

# **Postdoctoral Fellow in Pediatric Neuroimaging**

University of Wisconsin Madison, Departments of Medical Physics and Psychiatry are seeking a postdoctoral fellow to analyze data for a longitudinal study looking at the impact of poverty on infants' structural and functional brain development. This study examines the link between poverty on early behavioral development and later emergence of executive functions (cognitive processes that facilitate learning, self-monitoring, and decision making). Among numerous study measures, neuroimaging has been conducted with infants at two time points: at 2 weeks and 30 months old. An additional third scan is scheduled at 5 years of age.

The postdoctoral fellow will help perform quality control/assurance of the rsfMRI data, carry out the proposed rsfMRI analyses and brain-behavior analysis, interpret the data, and assist in writing final research reports or manuscripts for publication. The primary focus of this work is to examine relations between infants' brain development, their home environment, and the emergence of executive functions and social/emotional skills in early childhood. Our ideal candidate would be someone with experience in fMRI data analysis, interest/expertise in primary aims of this work and excellent written and oral communication skills.

The postdoctoral scholar in this position will work closely with Dr. Rasmus Birn, Associate Professor of Psychiatry and Medical Physics and with Dr. Sarah Short, Assistant Professor of Educational Psychology, and faculty with the Center for Healthy Minds.

## **Responsibilities:**

- Participates in planning, designing and conducting highly technical and complex research projects under the direction of supervising mentors.
- Analyzes and evaluates research data.
- Contributes to the development of research documentation for publication and/or prepares papers.

## **Requirements:**

- Ph.D. in Neuroscience, Psychology or related discipline.
- Demonstrated experience in neuroimaging.
- Experience with multi-modal imaging including functional, resting state, diffusion weighted, and/or structural preferred.
- Statistical acumen in analyzing neuroimaging data and programming expertise.
- Demonstrated experience in scientific communication including speaking and publishing.
- Excellent organizational, project management, interpersonal, writing and communication skills.
- Adaptable; self-motivated.

**Preferred:**

- Experience in neuroimaging research in pediatric samples.
- Experience with behavioral or cognitive data.
- Coursework or experience with developmental perspectives, theories, and models.

**Additional information:** Expected position duration is two years with potential for renewal based on funding and performance.

To learn more about the Brain and Early Experience Lab and the Center for Healthy Minds, visit our websites: <https://sjshortlab.education.wisc.edu> and <https://centerhealthyminds.org/> and <https://www.psychiatry.wisc.edu/staff/birn-rasmus/>

Interested candidates should submit an updated CV, a two-page letter of interest and one research manuscript of your choice that best demonstrates your research proficiency to Marianne Griffin at [griffin4@wisc.edu](mailto:griffin4@wisc.edu).

**UW-Madison is an equal opportunity/affirmative action employer. We promote excellence through diversity and encourage all qualified individuals to apply.**