

Richard Border

Curriculum Vitae

Predoctoral Fellow
Institute for Behavioral Genetics
University of Colorado Boulder
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I am a doctoral student in Behavioral Genetics and Applied Mathematics conducting researching under the supervision of Dr. Soo Hyun Rhee and Dr. Matthew C. Keller. My research interests include statistical genetics, developmental psychopathology, and metascience. I am currently working on the following projects:

1. *Analytic and computational arguments against the candidate gene approach in neuroimaging studies.* Supervised by Dr. Matthew Keller.
2. *Understanding the “still-missing heritability” in complex human traits; evidence from genomic-relatedness data and extended family designs.* Supervised by Dr. Matthew Keller.
3. *Premature mortality in clinically- and legally- ascertained adolescents, their siblings, and general population controls.* Supervised by Dr. Soo Hyun Rhee. Data request approved by National Death Index, preregistered in the Open Science Framework.

Education

- 2014– Present **Doctoral Student**, *Behavioral Genetics*, Advisors: Soo Rhee and Matthew Keller, Department of Psychology and Neuroscience, University of Colorado Boulder.
- 2016– Present **Master’s Student**, *Applied Mathematics*, Computational Science and Engineering Program, Department of Applied Mathematics, University of Colorado Boulder.
- 2006–2010 **Bachelor’s Degree**, *East Asian Studies*, Wesleyan University.

Publications and Presentations

- 2017 R. **Border**, R. Corley, W. Brown, J. Hewitt, C. Hopfer, M. Stallings, T. Wall, S. Young, and S. H. Rhee, “Predictors of adult outcomes in clinically- and legally-referred youth with conduct problems,” (Under Review).
- R. **Border** and M. C. Keller, “Fundamental problems with candidate gene-by-environment interaction studies,” (Accepted), *Journal of Child Psychology and Psychiatry*.
- E. Johnson, R. **Border**, W. Melroy-Greif, C. de Leeuw, M. Ehringer, and M. C. Keller, “No evidence that variants in historic candidate genes are more strongly associated with schizophrenia than variants in non-candidate genes,” (Invited for Resubmission).
- 2016 R. **Border**, R. Corley, S. Rhea, W. Brown, J. Hewitt, C. Hopfer, M. Stallings, T. Wall, S. Young, and S. H. Rhee, “Mortality in youth with conduct problems, their siblings, and matched controls,” (Talk), presented at the National Institute of Mental Health Trainee Miniconference at the Institute for Behavioral Genetics, Boulder, CO.
- E. Johnson, R. **Border**, W. Melroy-Greif, C. de Leeuw, M. Ehringer, and M. C. Keller, “No evidence that the classic candidate genes for schizophrenia are more relevant to schizophrenia than unrelated sets of genes,” (Poster), presented at the The 66th Annual Meeting of the American Society of Human Genetics, Vancouver, BC, Canada.

- 2015 R. **Border**, S. Sawaya, S. Huggett, S. Brown, T. Wall, and M. Stallings, “Sensitivity of random forests algorithm to population stratification in gwas data,” (Poster), presented at the The 45th Annual Meeting of the Behavior Genetics Association, San Diego, CA.
- 2014 S. Lee and R. **Border**, “Anxiety is differentially associated with affective and behavioral facets of oppositional defiant disorder,” (Symposium), in *Understanding Heterogeneity within Youth Antisocial Behavior through Subtyping Approaches*, L. Hyde, Ed., San Francisco, CA.
- S. Lee, A. Falk, and R. **Border**, “Association of child anxiety and conduct problems: Moderation by parenting stress,” (Poster), presented at the The 26th Annual Convention of the Association for Psychological Science, San Francisco, CA.
- 2013 S. Lee, A. Falk, and R. **Border**, “Anxiety is differentially associated with affective and behavioral facets of oppositional defiant disorder,” (Poster), presented at the The 27th Annual Meeting of the Society for Research in Psychopathology, L. Hyde, Ed., Oakland, CA.

Awards and Honors

- 2016–2017 **National Institute of Mental Health Trainee.**
Selected by faculty training committee to receive funding from grant T32 MH016880.
- 2015–2019 **Predoctoral Fellowship**, *Institute for Behavioral Genetics*.

Research Positions

- 2014– **Graduate Advisee**, *Dr. Soo Hyun Rhee*.
Present Institute for Behavioral Genetics, University of Colorado Boulder
- 2015– **Graduate Advisee**, *Dr. Matthew C. Keller*.
Present Institute for Behavioral Genetics, University of Colorado Boulder
- 2012–2014 **Research Assistant**, *ADHD and Development Lab*.
University of California Los Angeles
Principal Investigator: Dr. Steve Lee
- 2013–2014 **Research Assistant**, *Child F.I.R.S.T. Lab*.
University of California Los Angeles
Principal Investigator: Dr. Bruce Chorpita
- 2013–2013 **Research Assistant**, *Child OCD, Anxiety, and Tic Disorders Program*.
Semel Neuropsychiatric Institute, University of California Los Angeles
Principal Investigator: Dr. John Piacentini

Teaching

- Fall 2016 **Statistical Programming with R (Graduate)**, *Teaching Assistant*, Department of Psychology and Neuroscience.
Guest Lectures:
 - Reproducible Research in R
 - Simulations and Iterative Processes
- Spring 2016 **Statistics II (Graduate)**, *Teaching Assistant*, Department of Psychology and Neuroscience.

Fall 2015 **Introduction to Statistics (Undergraduate)**, *Teaching Assistant*, Department of Psychology and Neuroscience.

Guest Lectures:

- Statistical Power and the False Discovery Rate
- Factorial Analysis of Variance

Spring 2015 **Statistical Programming with R (Graduate)**, *Teaching Assistant*, Department of Psychology and Neuroscience.

Guest Lectures:

- Reproducible Research in R