He was born on 16 October 1921 in Madison, Wisconsin, and earned his PhD in 1952 from the University of Wisconsin. His doctoral thesis, which made an early attempt to quantify the nuclear force and to test the charge independence, significantly advanced the precision study of proton–proton scattering.

McGruer became a member of the physics faculty at the University of Pittsburgh in 1952. There he codesigned the precision analyzing system used in the early direct nuclear-reaction experiments with the 15-MeV cyclotron. He then supervised the construction of the present Nuclear Physics Laboratory and the installation there of the three-stage tandem Van de Graaff accelerator. Subsequently he guided the operation of the accelerator through its most productive years. McGruer was a major participant in the high-energy accelerator design project in Wisconsin for the Midwest Universities Research Association. He contributed greatly to the application of dual ion beams to study radiation damage in structural materials for fusion reactors. At the time of his death he was deeply involved in the construction of an ultra-high-vacuum channeling facility to be used for surface studies.

Cheerfully irreverent in style, McGruer was noted for his encyclopedic knowledge and his many skills, both in physics and in an astonishing variety of more personal activities: amateur astronomy, musical-instrument construction and horticulture. Everyone who knew McGruer benefited from him as a friendly and courteous source of information or advice.

B. L. COHEN
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Wolfgang K. H. Schuebel

Wolfgang K. H. Schuebel, research physicist at the Air Force Avionics Laboratory, Wright-Patterson Air Force Base, Ohio, and a pioneer in hollow-cathode discharge lasers, died on 9 March 1985.

Born in Jena, Thuringia, Germany, on 1 September 1931, Schuebel received his diploma in physics (1958) and his PhD (1963) at the Technische Hochschule in Munich for studies on mass spectroscopy under P. W. Ewald. He emigrated to the US and joined the Avionics Laboratory laser group of W. C. Eppers in 1965, where he was a colleague of Gustav Medicus.

Schuebel's studies focused primarily on the development of long-life, compact, visible- and near-infrared lasers.

He was one of the first to exploit the distributed hollow-cathode configuration, and several of his designs have become standards. In addition to his own studies, Schuebel was the program manager for the development of these lasers by universities and industry to larger systems and to operation at high repetition rates (notably copper vapor and helium–xenon).

In recent years Schuebel turned his attention to the transverse discharge laser, metal halide lasers and to problems associated with fiberoptic gyros.

Roman J. Wasilewski

Roman J. Wasilewski, the first head of the materials research laboratory section at NSF, died on 3 February 1985. Wasilewski was born in Poland in 1919 and served as an officer with the Polish army during World War II, receiving Poland's highest military award for outstanding bravery, the *Virtuti Militari*. He held a senior-level industrial position in the UK from 1948 to 1950, then came to study in the US, receiving his PhD in physical metallurgy from Columbia in 1953. He returned to industrial research and was appointed lecturer in physical metallurgy at the University of Liverpool (1955–57). Wasilewski then returned to the US, spending ten years at E. I. du Pont de Nemours & Co and five years as a senior technical adviser in physical metallurgy at Batelle's Columbus Labs. His primary research interests concerned refractory metals and compounds, intermetallic compounds, martensitic transformations, elastic–plastic deformation and shape memory phenomena. In 1971 he became the first head of the materials research laboratory section at NSF, where he made unique contributions to the development of interdisciplinary research in academic institutions. He retired from NSF in 1982 and returned to England in 1983.

John V. Kline

John V. Kline, professor of physics at the Colorado School of Mines, died on 7 October 1984 at the age of 64. A native of Washington, D.C., Kline obtained his doctorate at Purdue University. Prior to joining the faculty at CSM in 1956, he taught at the University of Redlands and at Colorado State University. An effective and stimulating instructor, Kline was one of the first CSM recipients of the AMOCO award for outstanding teaching. His research interests in the field of high-resolution optical spectroscopy were pursued both at CSM and through summer residences at Los Alamos. □