



RUTGERS

New Jersey Medical School

Postdoctoral Fellow for Neuroscience at Rutgers New Jersey Medical School

Rutgers, New Jersey Medical School is seeking a Postdoctoral Fellow for Neuroscience. Under the direction of the Principal Investigator (Dr. Hyung Jin Ahn), the Postdoctoral Fellow will be responsible for conducting research focused on studying the crosstalk between the cerebrovascular system and the nervous system to understand molecular mechanism underlying cerebrovascular deficits in Alzheimer's disease (AD). Our laboratory recently developed a novel fiber optic method for measuring vascular reactivity in freely moving animals. Therefore, the Postdoctoral Fellow will be primarily engaged in conducting experiments focused on the molecular mechanism underlying cerebrovascular deficits in AD pathogenesis, using fiberoptic spectroscopy combined with chemogenetics, in vivo two photon microscopy, MRI and immunohistochemistry in genetically modified mouse/rat AD models. Some of the projects involve collaborations with researchers at Rutgers Brain Health institute, The Rockefeller University, and Weill Cornell medical college.

Among the key duties of this position are the following

- Performs techniques in molecular biology, neuroscience and chemogenetics or optogenetics.
- Performs various research and technical operations relative to ongoing investigatory activities of a laboratory; may conduct independently or as assigned specialized research for a particular project.
- Assists in the conducting of continuous program of research and development regarding new procedures and instrumentation functions of the laboratory.
- As requested, assists in the implementation of the programs and projects in special areas of interest to the overall research program of the laboratory.
- Performs highly skilled biochemical, molecular biology, fiberoptic spectroscopy combined with chemogenetics, in vivo two photon microscopy, and immunohistochemistry using genetically modified mouse/rat AD models.
- Contributes to writing manuscripts and reviews articles that directly result from his/her research.
- Maintains a proper data notebook pursuant to the standards of the Department and the PI.
- Assists in training and mentoring graduate students and technicians.

Minimum Education and Experience

- Ph.D. or an M.D with research experience in Biomedical/Bioengineering Sciences or Neuroscience.
- Experience in in vivo GCaMP imaging, chemogenetics or optogenetics, in addition to Matlab programming experience is highly desirable.
- The candidate is expected to be proficient in spoken and written English.

If interested, submit your CV, a brief cover letter indicating your prior research experience and career goals to Dr. Hyung Jin Ahn (ha390@njms.rutgers.edu)