POSTDOCTORAL FELLOW POSITION @ Penn ADRC:
Computational Image Analysis in Neurodegeneration

Penn Alzheimer's Disease Research Center (ADRC)
Penn Image Computing and Science Lab (PICSL)
University of Pennsylvania Perelman School of Medicine
Philadelphia PA, USA
https://www.med.upenn.edu/adcc/
http://picsl.upenn.edu/

The Penn Image Computing and Science Laboratory (PICSL) and the Penn Alzheimer's Disease Research Center (ADRC) are seeking to recruit a postdoctoral fellow to engage in computational image analysis research focused on developing advanced biomarkers for early Alzheimer's disease. The postdoctoral fellow will be working with ADRC faculty to analyze unique in vivo and postmortem imaging datasets using novel image registration, segmentation, morphometry, and machine learning techniques. Candidates should have completed (or be about to complete) a Ph.D. in a relevant field of study and have a strong interest in neurodegenerative disease research. In particular, the candidates should have

- A Ph.D. degree in a computational field and a strong background in medical image analysis, computer vision, or machine learning; with innovation and productivity demonstrated by papers in competitive conferences such as CVPR, ICCV, IPMI, MICCAI, NIPS;

or

- A Ph.D. degree in a biomedical field and a strong background in neurodegenerative disease, neuroanatomy; with some background in computation and image analysis; and innovation/productivity demonstrated by papers in leading biomedical journals.

The specific research aims of the position will be tailored to the strengths of the postdoctoral fellow and the scientific aims of the funded research projects. Applicants with expertise in one or more of the following areas are particularly encouraged to apply:

- Deep learning and model-based approaches for medical image segmentation, registration, shape analysis
- Analysis of postmortem imaging and digital pathology datasets
- Python and C++ programming, particularly using the Insight Toolkit (ITK) and Visualization Toolkit (VTK)
- Knowledge of medial temporal lobe and hippocampal subfield anatomy
- Experience developing and implementing novel image segmentation protocols
- Experience with linking neuroimaging analyses to clinical data in aging and neurodegeneration

The University of Pennsylvania is an Ivy League university that is consistently recognized as one of the best in the United States. The Perelman School of Medicine is frequently among the top recipients of biomedical research funding in the nation. The postdoctoral fellow will join a dynamic and growing research group led by Drs. David Wolk and Paul Yushkevich that fosters a friendly, noncompetitive, collaborative environment where each individual member of the laboratory is encouraged to thrive. Past postdoctoral trainees have been successful in obtaining faculty and industry research positions.

The University of Pennsylvania is an equal opportunity, affirmative action employer. Women and minority candidates are strongly encouraged to apply.

**Please submit CV, a brief statement of research interests, and
three references to Paul Yushkevich (pauly2@pennmedicine.upenn.edu)**