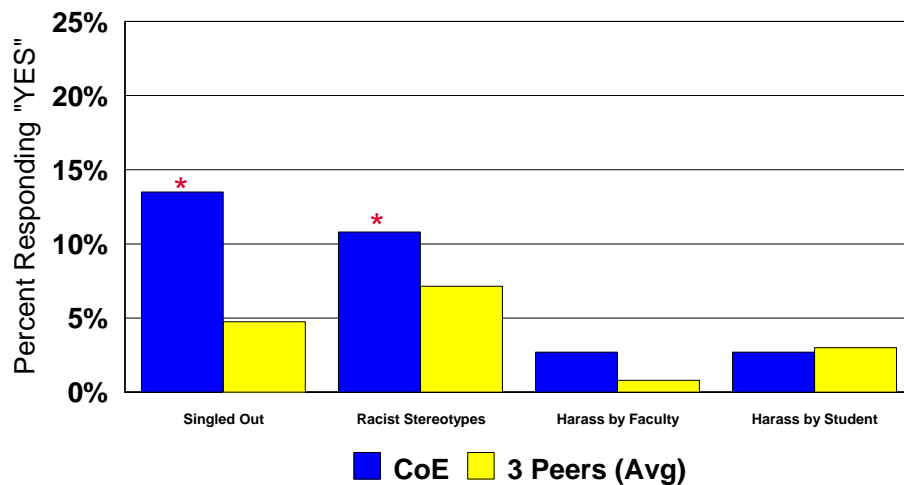
* CoE significantly different from Big-10 peers (see text)

Other Differences within CoE

Younger students (freshmen/sophomores) are less positive about almost all aspects of student interaction than are upperclassmen: they find group projects less valuable, they feel less like part of an Engineering community, they do not like studying with other students in a group, they are less involved with student study groups, they do not feel that Engineering students help each other succeed in class, and they feel that other students do not take their comments/suggestions in class seriously.

CoE students with high GPAs and/or who participate in CoE student organizations rate all of these areas higher than other students, except that the highest-GPA students more often indicate that they are not involved with study groups.

There is some evidence that students with financial need find the CoE to be more competitive (*Students compete with each other in class*) than other students.

Transfer students in the CoE feel less-often than others that group projects are valuable, and that they are a part of an Engineering community.

Section III: Intrapersonal Experiences (Confidence, Engineering ambitions)

CoE undergraduate students have high ambitions and high levels of confidence in their abilities. They forecast a longer Engineering career than students from peer institutions, and they less-often say that they can think of other majors they would prefer to

Engineering. At the same time, UW-Madison CoE students indicate more often that they would like to declare a non-Engineering major. (Maybe they didn't understand the question?)

Gender Differences

More women in CoE than men say they can think of majors they'd prefer to Engineering. Women are less confident in their ability to succeed in Engineering, and in Science courses. They are also less-confident in their abilities overall, and rate their academic abilities as lower than other students. These ratings occur despite the fact that self-reported GPAs for women CoE students are (non-significantly) higher than self-reports of men.

Figure 8. Confidence in Abilities
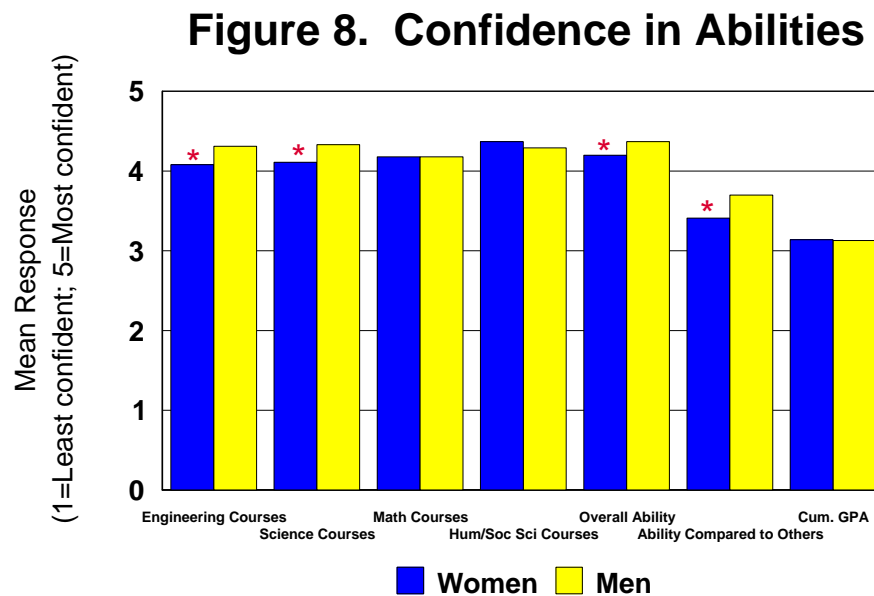
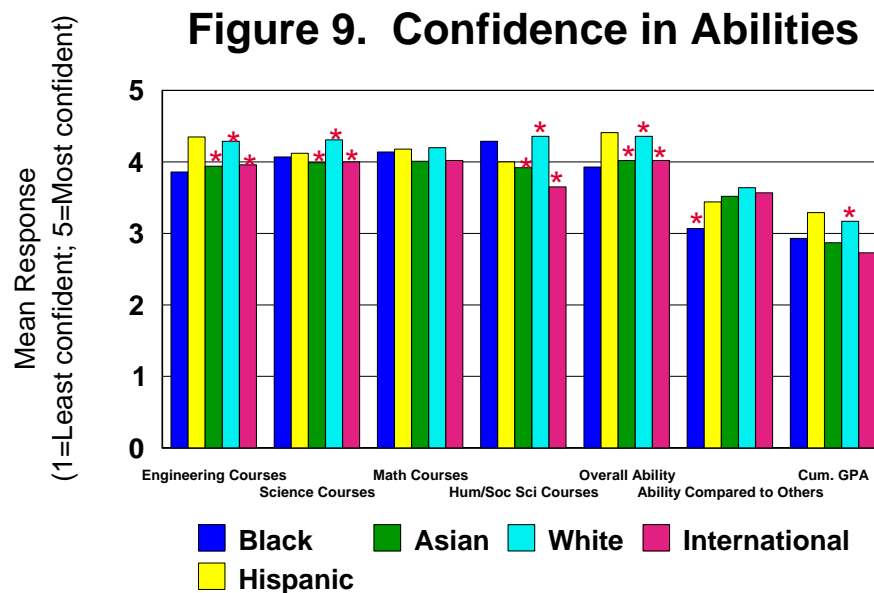* CoE women significantly different from CoE men (*p*<.05)
NOTE: See Appendix 1 for actual question wording and response categories.

Racial/Ethnic Differences

URM students rate their academic abilities lower than their majority counterparts at UW-Madison. They indicate that they intend to complete the Engineering major less often than their URM peers at other Engineering schools. In particular, Black students more often indicate they would prefer a major other than Engineering. They also rate their abilities in Engineering to be lower than their peers.

Asian students of all ethnicities also have a confidence gap, compared to other CoE students. Asian students at UW-Madison have much less confidence in their ability to succeed at Engineering and Science courses, and less confidence in their overall academic ability compared to other students at UW-Madison. Asian students anticipate a shorter Engineering career than other UW-Madison students. They are less sure about

their choice of an Engineering major, and say more often than other students that studying Engineering is not their choice.

Figure 9. Confidence in Abilities

Other Differences within CoE

Younger students (freshmen and sophomores) have significantly less confidence in their academic abilities for all subjects compared to older students. They are less certain of their commitment to studying Engineering. However, freshmen/sophomores actually anticipate having a *longer* career in Engineering compared to upperclassmen.

High-GPA students, and students in Engineering organizations, are more committed to Engineering careers and majors, and have more confidence in all of their academic courses.

There is some evidence that students with some financial need anticipate a longer career in Engineering, and also have a lower assessment of their academic abilities compared to their peers.

Transfer students indicate more often that others that they might like other majors better than Engineering.

Section IV: Perceptions of Engineering

UW-Madison CoE students do not think Engineering is boring, compared to peer schools! CoE undergrads have a very positive view of Engineering; almost all indicators

are above "Somewhat agree". Only the item *Engineers can design their own work schedules* had an overall disagree score. The most highly-rated item was *Engineering help to make the world a better place*.

Gender Differences

UW-Madison women feel that engineers are well-paid, and that engineers are respected by other people, more often than CoE men agree to these items. Less-positive are CoE women's perception of Engineering as being family-friendly; CoE women do not agree that *Engineering is a field that supports people who want to have children and continue working* as often as men agree.

Racial/Ethnic Differences

Compared to URM students at our peer schools, CoE URM students have a more positive perception of Engineering as a profession. They feel more often that engineers are well-paid; that Engineering supports people who want to have children and continue working; that society values the work that engineers do; that Engineering supports a balance between work and family; that Engineering will be a rewarding career; and that they will have no problem finding a job with an Engineering degree. CoE URM students also feel that Engineering supports work/family balance, and that engineers are respected, more often than majority students.

Figure 10. Perceptions of Engineering

Legend: Black, Asian, White, International, Hispanic
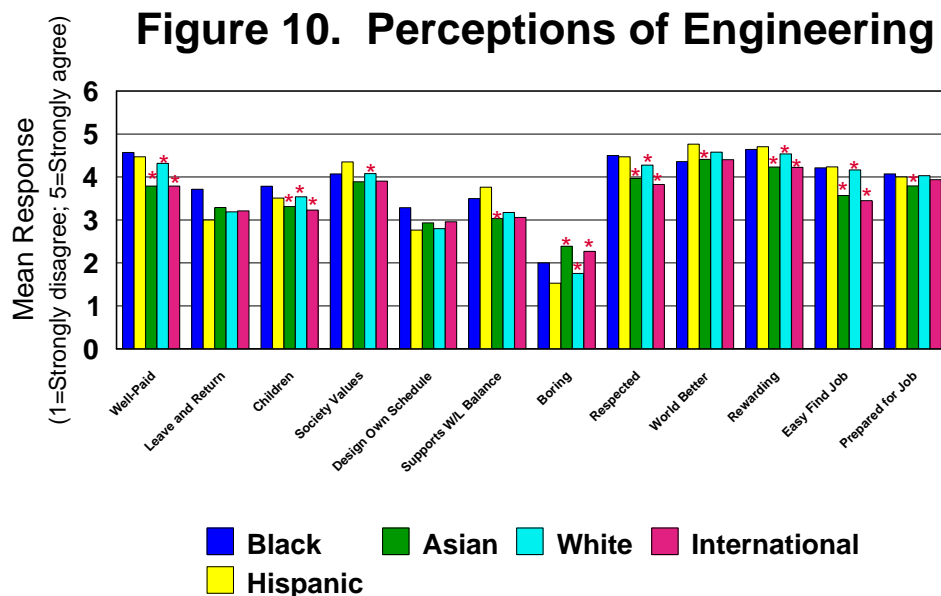
* Significant difference between selected group and all others ($p<.05$)

Asians (all ethnicities), on the other hand, have lower perceptions of Engineering compared to their Asian peers at other Big-10 programs, and also compared to their non-Asian peers here at UW-Madison. Asian students responded with lower ratings on almost every item (both compared to other CoE students, and compared to Asian students

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at our peer institutions) except one—they more often agreed that engineers can leave and come back more easily than other professions.

Other Differences within CoE

Younger students have more positive perceptions of Engineering than older students, with higher ratings on every item. Most of the differences were significant.

Students with high GPAs, and those in student organizations, have more positive perceptions of Engineering than other students. They are especially more likely to say that *I will have no problem finding a job when I have obtained an engineering degree* and *My engineering coursework will prepare me for a job in engineering*.

Students with financial need more often indicate that *Society values the work that engineers do*. They also agree more often that *Engineering is an occupation that is respected* and that they expect Engineering to be a rewarding career.

Transfer students have more negative perceptions of Engineering. They agree less often that: *Engineers are well-paid*, *Engineering supports people who want to have children and continue working*, *Society values the work that engineers do*, *Engineering is a field that supports work/family balance*, and *My engineering coursework will prepare me for a job in engineering*.

Section V: Experiences of Transfer Students

While overall, transfer students in the CoE are not very positive compared to other students (see Sections I-IV), they nevertheless rated the item 'I would recommend UW-Madison to other transfers' very highly, indicating that they are likely quite satisfied with their experiences here. Transfers to UW-Madison have no trouble finding their way around campus.

Very few transfers are underrepresented minorities, but among those who are, they report feeling overwhelmed, intimidated by large classes, and having difficulty adjusting to academic standards compared to other transfers.

Transfers who get involved in CoE student organizations report more often that they would recommend the UW-Madison to other transfers, that it is easy to make friends, and that they are very involved with social activities at UW-Madison.

Those who transferred from 2-year campuses more often report feeling overwhelmed, being uncomfortable in large lecture classes, and having increased levels of stress compared to transfers from 4-year campuses.

Transfers to UW-Madison more often experience a dip in grades compared to transfers at our peer programs. Transfers from 2-year campuses to UW-Madison report less-often

that faculty underestimate their abilities, compared to 2-year transfers at our peer institutions.

Summary and recommendations

Overall, the students in the College of Engineering at UW-Madison appear to be happy with the Engineering education they are receiving in the CoE—both overall, and relative to their peers in other Big-10 Engineering programs. The biggest overall problems appear to be the quality of teaching in Math courses at UW-Madison, and the culture of avoiding getting help directly from professors. The quality of CoE TAs and the Engineering Career Services stood out as being very highly rated by CoE students, compared to our Big-10 peers.

Some subgroups of students are consistently less-happy with the education they are receiving in the CoE, and with Engineering in general; in particular Asian students (all ethnicities) and transfer students provide lower ratings on almost all measures. On the other hand, students with high GPAs, Hispanic and White students, and students who participate in CoE student organizations are consistently happier with their studies in Engineering compared to other students. Women students, Black students, students with financial need, and younger students (freshmen/sophomores) had mixed results, with higher ratings on some items and lower ratings on others.

One of the most disturbing findings in this survey was the high incidence of women students responding that they had experienced differential treatment—including sexual harassment—based on gender. The incidence was high both on its face, and also relative to our peer programs in the Big-10. An in-depth analysis indicates that it is the women who participate in student organizations, especially the engineering projects (teams) and the professional associations, that are experiencing increased incidence of bias and harassment. This is problematic, as it is precisely the membership in these organizations that provides the optimal Engineering experience for most students. The CoE should work to stop a culture of sexism and harassment within these student groups, perhaps with education/training programs, or perhaps with more faculty oversight of the groups.

Another finding that might be of interest to faculty and staff who work with undergraduate students is the knowledge of the "confidence gap" that women exhibit. In contrast to their actual (self-reported) GPAs, women students tend to underestimate their abilities relative to their peers. This lack of self-confidence could be interpreted as a lack of ability, and women students in CoE do report more often than their Big-10 peers that their professors think they lack ability. If faculty were aware of this confidence gap, perhaps they could be more proactive in encouraging women to have more confidence in their academic abilities.

One positive aspect of the gender climate for women students in CoE is the finding that women students enjoy working in groups and enjoy their labs the same as men students, and feel that group work is divided equally among group members. Some literature

shows that women are not always treated equally in work-groups, so this is a positive climate finding for women students at UW-Madison. The findings for CoE women were similar to those at our peer institutions in the Big-10.

The finding that Asian students of all ethnicities in the CoE were among the most dissatisfied with their educational experience at UW-Madison was surprising. Although Asians (all ethnicities) comprise the largest of the non-white racial/ethnic group, Asian students do not seem to feel they are part of a cohesive Engineering community. Perhaps due to the "model minority" status they are assigned, Asians are more often assumed to not need assistance; perhaps because Asians are not seen as a "minority" at all they are not as involved in community-building groups such as the Diversity Affairs Office as they might be; or perhaps the reported experiences of discrimination are impeding Asian students' academic and social success. This issue may need to be studied in more depth to understand the experiences of Asian students in the CoE, in order to implement solutions that would make this group feel more welcome in the College.

To end on a more positive note, it is clear from the findings that students who participate in the many Engineering student organizations at UW-Madison are the most satisfied with all aspects of their education in the CoE. Assuming the CoE ensures that bias and harassment are removed from these learning environments, perhaps the best thing that the CoE can do to increase student satisfaction is to encourage participation in these activities. The groups that consistently report being least satisfied—Asian students, transfer students, students with financial need—are more satisfied when they belong to a student organization. Working through and with these student organizations to enhance the Engineering experience at UW-Madison may be the best strategy for ensuring a positive climate for all undergraduates in the College of Engineering.

Prepared for the College of Engineering at UW-Madison
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