Stephen Rhodes

Clinical Research Biostatistician III

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stephenrho

Resume
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Skills and Expertise

- **R + R-Studio**: for analysis, report building, package and shiny app development; used for over 10 years
- **Other Programming Languages**: SLURM (for high performance computing); SQL (for databases); JAGS, Stan (for Bayesian modeling); python (misc)
- **Clinical Research**: experimental design, clinical trial design; analysis of large healthcare databases; causal inference with observational data; Epic Cosmos superuser
- **Communication**: both written and spoken to both expert and lay audiences; regularly give seminars/workshops on statistical methods

Experience

2022-present **University Hospitals, Cleveland Medical Center** — Clinical Research Biostatistician III
Cleveland OH, USA (remote from 2024)

- Primary statistician on multi-center randomized trial funded by PCORI.
- Extract information from large admininstrative/claims databases (Premier Healthcare Database, Marketscan, ICES (Ontario), Epic Cosmos).
- Develop and evaluate clinical prediction models. Wrote two R packages that implement best-practices for internal validation (pminternal) and assessing calibration (pmcalibration) of prediction models.
- Provide seminars on concepts and approaches in biostatistics to residents, fellows, and research staff.

2019-2021 **Baycrest Hospital, Rotman Research Institute (University of Toronto)** — Postdoctoral Fellow
Toronto ON, CA

- Designed and conducted experiments on age-related changes to short- and long-term memory.
- Used neural network image classification models to measure image similarity for testing against human perception and memory.
- Developed and led a workshop on Bayesian data analysis (materials here).

2016-2019 **University of Missouri, Dept. of Psychological Sciences** — Postdoctoral Fellow
Columbia MO, USA

- Part of a collaboration on aging and memory between groups in the US, UK, and Switzerland (http://womaac.psy.ed.ac.uk/).
- Led the development of analysis pipelines (example here) and performed analyses of experimental data using generalized linear mixed effects models.
- Developed a protocol for data documentation and archiving to ensure reproducibility.
- Led two meta-analysis projects synthesizing findings in the literature on memory and aging.
- Co-developed and led a two day workshop on the statistical modeling using maximum likelihood and Bayesian estimation techniques (materials here).

Education

2012-2016 **PhD Cognitive Psychology** — The University of Edinburgh
Edinburgh, UK

2011-2012 **MSc Human Cognitive Neuropsychology** — The University of Edinburgh
Edinburgh, UK

2008-2011 **BSc (hons) Psychology** — University of Leeds
Leeds, UK