

To notify the community about a colleague's death, subscribers can visit <http://www.physicstoday.org/obits>, where they can submit obituaries (up to 750 words), comments, and reminiscences. Each month recently posted material will be summarized here, in print. Select online obituaries will later appear in print.

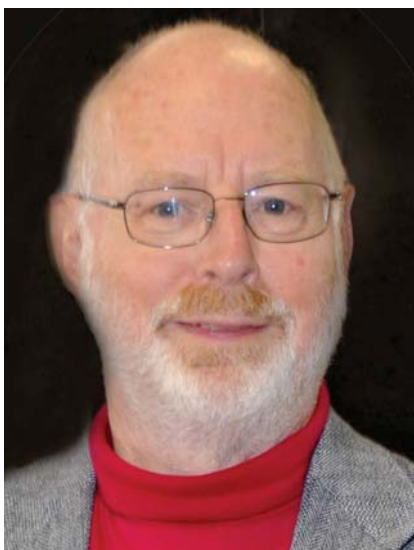
Robert Gohl Fuller

Physics educator Robert Gohl Fuller, emeritus professor at the University of Nebraska–Lincoln (UNL), died on 9 April 2012 in Lincoln of complications from a brain aneurysm.

Bob was born on 7 June 1935 in Crawfordsville, Indiana. He received his BS in physics from the Missouri School of Mines and Metallurgy in 1957. After completing an MS at the University of Illinois at Urbana-Champaign, he became science master at Methodist English High School in Rangoon, Burma, in 1958. Upon returning to Illinois in 1961, Bob completed his PhD in 1965 under Robert Maurer—his thesis was titled “The chlorine ion diffusion in potassium chloride”—and joined the Naval Research Laboratory. From 1966 to 1970 he wrote or cowrote 10 papers on electrical conductivity and ionic transport.

Bob's move to UNL in 1969 had a profound effect on his career. While teaching pre-med students, he became interested in understanding the difficulties they faced as they tried to learn physics. His research quickly moved from condensed matter to an area later called physics education research and development.

In 1971 Bob received his first NSF grant for physics education activities. The Film Loop Instructional Course, a workshop for college physics faculty, focused on the development of short Super-8 films, the pinnacle of interactive instructional media in those days. The workshop led to several lifelong collaborations and started Bob on one



Robert Gohl Fuller

of his many paths of R&D in physics education and interactive multimedia for the teaching of physics. His accomplishments in that area included *The Puzzle of the Tacoma Narrows Bridge Collapse*, the first interactive videodisc for physics instruction; the *Skylab* film series, 12 13-meter (three-minute) films edited from more than 3 kilometers of NASA film; *Physics: Cinema Classics*, scenes from old instructional films converted to interactive physics lessons; Scientific and Cultural Aspects of the Bicycle, an international project that led to student exchanges and a series of lessons; and Guilty or Innocent: You Be a Car Crash Expert, a prize-winning computer game for teaching mechanics. Those and other multimedia projects helped pave the way for many of the techniques and approaches that are now considered standard for helping students learn physics through technology.

Another strand that began early in Bob's career was the application of models of intellectual development to the teaching and learning of physics. In the early 1970s Bob and others designed a development effort for faculty called the Workshop on Physics Teaching and the Development of Reasoning. It had wide distribution and became a strong influence in the early efforts to create research-based active learning environments for college-level physics teaching. At UNL, Bob took the idea beyond physics and led an interdisciplinary group that developed and taught a pro-

gram called Accent on Developing Abstract Processes of Thought. The ADAPT program was designed for freshmen as a set of coordinated courses that helped students foster their ability to reason abstractly. Bob was ADAPT's director from 1975 to 1997.

Bob joined the American Association of Physics Teachers (AAPT) in 1959. He served in the presidential line starting in 1978, but before his term as president was to begin in 1980, he stepped in to complete the term of then president James Gerhart, who was having health problems. Bob held many committee assignments for AAPT and served as editor of its Instructional Materials Center from 1987 to 1994. His efforts led to the creation of the association's Venture Fund, a resource that helps members to promote the development and marketing of innovative teaching products.

Bob was fundamental in establishing the Physics Education Research Conference, or PERC. After the first conference in 1997, he organized the second a year later and helped give the conference its present name and acronym. The conferences have continued as an annual event associated with the AAPT summer meeting.

In 1986 AAPT awarded Bob its Distinguished Service Citation and in 1992, its Robert A. Millikan Medal. He received additional honors from UNL and from several state and national organizations.

Bob became emeritus at UNL in 2005. He edited two books, *A Love of Discovery: Science Education—The Second Career of Robert Karplus* (Kluwer Academic/Plenum, 2002) and *College Teaching and the Development of Reasoning* (Information Age, 2009), and contributed to a third, Albert Bartlett's *The Essential Exponential! For the Future of Our Planet* (University of Nebraska Press, 2004).

Bob developed many innovative ways to help students learn physics. He was a physics education researcher when that field was beginning, and he remained active in R&D and dissemination throughout his career. Although his creative efforts spanned a broad spectrum of instructional methods, he will be remembered most for his high level of enthusiasm for the discipline. His excitement for physics teaching and learning, his always seeking better ways to help students learn, and his ability to spread his excitement to other faculty members have had a profound effect on the physics education community. His contributions will continue to influence us for a long time to come.

Dean Zollman

Kansas State University
Manhattan ■

Recently posted notices at <http://www.physicstoday.org/obits>:

Jan Van Kranendonk

8 February 1924 – 30 May 2012

Frederic Holtzberg

12 April 1922 – 24 April 2012

Helmut Krawinkler

6 April 1940 – 16 April 2012

Charles K. “Ned” Birdsall

19 November 1925 – 6 March 2012

Brian David Serot

1 February 1955 – 2 March 2012

Richard James Plano

15 April 1929 – 8 January 2012

Frederick Calvin Brown

6 July 1924 – 18 November 2011