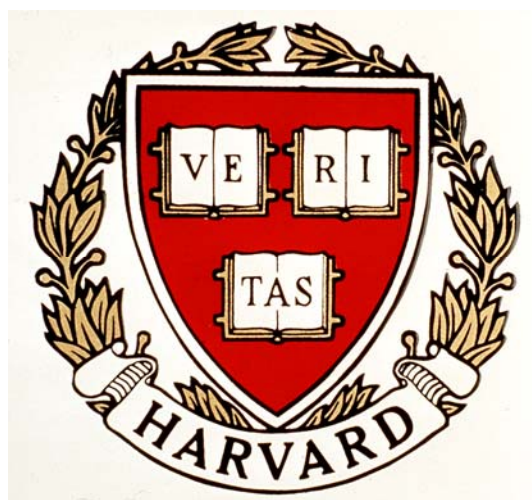


# **Report from the Task Force on Women in Science and Engineering**

## **Executive Summary**



**May 2005**

## **A. A Beginning Not an End**

In spite of more than three decades of concern, Harvard has made only limited progress in its efforts to create a genuinely diverse faculty. Women and minorities remain significantly underrepresented in relation not just to their proportions in the broader population, but in comparison to their presence in the student body of Harvard's ten Schools and, in many cases, to their numbers in the pool of Ph.D.s in individual academic fields. In the past year, these issues have generated intense discussion across Harvard about causes and potential remedies. On February 3, 2005, the University announced the formation of two Task Forces—the Task Force on Women Faculty (WF) and the Task Force on Women in Science and Engineering (WISE)—to "develop concrete proposals to reduce barriers to the advancement of women faculty at Harvard" before the end of the academic year in May.

Within this very narrow time frame, the Task Forces have concentrated on identifying issues for immediate action, as well as recommending structures and initiatives that will ensure continuing commitment to enhancing faculty diversity. The Task Forces' investigations have revealed complex and wide ranging concerns warranting significant further attention and analysis. In their three-month effort, the Task Forces have only begun to understand and address the questions that must become an ongoing concern and a continuing priority for the Harvard community and, in particular, for its leadership. This report represents a beginning, not an end.

The Task Forces have worked to identify how Harvard can build and nurture the very best faculty. A diverse faculty is a strong faculty because it emerges from the broadest possible consideration of available talent, talent that Harvard as an institution and a community must encourage and sustain throughout the varied stages of academic careers. The development, recruitment, and support of outstanding faculty, issues which have been at the heart of the Task Forces' deliberations, provide the essential foundation of a great university.

## **B. Task Force Charge**

The charge of the Task Force on WISE was to analyze and make recommendations concerning effective ways to build and sustain the "pipeline" of women pursuing academic careers in science, from undergraduate studies to graduate and postdoctoral work to advancement through faculty ranks. The full text of the charge is in *Appendix A*.

## **C. Task Force Membership and Approach**

The Task Force on WISE was chaired by Barbara J. Grosz, Higgins Professor of Natural Sciences in the Division of Engineering and Applied Science and Dean of Science at the Radcliffe Institute for Advanced Study. The full membership of the Task Force, which

included junior and senior faculty from the Faculty of Arts and Sciences (FAS), Harvard Medical School (HMS), and the School of Public Health (HSPH), may be found in *Appendix C*. To gain an in-depth understanding of issues at all levels of the pipeline in the charge, working groups led by Task Force members were formed in five career-stage and field areas: undergraduate students, graduate students, postdoctoral fellows in the life sciences, postdoctoral fellows in the physical sciences, and individuals with professional research appointments.<sup>1</sup> An additional working group focused on faculty in the Harvard-affiliated hospitals. The working groups comprised faculty members from the Task Force as well as other faculty members and students or trainees at each level. A full list of working group membership is provided in *Appendix D*.

The Task Force met weekly to review goals, data, research, and preliminary proposals from the working groups as well as issues related to women faculty in the sciences. The working groups consulted their constituencies in a variety of ways, including holding department-specific meetings and open forums, to seek advice from a broad range of individuals. A detailed list of meetings held is in *Appendix E*. In addition, the two Task Forces solicited ideas from faculty across the Harvard Community by writing to faculty and providing email addresses to which they were encouraged to send ideas.

## **D. Recommendations**

In formulating recommendations, the Task Force drew upon prior studies at Harvard and recent efforts at other institutions. Given the similarity of issues raised at each career stage, specific proposals are organized across several broad topics: sustaining commitment, mentoring and advising, enabling academic careers in the context of family obligations, and faculty development and diversity. Recommendation numbers are indicated in parentheses. Detailed recommendations are in Section IV of the report.

### **1. Sustaining Commitment**

- a. Undergraduates
  - i. Create Study Centers in the Pivotal Science Concentration Courses (1)
  - ii. Require Pedagogical Training for Doctoral Students with a Gender Bias Component (6)
  - iii. Develop the Harvard Undergraduate Summer Scientific Research Program (2)
- b. Improve the Environment in Science Departments (3)
- c. Create, Enhance, and Sustain Activities within Departments that Promote the Success of all Doctoral Students and Appoint a Coordinator in GSAS to Oversee These Activities (4)

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<sup>1</sup> Although individuals with professional research appointments are, in a strict sense, outside of the academic pipeline that flows towards tenured faculty positions, they are an important presence within the academic community, a source of role models for younger scientists, and an important locus of scientific talent. A full report from this working group can be found in *Appendix F*.

- d. Create an Office for Postdoctoral Affairs (5)
- 2. Mentoring and Advising**
  - a. Require Pedagogical Training with a Gender Bias Component for Doctoral Students (6)
  - b. Improve Freshman Advising (7)
  - c. Track the Progress of Graduate Students and Postdoctoral Fellows, and Provide Mentoring and Professional Development (8)
  - d. Provide Mentors for Junior Faculty in the Science Departments (9)
- 3. Enabling Academic Science Careers in the Context of Family Obligations**
  - a. Explore Options to Provide Paid Maternity Leave and Increase Childcare Scholarships for Doctoral Students and Postdoctoral Fellows (10)
  - b. Expand the Dependent Care Fund for Short-Term Professional Travel (11)
  - c. Establish Research Enabling Grants for Primary Caregivers in the Sciences (12)
- 4. Faculty Development and Diversity**
  - a. Design Programs on Diversity (13)
  - b. Revise and Expand Search Processes to Increase the Recruitment of Women and Underrepresented Minority Faculty in the Sciences (14)
  - c. Establish Programs to Provide Funding and Relief for Key Transition Points in Academic Careers (15)
- 5. Miscellaneous Environmental Factors**
  - a. Limit the Length of Appointment and Set a Base Salary for Postdoctoral Fellows (16)
  - b. Improve Safety at Night for Lab Scientists (17)

## **E. Relationship to the Task Force on Women Faculty**

While the Task Force on WISE focused on issues specific to women at all academic career stages in the sciences, from entering undergraduates to tenured faculty, the Task Force on WF studied the status of women faculty across all schools at Harvard University and the issues they face. The Task Force chairs and staff met weekly to coordinate efforts and recommendations across the two Task Forces. The Task Forces exchanged and reviewed recommendations at appropriate milestones during the process. The Task Force on WISE endorses the recommendations developed by the Task Force on WF.

## **F. Next Steps**

The Task Force on Women Faculty, in coordination with the Task Force on Women in Science and Engineering, recommends that a Transition Committee be established to provide initial oversight and implementation of recommendations developed by both Task Forces until accountability for the various action items called for in the Task Force recommendations is formally institutionalized throughout Harvard.

The Transition Committee, consisting of Task Force chairs, Professors Barbara Grosz and Evelyn Hammonds, and Dean Drew Faust, will be supported in its initiatives through expertise resident in the Office of Budgets, Financial Planning & Institutional Research (OBFPIR), Information Management Services and the Office of Work/Life Resources within the Office of Human Resources, the Office of the General Counsel, and other areas of the University as appropriate.

During the summer and fall of 2005, the Transition Committee will:

- Determine the cost and further refine the proposals with a view to their effective implementation;
- Design programs on diversity for University leaders in the larger context of leadership and management;
- Work with appropriate deans to put in place the structures and people needed to begin implementation of the recommendations;
- Continue the data collection effort across Schools;
- Establish initial scope of work, identify potential membership, and coordinate the work of supporting committees:
  - The Climate Survey Committee, which will launch a climate survey instrument for junior faculty in the fall of 2005 and design a survey instrument for all ladder (junior and senior) faculty by the end of 2005;
  - The University Committee on Child Care, which will analyze childcare-related alternatives put forward by the Task Forces and develop an implementation plan to achieve goals outlined in the Task Force reports.