Will Welch joined the Department of Statistics, UBC as a Professor in 2003, and was Head of Department from 2003 until 2008 and Interim Head August–December 2018. Prior to that he was at the University of Waterloo for 16 years. He also holds the honorary title of Visiting Professor in the Business School, Loughborough University, UK.

Welch's research spans computer-aided design of experiments, quality improvement, the design and analysis of computer experiments, statistical methods for drug discovery, and machine/statistical learning. The work is highly cited: please see http://scholar.google.com/citations?user=Bus4Xi8AAAAJ&hl=en. He has won the American Statistical Association's Statistics in Chemistry Prize and is a Fellow of the American Statistical Association.

Welch has served on the editorial boards of the Annals of Applied Statistics, the Canadian Journal of Statistics, and the SIAM/ASA Journal on Uncertainty Quantification. He has also served as Associate Director of the Canadian Statistical Sciences Institute (CANSSI).