An expert on electronic voting, Dr. Barbara Simons was appointed to the Board of Advisors of the U.S. Election Assistance Commission in 2008. She co-authored *Broken Ballots: Will Your Vote Count?* with Prof. Douglas Jones. She was a member of the National Workshop on Internet Voting that was convened at the request of President Clinton and produced a report on Internet Voting in 2001. She also participated on the Security Peer Review Group for the US Department of Defense's Internet voting project (SERVE) and co-authored the report that led to the cancellation of SERVE because of security concerns. Simons co-chaired the Association for Computing Machinery (ACM) study of statewide databases of registered voters, and she co-authored the League of Women Voters report on election auditing.

Simons was President of ACM, the nation's oldest and largest educational and scientific society for computing professionals, from July 1998 until June 2000. She founded ACM's US Public Policy Committee (USACM) in 1993 and served for many years as the Chair or co-Chair of USACM.

In 2005 Simons became the only woman to receive the Distinguished Engineering Alumni Award from the College of Engineering of U.C. Berkeley. She is also a Fellow of ACM and the American Association for the Advancement of Science. She received the Alumnus of the Year Award from the Berkeley Computer Science Department, the Distinguished Service Award from Computing Research Association, the Making a Difference Award from ACM's Special Interest Group on Computing and Society, the Norbert Wiener Award from Computer Professionals for Social Responsibility, the Outstanding Contribution Award from ACM, and the Pioneer Award from the Electronic Frontier Foundation. She was selected by C|NET as one of its 26 Internet "Visionaries" and by Open Computing as one of the "Top 100 Women in Computing." Science Magazine featured her in a special edition on women in science.

Simons served on the President's Export Council's Subcommittee on Encryption and on the Information Technology-Sector of the President's Council on the Year 2000 Conversion. She is the Chair of the Board of Directors of Verified Voting, and has also been on the boards of the U. C. Berkeley Engineering Fund, the Electronic Privacy Information Center, Public Knowledge, and the Oxford Internet Institute, as well as the Advisory Council of the Public Interest Registry's ORG. She has testified before federal and state legislatures and at government sponsored hearings. She was runner-up in the first election for the North America seat on the ICANN Board.

Simons co-founded the Reentry Program for Women and Minorities in the U.C. Berkeley Computer Science Department. She is on the Boards of the Coalition to Diversify Computing and the Berkeley Foundation for Opportunities in Information Technology, groups devoted to increasing participation in computer science of women and underrepresented minorities.

Simons earned her Ph.D. in computer science from the University of California, Berkeley. Her dissertation solved a major open problem in scheduling theory. In 1980, she became a Research Staff Member at IBM's San Jose Research Center (now Almaden). In 1992, she joined IBM's Applications Development Technology Institute as a Senior Programmer and subsequently served as Senior Technology Advisor for IBM Global Services. Her main areas of research have been compiler optimization, algorithm analysis and design, and scheduling theory. Her work on clock synchronization won an IBM Research Division Award. She holds several patents and has authored or co-authored two books and numerous technical papers. She is retired from IBM Research.