Company: Queens College, CUNY
Department: Research – Psychology, Neurosciences
FT/PT & FLSA: FT; Exempt
Location: New York (Flushing, Manhattan)
Supervisor Position: Yes
Updated: 

Summary:
CUNY Queens College is currently accepting applications for a full-time, 2 to 5 years post-doctoral research fellow (contingent upon satisfactory performance) interested in the study of neurodevelopmental trajectory, human brain function and the characterization of brain development and maturation, as well as underlying biophysiological mechanisms in a birth cohort exposed to climate related disaster in utero.

This fellowship is an opportunity for talented, early-career scientists to pursue pioneering research into critical aspects of the brain, behaviors, and underlying mechanisms. We welcome applicants interested in carrying out collaborative research under the mentorship of one or more faculty mentors in our study. Strong preference will be given to early-career applicants who received their Ph.D. less than one year prior to their start date.

The overarching goal of this advanced training position includes 1) the delineation of anxiety and reactive aggression and related conditions in terms of behavioral epigenetics and computational neuroscience, 2) charting neuro-developmental trajectories of behavioral, cognitive, and psychopathological profiles especially during pre/puberty, and 3) the identification of objective imaging-, cognitive- phenotypic-based markers of psychopathology, which will eventually serve to predict later outcome and/or guide clinicians in the selection of treatments.

The candidate will be expected to take a multidisciplinary approach to their work, drawing from a broad range of disciplines (e.g., clinical neuropsychology, epidemiology, cognitive neuroscience, computer science, engineering, mathematics). To facilitate this process, they will work as part of a multidisciplinary team collecting, analyzing, and integrating findings obtained from an ongoing NIH-funded longitudinal study of school-aged children exposed to Superstorm Sandy in utero. The project includes a variety of approaches: 1) scored biological and developmental data from the cohort, 2) neuroimaging of resting-state and task-based functional MRI, diffusion tensor imaging, cortical thickness, and volumetrics, and 3) pilot work on big data currently available in the scientific community. These contexts offer some protected time for analyses, as well as opportunities for study design and hands on data collection of typical awake MRI, phenotypic behavioral and cognitive observational and quantitative data, as well as initial hands-on training on grant writing.

The study has collaborations interdisciplinary components with CUNY Advance Sciences Research Center (ASRC), Child Mind Institute, Autism/ADHD center, CUNY City College in NY, and the Brain Institute at Icahn School of Medicine at Mount Sinai with the Queens College, CUNY overseeing the overall study.

Reporting to the overall PI, this is a full-time position located in two sites, Queens College, CUNY and CUNY ASRC.

Salary Range: $56,484.00 To 65,000.00 annually, based on experiences and qualifications. ABD will be considered.
Responsibilities:

- Work to supervise various teams working on the clinical and neurobehavioral assessments and brain scans.
- Work to identify objective markers of pathology in human brain function, development, and maturation using a combination of brain imaging and related approaches.
- Work in a multidisciplinary environment, drawing from a broad range of disciplines and imaging approaches.
- Participate in some aspects of data collection, supervise the quality of the data collection, and conduct data analysis.
- Mentoring graduate and undergraduate members in the team.
- Lead and assist with manuscript preparation.
- Assist with grant writing.

Qualifications:

- Completed Ph.D. in cognitive or clinical neuroscience, developmental epidemiology, biomedical engineering, computer science, clinical neuroscience, clinical neuropsychology, mathematics, bioinformatics, or related fields. ABD will be considered.
- Programming experience in one or more languages (e.g., Python, C/C++, Matlab or similar platforms is required). The candidate must be willing to develop expertise in Python during the first year of the fellowship.
- A passion for connecting behaviors and the brain, especially during pre/puberty.
- Interests in the effects of climate change.
- Competency in Spanish is a plus but not necessary.

Preferred Qualifications:

- Prior experience working with advanced analytic methods, including advanced data subtyping.
- Advanced neuroimaging skills with one or more imaging modalities (fMRI, DTI, MRI) or strong computational skills.
- Strong skills in the usage of one or more common functional neuroimaging packages (e.g., AFNI, FSL, or SPM).
- Competency in applying statistical analysis to scientific results.

Interested applicants should send a cover letter, CV, and three professional references to:

Yoko Nomura, Ph.D., MPH
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Queens College, CUNY
E-mail: yoko.nomura@qc.cuny.edu

All new hires must be vaccinated and must stay up to date with vaccines against the COVID-19 virus unless they have been granted a reasonable accommodation for religion or disability. If you
are offered employment with CUNY, this requirement must be met by your date of hire, unless a reasonable accommodation for exemption is received and approved by CUNY.

The CUNY is an equal opportunity employer and does not discriminate in employment based on race, religion (including religious dress and grooming practices), color, sex/gender (including pregnancy, childbirth, breastfeeding or related medical conditions), sex stereotype, gender identity/gender expression/transgender (including whether or not you are transitioning or have transitioned) and sexual orientation; national origin (including language use restrictions and possession of a driver's license issued to persons unable to prove their presence in the United States is authorized under federal law [Vehicle Code section 12801.9]); ancestry, physical or mental disability, medical condition, genetic information/characteristics, marital status/registered domestic partner status, age (40 and over), sexual orientation, military or veteran status, or any other basis protected by federal, state or local law or ordinance or regulation.