

ADVANCED STATISTICS & RESEARCH METHODS SEMINAR

When:

Mondays, February to June 2021 from 4:30-5:30pm (excluding holidays)

Where:

- A) By Zoom: For instructions email: Francesca.Fortenbaugh@va.gov
 - Note: Zoom instructions will be emailed to all registered participants

Who Can Participate?

VA-BUSM-HMS NeTReF fellows; research assistants and coordinators, post-docs, residents, VABHS employees in research

Who's Teaching?

Francesca Fortenbaugh, Ph.D., VA Boston Healthcare System & Instructor of Psychiatry, HMS Jennifer Fonda, Ph.D., VA Boston Healthcare System & Assistant Professor of Psychiatry, BUSM Other faculty with areas of particular expertise

How to Register and for Questions: Email both Dr. Fortenbaugh and Dr. Fonda

- A) Email: Francesca.Fortenbaugh@va.gov
- B) Email: Jennifer.Fonda@va.gov

Content

This 16-week seminar series builds on the previous fall course (Basic Biostatistic & Research Design Bootcamp) while encouraging greater communication and collaboration among experts across the VABHS campus and affiliated academic institutions. The seminar includes: 1) Didactic/lecture classes covering advanced statistical techniques led by researchers who actually employ these methods in their own research projects and 2) Office hours where community/class member are welcome to attend for discussion and feedback on their own research ideas, data sets, and/or analyses.

** See 2nd page for schedule of lectures **

ADVANCED STATISTICS & RESEARCH METHODS SEMINAR SPRING 2021 SCHEDULE

- 02/22/2021: Model Fitting with Multiple Linear & Non-Linear Regression (Francesca Fortenbaugh)
- 03/01/2021: Data Reduction: K-means Cluster Analyses (Travis Evans)
- 03/08/2021: Data Reduction: Factor Analysis (Daniel Lee)
- 03/15/2021: Survival Analysis (Jennifer Fonda)
- 03/22/2021: Introduction to Machine Learning Approaches (Jirapat Likitlersuang)
- 03/29/2021: Data Reduction: PCA, ICA, and Canonical Correlations (Audreyana Jagger-Rickels)
- 04/05/2021: Sensitivity, Specificity, PPV, and NPV Analyses (Jennifer Fonda)
- 04/12/2021: Signal Detection & Receiver Operating Curves (Maruti Mishra)
- 04/19/2021: Cross-Validation & Permutation Testing (Francesca Fortenbaugh)
- 04/26/2021: Growth Curve Modeling (Daniel Lee)
- 05/03/2021: Individual Differences & Reliability Analyses (Joseph DeGutis)
- 05/10/2021: Modeling Pupil Dynamics & Model Selection Approaches (Rachel Denison)
- 05/17/2021: Discriminant Function Analysis (Meghan Pierce)
- 05/24/2021: Mixed-Effects Modeling (Agnieszka Zuberer) *pre-recorded lecture
- 05/31/2021: Memorial Day (Federal Holiday)
- 06/07/2021: Mediation Analyses (Jennifer Fonda & Anna Etchin)
- 06/14/2021: Effect Size & Power Analyses (Jennifer Fonda & Francesca Fortenbaugh)

06/21/2021: Office Hours