Cytokine Gene Regulation and Cytokine Biology in CNS

Position Description:
The laboratory of Dr. Han-Yu Shih at the National Institutes of Health (NIH) in Bethesda, MD is seeking a motivated and talented postdoctoral researcher to join our multidisciplinary team. Our lab focuses on understanding the mechanisms that precisely regulate gene expression in lymphoid cells, with a particular interest in homeostasis and CNS inflammation. We use cutting-edge genomic approaches to address three fundamental questions:

1. How do transcription factors modulate chromatin landscapes during lymphoid cell development and activation?

2. How do cytokines and their producers contribute to the progression of neurodegenerative and neuroinflammatory diseases, such as Alzheimer's disease?

3. How does crosstalk between neural and immune cells control autoimmune diseases in CNS?

The successful candidate will use “omic” approaches to investigate immunoregulation and identify potential therapeutic targets. You will have the opportunity to lead and co-lead projects, design experiments for generating high-dimensional data (single cell transcriptomes and epigenomes, spatial transcriptomes, TCR/BCR repertoires), and work closely with collaborators and lab members. Additionally, you will receive training in bioinformatics and have opportunities to mentor postdocs or summer students. will be available based on interest. Salary is commensurate with research experience and accomplishments.

Selected publications:


Qualifications:
- Candidates must hold a Ph.D. or M.D./Ph.D. in immunology, neuroscience, genetics, molecular biology, biochemistry, computational biology or a related field, within three years of degree being awarded;
- Must have first authorship on at least one peer-reviewed publication;
- Must be self-motivated and keen to develop and/or learn cutting-edge technologies and/or up-to-date genomic data analysis;
- Experience in animal experiments, or NGS data analysis are preferred;
- The ability to work as part of a cohesive group is important as we are a highly collaborative lab;

To Apply:
Interested candidates please send a cover letter, curriculum vitae, and contact information of three references to: NEI Shih Lab han-yu.shih@nih.gov

Lab website:

The NIH is dedicated to building a diverse community in its training and employment programs.