

**Center for the Neural Basis  
of Cognition (CNBC)**  
115 Mellon Institute  
4400 Fifth Avenue  
Pittsburgh, Pennsylvania 15213-2683  
  
Phone: 412-268-4615  
Fax: 412-268-5060  
[www.cognitiveaxon.com](http://www.cognitiveaxon.com)  
[timothyv@cmu.edu](mailto:timothyv@cmu.edu)

The Cognitive Axon (CoAx) Lab at Carnegie Mellon University ([www.cognitiveaxon.com](http://www.cognitiveaxon.com)) seeks a post-doctoral fellow to lead a set of projects that examine structure-function interactions in macroscopic brain networks. These collaborative projects are in conjunction with the Machine Learning Department at CMU and the Army Research Laboratory in MD. Using a combination of neuroimaging techniques (e.g., resting-state fMRI, task-evoked fMRI, EEG, diffusion MRI) and machine learning tools, this research program seeks to understand how structural connectivity in global neural networks constrains functional communication and subsequent cognitive function, with an emphasis on cortico-basal ganglia pathways and their role in adaptive decision making.

**Strong applicants will have:**

- Established experience in analyzing neuroimaging data (e.g., fMRI, EEG, diffusion MRI) and/or machine learning.
- Experience with statistical/scientific programming languages (expertise in Python, Matlab, and/or R preferred).
- Topical expertise in statistical and computational approaches (e.g., regression, clustering, signal processing).
- Demonstrated ability to complete projects as evidenced by first-author publications.
- Strong organizational, interpersonal, and communication skills that will ensure multidisciplinary collaboration across labs

This position is fully funded for two years with a possible extension for a third year. The position includes funds to attend scientific conferences as well as travel funds to regularly travel to Aberdeen Proving Ground in MD (halfway between Baltimore and Philadelphia) as part of ongoing collaboration with Army Research Laboratory.

To apply, please submit a CV, cover letter, and a list of three references to Timothy Verstynen by email: [timothyv@andrew.cmu.edu](mailto:timothyv@andrew.cmu.edu). The cover letter should include a summary of the candidate's research interests to date and a statement of future research interests.

The target start date is between July 1 - October 1, 2016; however, review of applications will continue until the position is filled.

*Carnegie Mellon University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.*