THE UNIVERSITY OF ARIZONA

BIOSTATISTICS FACULTY

EPIDEMIOLOGY & BIOSTATISTICS DEPARTMENT

Edward Bedrick, PhD
Program Director, Biostatistics
Professor | edwardjbedrick@email.arizona.edu

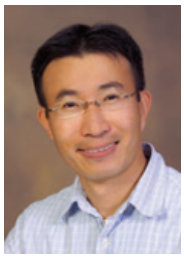
- Research interests include Bayesian methods, linear models and regression models
- Collaborative research as member of the University of Arizona Statistics Consulting Laboratory (StatLab) and Center for Biomedical Informatics and Biostatistics (CB2)

Melanie Bell, PhD
Professor | melaniebell@email.arizona.edu

- Methods for handling missing data in longitudinal studies
- Design and analysis of clinical trials and cluster randomized trials
- Design and analysis of quality of life and other patient reported outcomes
- Research methods evaluation
- Statistics Graduate Inter-Disciplinary Program, Executive Committee

Dean Billheimer, PhD
Professor | dean.billheimer@arizona.edu

- Directs the University of Arizona Statistics Consulting Laboratory (StatLab) to collaborate with scientists and physicians to advance discovery and understanding
- Develops statistical methods for discovery, measurement, and use of biomarkers
- Develops and applies new methods for Bayesian adaptive study design
- Develops new statistical methods for compositional data



Paul Hsu, PhD
Professor | pchhsu@email.arizona.edu

- Directs the Biometry Core of Phase I & II Chemoprevention Consortium
- Develops statistical methods for survival data subject to informative censoring
- Develops sensitivity analysis approaches for data subject to missing not at random mechanism
- Develops statistical models for analyzing colorectal polyp data, which account for misclassification and variable follow-up
- Collaborative research in cancer, surgery, native American health care, cardiovascular and nursing

Mel & Enid Zuckerman College of Public Health

Chengcheng Hu, PhD, MS

Professor | hucc@email.arizona.edu

- Collaborative research in cancer, occupational health, emergency medicine, and pediatrics
- Methodological research in the areas of survival analysis, longitudinal data, high-dimensional data, and measurement error
- Directs the Biostatistics and Study Design Service at the University of Arizona College of Medicine-Phoenix

Shikhar Kumar, PhD

Lecturer | shikhark@email.arizona.edu

- Research interests include agent-based modelling and computational modelling of behavior and social phenomenon, in particular network analyses, and its applications in Public Health research
- Statistician at UAHS, where I am a member of the H3Africa collaborative network, focusing on the study of chronic kidney diseases in sub-Saharan Africa

Denise Roe, DrPH, MS

Professor | droe@email.arizona.edu

- Directs the University of Arizona Cancer Center Biostatistics Shared Resource to collaborate with investigators in the design, conduct and statistical analysis of clinical, prevention, and laboratory studies
- Developing and evaluating statistical methods useful in clinical trials, prevention studies, pharmacokinetics, and longitudinal studies

Xiaoxiao Sun, PhD

Assistant Professor | xiaosun@email.arizona.edu

- Developing theoretically justifiable and computationally efficient methods for complex and big data arising in data-rich areas, such as genomics, social media, and neuroscience
- Methodological research in the areas of nonparametric modeling, computational biology, statistical computing, and big data analytics

Jin Zhou, PhD

Associate Professor | jzhou@email.arizona.edu

- Role of genetic, epigenetic and environmental factors in the development of complex diseases, including cancers
- Methodological development in modeling biological data and hands-on data analysis
- How to appropriately model and take full advantage of the correlation structure of the large-scale genetic dataset and improve computation efficiency
- Building mathematical/statistical models and efficient user-friendly software to better utilize various types of high-throughput data (“big data”) and systematically understand the heterogeneity of complex diseases, therefore to facilitate the evolution into the era of tailored therapy and personalized medicine