

IN MEMORIAM



Richard Wilson

by Elaine Wilson

Richard “Dick” Wilson, Mallinckrodt Professor of Physics Emeritus at Harvard University, died on May 19 in Needham, Mass.

Wilson will be remembered for his scientific work, student mentorship, principled humanitarian and environmental stands, and interdisciplinary connections across the globe. He was also a railway enthusiast, Morris dancer, concertina player, world traveler, and hiker.

Born on April 29, 1926, in Putney, England, Wilson studied at London’s Colet Court and St. Paul’s schools, evacuating to Crowthorne by bicycle during World War II. He earned his BA and DPhil at Christ Church, Oxford. He was a Guggenheim Fellow for postdoctoral work in the U.S. at Rochester University and then Stanford University with Wolfgang “Pief” Panofsky. While at Stanford, Wilson met Andrée Désirée DuMond, marrying her after a brief courtship.

In 1952, the couple moved to Oxford University for Wilson’s research lecturer position and in 1955 to Cambridge, Mass., for a faculty position at Harvard.

Wilson specialized in experimental particle physics, studying the nature of the smallest particles that constitute matter as they collide at very high velocities. He led the upgrade of Harvard’s proton cyclotron to 160 MeV in order to study nucleon-nucleon interactions. With Harvard and MIT colleagues, Wilson designed, constructed, and used the Cambridge Electron Accelerator 6 GeV synchrotron, which, from 1962 on, further probed nucleonic structure.

Wilson was involved in constructing and using the new Fermi National Accelerator Laboratory (Fermilab) in Batavia, Ill., frequently “commuting” there from Harvard, to maintain close contact with students and research. At Fermilab, Wilson continued the study of nucleonic structure with high-energy muon beams. When Harvard’s cyclotron became obsolete for particle research, Wilson helped adapt it for the treatment of cancerous tumors. He also studied electron-positron interactions with the CLEO collaboration at the Cornell Electron Storage Ring. Finally, Wilson joined a research group using the intense polarized beam of the new Continuous Electron Beam Accelerator Facility in Virginia.

Wilson often visited the USSR and, later, Russia, believing that direct cultural and scientific contact was essential to prevent war. After the exile of dissident Soviet physicists, he boycotted USSR conferences and was an early and visible supporter of Andrei Sakharov.

Wilson studied nuclear power safety and environmental carcinogens, such as asbestos. He visited Chernobyl after the nuclear accident, taking a PBS film crew with him. He also did extensive studies into the presence of arsenic in water in Southeast Asia, and he raised funds to provide safe drinking water in many villages, especially in Bangladesh, which he visited every year.

Wilson authored 935 scholarly papers and eight books.