Post-doctoral Positions in Synthetic and Systems Biology

School of Biological and Health Systems Engineering, Arizona State University

Post-doctoral positions in synthetic and systems biology are available in the School of Biological and Health Systems Engineering at Arizona State University in Prof. Xiao Wang's lab. We employ a combination of experimental and computational approaches to engineer and investigate gene regulatory networks. We aim to advance the understanding of interactions between multistability and stochasticity in biology using both synthetic gene circuits and single cell dynamics analysis, and to extrapolate this knowledge to the mechanistic understanding of gene regulation in more complex processes, such as stem cell differentiation and reprogramming, with the purpose of developing new therapeutic applications.

Our group is highly interdisciplinary and collaborative. It offers excellent training opportunities in quantitative and synthetic biology. We welcome highly motivated and qualified individuals that have a strong molecular biology background and a quantitative mind set. Responsibilities include constructing synthetic gene circuits using basic molecular biology techniques; collecting and analyzing single cell quantitative fluorescence data; synergistically collaborating with other groups to integrating new techniques such as microfluidics.

Qualifications: A Ph.D. in related fields, strong background in molecular biology, extensive experience with cloning, cell culturing, fluorescence measurements using flow cytometry. Ability to work independently. Basic knowledge of mathematical modeling and stochastic processes is desired but not required.

Start Date: flexible.

Submission instructions: Interested individuals should submit their CV, names of three references, and availability via email to Xiao Wang at xiaowang@asu.edu.

Please check our website at xiao.lab.asu.edu for more information.