DIVERSIFYING THE SCIENCE & ENGINEERING WORKFORCE:
WOMEN, UNDERREPRESENTED MINORITIES, AND THEIR S&E CAREERS

The Science and Engineering Workforce Project
of the National Bureau of Economic Research

Sponsored by the Alfred P. Sloan Foundation
January 14-15, 2005
Richard B. Freeman and Daniel L. Goroff: Organizers

The National Bureau of Economic Research
1050 Massachusetts Avenue, 3rd floor, Cambridge, MA

Purpose: Women and underrepresented minorities have increased their share of S&E degrees in the past two decades. What forces have facilitated/impeded this process? How has the labor market adjusted? What challenges do women and underrepresented groups face in the S&E job market and how can these be alleviated? What programs and policies can further the process of diversifying the science workforce?

FRIDAY, JANUARY 14
(Shuttle buses depart front door of Sonesta Hotel, 5 Cambridge Pkway at 8:00am & 8:20am)
Breakfast: 8:15am (NBER, 1050 Mass. Ave, go to 3rd floor receptionist, then proceed to 2nd floor conference room)
Opening Statement
8:45am Richard B. Freeman, Greetings

Panel 1: Introduction: The Current Situation
9:00–10:30am Richard B. Freeman, Tanwin Chang, Hanley Chiang; Harvard University and NBER
“Recent Progress in S&E Developments”
Mary Frase, NSF
“Highlights of the NSF Women and Minorities Report”
Denice D. Denton, University of Washington
“Diversifying Science and Engineering”

Break: 10:30am

Panel 2: Research University Experiences
Chair and first discussant: Daniel L. Goroff, Harvard University and NBER
10:45-12:15 Barbara J. Grosz, Harvard
“Women in Science and Engineering at Harvard”
Nancy Hopkins, MIT
“Women in Science and Engineering at MIT”
Linda Hamilton Krieger, UC Berkeley
“Women in Science: Equal Employment and Educational Opportunity Law”

12:15
Linda Hamilton Krieger, UC Berkeley
“Implicit Bias & the Female/Science Disassociation”

Lunch: 12:30 pm
Lawrence Summers, President, Harvard University
“Faculty Diversity: Research Agenda”
Shirley Malcom, American Association for the Advancement of Science
“Standing Our Ground in the Post-Michigan Era”

Panel 3: Psychological and Sociological Aspects of Occupation Choice
Chair and first discussant: Paula Stephan, Georgia State University
2:00-3:30pm Catherine D. Good, Columbia University
“Closing Achievement Gaps”
Daniel B. Berch, National Institutes of Health
“Quantitative and Scientific Reasoning: Perspectives from Cognitive Science”
Yu Xie, University of Michigan and Kimberlee Shauman, University of California, Davis
“Sociological Aspects of S&E Career Participation”

Break: 3:30
Panel 4: Learning from Successful Programs
Chair and first discussant: Geoff Davis, Sigma Xi, The Scientific Research Society
3:45-5:30pm
Sue Rosser, Georgia Institute of Technology
“POWRE and ADVANCE Programs for Women”
David Manderscheid, University of Iowa
“Minorities in the Iowa Mathematics PhD Program”
Sheila Tobias, Sloan Foundation, Science Masters Initiative
“The Newest Master’s: Professional Studies in the Sciences and Mathematics”
Wanda E. Ward, NSF
“Optimizing America’s Scientific Talent: Opening Doors to Success and Broadening Participation in Science and Engineering Careers”

Break: 5:30pm
Informal Reception: 6:00pm - The Harvard Faculty Club, 20 Quincy Street, Cambridge
Dinner: 6:30pm (after dinner, shuttle buses will return to Sonesta Hotel at 8:45pm and 9:10pm)
Chairperson: Nila Bhakuni, Harvard University
Jaline Gerardin, Harvard Univ and Saundra Quinlan, MIT and Natl Society of Black Engineers
“Science and Diversity: Student Views”
Anne C. Petersen, WK Kellogg Foundation
“Hybrid Vigor: Strengthening the Science and Engineering Workforces with Women and Underrepresented Minorities”

SATURDAY, January 15 (Shuttle buses depart front door of Sonesta Hotel at 7:45am and 8:15am for NBER)
Breakfast: 8:00am (NBER, 1050 Mass. Ave, entry instructions will be posted in the street level foyer)

Panel 5: Academic Employment Issues
Chair and first discussant: Charles Brown, University of Michigan and NBER
8:30-10:15am
Catherine Weinberger, UC Santa Barbara
“Is the Science and Engineering Workforce Drawn from the Far Upper Tail of the Math Ability Distribution?”
Donna J. Nelson, University of Oklahoma
“National Analysis of Science and Engineering Diversity at Research Universities”
Cathy Trower, Harvard University
“Portrait of an Intractable Problem”
Ronald Oaxaca, University of Arizona
“Faculty Salary Determination at a Research I University”

Break: 10:15am

Panel 6: Non-Academic Employment Issues
Chair and first discussant: Sarah Turner, University of Virginia and NBER
10:30 am
Kristen Roby, Microsoft
“Recruiting Scientists and Engineers”
William Berry, U.S. Department of Defense
“National Security Needs for Scientists and Engineers”
Kjersten Bunker Whittington, Stanford University
“Employment Sectors as Opportunity Structures: The Effects of Location on Male and Female Commercial Dissemination”
Sharon Levin, U of Missouri, St. Louis and Paula Stephan, Georgia State University
“Leaving Careers in IT: Differences in Retention by Gender and Minority”

Lunch: 12:15pm
David Goldston, House Committee on Science
“Congressional Viewpoints on S&E Representation”

Adjourn: 2:00pm