2018 Summer Institute
August 6-17, 2018

This summer, take your quantitative research perspectives, methods and tools to the next level with four, week-long courses designed to offer hands-on learning in biostatistics and bioinformatics.

Bioinformatics: Big Data in Biomedical Research
August 6-10 9 AM – 12 PM
Introduction of statistical, bioinformatics, and computational methods and tools for analyzing big Omics data in biomedical research.
Instruction led by Drs. Yu Shyr and Qi Liu.

Machine Learning in Python and Tensorflow
August 6-10 1 PM – 4 PM
Develop proficiency in the following: Data transformation and manipulation; Regularized regression models; Decision trees and random forests; Gaussian processes; Gradient boosted trees; Neural networks
Instruction led by Dr. Chris Fonnesbeck.

Data Science in Biomedical Research
August 13-17 9 AM – 12 PM
This course focuses on the use of computational biology tools for advanced, discovery-oriented data science in biomedical research. This CQS Summer Institute will have a biological applications emphasis.
Instruction led by Drs. Jonathan Irish and Ken Lau.

Machine Learning & Statistics using R
August 13-17 1 PM – 4 PM
This course provides an introduction and overview of the most powerful and common machine learning methods and statistical inference techniques using R (The R Project for Statistical Computing: https://www.r-project.org).
Instruction led by Dr. Matt Shotwell.

For more information visit www.vumc.org/cqs/