Statistical Considerations in Life Sciences Research

Workshop Instructor: Dr. Hélène Côté

Hosted by the Centre for Blood Research and the Department of Microbiology and Immunology

Refine your understanding of statistical concepts and skills in data acquisition, analysis and presentation. Sign up to attend *one or all workshops*!

Sign up here: survey.ubc.ca/s/lifesciencesskills/

Workshop 1

Understanding the meaning and shortcomings of the p-value.

November 25 | 2-5pm | LSC 3

In this workshop you will learn the limitations and meaning of the p-value and the important relationship between the p-value, power, and sample size. We will also cover the importance of interpreting results based on confidence intervals rather than p values and discuss common errors and biases in life sciences publications.

Workshop 2

So many comparisons: t-test, ANOVA, and other tests

December 1 | 2-5pm | LSC 3

This workshop will build on your understanding of the p-value and we will discuss how to choose an appropriate statistical test for your data. We will look at parametric (eg. t-test, ANOVA) and nonparametric tests (eg. Mann-Whitney, Wilcoxon rank sum), tests of association (eg. chi-square, Fisher's exact test), and when adjustments for multiple comparisons are required.

Workshop 3

Informative and transparent data presentation

December 8 | 2-5pm | LSC 3

In this workshop, you will learn how to graph and represent your data in a clear, informative, and transparent way. We will discuss why bar graphs are rarely useful for graphing data, and how you can use SD, SEM or 95% CI intelligently in our graphical presentations. You will also be able to get feedback on your specific data and the best ways to present it.