Remembrances of Denice

For over twenty years, Denice made significant contributions to the progress of the U.S. science and engineering enterprise through her technical research results and her leadership of innovative education projects. Perhaps most importantly, she shaped the direction of science and engineering research and education through her insightful and compelling advice. She always kept the interests of students foremost.

Selected Accomplishments and Contributions of Denice Denton to the National Science Foundation

1986 Awarded the prestigious Presidential Young Investigator Award (PYI) for her seminal work in the field of electrical engineering. She continued to receive support for her technical work through out the 1990’s.

1990 Presidential Young Investigator Colloquium on U.S. Engineering, Mathematics, and Science Education for the Year 2010. Fifty PYIs participated. They were nominated by their institutions and selected by the National Science Foundation for their demonstrable concern for precollege and undergraduate education and for their potential for future academic leadership. Denice was one of them. The charge to the group was to state their vision and recommendations on how to achieve high quality precollege and undergraduate instruction in engineering, mathematics, and the sciences for everyone by the year 2010. This colloquy marked Denice’s emergence as a national higher education leader.

1996 NSF assembled a very select group of leaders in higher education to review the status of undergraduate education in science, engineering and mathematics. Denice was a member of that committee. Their report Shaping the Future: New Expectations for Undergraduate Education in Science, Mathematics, Engineering and Technology revitalized the NSF programs for undergraduate education.

1995-2005 Denice served on many Directorate Advisory Committees and Divisional Committee of Visitors for both the engineering and education programs of NSF, most recently for the nanoscale science and engineering program.

1999-2004 With University of Washington colleagues, Denice led innovative new education programs sponsored by NSF, including the NSF Graduate Teaching Fellows in K-12 Education, DO-IT (program for persons with disabilities), and the ADVANCE institutional transformation project.

2003-2004 Denice was a member of the selection committee for the NSF Alan Waterman Award, a $500k award which goes to the most outstanding scientist, mathematician or engineer under 35.

2003-2006 Working with colleagues at the University of Washington, Colorado School of Mines, Howard University, Stanford University and University of Minnesota, Denice was instrumental in forming the NSF-funded Center for the Advancement of Engineering Education. She continued to work with the team to expand the Center's influence after award of the grant in 2003.

2004 President George W. Bush presents Denice with the Excellence in Science, Mathematics and Engineering Mentoring Award.
2004-2006 President George W. Bush appoints Denice to the National Medal of Science Selection Committee. The medal is our nation’s highest award for distinguished contributions to science.

Summary of National Science Foundation Grants Awarded to Denice (and collaborators):
Principal Investigator
- Presidential Award for Excellence in Science, Math and Engineering Mentoring
- Presidential Young Investigator Award
- Materials Development and Processing for Fabrication of a Microdynamical Optical Switch
- Program for Persons with Disabilities: Institutionalization of DO-IT
- NSF Graduate Teaching Fellows in K-12 Education

Co-Principal Investigator
- ADVANCE Institutional Transformation Award

Submitted by Sue Kemnitzer
June 29, 2006

Denice Dee Denton, 1959-2006.

A valued member of this committee, Denice Denton was an extraordinarily talented scholar, educational leader, and relentless voice for progress. She helped shape the direction of our nation’s science and engineering enterprise through her research, teaching, technology development, service, leadership, mentoring, public communication of science and engineering, initiatives to promote diversity and inclusion, and outreach to our schools.

She was bigger than life. She opened doors, and stood in them to let others through. She mentored young scholars and students. Her enthusiasm for science was clear and infectious.

She was a force—a magnificent force. She pushed the institutions she inhabited to be better than they wanted to be.

With her tragic death we lost a friend, a colleague, and a champion. We proudly dedicate this report to her.

We will miss her.

Donna E. Shalala
Chair, Committee on Maximizing the Potential of Women in Academic Science and Engineering