

Dr. Nicholas Wagner invites applications for a postdoctoral fellow position in the Department of Psychological and Brain Sciences at Boston University. The fellow will join the Biobehavioral and Social-Emotional Development (BASE) Lab (<https://www.bu.edu/cdl/baselab/>) and have the opportunity to work on multiple federally-funded research projects (described below). Research in the BASE lab broadly focuses on understanding the systems and processes that promote psychosocial adaptation or contribute to the emergence of psychopathology across development. Specifically, we examine how early experiences and children's self-regulation shape trajectories across various domains of adaptive functioning, including social competence, prosocial and empathic behaviors, and school success, and maladaptive functioning, including aggression, callous-unemotional traits, and anxiety.

An overarching theme in our lab is the utilization of multiple methods for studying child development at experiential (e.g., self- and other-report methods), behavioral (e.g., observations, eye-tracking), and biological (e.g., autonomic and neuroendocrine regulatory systems) levels of influence. The BASE Lab is committed to increasing justice, equity, diversity, and inclusion in the psychological sciences, and the person who fills this position will have opportunities to engage in these efforts if they so choose. Candidates from underrepresented and marginalized social identity positions are encouraged to apply.

Position Summary and Description of Projects

This position prepares post-doctoral scholars to conduct independent research in developmental psychopathology, neurophysiological mechanisms underlying social-emotional (dys)regulation, and risk and protective factors across development. An emphasis will also be placed on integrating measures of behavioral and neurophysiological functioning, as well as the application of advanced quantitative methodologies. This position will provide multiple opportunities for interdisciplinary collaboration and publication. The postdoctoral fellow will have opportunities to analyze data, write papers and grants, obtain mentoring from faculty, and mentor graduate and undergraduate students to advance their research program. This position may be funded and supported for up to 3 years pending performance and the availability of funding.

We are seeking applicants whose research broadly aligns with the work being done in the BASE lab, and who would be interested in pursuing one or more of the research topics described below:

(1) Examining Neurophysiological Predictors of Treatment Response to an Early Intervention for Socially Inhibited Preschoolers. This study examines the influences of parents' neurophysiological reactivity and regulation on parenting behaviors which are known mechanisms contributors to the development of children's BI and risk for anxiety. In addition, this study explores predictors of treatment response in the context of a multi-component parenting intervention. This project allows for opportunities to collaborate with colleagues at UMD including Drs. Kenneth Rubin and Andrea Chronis-Tuscano.

(2) Gut Microbiota and Behavioral Inhibition in Childhood: The Role of Early Stress and Brain Development. This recently funded study (R01HM122526) examines the influences of psychosocial stress on children's microbiome and brain development across the first five years of life and tests how these gut-brain pathways mediate links between stress and risk for anxiety disorders. The BASE lab is specifically focused on the longitudinal assessment of fear and other methodological aspects of the study. This project allows for opportunities to collaborate with colleagues at UNC-CH (MPI: Propper, Sheridan, Mills-Koonce), MSU (MPI: Knickermeier), and UW (Short).

(3) Family and Child Emotion Socialization Study. This study uses cutting edge methodology (i.e., eye-tracking, psychophysiology) to examine mechanisms underlying variation in threat sensitivity and social affiliation as well as whether and how these processes differentiate risk for externalizing and internalizing psychopathology, including callous-unemotional traits and anxiety. This project will allow for opportunities to collaborate with colleagues at the University of Pennsylvania including Dr. Rebecca Waller.

Essential Functions

- Data analysis.
- Writing scientific papers and grant proposals.
- Study coordination/project management.
- Opportunities for collaboration and mentorship.

Knowledge, Skills, and Abilities

- Strong interpersonal skills.
- Prior clinical, developmental, and/or quantitative research experience.
- Expertise in advanced quantitative methods including approaches for analyzing longitudinal and/or experimental data.
- Strong organization and administrative skills, detail-orientation and conscientiousness to include data management, statistical analyses, and the completion of manuscripts in a timely manner.
- Database management and statistical analysis experience.
- Critical thinking skills along with the ability to discuss and solve problems and issues that may arise

Required Qualifications

- Ph.D. in a relevant discipline (e.g., developmental, quantitative, or clinical areas) by the time the position starts.
- Prior project management experience, including managing data for large, longitudinal studies.

Preferred Qualifications

- Experience working with neurophysiological and longitudinal data, including measures of autonomic nervous system functioning (e.g., RSA, skin conductance) and/or attention (e.g., eye-tracking).
- Experience working in fast-paced, collaborative environments.
- Experience, knowledge, and/ or research interest in developmental psychopathology, children's mental health, as well as developmental psychology and risk mechanisms.

Salary and Benefits

Position is contingent on available funding. Salary will be based on NIH guidelines (range \$53,460 to \$64,008). For more information regarding available benefits please visit: <https://www.bu.edu/hr/employee-resources/benefits/>

Deadline and Instructions

Start date is flexible. Application materials will be accepted on a rolling basis and should be sent to Dr. Nicholas Wagner at njwagner [at] bu.edu

Requested Materials:

- Resume/CV.
- Letter of intent detailing relevant experience and identifying specific research projects of interest.
- Statement of current and future research plans.
- Writing sample(s).