
Inside the AMS

Hawkins Presents Testimony

On March 25, 2004, Jane Hawkins, chair of the AMS Committee on Science Policy, presented testimony in support of the fiscal year 2005 appropriations for the National Science Foundation (NSF). The testimony was given before the subcommittee on Veterans' Affairs, Housing and Urban Development, and Independent Agencies of the House Committee on Appropriations. The NSF falls under the aegis of this subcommittee. Also presenting testimony were representatives of the American Chemical Society, the American Physical Society, and the Federation of American Societies for Experimental Biology. What follows is the text of Hawkins's testimony.

Mr. Chairman, Mr. Mollohan, and members of the subcommittee, the NSF is one of our nation's most important agencies for promoting and funding scientific, mathematical, and engineering research and education. This support is across all fields of science, as well as for interdisciplinary partnerships and new frontiers of scientific inquiry, such as nanotechnology.

Many new products, procedures, and methods have accrued from the NSF investment in basic research. These innovations came out of inquiries in quite a different context, often just scientific discovery. Research of this kind is essential to breakthroughs relevant to our modern world even though at the time of discovery relevance is not even suspected. To illustrate: much of the theoretical machinery developed during the latter part of the twentieth century to solve the three-hundred-year-old mathematics problem, Fermat's Theorem, is now finding its way into the construction of codes for secure communication. The mathematicians developing this theory were not thinking of secure communication codes; they were trying to solve a famous mathematical problem. Fourier series, developed over one hundred years ago as a way to represent functions, has a modern-day equivalent, wavelets, that has been instrumental in image restoration, including military applications.

The recent budget request proposes only a 0.6 percent increase in the overall federal basic research budget of the U.S. The nonmedical federal basic research budget will decline by 2.5 percent in FY 2005. NSF is an important agency for supporting basic research; in fact, although the NSF accounts for only 4.0 percent of federal spending for research and development, it supports nearly 50.0 percent



James Mitchell (American Chemical Society) and Jane Hawkins (American Mathematical Society) testifying in support of fiscal 2005 appropriations for NSF.

of the nonmedical basic research at our colleges and universities.

Federal support, broadly across all disciplines, is critical for the U.S. scientific enterprise to remain healthy and to be a contributor to innovation twenty to thirty years from now. Neglect of basic inquiry over time will inhibit the growth of innovation and affect the country's economic stability as well as our national security. I urge the subcommittee to make an effort to increase the NSF budget substantially over the budget request level, thereby helping to establish an FY 2005 U.S. basic research budget that will sustain an optimum level of innovation.

—AMS Washington office

Retirement of Bernard R. McDonald

At its meeting in April 2004, the AMS Committee on Science Policy (CSP) held a brief event to honor Bernard R. McDonald, who, after more than twenty years of service, recently retired from the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF).

McDonald received his Ph.D. from Michigan State University in 1968. He was at the University of Oklahoma for sixteen years before joining the DMS staff in 1983 as

a program director for the Algebra and Number Theory program. He also served as head of the Office of Special Projects and was executive officer/deputy director from 1988 until his retirement. During 1995–96 he served on detail in the office of the NSF director. From the fall of 2002 until his retirement he served on detail as a senior advisor in the NSF Budget Division, where he handled NSF assessment activities.

McDonald was awarded the Director's Distinguished Service Award (1999) and the Director's Meritorious Service Award (1995), which represent the two highest honors conferred by the foundation on its employees.

Among those making comments during the CSP event were acting DMS executive officer, Deborah Lockhart, and McDonald's longtime NSF colleague and former DMS director, Judith Sunley. Also making remarks were AMS president David Eisenbud of the Mathematical Sciences Research Institute in Berkeley, AMS executive director John H. Ewing, and CSP chair Jane Hawkins of the University of North Carolina, Chapel Hill. They praised McDonald's sound, sure judgment, his integrity, and his unflappability.

McDonald was given a framed certificate with the following text.

"The Committee on Science Policy of the American Mathematical Society expresses its profound gratitude to Bernard R. McDonald for his devoted service to mathematics and to the community of mathematicians. Through his dedicated work for more than twenty years at the National Science Foundation, Dr. McDonald has guided programs with a steady hand and has provided wise counsel to mathematicians everywhere. His level-headed insight and influence will be missed by all.

"The members of the Committee on Science Policy appreciate all that he has accomplished, and offer Dr. McDonald their special thanks and heartfelt good wishes for a happy and well-deserved retirement."

—*Allyn Jackson*

Deaths of AMS Members

AGNES BERGER, retired associate professor, Mt. Sinai Medical Center, died on March 27, 2002. Born on November 9, 1916, she was a member of the Society for 59 years.

WILLEM J. BLOK, professor, University of Illinois at Chicago, died on November 30, 2003. Born on February 22, 1947, he was a member of the Society for 32 years.

JOHN W. CARLSON, dean, University of South Dakota, died on June 1, 2003. Born on November 10, 1940, he was a member of the Society for 31 years.

SUBINOY CHAKRAVARTY, research consultant, Michigan State University, died on February 17, 2004. Born on July 18, 1946, he was a member of the Society for 20 years.

WILLIAM G. CHINN, emeritus, from San Francisco, CA, died on March 23, 2004. Born on May 26, 1919, he was a member of the Society for 45 years.

ELIAS DEEBA, professor, University of Houston-Downtown, died in February 2004. Born on December 15, 1949, he was a member of the Society for 29 years.

J. C. E. DEKKER, professor emeritus, Rutgers University, died on April 3, 2004. Born on September 6, 1921, he was a member of the Society for 53 years.

A. YA. DOROGVTSEV, professor, Kiev, Ukraine, died on April 22, 2004. Born on September 7, 1935, he was a member of the Society for 25 years.

ALBERTO R. GALMARINO, professor emeritus, Northeastern University, died on March 18, 2004. Born on September 23, 1928, he was a member of the Society for 43 years.

WALTER GOTTSCHALK, of Providence, RI, died on February 15, 2004. Born on November 3, 1918, he was a member of the Society for 63 years.

MARTIN GUTERMAN, professor, Tufts University, died on February 1, 2004. Born on November 18, 1941, he was a member of the Society for 42 years.

VELMER HEADLEY, professor, Brock University, Canada, died on March 24, 2004. Born on September 7, 1934, he was a member of the Society for 38 years.

CLAIBORNE M. JAMES of Longmont, CO, died on November 23, 2003. He was a member of the Society for 4 years.

ROBERT M. KAUFFMAN, professor, University of Alabama at Birmingham, died on February 8, 2004. Born on August 26, 1941, he was a member of the Society for 38 years.

OLGA A. LADYZHENSKAYA, professor and chair, Russian Academy of Sciences, Steklov Mathematical Institute, died on January 12, 2004. Born on March 7, 1922, she was a member of the Society for 9 years.

DAVID A. PAGE, professor, University of Illinois at Chicago, died on January 29, 2004. Born in 1925, he was a member of the Society for 28 years.

MARVIN ROSENBLUM, professor emeritus, University of Virginia, died on November 19, 2003. Born on June 30, 1926, he was a member of the Society for 48 years.

CAREL L. SCHEFFER, retired, Delft University of Technology, The Netherlands, died on January 13, 2004. Born on October 9, 1928, he was a member of the Society for 40 years.

R. SUBRAMANIAN, professor emeritus, Indian Institute of Technology, died in December 2003. Born on September 15, 1937, he was a member of the Society for 8 years.

NORMAN WESLEY TORGERSO, retired, from Long Beach, CA, died on October 10, 2003. Born on April 30, 1925, he was a member of the Society for 23 years.

HERBERT VOEGE, professor, Ferris State University, died on January 9, 2004. Born on April 18, 1929, he was a member of the Society for 24 years.

GEORGE W. WHITEHEAD JR., professor emeritus, Massachusetts Institute of Technology, died on April 12, 2004. Born on August 2, 1918, he was a member of the Society for 65 years.

CHARLES W. WILLIAMS, professor emeritus, Washington & Lee University, died on October 25, 2003. Born on March 24, 1912, he was a member of the Society for 38 years.

BERTRAM YOOD, professor emeritus, Pennsylvania State University, died on March 17, 2004. Born on January 6, 1917, he was a member of the Society for 62 years.