Lydia Rader
Lydia.rader@colorado.edu

EDUCATION

University of Colorado, Boulder, CO
May 2021-Present
Predoctoral student
Doctor of Philosophy in Statistical Genetics & Cognitive Neuroscience
Certificate in Data Science Statistics

Kings College London, London, UK
September 2018-2019
Master of Science in Genes, Environment & Development in Psychiatry & Psychology
Distinction; Top 1% in class

Masters Thesis: Genetic and environmental associations of fatigue, depression, and childhood adversity in a Sri Lankan Twin & Singleton study
Faculty Suipervisors: Helena Zavos Ph.D., Fruhling Rijsdijk Ph.D.

George Mason University, VA, USA
September 2014-May 2018
Bachelor of Arts in Psychology
GPA: 3.96 and Latin Honours Summa Cum Laude

Oxford University, Oxfordshire, England
Michaelmas-Hilary Term 2017-2018

MANUSCRIPTS IN PROGRESS

Rader, L., Friedman, N.P. (in preparation). Longitudinal phenotypic and genetic relationships between executive functions and chronic pain: a twin study.

Rader, L., Freis, S.M., Friedman, N.P. (in preparation). Genetic and environmental relationships between adolescent pain and psychopathology across time.

Rader, L., Reineberg A.E., Petre, B., Wager, T.D., Friedman, N.P. (in preparation). Familial effects account for relationship between past month tobacco frequency and presence of a current pain episode.

Zorina-Lichtenwalter, K., Bango, C.I., Ceko, M., Wager, T.D., Friedman, N.P., **Rader, L.** (in preparation). Structural grey matter associations with chronic pain in the 40,000-person UK Biobank sample.

PRESENTATIONS

Rader, L., Reineberg A.E., Petre, B., Wager, T.D., Friedman, N.P. Familial effects account for relationship between past month tobacco frequency and presence of a current pain episode. Poster presented at the Behavior Genetic Association Annual Meeting.

EXPERIENCE

Data Analyst Winter Intern at the Parkinson's Foundation
December 2021-May 2022
- Data cleaning, analysis, visualization, and presentation. Experience with hypothesis development and literature review. All analyses were developed and conducted using R. Visualization was done using Tableau.
- Helped push 2 publications in 2 months
- Initiated program development for outreach to underrepresented communities in Parkinson's Disease research

Graduate Teaching Assistant
August 2021-Current
- TA for Statistics, Neuroscience, and Biological Psychology
- Grader for History of Psychology & Behavioral Neuroendocrinology

Graduate Research Assistant
May 2021 - August 2021
May 2022 – August 2022
- Worked on a pain and placebo imaging genetics grant

Eating Recovery Center
November 2020-April 2021
- Worked as a behavioral health counselor at an Intensive Treatment Unit.

Higher Education Liaison Representative
Oct 2018- Jul 2019
- Promote university to prospective students and assisted in brand & marketing

SERVICE

Institute of Cognitive Science
Research Award Reviewer
September 2022 – Present
- Review and select research project submissions for research awards

CU Boulder Graduate Peer Mentoring Program
Graduate Student Peer Mentor
September 2022 – Present

Front Range Neuroscience Group Conference organizer
Conference organizer
June 2022 – Present
- Assisted with organizing the annual Neuroscience Conference held in Fort Collins, CO

Institute of Psychology, Psychiatry & Neuroscience
Student Representative
September 2018-2019

George Mason University Undergraduate Research Journal
Peer Reviewer

September 2016 – 2018
- Reviewed, revised, and chose candidates for the Undergraduate Research journal at George Mason University

SKILLS

- Experience in R and Python
- Data visualization with Tableau
- Machine learning: sci-kit learn, jupyter notebook, matplotlib, numpy, pandas
- Experience using FSL and SPM for imaging methods
- Experience in statistical genetic (i.e. GWAS, PRS) and biometrical genetic (SEM) methods
- Professional working fluency in Russian; Limited working proficiency in Spanish

GRANTS, HONORS, & AWARDS

June 2022   Volsky Award

September 2018   Dean's Scholarship for King's College London

September 2014-2018   George Mason University's Dean's List

PROFESSIONAL AFFILIATIONS

Phi Beta Kappa

International Honor Society in Psychology (Psi Chi)

Association for Women in Science

Organization for Human Brain Mapping

Behavior Genetics Association