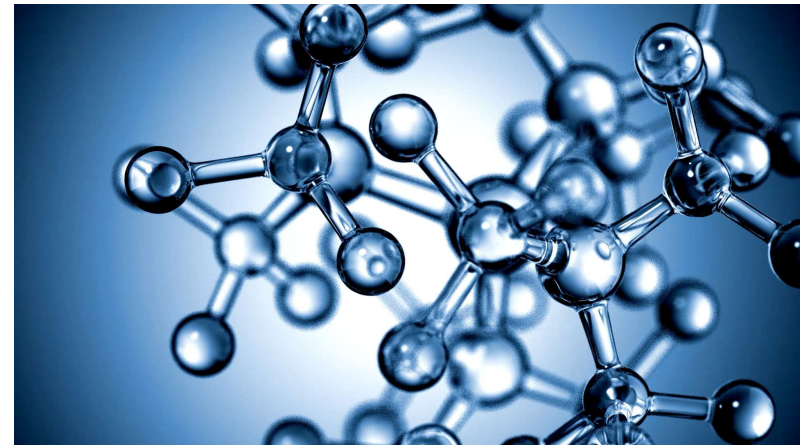

OSC-RAD Summer Course: ***Basic Statistical Analysis*** ***Methods for Biomedical*** ***Researchers***

Min-ge Xie

Department of Statistics



RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

Office of Statistical Consulting (OSC)

Department of Statistics



RUTGERS

THE STATE UNIVERSITY
OF NEW JERSEY

Rutgers, The State University of New Jersey established the Office of Statistical Consulting (OSC) in the Department of Statistics in 1983. The Rutgers Statistics Department research ranks among the best in the nation, and it has a strong, energetic, and highly interdisciplinary faculty with diverse skills. Researchers from a broad range of disciplines, including bio-informatics, life sciences, social sciences, physical sciences, education, and industry, can receive expert assistance from the office. It allows researchers both inside and outside Rutgers to draw on the most current knowledge of statistics, data science, machine learning and AI. The office promotes two main types of activities:

Collaborative

- Faculty/student research projects, including statistical methodology, experimental design, data collection and analysis, and interpretation of results
- Inter-disciplinary collaboration and methodology development
- Grant planning and development, power analysis, and proposal preparation
- Graduate student education and training in quantitative analysis skills

Services

- Statistical advice and statistical analyses of data for clients
- Tutorials on use of statistical software, technical support, and instruction for supported software
- Extraction and/or conversion of data into a format suitable for analysis
- Short courses on statistical topics of current interest

Contact Us

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18:848:611: *Basic Statistical Analysis Methods for Biomedical Researchers*

Time and Location: June 2–6, 2025 @ Room 120, Proteomics Building

Description: This one-credit summer course introduces biomedical researchers to core statistical methods, including data exploration and descriptive statistics, hypothesis testing (e.g., t-tests, chi-squared tests, F-tests), confidence intervals, regression, power analysis, and non-parametric tests (e.g., Wilcoxon, Kruskal-Wallis). The course emphasizes practical application using real-world biomedical data and hands-on experience with statistical software. No prior background in statistics is required.

Future RAD/OSC Collaborations:

- Follow-up course on advanced topics: random effects models and repeated measures, logistic regression models, imaging data, experimental designs, and the use of machine learning and AI for exploratory data analysis.
- Research collaborations on cutting-edge Stat/ML/AI methods for biomedical research