

## **Simulating power for linear mixed-effects models**

In this workshop we will learn about using Monte Carlo simulation in R to estimate power for mixed-effects analyses. This hands-on workshop will assume some basic knowledge of R programming as well as a basic understanding of linear mixed effects modelling. We will learn about writing custom functions, constructing random-effects covariance matrices, generating trial-level data structures, and working with different types of data distributions. Not only will the workshop help you plan better studies, but it will help improve your understanding of linear mixed-effects models. Please bring a laptop with R, tidyverse, lme4, and your favorite IDE (e.g., RStudio, emacs, Atom) installed.