

## American Association of Physics Teachers 2001 Oersted Medalist: Lillian C. McDermott

The Oersted Medal is AAPT's most prestigious award and has been given annually at the AAPT Winter Meeting since 1936. This award recognizes individuals who have made "notable contributions to the teaching of physics." The 2001 Oersted Medal is awarded to Lillian C. McDermott, Professor of Physics at the University of Washington.

Professor McDermott received her B.A. from Vassar College and her M.A. and Ph.D. in experimental nuclear physics from Columbia University. After teaching at City College of New York, Seattle University, and the University of Washington, she was appointed as an Assistant Professor at the University of Washington in 1973 and was promoted to Professor in 1981.

Professor McDermott has directed the Physics Education Group at the University of Washington for more than 25 years. Under her leadership, the Physics Education Group conducts research on the learning and teaching of physics and applies the results to the design of curriculum. Sixteen graduate students in the group have earned a Ph.D. in physics for research in physics education. Professor McDermott's influence goes well beyond her own students as many physicists from around the world have visited the University of Washington to work with and learn from the Physics Education Group. These graduates and visitors have developed numerous graduate programs modeled after the one she started.

Professor McDermott and the Physics Education Group are currently developing two kinds of research-based instructional materials. *Tutorials in Introductory Physics* is designed to supplement the lectures and textbooks, through which introductory physics is traditionally taught, by helping students develop a qualitative understanding of the subject matter. *Physics by Inquiry* is a set of laboratory-based instructional modules designed to prepare K-12 teachers to teach science effectively. The development of the modules has taken place in a year-round program for prospective and practicing teachers that has been ongoing for more than 25 years.

More than 60 articles by Professor McDermott have appeared in the *American Journal of Physics*, *Physics Education Research—A Supplement to AJP*, *The Physics Teacher*, *Physics Today*, *Physics Education*, *Optics and Photonics News*, and the *Journal of College Science Teaching*, as well as in numerous conference proceedings. She has contributed an invited chapter to *Inquiring into Inquiry in Science Learning and Teaching* published by the AAAS. She has given many invited talks and conducted workshops at national and international professional meetings and at universities and colleges in the U.S. and abroad.



Lillian C. McDermott

Professor McDermott is a Fellow of the American Physical Society and the American Association for the Advancement of Science. Among the awards she has received are an AAPT Distinguished Service Citation in 1981, the Seattle Urban League Affirmative Action Award in 1983, the AAPT Robert A. Millikan Lecture Award in 1990, an honorary Doctor of Science degree from Ripon College in 1991, a George Washington University Welling Professorship in 2000, the Archie Mahan Prize of the Optical Society of America in 2000, and the Council of Scientific Society Presidents Educational Research Achievement Award in 2000.

Professor McDermott has been a Councillor of the APS, a member of the APS Executive Board, and a member and chair of several APS and AAPT committees. She recently served on the committee of the National Research Council that developed an Addendum to the National Science Education Standards on scientific inquiry. She is currently a Member at Large of the AAAS Committee on Education.

In recognition of her pioneering work in establishing research on the learning and teaching of physics as a valuable field for scholarly inquiry by physicists, her influential curriculum development at the university level, and her efforts to improve teacher education, the American Association of Physics Teachers is honored to present Lillian C. McDermott with its 66th Oersted Medal.

Larry D. Kirkpatrick  
Chair, AAPT Awards Committee