PAUL C. LAUTERBUR (1929–2007)

Paul Lauterbur, co-recipient of the 2003 Nobel Prize in Physiology or Medicine for his pioneering work in MR imaging of the body, died March 27, 2007.

A native of Sidney, Ohio, Lauterbur received a BS in chemistry from Case Institute of Technology in 1951 and went from there to employment at the Mellon Institute. He was drafted in 1953, spending most of his service at the Army Chemical Center, where he established a new nuclear MR (NMR) laboratory. In 1955, he returned to the Mellon Institute, setting up another NMR laboratory and attending graduate school at the University of Pittsburgh, from which he received a PhD in chemistry in 1962.

The following year he joined the State University of New York at Stony Brook as an Associate Professor of Chemistry. It was here in 1971 that he began the research that developed into MR imaging of the body. Lauterbur discovered the possibility of creating a 2D picture by introducing gradients in the magnetic field. By analyzing the characteristics of the emitted radio waves, he could determine their origin. This made it possible to build 2D pictures of structures that could not be visualized by other techniques. In 1973, he described how the addition of gradient magnets to the main magnet made it possible to visualize a cross-section of tubes with ordinary water surrounded by heavy water.

Lauterbur left Stony Brook in 1985 for the University of Illinois at Champaign-Urbana, where he served until his death as a Professor in the College of Medicine and the Department of Chemistry and Director of the Biomedical Magnetic Resonance Laboratory, as well as in several other programs.

The author or coauthor of more than 300 publications, he

was recognized with numerous honorary degrees and awards, including membership in the National Academy of Sciences, the National Medal of Science, the Albert Lasker Clinical Research Award, the Eduard Rhein Foundation Technology Award, and the Bower Prize. He was named an ASNR Honorary Member in 2003 for his contribution to the development of MR as a body imaging technique.

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