Power and Sample Size Simulations in R

Robin Baudier, M.S.P.H. M.F.A.

Biostatistics, Epidemiology, and Research Design (BERD) Program

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If you're struggling to find a power and sample size (PSS) calculation appropriate for your proposed analysis or data structure, Monte Carlo power simulations are an endlessly adaptable solution. In this seminar, we will cover how to simulate datasets that resemble your study's data distributions, correlation structures, and type including repeated measures, correlation with covariates, and time to event. Then, we will cover how to use those simulated datasets with the analytic approach of your choice to find the sample and effect sizes needed to reach your power requirements.

Recommended background: This seminar builds on material from the introductory seminar in this series, **PSS 101**, and will recap those concepts only briefly (power, sample size, effect size, level, Type I & II errors). The recording and slides from the PSS 101 seminar are available on the **OCTRI Research Forum webpage**. **Experience with R is recommended**, as this seminar will use R code to simulate data, generate statistical models, create loops, and generate PSS estimates using Monte Carlo simulation models. Previous knowledge of Monte Carlo simulation methods is not required.

Register via Compass. This seminar will be recorded.

Questions? Contact Amy Laird: laird@ohsu.edu

If you have a disability and need an accommodation to attend or participate in this event, please contact Amy Laird (laird@ohsu.edu) at least five business days before the event.

**Thursday
November 21, 2024
11:00 a.m. – Noon**

Virtual meeting

Photo: Fox sparrow, Montana. Jay McGowan.

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