MARY-CLAIRE KING, PhD American Cancer Society Professor University of Washington, Seattle

Mary-Claire King, PhD, is American Cancer Society Professor in the Department of Medicine and the Department of Genome Sciences at the University of Washington in Seattle, Washington. She was the first to show that breast cancer is inherited in some families, as the result of mutations in the gene that she named *BRCA1*. In addition to inherited breast and ovarian cancer, her research interests include the genetic bases of schizophrenia, the genetic causes of congenital disorders in children, and human genetic diversity and evolution. She pioneered the use of DNA sequencing for human rights investigations, developing the approach of sequencing mitochondrial DNA preserved in human remains, then applying this method to the identification of kidnapped children in Argentina and subsequently to cases of human rights violations on six continents.

Dr. King grew up in Chicago. She received her BA in Mathematics from Carleton College in Northfield, Minnesota; her PhD in Genetics from the University of California at Berkeley; and her postdoctoral training at UC San Francisco. Her PhD dissertation with Allan Wilson demonstrated that protein sequences of humans and chimpanzees are 99% identical. She was professor at UC Berkeley from 1976-1995 and at the University of Washington in Seattle since 1995.

Dr. King has served on multiple councils and study sections of the NIH and the U.S. National Academy of Sciences. She was consultant to the Commission on the Disappearance of Persons of the Republic of Argentina and carried out DNA identifications for the United Nations War Crimes Tribunals. She is past president of the American Society of Human Genetics and a past member of the Council of the National Academy of Sciences of the USA.

In addition to the National Academy of Sciences, Dr. King has been elected to the American Academy of Arts and Sciences, the National Academy of Medicine (formerly IOM), the American Philosophical Society, and as a foreign member of the French Academy of Sciences. She has received 18 honorary doctoral degrees, from Harvard, Yale, Columbia, Princeton, Brown, Rockefeller, Leuven (Belgium) Tel Aviv (Israel), and Ben Gurion (Israel) Universities; the University of Michigan; the State University of New York; Rensselaer Polytechnic Institute; Hong Kong University; the University of British Columbia; and Carleton, Smith, Bard, and Dartmouth Colleges. In 2014, she received the Lasker Foundation Special Achievement Award for Medical Research, in 2016 the United States National Medal of Science, and in 2018 the Dan David Prize and the Shaw Prize.