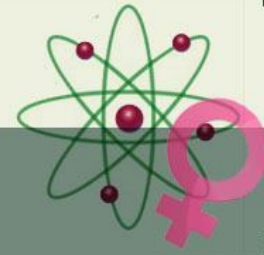# Coming Together: Keeping Women Scientists in the Pipeline

Wednesday, April 21, 2010
American Council on Education Headquarters
Kellogg Conference Room, 8th Floor
One Dupont Circle, Washington, D.C.

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Conference Discussion Synopsis

On April 21, 2010, key stakeholders and leaders in higher education, the federal government, and professional societies came together for a day-long conference to discuss problems in the academic pipeline for individuals with caregiving responsibilities, and consider joint solutions (see attached list of attendees). What resulted was a dynamic, engaging day of thoughtful discussions on a variety of topics, and a number of specific suggestions of actions that can be undertaken by both sectors to increase the success and competitiveness of American science.

Although issues related to leaks from the academic pipeline have received a great deal of attention in the last five or more years, there is general agreement that significant gaps persist. Family-focused policies have come as a result of a more general awareness of changing demographics and needs, but the frame of reference continues to be narrow. Both universities and federal agencies can do much more to broaden the scope of their activities and make it more possible for scientists to both have a family and succeed at all career stages.

What types of problems can be solved by universities? Which by federal agencies? And in which cases do they need to work together, along with the professional societies and organizations, to determine the best leverage points to act on?

This document is both a distillation of the conference discussions and a call to action. We hope that it will serve as a useful framework for upcoming work, and know that the synergy that can result from joint attention will be far more effective than by each continuing to work alone.

Thank you again for your participation and we look forward to continuing discussions in the months ahead.

Major Areas to Address:

1. **Communicate and market policies, programs, and grants**
2. **Bring family caregiving needs to the forefront**
3. **Support Principal Investigators**
4. **Cost out various programs and policies**
5. **Collect and analyze data, and evaluate the efficacy of policies and programs**
6. **Potential mechanisms for change**

1.   Communicate and Market Policies, Programs, and Grants

Universities and federal granting agencies can support and encourage policy and cultural change by clearly communicating an understanding and support for individuals in all stages of the academic pipeline. There are a tremendous amount of positive activities already going on that can be better promoted.

Create and publicize formal policy statements from top leadership

- Issue prominent, formalized statements from top leadership (Chancellors, Presidents, federal granting agency Directors) about the importance of the academic science pipeline to the mission of the institution or agency, as well as the competitive success of the nation. Clear support from the top sustains policy as well as cultural change (see for example, the statement at the Office of Science, Department of Energy, *http://www.science.energy.gov/bes/research_conduct_policies.html*). Use the opportunity to highlight existing policies and programs.

Create working groups, workshops, and disciplinary-based programs

- Create working groups on women in science careers (such as the Working Group on Women in Biomedical Careers formed by former NIH Director Zerhouni and Co-Chaired by Vivian Pinn, Director of the NIH Office of Research on Women's Health, *http://womeninscience.nih.gov/workinggroup/index.asp*).

- Jointly host gender equity workshops that engage university department chairs, program officers, and faculty PIs (*http://www.er.doe.gov/bes/chm/Publications/URM_Report_021308_FINAL.pdf*).

- Initiate disciplinary-based programs at universities, such as Women in Engineering or Women in Physics programs to provide guidance and mentoring (*http://www.physics.umd.edu/wip/index.html*).

- Create FAQ pages that clearly answer questions regarding dependent care, child care, and parental leave (such as the ones currently available through NIH and NSF - at *http://grants.nih.gov/training/faq_childcare.htm*, *http://www.nsf.gov/pubs/2010/nsf10032/nsf10032.jsp*), with contact information to allow for follow-up or clarification when needed. Use these

tools to highlight many of the good things that are available to PIs, fellows, and individual employees working on grants.

- Think outside the box when it comes to highlighting new programs, policies, or grants by reaching out to professional societies, web-based list serves, or other appropriate non-academic audiences (for example, NIH has a reentry grant program for individuals who have been out of the workforce but few have yet applied for it, available at http://grants.nih.gov/grants/guide/pa-files/pa-08-191.html).

- Create a web page providing descriptions and links to all of the various programs and policies that support women or individuals with caregiving responsibilities at federal granting agencies and institutions of higher education (e.g., the 2-month parental leave policy at the NSF Earth Sciences program, *available at http://www.nsf.gov/pubs/2010/nsf10500/nsf10500.htm*).

2.   Bring Family Caregiving Needs to the Forefront

The success of American science depends on taking advantage of all the talent and potential talent that exists in the academic pipeline. Individuals with current family caregiving responsibilities, or those who are imagining how to balance a successful scientific career with a family will be buoyed with the knowledge that policies are in place to provide flexibility over the career life course.

Broaden the thinking about family responsive policies to include *all classes of researchers*

- Expand the frame of reference for family responsive policies from those primarily focused on faculty to include doctoral students, postdoctoral associates, and academic researchers.

Broaden the thinking about family responsive policies to include *all phases of academic careers*

- Broaden the conception that caregiving needs only occur at the time of birth or adoption to recognize the changing needs that occur throughout the academic career life span (e.g., personal or family illness, elder or adult dependent caregiving needs, etc.).

Provide a minimum baseline of family responsive leave for birth and adoption

- Meet the caregiving needs of all classes of researchers (i.e., doctoral students, postdoctoral associates, academic researchers, and faculty) through the provision of a consistent minimum level of paid family responsive leave, without limitations that prohibit access to it, of at least six weeks for birth mothers and two weeks for secondary caregivers.

Allow part-time effort for postdoctoral associates with caregiving responsibilities

- Collaborate (between universities, federal granting agencies, and professional organizations) to evaluate and reconsider the full-time or no-time requirement for postdoctoral positions.

Flexibility within the postdoc years, either through the option of part-time effort (e.g., two-thirds time for three years instead of full-time for two) or extensions of the fellowship period will support women and men in family formation and in meeting their family caregiving needs (see for example, the policy of the European Molecular Biology Organization [EMBO], available at http://fellowsnet.embo.org/faqs/305-maternity-leave-a-child-care-support.html).

Support re-entry, including grants for those who have stopped out

- Engage in collaborative discussions between universities and federal granting agencies about the nature of "stopping out," which usually is not as long as people imagine. Look to the corporate sector for examples about expectations and programs.

3. Support Principal Investigators

Clarify the use of no-cost extensions

- Provide a list of the possible range of reasons for the use of a no-cost extension, including to meet the family caregiving needs of the Principal Investigator and/or those working on their grants (e.g., doctoral students, postdoctoral scholars).

Create and provide supplements to support family caregiving responsibilities

- Collaborate to decide how to best support PIs when they or someone working on their grant needs to take time out for caregiving related purposes. Specifically, create a mechanism for PIs to access supplemental funds to hire a temporary employee (e.g., a lab manager or technician, or a doctoral student) when they or another individual is out on leave. Agencies can provide express support for the provision, and work with universities to decide how to best implement it (e.g., fringe benefits, central pool of funds).

Create FAQ pages for PIs

- Universities and Federal Agencies collaborate to decide what the key caregiving-related questions are for Principal Investigators running a grant. Create a FAQ to cover questions, such as "What are the responsibilities of the PI if their employee (i.e., doctoral student, postdoctoral associate) has a family caregiving need such as a family emergency, a new child, etc." "What does the PI do if the institution they work for does not have a policy in place to allow the use of a policy issued by the federal granting agency?"

4. Cost Out Various Programs and Policies

The common assumption is that the cost of programs and policies to support individuals in the academic pipeline with caregiving responsibilities will be high. It is therefore important to carefully assess costs and find those programs that will have the biggest bang for the buck. Family responsive policies and programs typically cost significantly less than assumed.

- The AAU could consider the potential costs associated with various policies by conducting assessments of existing policies at universities around the country and providing them as examples for others. For example, how much does it cost for institutions to provide dependent care grants to doctoral students, postdocs, and faculty when needed for travel to conferences (e.g., Princeton provides up to $500/year for dependent care conference expenses at a cost of approximately $25,000/year, available at http://gradschool.princeton.edu/studentlife/childcare/dependent_care_travel_fun/)?

5. Collect and Analyze Data, and Evaluate the Efficacy of Policies and Programs

Increase institutional and agency capacity for data collection in order to evaluate whether and how the policies and programs introduced by institutions of higher education and federal granting agencies are working as intended. This is necessary to measure progress and identify gaps.

- Create more synergy between databases at federal granting agencies and institutions through the formation of a joint partnership. Potentially use existing vehicles such as AAUDE (the Association of American Universities Data Exchange) and databases at the federal granting agencies.

- Examine the efficacy of existing policies – for example, is tenure clock extension a good policy? Are there unintended consequences, particularly in how it is administered? How much does the provision of institution-based child care services and supports make a difference to the success of faculty? And consider the broader academic landscape – policies, culture, leadership – as they affect success.

6. Potential Mechanisms for Change

Organizations exist (see below) that can be helpful conduits for moving forward changes. However, it is ultimately the universities and the federal granting agencies that will need to work in concert to shepherd through the policies, programs, and other activities that are most likely to have the biggest impact on the science pipeline.

Organizations:

- **The National Academies Federal Demonstration Partnership (FDP) under the Government University Industry Research Roundtable (GUIRR)**

  The FDP has a number of collaborative working groups that cover particular topics related to reducing the administrative burdens associated with research grants and contracts. The FDP could potentially take on some of these topical areas as a working group (http://sites.nationalacademies.org/PGA/fdp/index.htm).

- **Association of American Universities (AAU)**

  "AAU programs and projects address institutional issues facing its member universities, as well as government actions that affect these and other universities. AAU works to maintain the productive partnership between the nation's research universities and the federal government. The major activities of the association include federal government relations, policy studies, and public affairs (http://www.aau.edu/)."

- **Association of American Universities Data Exchange (AAUDE)**

  "The Association of American Universities Data Exchange (AAUDE) is a public service organization whose purpose is to improve the quality and usability of information about higher education. Our membership is comprised of AAU institutions that support this purpose and participate in the exchange of data/information to support decision-making at their institution (http://www.aaude.org/)"

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