“How to Do Biostatistics” will be a three-part short course to provide researchers conducting analyses with straightforward tools for completing common data analysis tasks.

The course will use the free Rcmdr software package (R plus a user-friendly graphical user interface) to work with common types of biomedical data. People who complete the course will know how to draw, describe, conduct analyses (with diagnostics) and interpret the results for data sets that have continuous outcomes (e.g., amount of a peptide in a sample), categorical outcomes (e.g., medium or large tumors) and survival information (e.g., time to relapse or time until death after diagnosis). The intended audience for this course is people who have been exposed to statistics in the past and would like to enhance their ability to describe data and conduct analyses.

NEW! Applying Network Analysis Principles to Identify Key Genes From Microarray Data

W, Feb 7  10:00–11:30 a.m.
Class meets in Room M114

Analyzing microarray or proteomics data from a network perspective typically results in hard-to-interpret diagrams. However, a few simple principles can help disentangle such networks and help answer questions such as “which genes are most likely to have the greatest effect on my phenotype?” In this class, methods of network analysis from fields outside of the life sciences will be used to identify key genes. Networks created by the Ingenuity Pathways Analysis system will be analyzed, based on examples from the work of Stanford’s Branimir Sikic and colleagues on identifying mechanisms of drug resistance in the treatment of glioblastomas. It is suggested that participants read the paper below prior to attending.


A Guided SQL Tour of Bioinformatics Databases

W, Feb 28  10:00–11:30 a.m.
Class meets in Room M112

Many biological databases can be queried directly via the Structure Query Language (SQL), thus enabling serious data mining among other benefits. SQL is at the heart of biological databases as diverse as Ensembl, the Mouse Genome Database and BioWarehouse. In this class, we’ll walkthrough the schema of these three databases, as well as live querying examples using meaningful SQL queries, all focused on understanding relational databases by studying actual biological databases and learning how to query them using SQL. Take your first step toward data mining like the pros! See the Lane Workshops page for additional helpful links.

Effective Strategies for Locating Health Statistics

W, Jan 17  10:00–11:30 a.m.
Class meets in Computer Lab—Room M202

Who collects statistical information? What information is collected? How can we access this information? This class explores online and print resources for finding data about diseases, the health of various population groups, and other questions at local, national, and global levels.

Registration and SUNet IDs are REQUIRED!
http://lane.stanford.edu/classes
OR call 650–723–6831 for more information.

Creating Presentations with PowerPoint

Level 1:
T, Jan 16  5:00 –6:30 p.m.
F, Feb 9  10:00–11:30 a.m.

Level 2:
T, Jan 23  5:00–6:30 p.m.
F, Feb 16  10:00–11:30 a.m.

Class meets in Computer Lab—Room M202

Level 1 covers slide composition/design, and is designed primarily for first time PowerPoint users. Level 2 explores the use of multimedia files in presentations and PowerPoint template creation.

EDUCATIONAL TECHNOLOGY

Create Educational Materials In Lane’s EdTech Studio!

W, Jan 10  11:00–noon
W, Feb 14  11:00–noon
W, Mar 7  11:00–noon

Class meets in Lane’s EdTech Studio

SOM curriculum developers may attend this workshop on the basics of the EdTech studio’s development tools. Learn how to: scan multi-page documents and 35mm slides; capture images of objects; use a tablet computer; create quick demo videos. It’s recommended that you bring materials to work with. Individual sessions can also be arranged.

MANAGING INFORMATION

Administrative Staff Time–Savers

F, Jan 26  9:00–10:30 a.m.
W, Feb 14  9:00–10:30 a.m.

Class meets in Computer Lab—Room M202

A class to support Stanford’s administrative staff. Need to find your faculty member’s articles faster? Want to know the latest PubMed and eJournal tricks? Heard about EndNote but not sure what it does? Learn about essential Lane services, tools and resources.
Creating Bibliographies & Customizing Bibliography Styles with EndNote

Level 1:
F, Jan 12 10:00–11:30 A.M.
T, Feb 6 5:00–6:30 P.M.
W, Mar 21 10:00–11:30 A.M.

Level 2:
F, Jan 19 10:00–11:30 A.M.
T, Feb 13 5:00–6:30 p.m.
Th, Mar 22 10:00–11:30 A.M.

Class meets in Computer Lab–Room M202

Level 1 provides the basics; i.e., creating libraries, importing citations and generating bibliographies. Level 2 explores customizing style files, use of manuscript templates for MS Word, citation annotation and much more.

SEARCHING

Finding Funding
Th, Feb 1 10:00–11:30 A.M.
W, Mar 14 5:00–6:30 P.M.

Class meets in Computer Lab–Room M202

Explore websites and databases to find financial support for fellowships, research funds, and more. Go beyond the NSF and the NIH in this hands-on class.

PubMed: Basic to Advanced Techniques
W, Jan 24 10:00–11:30 A.M.
T, Feb 20 5:00–6:30 P.M.

Class meets in Computer Lab–Room M202

Learn the secrets of effective PubMed searching in this hands-on workshop.

Who’s Citing my Articles? Where Should I Publish My Manuscript? What Article is “Best?”
Th, Feb 22 10:00–11:30 A.M.

Class meets in Computer Lab–Room M202

Use Science Citation Index to track the citation history for a particular work (e.g., journal article); use JCR to view journals in your field ranked by “impact factor;” and use Faculty of 1000 to find key bioscience articles.

TOURS

Orientation to Lane Library
Available on request: laneaskus@stanford.edu

Tour Lane Library and learn about accessing eJournals, searching the online catalog, finding your library liaison, interlibrary loan/document delivery, reference services, classes, and more. Open to the public! Customized orientations available.

Walking Tour of the SUMC Architecture
W, Jan 10 1:00–2:00 P.M.
W, Feb 7 1:00–2:00 P.M.
W, Mar 7 1:00–2:00 P.M.

Class meets at the fountains in front of the Hospital on Pasteur Drive

Put on your walking shoes and come explore the architectural landscape of the Stanford University Medical Center. Open to the public!

WRITING

Grant Writing
T, Feb 20, 10:00–noon

Class meets in CCSR 4105

In this two-hour class, we will examine the mechanics of writing and assembling an NIH grant. Topics covered will be types of grants (K awards, training grants, research, etc.), structure of the NIH websites, funding agencies, and particularly, we will examine writing strategies and requirements for the research plan, the heart of the grant. Other topics will include the grant “surrounds”—budget and its justification, research environment, biosketches, etc.

Writing For Medical Journals
T, Feb 13 10:00–noon

Class meets in CCSR 4105

In this two-hour morning class, we will examine the basics of creating manuscripts for peer-reviewed publications. We will study both the elements of good medical writing and the process of assembling the various parts of a manuscript. We will look at these issues from the point of view of the journal editor (aside from peer-review criticism of your science).

Improving Your Scientific Writing Skills
W, Feb 28 10:00–noon

Class meets in M114

Learn 6 practical techniques that will greatly improve the clarity and conciseness of your journal manuscripts and/or grants, including “why” and “how” to use each technique. Improve your mastery of these techniques via short in-class writing exercises and identify when to apply these techniques in your own manuscript drafts.

Instructor: Michaela Kiernan, PhD
Senior Research Scientist
Stanford Prevention Research Center (SPRC)

LaneAskUs@stanford.edu
650–723–6831

Webcasts for selected Lane classes

http://lane.stanford.edu/classes

- Learning SQL to Query Biological Databases
- Correct Nomenclature of Genes and Mutations
- Essential Software for Analyzing the Proteome
- Managing Experiment Data Using Excel and Friends
- Patent Data: What You Don’t Know Will Cost You
- Writing for Medical Journals
- Writing the NIH Grant

Request A Custom Workshop!

Lane can coordinate workshops on selected information tools and resources.

Contact:
Christopher Stave
650–725–4580
cstave@stanford.edu