

Kenneth Buetow - Class of 1975

Dr. Ken Buetow is a human geneticist and genomicist who leverages data science and computational tools to understand complex traits such as cancer, liver disease, and obesity. Dr. Buetow grew up in the Brownsburg Community School Corporation (BCSC), arriving mid-school year during 2nd grade, and ultimately graduating from Brownsburg High School in 1975. He received a BA in Biology from Indiana University in 1980, followed by a MS in 1983 and a PhD in 1986 from the Human Genetics program at the University of Pittsburgh, PA.

Dr. Buetow's first professional position was at the Fox Chase Cancer Center (FCCC) in Philadelphia in 1986. While at FCCC he was a participant in Human Genome Project and helped the project achieve one of its early milestones—creation of the comprehensive human genetic map. To accomplish this, his group created a virtual laboratory that connected researchers across the country in one of the earliest uses of the internet and biomedicine.

In 1998, Dr. Buetow moved to the National Institutes of Health's National Cancer Institute (NCI) in Bethesda, MD. There, he established the Laboratory of Population Genetics within the NCI and became the founding Director of the NCI's Center for Biomedical Informatics and Information Technology. As the NCI Associate Director for Bioinformatics and Information Technology, he was responsible for coordinating biomedical informatics and information technology. In that capacity, he initiated and oversaw the NCI's efforts to connect the global cancer community through community-developed, standards-based, interoperable informatics capabilities that enabled secure exchange and use of biomedical data. Dr. Buetow designed and built one of the largest biomedical computing efforts in the world. The NCI center he led focused on speeding scientific discovery and facilitated translational research by coordinating, developing, and deploying biomedical informatics systems, infrastructure, tools, and data in support of NCI research initiatives.

Dr. Buetow currently serves as Professor within the Genetics and Evolution Faculty, School of Life Sciences; Director of the Center for Evolution and Medicine; and Co-Director of the Computational Life Sciences Certificate Program at Arizona State University in Tempe, AZ. The Center for Evolution and Medicine is pioneering a Precision Medicine 2.0. This effort extends the current genomics-based Precision Medicine paradigm of defining disease at the molecular level by embracing the complexity of disease and embedding it in a multidimensional environmental and social context. It recognizes that health is a compromise and is manifest along a continuum that an individual experiences across their lifetime.

In addition to service on numerous governing and advisory boards, Dr. Buetow has published more than 200 scientific papers. His honors and awards include the American Association of Cancer Research's Team Award (2020), Fellow of the American College of Medical Informatics (2010), NIH Director's Award (2009), NIH Award of Merit (2009), The Editor's Choice Award from Bio-IT World (2008), and the Federal 100 Award (2005).