The New Norm of Faculty Flexibility:
Transforming the Culture in Science & Engineering

October 10-11, 2008
Iowa State University - Ames, Iowa
October 2008

Dear Conference Attendees:

Welcome to “The New Norm of Faculty Flexibility: Transforming the Culture in Science and Engineering” conference. Iowa State University is proud to join with the American Council on Education in sponsoring this important meeting.

The conference begins with the assumption that we can and will move to a new paradigm in managing work-life issues for faculty in STEM fields. Our hope is that the conference will galvanize and advance national conversations and models. And while it is important to recognize and identify issues and problems, we also need to create principles and solutions for the future.

Over the course of your two days at Iowa State, you will hear from experts who are pioneers in research on the shape of academic careers and the challenges of work-life issues for STEM faculty. We know you are here because you are already dedicated to the transformation of your own campus, and our keynote speakers and expert panelists will give you access to new research and practices that will assist you in meeting your personal, professional and institutional goals.

Now in its third year, the ISU ADVANCE Program is leading our institutional efforts at Iowa State to allow full participation of women and faculty of color in our STEM disciplines. A major grant from the National Science Foundation allowed for the creation of the program, and three colleges – Agriculture and Life Sciences, Engineering, and Liberal Arts and Sciences – are leading the way in improving the way we recruit, retain and advance STEM faculty. This is enabling us to maintain our commitment to world-class research and education.

You have an exciting time ahead of you here in Ames. We wish you a most enjoyable, stimulating and beneficial conference.

Dr. Gregory Geoffroy  
President

Dr. Elizabeth Hoffman  
Executive Vice President and Provost
Dear Conference Attendees,

Welcome to "The New Norm of Faculty Flexibility: Transforming the Culture in Science and Engineering." The American Council on Education (ACE) is pleased to partner with Iowa State University (ISU) as a sponsor for this conference. On behalf of ACE, particularly our Center for Effective Leadership, I extend my thanks to ISU, for their good work in organizing this event, and to you, for your attendance.

ACE has been actively addressing the critical issues of recruiting and retaining the most talented scholars in the academy for the past five years. We believe that one of the key components to making the professoriate more attractive is increasing flexibility in tenure-track faculty career paths. This flexibility is central to diversifying and maintaining excellence in teaching and innovative research, particularly in science, technology, engineering, and mathematics (STEM) fields throughout American higher education.

As a conference participant, you have the opportunity to learn about best practices applicable to your campus and necessary to establishing new norms that will transform the culture in STEM fields. Establishing new norms of faculty flexibility is tremendously important to the future of the professoriate.

Please consider ACE's Center for Effective Leadership as a knowledgeable resource to assist your efforts to attract and retain leading scholars. Together, we can maintain a robust academy and support talented faculty who educate America's students and pursue discovery through research, now and in the future.

Sincerely,

Molly Corbett Broad
President

MCB:gd
## Schedule: Friday, October 10, 2008

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am – 9:00 am</td>
<td>Registration and Continental Breakfast</td>
</tr>
<tr>
<td>9:00 am – 9:05 am</td>
<td>Welcome, Susan Carlson &amp; Bonnie Bowen</td>
</tr>
<tr>
<td></td>
<td>ISU ADVANCE Program and Co-Chairs of the <em>New Norm</em> Conference</td>
</tr>
<tr>
<td>9:05 am – 9:10 am</td>
<td>Welcome, Elizabeth Hoffman</td>
</tr>
<tr>
<td></td>
<td>Executive Vice President and Provost, Iowa State University</td>
</tr>
<tr>
<td>9:10 am – 10:10 am</td>
<td>Keynote Presentation</td>
</tr>
<tr>
<td></td>
<td><em>Do Babies Matter? Women in Science</em></td>
</tr>
<tr>
<td></td>
<td>Mary Ann Mason</td>
</tr>
<tr>
<td></td>
<td>Professor and Co-Director, Berkeley Law Center on Health, Economic</td>
</tr>
<tr>
<td></td>
<td>and Family Security (CHEFS), University of California, Berkeley</td>
</tr>
<tr>
<td></td>
<td>Introduced by Michael Whiteford, Dean, College of Liberal Arts &amp;</td>
</tr>
<tr>
<td></td>
<td>Sciences, Iowa State University</td>
</tr>
<tr>
<td>10:10 am – 10:30 am</td>
<td>Break and Refreshments</td>
</tr>
<tr>
<td>10:30 am – 11:00 am</td>
<td>Keynote Presentation</td>
</tr>
<tr>
<td></td>
<td><em>Having Your Science and Your Life Too: Institutional Responsibilities, Individual Strategies</em></td>
</tr>
<tr>
<td></td>
<td>Shirley Malcom</td>
</tr>
<tr>
<td></td>
<td>Head of the Directorate for Education &amp; Human Resources Programs,</td>
</tr>
<tr>
<td></td>
<td>American Association for the Advancement of Science (AAAS)</td>
</tr>
<tr>
<td></td>
<td>Introduced by Elizabeth Hoffman, Executive Vice President and</td>
</tr>
<tr>
<td></td>
<td>Provost, Iowa State University</td>
</tr>
<tr>
<td>11:00 am – 12:30 pm</td>
<td>Panel #1: Best Policies and Practices for Faculty Flexibility</td>
</tr>
<tr>
<td></td>
<td>Panel Organizers: Jill Bystydzienski, The Ohio State University;</td>
</tr>
<tr>
<td></td>
<td>Cynthia Hudgins, University of Michigan ADVANCE; Gloria Thomas,</td>
</tr>
<tr>
<td></td>
<td>American Council on Education; Joyce Yen, University of Washington</td>
</tr>
<tr>
<td></td>
<td>ADVANCE</td>
</tr>
<tr>
<td></td>
<td>Panelists will provide descriptions and details regarding the</td>
</tr>
<tr>
<td></td>
<td>implementation, use, and assessment of some of the most progressive</td>
</tr>
<tr>
<td></td>
<td>flexible career policies and practices in place for tenured and</td>
</tr>
<tr>
<td></td>
<td>tenure-track faculty at research universities. Information and</td>
</tr>
<tr>
<td></td>
<td>resources will be shared for replication on other campuses.</td>
</tr>
<tr>
<td></td>
<td>Panel Presentations</td>
</tr>
<tr>
<td></td>
<td><em>Help for Dual Career Academic Couples</em></td>
</tr>
<tr>
<td></td>
<td>Nancy Aebersold, Director, National Higher Education Recruitment</td>
</tr>
<tr>
<td></td>
<td>Consortium (HERC)</td>
</tr>
<tr>
<td></td>
<td>*Part-time on the Tenure-Track: the Nexus Between Policy and</td>
</tr>
<tr>
<td></td>
<td>Utilization*</td>
</tr>
<tr>
<td></td>
<td>Joan Herbers, Principal Investigator, ADVANCE Institutional</td>
</tr>
<tr>
<td></td>
<td>Transformation Award and Professor of Ecology, Evolution and</td>
</tr>
<tr>
<td></td>
<td>Organismal Biology, The Ohio State University</td>
</tr>
<tr>
<td></td>
<td>*Flexibility as New Norm? Faculty Response is Not Always Trusting</td>
</tr>
<tr>
<td></td>
<td>of Institutional Motives*</td>
</tr>
<tr>
<td></td>
<td>Gertrude Fraser, Vice Provost for Faculty Advancement, University of</td>
</tr>
<tr>
<td></td>
<td>Virginia</td>
</tr>
<tr>
<td>12:30 pm – 1:15 pm</td>
<td>Luncheon</td>
</tr>
</tbody>
</table>
Schedule: Friday, October 10, 2008

1:15 pm – 1:30 pm  Transition to Group Discussions

1:30 pm – 2:45 pm  Group Discussions (Choose one of the following)
1. Campus teams discuss and plan policies for home institutions.
2. World Café Conversations of challenges facing women in science and best practices for faculty flexibility. See page 7 for description of the World Café.

2:45 pm – 3:15 pm  Break and Refreshments

3:15 pm – 3:30 pm  The Role of the American Council on Education in Supporting Faculty Flexibility
Claire Van Ummersen
Vice President, Center for Effective Leadership, American Council on Education

3:30 pm – 5:00 pm  Panel #2: Intersections and Collaborations Among Business, Industry, and Academe

Panel Organizers: Claire Andreasen, Departments of Veterinary Pathology and Veterinary Clinical Sciences, Iowa State University; Becky Stadlman, Sauer-Danfoss, Inc.
Businesses and industries have made progress in shaping the workplace to support employees who now expect flexibility, healthy lifestyles, and manageable integration of work and personal lives. Workplace flexibility leads to competitive excellence. Higher Education can learn from businesses and corporations as they work to attract and retain the brightest and most diverse workforce.

Panel Presentations
The Future Workforce: Why Should We Include Everyone?
Ron Hanson, Vice President, Human Resources, Sauer-Danfoss, Inc.

Brain Drain: Why Women Scientists/Engineers Leave Academe and Industry
Anne C. Petersen, Deputy Director, Center for Advanced Study in the Behavioral Sciences, and Professor of Psychology, Stanford University

From the Board Room to the Academy – How Promising Corporate Workplace Practices Can Transform the Academic Culture
Linda Siebert Rapoport, Director, Women in Science & Engineering System Transformation (WISEST), University of Illinois at Chicago

5:00 pm – 6:15 pm  Poster Presentations and Networking Reception

6:15 pm – 6:30 pm  Transition to Banquet

6:30 pm – 8:00 pm  Banquet with Keynote Presentation
Time Norms and Glass Ceilings: Exploring the Role of Gender Bias
Joan C. Williams
1066 Foundation Chair and Distinguished Professor, University of California Hastings College of the Law
Introduced by Laura Kramer, who served as Program Director of NSF ADVANCE, January 2007 to June 2008, and is now an Emerita Professor of Sociology at Montclair State University.

8:00 pm – 9:00 pm  Dessert Buffet  (Please remove posters following your dessert)
Schedule: Saturday, October 11, 2008

8:00 am – 8:30 am  Continental Breakfast

8:30 am – 10:00 am  Panel #3: Measurement and Assessment of Policies and Flexibility

Panel Organizers: Bonnie Bowen, ISU ADVANCE Program; Kate Quinn, Balance@UW, University of Washington
The panel will introduce the need for data and measurement in assessing the impact of cultural change efforts and share strategies and best practices in measurement and assessment.

Panel Presentations

Analyzing Flexible Policy Options for Faculty: Recommendations from Balance@UW  
Kate Quinn, Project Director, Balance@UW, University of Washington

Breaking the Norms: Measuring the Impact of New Policies
Sandra Gahn, Senior Research Analyst, Office of Institutional Research, and ISU ADVANCE Program, Iowa State University
Susan Carlson, Associate Provost for Faculty Advancement and Diversity, and ISU ADVANCE Program, Iowa State University

Taking a Strategic Approach to Assessing Culture Change
Ann E. Austin, Mildred B. Erickson Distinguished Chair in Higher, Adult, and Lifelong Education, Michigan State University

Competing on Culture: Academia’s New Strategic Imperative
Cathy A. Trower, Research Director, Collaborative on Academic Careers in Higher Education (COACHE), Harvard University

10:00 am – 10:15 am  Break and Refreshments

10:15 am – 11:00 am  Keynote Presentation
The Athena Factor: Reversing the Brain Drain in Science, Engineering and Technology
Laura Sherbin
Vice President, Center for Work-Life Policy
Introduced by Susan Carlson, Associate Provost for Faculty Advancement and Diversity and Principal Investigator, ISU ADVANCE Program, Iowa State University

11:00 am – 11:15 am  Summary Remarks
Susan Carlson, Associate Provost for Faculty Advancement and Diversity and Principal Investigator, ISU ADVANCE Program, Iowa State University

11:15 am – 12:30 pm  Luncheon & Discussions on moving forward to the next step in faculty flexibility
1. Campus teams discuss and plan policies for home institutions
2. World Café Conversations of the role of data in supporting the need for flexible careers, the use and lack of use of change strategies that support flexible careers, and the opportunities for the academy to adopt best practices developed in business and industry. See page 7 for description of the World Café Conversation process.

12:30 pm  Conference concludes
The World Café Conversation Process

The World Café is a conversational process that allows conference participants to use limited discussion time to collaborate on ideas.

It is an exciting and dynamic way to:
- harness the power of conversation with the goal of creating actionable knowledge
- provide a creative alternative to other discussion formats as conversations are built upon one another’s ideas
- uncover new insights into the questions and issues that are at the center of the conference.

Our World Café conversations will occur at round tables, with each table having a specific question or topic for discussion. Participants will have 15 minutes to consider the question and share their perspectives, recording their observations on the table flip charts. Tables will be visited by three different groups of participants, and the results of subsequent conversations will be added to the flip charts. Conversational rounds allow for new and different ideas to develop in a short period of time, while connecting everyone to this broader conversational system. At the end of the table conversations, we will have time as a group to reflect and share key insights that have emerged from the process.

Keynote Speaker Abstracts

Mary Ann Mason

Professor and Co-Director, Berkeley Law Center on Health, Economic and Family Security (CHEFS), University of California, Berkeley, CA

As Dean of the Graduate Division at UC Berkeley (2000-2007), Mary Ann Mason has been in a unique position to evaluate the unprecedented admission of women, now nearing equal numbers, into advanced fields over the past thirty years. Her research on the impact of family on the lifetime careers of academic and professional women and men, called the Do Babies Matter? project, has garnered nationwide attention. Her data-driven advocacy was recognized in 2006 by an Alfred P. Sloan Foundation achievement award. Mason’s newest book, Mothers on the Fast Track: How the New Generation Can Balance Career and Family, expands on the groundbreaking Do Babies Matter? research. Mason received a B.A. cum laude from Vassar College, a Ph.D. in American History from the University of Rochester, and a J.D. from the University of San Francisco.

Do Babies Matter? Women in Science

Mason and her research team (Marc Goulden, Nicholas H. Wolfinger, and Karie Frasch) have authored eight research papers and a book chapter on the effects of family formation on the careers and lives of men and women Ph.Ds. From graduate school days through the life course of their careers, the team carefully investigated when and where men and especially women dropped out of the pipeline due to family concerns. Particular attention was paid to women in science who face special challenges with discrimination and the policies of federal agencies. During this time they also helped spearhead a major effort aimed at transforming the entire UC system to promote a family-friendly culture. Mary Ann Mason is also the author, with daughter Eve Ekman, of Mothers on the Fast Track: How a new generation can balance family and career (Oxford University Press, 2007).

Shirley Malcom

Head of the Directorate for Education and Human Resources Programs, American Association for the Advancement of Science (AAAS), Washington, D.C.

The directorate for Education and Human Resources Programs, which Shirley Malcom heads, includes AAAS programs in education, activities for underrepresented groups, and public understanding of science and technology. Dr. Malcom serves on several boards, including the Heinz Endowments and the H. John Heinz III Center for Science, Economics and the Environment. In 2006 she was named as co-chair of the National Science Board Commission on 21st Century Education in STEM. In addition, she has chaired a number of national committees addressing education reform and access to scientific and technical education, careers and literacy. Dr. Malcom is a fellow of the AAAS and the American Academy of Arts and Sciences. She served on the National Science Board, the policymaking body of the National Science Foundation, from 1994 to 1998, and from 1994-2001 served on the President’s Committee of Advisors on Science and Technology. Dr. Malcom received her doctorate in ecology from Pennsylvania State University; master’s degree in zoology from the University of California, Los Angeles; and bachelor’s degree with distinction in zoology from the University of Washington.

Having Your Science and Your Life Too: Institutional Responsibilities, Individual Strategies

The culture of STEM has glorified single minded, unrelenting, 24-7 pursuit of career goals. This presentation will introduce institutional strategies and some individual solutions to finding space to “get a life.”
Joan C. Williams
1066 Foundation Chair and Distinguished Professor, University of California Hastings College of the Law, San Francisco, CA

Joan C. Williams is the author of Unbending Gender: Why Family and Work Conflict and What To Do About It (Oxford University Press, 2000), which won the 2000 Gustavus Myers Outstanding Book Award. She has authored or co-authored four books and over fifty law review articles. Founding Director of WorkLife Law (WLL), she is also Co-Director of the Project on Attorney Retention. She has played a leading role in documenting workplace bias against mothers. Her current work focuses on social psychology, and on how work/family conflict affects families across the social spectrum, with a particular focus on how caregiving issues arise in union arbitrations. Professor Williams earned her B.A. in history from Yale University, her Master’s Degree in City Planning from Massachusetts Institute of Technology, and her J.D. from Harvard Law School.

Time Norms and Glass Ceilings: Exploring the Role of Gender Bias
Both academia and science reflect a “norm of work devotion”: they assume an Ideal Worker who can devote himself to science because his wife devotes herself to family. This masculine norm doesn’t work well for most women – or for men who seek an active role in family care. This talk will examine the masculine norms that create not only the “maternal wall” for mothers, but the glass ceiling for all women, whether they have children or not. Joan C. Williams was awarded an ADVANCE Leadership Grant in 2005. For information on best-practice work/life policies in academia, the business case for retaining and advancing women, and a webpage on forms of hidden gender bias, see http://www.worklifelaw.org/GenderBias_index.html.

Laura Sherbin
Vice President, Center for Work Life Policy, New York, NY

Laura Sherbin is a Vice President at the Center for Work-Life Policy where she heads up CWLP’s survey research. She is currently leading two major research projects: Women in Tech in the Financial Sector and Bookend Generations: Leveraging Common Ground. Prior to joining CWLP Ms. Sherbin was a visiting fellow at Catalyst. She is a graduate of the University of Delaware and earned her PhD in economics from American University. Dr. Sherbin is a co-author of the Harvard Business Review Research Report; The Athena Factor: Reversing the Brain Drain in Science Engineering and Technology.

The Athena Factor: Reversing the Brain Drain in Science, Engineering and Technology
It’s no secret that a talent shortfall poses a serious competitive threat to science, engineering and technology (SET) companies. Business leaders are focusing their efforts on calls for relaxing visa norms. But what employers don’t seem to realize is that the talent they need is already here—if they could only retain it. Even in the face of a worsening worldwide labor shortage of qualified professionals in the SET fields, 52 percent of our best and brightest female scientists, engineers and technologists are bailing on hard-earned careers and not looking back—precisely when they should be hitting their professional strides. Pioneering companies are taking steps to reverse this brain drain and gain competitive edge. Their progress shows how companies can recruit, cultivate, and retain this critically important source of talent and experience.
Panel #1 Abstracts

Panel #1: Best Policies and Practices for Faculty Flexibility

Nancy Aebersold
Director, National Higher Education Recruitment Consortium (HERC), Santa Cruz, CA

Help for Dual Career Academic Couples
Dual Career challenges are one of the top reasons colleges and universities cite as contributing to unsuccessful recruitment and retention of faculty and senior administrators. Over 400 colleges and universities around the U.S. are collaborating to address the dual career challenge through regional Higher Education Recruitment Consortiums (HERCs). The National Director of HERC will speak about how HERCs help dual career academic couples.

Gertrude Fraser
Vice Provost for Faculty Advancement, University of Virginia, Charlottesville, VA

Flexibility as New Norm? Faculty Response is Not Always Trusting of Institutional Motives
This presentation will discuss a case study of an attempt at one research institution to institute modest reforms that would offer more flexibility options for promotion and tenure. The presentation provides a synopsis of the contemporary national context in which flexibility discourses and paradigms are promoted, describes the institution’s recent policy review initiative focused on flexibility in the promotion and tenure process and ends with an analysis of faculty response to flexibility policy reform, with a focus on the reasons for faculty skepticism. It raises questions about what counts as normative and the complex responses to change proposals. It further points to issues of legitimization and credibility that underpin the integration of flexibility norms on college campuses.

Joan M. Herbers
Principal Investigator, ADVANCE Institutional Transformation Award and Professor of Ecology, Evolution and Organismal Biology, The Ohio State University, Columbus, OH

Part-time on the Tenure-track: the Nexus between Policy and Utilization
In the United States, part-time tenured/tenure-track appointments fall into three broad categories: a step-down towards retirement; mid-career changes to accommodate outside interests; and appointments to accommodate family concerns. Of these three categories, the last is of particular interest for women in STEM disciplines.

Ohio State has policies allowing part-time tenure-track appointments, yet utilization is very low. A task force studying policy utilization determined that ignorance of policies, resistance at the local level, and bias avoidance by individual faculty all are responsible. Changing the first is straightforward, but changing the latter will require long-term cultural change concerning the norms for successful faculty careers.
Panel #2 Abstracts

Panel #2: Intersections and Collaborations Among Business, Industry, and Academe

Ron Hanson
Vice President, Human Resources, Sauer-Danfoss, Inc., Ames, IA

The Future Workforce: Why Should We Include Everyone?
Ron Hanson is Vice President, Human Resources, for Sauer-Danfoss, Inc., a $2 billion company with over 10,000 employees in more than 50 countries supplying highly engineered products to off-road equipment manufacturers around the world. Sauer-Danfoss is highly dependent upon a continuing supply of bright engineers. The competitive labor market leads businesses to explore new approaches to attracting and retaining skilled labor. Mr. Hanson will share his organization’s experiences and suggest ideas about how business and academe can work more closely together.

Anne C. Petersen
Deputy Director, Center for Advanced Study in the Behavioral Sciences and Professor of Psychology, Stanford University, Stanford, CA

Brain Drain: Why Women Scientists/Engineers Leave Academe and Industry
Drawing from recent reports on academe and industry, Petersen will review the evidence on why women who have successfully leaped all prior hurdles, leave their positions as professors or industry scientists. Especially notable are the common reasons for departure from both settings. Our nation cannot afford to lose this talented and highly trained component of our workforce. The presentation will conclude with recommendations.

Linda Siebert Rapoport
Director, Women in Science & Engineering System Transformation (WISEST), University of Illinois at Chicago, Chicago, IL

From the Board Room to the Academy - How Promising Corporate Workplace Practices Can Transform the Academic Culture
Corporations have used a worklife and cultural transformation lens to create a competitive, flexible “great place to work” brand. We will identify the range of elements for total academic cultural transformation including: creating a compelling case, engaging top leadership, creating alliances and partnerships, and developing a winning communication and messaging campaign to reach across silos. We will provide practical tactics and promising collaboration possibilities.
Panel #3 Abstracts

**Panel #3: Measurement and Assessment of Policies and Flexibility**

**Ann E. Austin**  
Mildred B. Erickson Distinguished Chair in Higher, Adult, and Lifelong Education, Michigan State University, East Lansing, MI

**Taking a Strategic Approach to Assessing Cultural Change**  
Moving an institution forward to create cultural change around work-life issues requires not only good programmatic and policy strategies but on-going assessment of the progress and impact of those strategies. This presentation will make a case for the importance of such measurement and assessment, discuss which organizational members ideally participate in decisions about assessment and why wide involvement is strategically valuable, suggest both qualitative and quantitative strategies that can be used, and highlight ways in which such data can be used to strengthen cultural change within the institution.

**Sandra Gahn**  
Senior Research Analyst, Office of Institutional Research, and ISU ADVANCE Program, Iowa State University

**Susan Carlson**  
Associate Provost for Faculty Advancement and Diversity, and ISU ADVANCE Program, Iowa State University

**Breaking the Norms: Measuring the Impact of New Policies**  
While many policy makers and researchers have posited a correlation between flexibility in faculty personnel policies and a higher rate of faculty recruitment and retention, few universities have accurate measurements of such issues. ISU has a history of flexibility in its faculty policies and is now piloting a database to assess the costs and benefits of extending the tenure-clock, modifying faculty duties, and moving in and out of part-time appointments. This presentation will detail the process of designing the complex data set and the barriers to combining discrete sets of data. The presenters will explore initial findings on the use of flexible policies and provide related data on faculty attitudes about these policies.

**Kate Quinn**  
Project Director, Balance@UW, University of Washington, Seattle, WA

**Analyzing Flexible Policy Options for Faculty: Recommendations from Balance@UW**  
Many institutions of higher education are adopting flexible work-life policies for faculty, but few track their usage. The lack of utilization data makes conducting policy analysis challenging. To provide context for the discussion, this presentation shares the findings of a peer benchmarking study that explored the availability and usage tracking of flexible options for faculty. Next, an example of a flexible policy analysis is shared. The study of UW’s tenure clock extension policy explored differences in utilization by faculty gender, race, and academic field, as well as differences in career outcomes, namely retention and tenure attainment, by whether an extension was used. In addition to the study findings, attendees will receive recommendations about the kinds of data needed to conduct their own policy analyses.
Panel #3 Abstracts

Cathy A. Trower  
Research Director, Collaborative on Academic Careers in Higher Education (COACHE), Harvard University Graduate School of Education, Cambridge, MA

Competing on Culture: Academia’s New Strategic Imperative  
Pre-tenure faculty are the future of our institutions as the academic ‘boomers’ seek full or phased retirement in record numbers. The Collaborative on Academic Careers in Higher Education (COACHE) has data on the job satisfaction of over 8,000 pre-tenure faculty at more than 100 institutions. Among the climate variables tracked, sense of fit in the department, the interest tenured faculty take in their pre-tenure colleagues’ professional development, and opportunities to collaborate are most highly correlated with global satisfaction and intentions to stay at one’s institution. Attendees will gain a deeper understanding of culture and climate as they relate to the recruitment, development, and retention of the faculty.

Conference Planning Committee Members

Iowa State University  
Claire Andreasen, Professor and Chair, Veterinary Pathology and Interim Chair of Veterinary Clinical Sciences  
Bonnie Bowen, Executive Director, ISU ADVANCE Program  
Susan Carlson, Principal Investigator, ISU ADVANCE Program  
Haley Cook, University Conference Services  
Nicol Jones, Program Assistant, ISU ADVANCE Program  
Susan Masters, Friend of the ISU ADVANCE Program  
Divinity B. O’Connor-Roberts, Graduate Assistant, ISU ADVANCE Program  
Julie Tarbox, Office of the Executive Vice President & Provost

American Council on Education  
Gloria Thomas, Associate Director, Office of Women in Higher Education

The Ohio State University  
Jill Bystydzienski, Professor and Chair, Women’s Studies Department

Sauer-Danfoss, Inc. (Ames, IA)  
Becky Stadlman, Director of Human Resources

University of Michigan  
Cynthia Hudgins, Program Manager, UM ADVANCE Program  
Abigail Stewart, Director, UM ADVANCE Program

University of Washington  
Kate Quinn, Project Director, Balance@UW  
Joyce Yen, Program/Research Manager, UW ADVANCE Program
1. The Vilas Life Cycle Professorship Program at the UW-Madison
Jennifer Sheridan, Amy Wendt, Christine Pribbenow and Molly Carnes, University of Wisconsin-Madison, Madison, WI 53706, sheridan@engr.wisc.edu

We highlight the Vilas Life Cycle Professorship program at the University of Wisconsin-Madison. This program was selected by the ACE/Sloan Foundation as a best practice in faculty career flexibility in 2006. Started as a pilot project funded by an NSF ADVANCE grant, the program provides funds to faculty and staff with permanent PI status in any discipline who have experienced a significant life event that has impacted their research productivity at a critical career juncture. We present details on program administration as well as evaluation and outcome data from six years of program implementation.

2. Work-Family Decisions During the Transition from Graduate School to Professional Scientist
Kim Sullivan and Amanda Bakian, Utah State University, Logan, UT 84322-5305, yejunco@biology.usu.edu

We interviewed 234 early career scientists in the fields of ornithology and ecology. Participants were graduate students, post-doctoral fellows and other temporary job holders, and recently hired permanent job holders. The relative competitiveness of their field was a strong determinant in life decisions. Ornithologists facing strong competition for jobs expected to spend longer on the job market, applied for more jobs, spent longer in graduate school and were less likely to have children than ecologists. The other major factor was their partner. The majority of men and women had a long term partner with women being more likely to have a partner in the same field. Women limited their job search and men expanded their job search once partnered. Women with partners in the same field applied for the fewest jobs while men with partners in the same field applied for the most jobs. Women with partners in the same field were more likely to change their career goals in grad school. Most participants met their partners in graduate school. Much of the loss of women at this stage in the pipeline appears to be due to decisions women make trying to balance work and family.

3. Work-Life Policies and Programs at Virginia Tech
Patricia Hyer, Virginia Tech, Blacksburg, VA 24061, hyerp@vt.edu

Virginia Tech has adopted a suite of policies and programs to address work-life balance issues for faculty: dual career assistance, revision of stop-the-clock, and new policies on modified duties and part-time tenure-track. These policy changes, along with education of department heads and promotion and tenure committees, create an environment of support for faculty members trying to balance the obligations of work and family.
4. Modified Duties Caregiving Policy at Utah State University
Ronda Callister, Christine Hult, Ann Austin and Kim Sullivan, Utah State University, Logan, UT 84322, ronda.callister@usu.edu

Women in academics have a more difficult time than men both getting tenure and having comparable families. Universities are often sympathetic, but have trouble finding the budget to implement supportive policies. This poster outlines a caregiving policy with modified duties that is designed to distribute the cost of implementing this program in a way that objections from administrators are reduced. This caregiving with modified duties (CGMD) policy is designed to allow tenured and tenure-track faculty to continue to perform selected job responsibilities, but upon request provides relief from teaching up to two courses for one semester (or the equivalent release time for non-teaching faculty) when major events such as the birth or adoption of a child occur or the serious illness or traumatic injury of parents, children or partners. The faculty member may choose to continue other professional activities (e.g. research, working with graduate students or serving on important committees.) This policy recognizes that major life and health events can create significant stresses and challenges in keeping up with the full range of responsibilities required by an academic career and provides some relief from these responsibilities.

5. K-State Recruitment, Retention, and Advancement of Women in Science and Engineering
Dana Britton, Rebecca Wood, Beth Montelone and Christa Smith, Kansas State University, Manhattan, KS 66506, brittn@ksu.edu

Since the inception in 2003 of the Kansas State University (K-State) ADVANCE Project, there has been an increase in the number of women faculty in science, engineering, and mathematics (SEM) disciplines at K-State, as well as a shift in demographics, such that more SEM women hold higher rank and are in administrative positions. We highlight the quantitative growth of SEM women faculty at K-State, describe unique and successful K-State ADVANCE programs, list specific measures of success, and share lessons learned during the past five years. We provide data showing the increase in the percentage of full-time tenure line women faculty, full professors, and administrators at K-State since 1997, which we are using as a benchmark year, and since 2003. We also provide data from the recent climate survey documenting faculty perceptions of successes and challenges with work/life balance. The poster will summarize participation and outcomes of department, college and project-level programs. We will discuss how these programs have been implemented in the historically decentralized administrative culture at K-State. The success of the ADVANCE Project at K-State has been demonstrated by quantitative measures, a more open atmosphere for discussing gender issues, commitments by the SEM college deans to continue their support of the ADVANCE programs beyond the life of the grant, and the dissemination of these unique programs to national audiences.
6. Advancing Women Faculty at North Dakota State University
Canan Bilen-Green, Elizabeth Birmingham, Ann Burnett, Karen Froelich, Kalpana Katti, Kevin McCaul, Christi McGeorge, Rhonda Magel, Eveadean Myers, Don Schwert, Kay Sizer, Gary Smith, Craig Schnell, Christina Weber and Charlene Wolf-Hall, North Dakota State University, Fargo, ND 58105, canan.bilen.green@ndsu.edu

Since 2002, North Dakota State University has been developing and implementing a research-driven strategy to transform the institution and increase the participation of women at all faculty ranks. Research efforts in this area have been spearheaded by NDSU’s FORWARD (Focus on Resources for Women’s Advancement, Recruitment/Retention) team, a group of faculty and administrators who came together out of a shared concern about the slow advancement of women faculty on our campus. In order to increase the participation of women at all faculty ranks, the FORWARD team collected and analyzed institutional data and conducted several surveys to document the present climate and understand institutional barriers to women’s success. The committee researched extensively relevant literature and best practices developed and/or adopted by NSF ADVANCE institutions. As a result, a number of policies and practices for faculty, such as automatic tenure-extension, dual career hiring assistance, childcare availability on campus, and search committee training have been institutionalized.

Although NDSU has a long way to go to achieve gender equity in faculty ranks, nevertheless the numbers and participation of women faculty has significantly increased. Between 2002 and 2007, the percentage of STEM women faculty at NDSU doubled.

In this paper we will discuss how climate at NDSU changed between 2002 and 2007 prior to receiving an NSF ADVANCE Institutional Transformation award. We will describe the research-driven-strategy used and the initiatives that were implemented as well as the challenges NDSU and the FORWARD team overcame.

7. Creating a New Conversation on How Science Gets Done
Kennan Kellaris Salinero, Linda Jean Shepherd, Richard Stafford, Richard A. Weibl, and Florence F. Davidson, Yámana* Science, Livermore, CA 94550, kellarkv@nature.berkeley.edu

Yámana* Science is a new non-profit organization forming to encourage a science culture where both people and ideas flourish in the presence of effective support, balanced lifestyles, and thriving workplaces. We interact at the crossroads of basic research training and an active scientific research community, and are exploring organizational models and professional practices that enhance flexibility and work/life balance for effective, cooperative group leadership. Yámana Science is creating conversations to explore the ways in which synergies build on cooperation to support creativity, sustainability and robust interaction between scientists and society. We are incorporating the highly effective model of the Hidden Brain Drain Task Force, which became the Center for Work-Life Balance, and are exploring new business theories of the intelligence of groups and alternative ways of organizing work. Interactions with the Haas School of Business as well as the UC Berkeley task force that developed their Family Friendly Initiatives have brought valuable insights to our approaches.

*Yámana (def.): highest form of life, living, to be alive (translation by Thomas Bridges, from Blessed Unrest by Paul Hawken).
ADVANCE Institutional Transformation Awardees, Rounds 1-4

Brown University
California State Polytechnic University, Pomona
Case Western Reserve University
Columbia University’s Earth Institute
Cornell University
Duke University
Franklin and Marshall College
Georgia Institute of Technology
Iowa State University
Kansas State University
Marshall University
Michigan State University
Montana State University
New Jersey Institute of Technology
New Mexico State University
Hunter College, City University of New York
North Dakota State University
Northeastern University
The Ohio State University
Purdue University
Rensselaer Polytechnic Institute
Rutgers University New Brunswick
University of Alabama at Birmingham
University of Arizona
University of California, Irvine
University of California, San Diego
University of Colorado, Boulder
University of Illinois, Chicago
University of Maryland, Baltimore County
University of Maryland, Eastern Shore
University of Michigan, Ann Arbor
University of Montana
University of Nebraska, Lincoln
University of North Carolina at Charlotte
University of Puerto Rico, Humacao
University of Rhode Island
University of Texas at El Paso
University of Washington
University of Wisconsin, Madison
Washington State University
William Marsh Rice University
Utah State University
Virginia Polytechnic Institute and State University

For information on ADVANCE program websites from awardees Rounds 1-3, visit http://www.nsf.gov/crssprgm/advance/itwebsites.jsp

ADVANCE Partnerships for Adaptation, Implementation, and Dissemination (PAID) Awardees

Auburn University
Boston University
Commission on Professionals in Science & Tech.
CUNY Hunter College
DePauw University
Furman University
Grand Valley State University
Harvey Mudd College
Idaho State University
Michigan Technological University
National Postdoctoral Association
New Mexico State University
New York University
North Carolina State University
Oklahoma State University
Pennsylvania State University, University Park
Skidmore College
Texas Tech University
Union College
University of California, Irvine
University of Colorado, Boulder
University of Delaware
University of Miami
University of Michigan
University of Missouri, Columbia
University of Nebraska, Lincoln
University of Nevada Desert Research Institute
University of Oklahoma, Norman Campus
University of Washington
University of Wisconsin, Madison
Utah State University
Vassar College
Wayne State University
Wesleyan University
Faculty Flexibility Online Resources

ADVANCE Portal, hosted by Virginia Tech
http://research.cs.vt.edu/advance/index.htm

American Council on Education http://www.acenet.edu

Balance@UW http://www.washington.edu/provost/initiatives/balance/

Center for Work-Life Policy http://www.worklifepolicy.org/

The Collaborative on Academic Careers in Higher Education (COACHE)
http://gseacademic.harvard.edu/~coache/

Higher Education Recruitment Consortium (HERC)
http://www.hercjobs.org/home/index.cfm?site_id=793

Alfred P. Sloan Awardees for Faculty Career Flexibility

Duke University http://www.provost.duke.edu/units/FacDiversity-Development.html

Lehigh University http://www.lehigh.edu/~inprv/sloan.html

University of California, Berkeley http://ucfamilyedge.berkeley.edu/ucfamilyfriendlyedge.html

University of California, Davis http://academicpersonnel.ucdavis.edu/worklife/

University of Florida http://www.aaw.ufl.edu/aa/facdev/index.shtml

University of Washington http://www.washington.edu/provost/initiatives/balance/
Goal

The Iowa State University ADVANCE Program aims to increase the participation and advancement of women faculty in the sciences, technology, engineering, and mathematics (STEM) fields at ISU through a comprehensive institutional intervention plan. The program uses an integrated approach to examine cultures, practices, and structures within the University and determine how these enhance or hinder the careers of all ISU faculty, and especially women faculty in STEM disciplines. This information will be used to inform best practices at all levels of the University. The ISU ADVANCE program is supported by a 5 year grant (2006-2011) from the National Science Foundation.

Constituents

Faculty in 30 STEM departments across 5 colleges, representing over 750 faculty members in total, are included in the program’s constituents. Additionally, 9 focal departments in the STEM disciplines, representing 3 colleges, have been selected for targeted departmental transformation intervention over the course of the project. Key partners and change agents are Equity Advisors, one in each of the three focal colleges, and ADVANCE Professors and department chairs in each of the nine focal departments.

Activities & Initiatives

Building Infrastructure in the University, Colleges & Departments

• ADVANCE Professors and Equity Advisors represent ISU ADVANCE in STEM departments and colleges
• ADVANCE Council of key institutional partners meets regularly to guide the program

Collaborative Transformation in Departments

• Three-step process for departmental transformation that includes (1) focus groups, (2) needs assessment meetings and training sessions, and (3) collaborative problem solving
• The full Collaborative Transformation process has been implemented in three focal departments, resulting in three reports on climate, recruitment and retention, as well as a synthesis report of the three focal departments that was shared with the ISU campus community in April 2008
• Three additional departments began the Collaborative Transformation process in Fall 2008

Faculty Issues

• In Years 2 and 3 of our program, we have chosen a theme for our university-wide and college level activities
• Unintentional Bias was the theme in Year 2 (2007-08)
• Recruiting the Best: The Role of Work-life Flexibility is the theme in Year 3 (2008-09)
• Recent initiatives that address faculty issues include providing resources for faculty search committees, activities to combat isolation, research on faculty satisfaction and sponsoring our national conference.

Resources for Faculty Search Committees

• Our ADVANCE Fellow, sponsored by the Office of the Executive Vice President and Provost, compiled handouts, check lists, sample forms and tip sheets that can be downloaded from our Web site and that are available on a CD
• Topics covered include: Advertising to recruit a diverse faculty, What to ask? What not to ask? Sample forms for evaluating candidates, and Evaluating letters of recommendation

Combating Isolation

• Networking events and workshops for faculty in STEM. Topics in 2007-08 included workshops on unintentional bias and cognitive errors, guest presentation on Gender, Science & the Myths of Merit, panel discussion on Making a Career in STEM: Three Women’s Stories
• Sponsorship of ADVANCE lectures and departmental seminars
• Development of ISU ADVANCE Scholar program for women faculty of color in STEM to match junior faculty with external Eminent Scholars in their fields

Research on Faculty Satisfaction

• Survey of faculty perceptions of quality of workspace, which will be compared with quantity of space analysis
• Faculty climate surveys (AAUDE and COACHE)

National Conference

October 10-11, 2008

The New Norm of Faculty Flexibility: Transforming the Culture in Science & Engineering is co-sponsored by the American Council on Education and features nationally prominent keynote speakers and panel presenters
A special thank you to our sponsors who helped make this Conference possible:

**Platinum Sponsors**

**IOWA STATE UNIVERSITY**
Office of the President

**IOWA STATE UNIVERSITY**
Office of the Executive Vice President & Provost

**IOWA STATE UNIVERSITY**
College of Veterinary Medicine

**Hospitality Sponsors**

**IOWA STATE UNIVERSITY**
College of Agriculture and Life Sciences

**IOWA STATE UNIVERSITY**
College of Engineering

**IOWA STATE UNIVERSITY**
College of Liberal Arts & Sciences

**IOWA STATE UNIVERSITY**
College of Human Sciences

**Friends of the Conference**

Balance@UW
University of Washington

SauерDanfoss

This Conference is based upon work supported by the National Science Foundation under Grant No. SBE-06003999. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.