Open Postdoctoral Research Positions in Modeling Viral and Bacterial Infections

Postdoctoral Research positions are available beginning August 1, 2017 in the Department of Pediatrics and the Institute for the Study of Host-Pathogen Systems at the University of Tennessee Health Science Center (UTHSC) in Memphis, TN. The successful applicant will work with Dr. Amber Smith (https://www.ambersmithlab.com) to develop and analyze mathematical models of the immune response and treatment of respiratory viral and bacterial infections and coinfections. The Smith lab is a combined dry/wet laboratory and has the unique ability to generate robust data sets to train and validate the models and their predictions.

Postdocs will collaborate with computational biologists, virologists, bacteriologists, immunologists, and clinicians within the Smith Lab, across UTHSC, and at neighboring St. Jude Children’s Research Hospital. He/she will develop and analyze dynamical infection models, use parameter estimation to investigate experimental kinetic data, design new experiments, and generate new hypotheses about infection biology.

Qualifications:

• Ph.D. in Mathematics, Computer Science, Statistics, Physics, Engineering, or a related field
• Previous experience in modeling viral infections, bacterial infections, and/or immune response dynamics is preferred
• Experience with parameter estimation techniques and data-driven modeling
• Proficient programming skills in Python, Matlab, and/or R

Excellent oral and written communication skills, and the ability to work well in a fast paced, collaborative, medically focused research environment are also required. Experience and willingness to work closely with experimental collaborators and design experiments is also highly desired. The positions require independent, career-focused and creative individuals.

Application Instructions: Please send a brief statement of research interests, CV, and contact information for three references to amber.smith@stjude.org

Application Deadline: Review will continue until the positions are filled.