

Murray Gerstenhaber, Mathematics

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DEATHS

PRINT



Murray Gerstenhaber

Murray Gerstenhaber, an emeritus professor of mathematics in the School of Arts and Sciences, died on February 21. He was 96.

Born in New York to Jewish immigrants, Dr. Gerstenhaber was recognized for his intellect from an early age. At 10 years old, Dr. Gerstenhaber had an IQ of 199+ and was recognized as a child prodigy. He attended the Speyer School and the Bronx High School of Science. After graduating high school as valedictorian (and as a recipient of the prestigious George Westinghouse Award), Dr. Gerstenhaber served in the U.S. Army in Berlin from 1945 to 1957, where he also taught higher mathematics courses at a university the U.S. had established there. Dr. Gerstenhaber attended Yale's Sheffield Scientific School in an accelerated program and obtained his undergraduate degree in

mathematics in 1948. He later earned his PhD in mathematics at the University of Chicago in 1951. Dr.

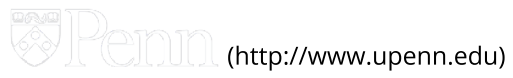
Gerstenhaber engaged in postdoctoral studies at Harvard from 1951-1952, then at the Institute for Advanced Study in Princeton from 1952-1953.

Dr. Gerstenhaber joined the faculty of Penn's School of Arts & Sciences in the department of mathematics in 1953. Struggling with limited funds for the mathematics department, Dr. Gerstenhaber entered a local radio quiz show, winning \$25 per show, which he contributed to the department. In 1954, Dr. Gerstenhaber secured Penn's first National Science Foundation (NSF) grant in mathematics. He served as the chair of the department of mathematics, and, from 1982-1983, as chair of Penn's Faculty Senate. Dr. Gerstenhaber earned a JD in 1973 from Penn's Law School, then became a member of the Pennsylvania bar. Later, he lectured at the law school, constructing a pioneering course there on the defensive application of statistical evidence in criminal trials. Dr. Gerstenhaber retired from Penn in 2011 and took emeritus status. When he retired, he was the longest-serving tenured faculty member in Penn's history.

As a researcher, Dr. Gerstenhaber made significant contributions to theoretical physics and discovered the Gerstenhaber algebra, a novel algebraic structure, while at Penn. He dedicated his research to algebraic deformation theory, structure of algebras, and quantum groups. Dr. Gerstenhaber's work was renowned by his peers. His papers "On the Deformation of Rings and Algebras" and "The Cohomology Structure of an Associative Ring" were cited when he won the 2021 Leroy P. Steele Prize from the American Mathematical Society.

Outside of Penn, Dr. Gerstenhaber founded the Association of Members of the Institute for Advanced Study (AMIAS,) served as a fellow of the American Association for the Advancement of Science and as an inaugural fellow of the American Mathematical Society, and was the managing editor of the Bulletin of the American Mathematical Society. He was also fervent in his commitment to social justice and maintained a longstanding membership with the American Civil Liberties Union.

Dr. Gerstenhaber is survived by his son, David; his daughter, Rachel; his son-in-law, Alex; his granddaughters, Amanda, Arielle, Elana, and Mikaela; and his grandsons, Alexander, Joshua, and Dylan. Private funeral services were held on March 3.



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