

# SCHOOL OF MEDICINE

## POST-DOCTORAL POSITION IN HUMAN IMMUNOLOGY, BIOINFORMATICS, AND NEUROLOGICAL DISORDERS

### **Job Description:**

The laboratory of "*Human Adaptive immunity and Neurology*" headed by Dr. Naresha Saligrama is located at Washington University in St. Louis, within the Department of Neurology and Pathology and Immunology. Our focus is to determine the phenotype, function, and specificity of T cells in neurological and autoimmune disorders. Our overarching goal is to gain novel scientific knowledge in regard to human adaptive immune responses in neurological and autoimmune diseases that will help guide clinical practice. We use cutting edge single cell, high throughput sequencing methods, and multiparameter flow cytometry to determine adaptive immune (T and B cells) responses specifically in human conditions which affect the brain such as Multiple sclerosis, Alzheimer's disease, Parkinson's disease, and others.

Our research focus can be subdivided into three broad areas -1) T cell receptor repertoire in autoimmunity, 2) specificity and function of T cells in autoimmunity and neurological disorders, and 3) systems level understanding of immunological events in neurological disorders. We welcome diverse group of individuals/candidates who are experienced, highly motivated and autonomous post-doctoral research scientists. The candidate will develop and carry on his/her own research projects aiming at deciphering mechanisms of immune responses in human neurological and autoimmune diseases under the guidance of Dr. Saligrama. The post-doc will also develop new approaches and tools. The candidate will also participate and add their expertise in other members' projects. Most importantly, candidates are highly encouraged to explore their own ideas, write grants, and present their work at conferences.

#### **Qualifications:**

We have two/three well-funded postdoc positions available, immediately. The candidate should have an interest in translational research and be able to work independently and interactively in a team setting, be responsible, organized and enthusiasm for research. PhD (or equivalent) in immunology, biochemistry, protein engineering, and bioinformatics is required. Applicant should have a strong expertise in immunobiology and pathogenesis of immunological disorders. Experience in bioinformatics, repertoire analysis, computer science would be a plus.

Please contact Dr. Saligrama (nareshas@wustl.edu) directly with CV and cover letter with research interests.

#### **Funding:**

The lab is well funded through Department of Neurology, Wash U, National Institute of Health, National Institute of Aging (NIA), National Institute of Neurological disorder and Stroke (NINDS), National Multiple Sclerosis Society (NMSS), Michael J Fox Foundation (MJFF), Wellcome Trust, Veterans Health (VA), Ludwig Family Foundation etc.

#### **Highlight:**

Recently, we are approved via Wellcome Leap funding to sequence 10 million T cells at a single cell level. This would be a huge opportunity for prospective postdoc candidates with bioinformatics experience to delve into!

#### Institution/Organization:

Washington University School of Medicine St Louis. USA

External link and contact information: www.saligramalab.org