



Postdoctoral Positions Available to Study Immuno-oncology, Autoimmunity, and Chronic Virus Infection

Postdoctoral positions are available in the Department of Immunology and Microbiology at The Scripps Research Institute, to study the cellular and molecular mechanisms underlying (1) immune control of cancer and chronic virus infection; (2) immune tolerance and autoimmune diseases.

Highly motivated PhD, MD, or MD/PhD with a solid background in immunology, RNA biology, cell biology, or molecular biology. Working experience in the following areas is desired:

1. The mouse immune system
2. Immuno-oncology
3. Mouse models of autoimmune diseases
4. Lentiviral or retroviral systems for gene expression
5. Bone marrow reconstitution
6. Signaling pathway analysis in primary mouse B and T cells
7. CRISPR-Cas9-mediated *in vitro* and *in vivo* functional screening
8. Ribosome and polysome profiling
9. PAR-CLIP, HITS-CLIP, or other CLIP methods to study RNA-protein interactions
10. Bioinformatic skills

Candidates should be fluent in English, and can be available for interview. Please e-mail application including cover letter indicating current and future research interests and expected availability date, CV, selected reprints of publications, names and contact information of three references to cxiao@scripps.edu.

Lab website: <http://www.scripps.edu/xiao>



Research Focus of the Xiao Lab

We strive to understand the mammalian immune system at the organismal, cellular, and molecular levels, under health and disease conditions, with a strong interest in the development, differentiation, function, and tolerance of B and T lymphocytes. We have been studying the function and molecular mechanism of action of microRNA, RNA-binding protein, and translational control in B and T cells since 2004, with a focus on (1) immune tolerance and autoimmune diseases; (2) antibody response; (3) immune control of chronic virus infection; (4) immuno-oncology; (5) lymphoma and leukemia. We have made a series of seminal discoveries, which were published in *Cell* (2007, 2009), *Nature Immunology* (2008, 2013, 2016, 2018), *Immunity* (2016), *J Exp Med* (2016), *Nature Communications* (2016), *EMBO J* (2013), *Leukemia* (2016, 2018), *PLoS Genetics* (2017), and many other journals.

A few years ago, we started to explore the cellular and molecular mechanisms underlying immune control of cancer and virus, aiming to develop new therapeutics to treat immune diseases and harness the immune system to treat cancer. In addition to the traditional experimental approaches such as mouse genetics, flow cytometry, molecular and cellular methods, we are establishing technology platforms combining Mass Cytometry (CyTOF), single cell sequencing, and CRISPR-Cas9 mediated *in vitro* and *in vivo* functional screening to profile and interrogate the immune system in an unprecedented way. Employing these state-of-the-art technologies, we have identified novel molecules and pathways that play critical roles in autoimmune diseases, and in immune control of cancer and virus infection. We are pursuing these exciting findings at this moment. Highly motivated young scientists are always welcome to join our adventure.