

Lillian Christie McDermott is widely recognized for her leadership in promoting the importance of physics education research as a subdiscipline of physics, and developing research-based curricula that have improved student learning of physics from kindergarten to graduate school. Her foundational work in physics education research has had an international impact on physics education and her record of publications, accomplishments, and awards is second to none in the field.

Prof. McDermott received her Ph.D. in experimental nuclear physics from Columbia University in 1959. After teaching at City College of New York, Seattle University, and the University of Washington, she collaborated with Arnold Arons, who had gone to the University of Washington to establish a program in the Department of Physics for the preparation of precollege teachers. McDermott expanded the program to include high school teachers. It has since become the longest-lived teacher education program based in a university physics department in the United States.

Prof. McDermott was appointed to the faculty in the University of Washington Physics Department in 1973 and promoted to Full Professor in 1981. With her colleagues she conducts research on the learning and teaching of physics and applies the results to the design of curriculum. The group is engaged in developing two sets of research-based instructional materials: Tutorials in Introductory Physics and Physics by Inquiry. Both are widely distributed in the U.S. and have been translated into several other languages.

For more than 30 years, Prof. McDermott has worked to establish research in physics education as a field for scholarly inquiry by physicists. In 1973 she began a new program in which graduate students earn doctorates in physics for research on the learning and teaching of physics. The group has served as a model for discipline-specific educational research and curriculum development, and produced numerous trailblazing articles. Many of McDermott's graduate students and postdocs have gone on to faculty positions in the US, Germany and South Africa. Similar Ph.D. programs have since been set up at several other universities in the U.S. Many physicists from around the world have come to the University of Washington to visit, or to work with, the Physics Education Group.

Prof. McDermott was a fellow of the American Physical Society (APS) and the American Association for the Advancement of Science (AAAS). Among the numerous awards she has received are the 2000 Archie Mahan Prize of the Optical Society of America (OSA) and the 2000 Education Research Achievement Award of the Council of Scientific Society Presidents (CSSP). She was recognized by the AAPT with the Robert A. Millikan Lecture Award in 1990, the Oersted Medal in 2002 and the Melba Phillips Award in 2013. In 2002, she received the Medal of the International Commission on Physics Education (ICPE) for longstanding contributions to international physics education in Udine GIREP-ICPE Congress and in 2008 shared the APS Education Award with colleagues. In 2014 she was given the University Faculty Lecture Award, one of the highest honors at the University of Washington. Prof. McDermott has been a Councillor of the APS, a member of the APS Executive Board.

Lillian supported GIREP goals in PER and in bridging research and practice having contents as background referent since from 1996 and from 2003 her contribution was continuous and a great referent for Girep activities.