

Postdoctoral associate in structure-function connectomics research at Washington University

We are seeking a highly motivated postdoctoral research associate interested in using UK Biobank neuroimaging data to study structure-function interactions in brain correlates of late life depression. The role will involve structural covariance analysis using non-negative matrix factorization, resting state fMRI analysis using Probabilistic Functional Modes, and structure-function mediation analyses.

The position will be in the Computational Imaging Research Center ([CIRC](#)) at Washington University in St Louis under the joint supervision of [Dr. Sotiras](#) and [Dr. Bijsterbosch](#). The successful candidate will have full access to state-of-the-art computational resources such as the Center High-Performance Computing, and will benefit from a highly collaborative environment, including close collaborations with software development and clinical experts (e.g., Dr. Dan Marcus, Dr. Deanna Barch, and Dr. Eric Lenze).

We encourage anyone who is interested to contact Dr. Sotiras (aristeidis.sotiras@wustl.edu) and/or Dr. Bijsterbosch (janine.bijsterbosch@wustl.edu) for further information and informal enquiries.

Required skills and expertise:

- Doctoral degree in a relevant discipline (e.g. computer science, math, engineering, neuroscience, medicine, or psychology)
- Research experience in the analysis of structural and/or functional MRI data
- Strong scripting experience (preferably in Matlab or Python)
- A clear motivation to pursue big-data neuroimaging research into structure-function markers of depression
- Desirable (but not required) areas of experience:
 - Experience with large-scale datasets such as HCP or UK Biobank
 - Experience with unsupervised dimensionality reduction methods in neuroimaging (e.g., non-negative matrix factorization, Independent Components Analysis, etc.).

The start date for this position is flexible. The initial appointment will be for 1 year. Renewal is contingent upon performance and funding availability. Applications are reviewed on a rolling basis, and the position will remain open until filled.

To apply, please send a CV, statement of interest/cover letter, one relevant manuscript, and names of three references to janine.bijsterbosch@wustl.edu.