

**Name:** BRUCE SPENCER WEIR

**Position:** Professor of Biostatistics, Epidemiology and Genome Sciences, University of Washington

**Place of Birth:** Christchurch, New Zealand. New Zealand citizen, United States citizen.

**Office Address:** Department of Biostatistics, University of Washington  
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**Education:** Shirley Boys High School, Christchurch, New Zealand, 1957-1961.  
B.Sc(HONS). (1st class honours in Mathematics), Canterbury, New Zealand, 1965.  
Ph.D. (Statistics and Genetics), North Carolina State University, 1968.  
Postdoctoral (Genetics), University of California at Davis, 1969.

**Honorary:** Fellow of the American Association for the Advancement of Science, 1998  
Honorary Fellow of the Royal Society of New Zealand, 1998  
Fellow of the American Statistical Association, 1999  
Fellow of the American Academy of Forensic Sciences, 2008  
Fellow of the Royal Society of London, 2021

**APPOINTMENTS:** (current \*)

**Massey University, New Zealand**

Senior Lecturer, Reader in Mathematics, 1970-75

**North Carolina State University**

Associate Professor 1976-81, Professor 1981-92, Department of Statistics

William Neal Reynolds Distinguished Professor of Statistics and Genetics 1992-2005

Director Bioinformatics Research Center, Director Bioinformatics Graduate Program, 2001-2005

**University of Auckland, New Zealand**

Adjunct Professor of Bioinformatics, 2005-2008

Adjunct Professor, Honorary Professor of Statistics, 2008-\*

**University of Washington**

Professor, Department of Biostatistics, 2006-\*

Adjunct Professor, Department of Genome Sciences, 2006-\*

Adjunct Professor, Department of Epidemiology, 2020-\*

Chair, Department of Biostatistics, 2006-2014

Director, Institute of Public Health Genetics, 2015-\*

**Visiting/short-term**

Institute of Animal Genetics, University of Edinburgh, 1983-84.

Wellcome Trust Centre for Human Genetics / University of Oxford Department of Statistics, 2002.

Department of Genetics, ESALQ, University of Sao Paulo, Brazil, 2014.

Department of Ecology and Evolution, UNIL, Switzerland, 2014.

## **RESEARCH:**

Population and quantitative genetics theory. Development and application of methods in statistical genetics for human and natural populations. Prediction and characterization of associations of alleles within and between individuals or populations, with applications to estimation of inbreeding, relatedness and population structure. Associations between alleles at different loci and detection of association between traits and genetic markers. The use of genetic profiles in forensic science, with emphasis on allelic associations from relatedness and population structure, and dependencies of match probabilities among loci.

## **Publications:**

Over two hundred peer-reviewed journal papers, over 30 book chapters, plus several published Commentaries and Correspondences. Two textbooks and five edited books.

## **Research grants:**

Individual research grants from the US National Institutes of Health and US National Institute of Justice. Group research awards, institutional training grants and research coordinating center contracts from the US National Institutes of Health.

## **Teaching:**

Statistical genetics and forensic genetics courses at home universities. Supervision of 35 PhD students and 19 postdoctoral fellows. Initiation and direction of the annual Summer Institute in Statistical Genetics at North Carolina State University in 1996 and at the University of Washington in 2005. Short courses in statistical genetics in 12 other countries.

## **Editorial Positions:**

- 1977-97 Associate Editor of *Genetics*
- 1979-87 Associate Editor of *Theoretical Population Biology*
- 1984-89 Associate Editor of *Biometrics*
- 1990-05 Associate Editor of *Journal of Heredity*
- 1993-95 Associate Editor of *American Journal of Human Genetics*
- 1993-05 Editor of *Theoretical Population Biology*
- 1997-12 Associate Editor of *Genetics Research*
- 2000-10 Associate Editor of *Genetic Epidemiology*
- 2005-08 Associate Editor of *Journal of the American Statistical Association*
- 2012-22 Editorial Board of *Journal of Forensic Sciences*

## **Committee Memberships:** (current \*)

NIH Review Panels: Genetics Study Section (1978-83), Genetic Basis of Disease Study Section (1991-05),  
Genome Study Section (2000-04)  
Grant Review Panel, National Institute of Justice, 2016, 2018.  
Gordon Conference on Quantitative Genetics and Biotechnology (Vice-chair, 1993; Chair, 1995)  
International Conference on Quantitative Genetics (Secretary 2nd Conference, 1987;  
Program Co-Chair 3rd Conference, 2007)  
International Conference on Forensic Statistics (Chair, 4th Conference, 1999;  
Chair, 8th Conference, 2011)  
Member Regional Advisory Board, Biometric Society, ENAR, 1984-83  
Defense Science Board Task Force on Use of DNA for Ancient Remains, 1994-95  
Council member, American Genetic Association, 1996-98  
Scientific Advisory Board, Wellcome Trust Centre for Human Genetics, Oxford, 2000-04  
Board of Scientific Counselors, National Toxicology Program, 2000-05  
Treasurer, Genetics Society of America, 2002-05  
External Advisory Board, New Zealand Institute of Mathematics and its Applications, 2003-08  
External Advisory Committee, Virtual Institute on Statistical Genetics, New Zealand, 2008-2012  
Technical Advisory Committee, Western Alaskan Salmon Stock Identification Program, 2008-2010  
Bioinformatics Research Advisory Group, National Marrow Donor Program, 2011-2013  
Strategic Science Advisory Panel, Environmental and Scientific Research, New Zealand, 2011-2020  
Lineage Marker Working Group, Scientific Working Group on DNA Analysis Methods, 2012-  
American Statistical Association Committee on Forensic Science, 2012-  
Member, Biology/DNA Scientific Area Committee within the Organization of Scientific Area Committees,  
NIJ/NIST, 2014-2020  
New York Commission on Forensic Science, Chair of DNA Subcommittee, 2020-\*

## **Awards and Named Lectures:**

1961 New Zealand University Entrance Scholarship  
1965 Cook Memorial Prize for Mathematics, University of Canterbury, New Zealand  
1965 Fulbright Travel Grant (Study at North Carolina State University)  
1981 Alumni Association Award for Outstanding Research, North Carolina State University  
1983 Guggenheim Fellowship (Research at University of Edinburgh)  
1990 United States Department of Agriculture Superior Service Award  
for Scientific Research (Group Award)  
1994 D.D. Mason Award, North Carolina State University Statistics Department  
1996 Osborne Memorial Lecture, University of Edinburgh  
1996 Samuels Memorial Lecture, Purdue University  
1999 Snedecor Lecture, Iowa State University  
2001 Fisher Lecture, University of Adelaide  
2003 O. Max Gardner Award, University of North Carolina System (16 campuses)  
2005 Holladay Medal for Excellence, North Carolina State University  
2014 Fulbright - Science Without Borders Distinguished Chair (Research at University of Sao Paulo)  
2016 Award for Contributions to Teaching and Research in Quantitative Genetics,  
5th International Conference on Quantitative Genetics  
2016 Cockerham Lecture, North Carolina State University  
2019 Elizabeth W. Jones Award for Excellence in Education, Genetics Society of America