* Introduction to R
  + Overview of R, how to load, how to read in data, basic syntax for frequently used commands

Maybe 2-3 sessions?

* Hypothesis testing
  + Significance level, power, issues in sample-size estimation, definition of and common misuses of p-values

Maybe 1-2 sessions?

* Broad overview of regression
  + Identify issues for consideration: overfitting, confounding, collinearity, effect modification (statistical interaction)
  + These concepts will be examined with real data when specific types of regression are discussed in the future

Probably 1 session sufficient?

* Analysis of continuous data
  + Basic descriptive methods (mean, std dev, median, histograms, box plots, dot plots, etc.)
    - Using R to summarize continuous data, both visually and descriptively
  + Intro to parametric tests (one- and two-sample t-tests, ANOVA for >2 groups)
  + Non-parametric versions of the above
    - Using R to do inference on continuous data

Maybe 3-4 sessions?

* + Intro to linear regression
    - Using R to fit linear regression models
    - Linear regression with “real” data; likely also demonstrate some of above (plots, descriptive stats) to supplement linear regression modeling
    - Attendee data for use of linear regression

Maybe 2-3 sessions, depending on whether an attendee has their own data

* Analysis of binary data
  + Basic descriptive methods (mxn tables)
    - Using R to summarize binary outcome according to categories
  + Intro to statistical tests (Chi-square, Fisher’s exact, McNemar’s test for paired data)
    - Using R to conduct statistical tests
  + Intro to logistic regression
    - Using R to fit logistic regression models
    - Logistic regression with “real” data; likely also demonstrate some of above (simple tables) to supplement logisitc regression modeling
    - Attendee data for use of logistic regression
* Maybe 3-4 sessions, depending on whether an attendee has their own data
* Analysis of time-to-event data
  + Intro to time-to-event data
    - Estimation in the absence (KM) and presence of competing risks (CI), concept of censoring and what it means mathematically
  + Intro to statistical tests for time-to-event data
    - Log-rank test, Grays’ test and differences, advice on when to use (one or the other or both)
    - Using R to compare time-to-event outcomes between groups (log-rank and/or Gray’s test)
  + Intro to regression for time-to-event data
    - Cox regression, Fine-Gray regression and differences, when to use (one or the other or both; basically the same discussion as with log-rank vs. Gray’s test, so likely not needed here)
    - Using R to fit Cox/FG models
    - Regression with “real” data
    - Attendee data for use of regression for time-to-event data

Maybe 4-5 sessions