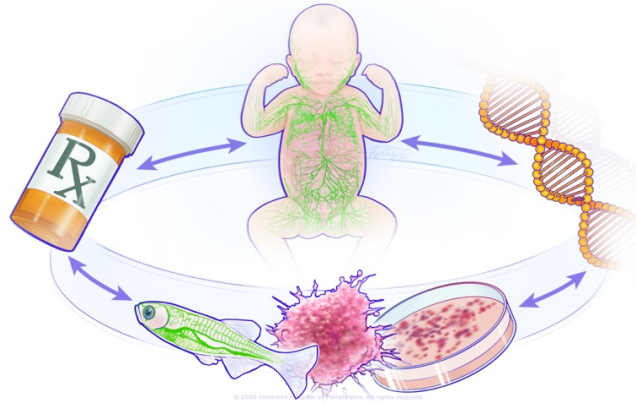


Cellular and Molecular Mechanisms of Human Lymphatic Disorders

EUNICE KENNEDY SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT, BETHESDA, MD AND SURROUNDING AREA



Caption: The figure shows a circle with the major components of the research in the lab. Figure shows a child with abnormal lymphatics, a DNA molecule, a representation of a zebrafish model and organoid model, and a pill bottle. This represents a bedside to bench to bedside program using organoid and zebrafish to model patient's lymphatic anomalies and develop therapies which will be translated back to the patients.

The Unit on Vascular Malformations is recruiting for two postdoctoral positions in the laboratory of Dr. Sarah Sheppard. Dr. Sheppard's translational laboratory focuses on understanding the cellular and molecular mechanisms that perturb vascular development in humans to develop molecularly targeted therapies. To accomplish this, we use genomics, organoids, and the zebrafish as an animal model. We recently identified multiple genetic causes of central conducting lymphatic anomaly (CCLA), a human lymphatic disorder, and showed that germline RASopathies, mosaic KRASopathies, *PIEZO1*-related lymphatic dysplasia, and Trisomy 21 all have distinct central lymphatic flow phenotypes (Liu et al *EJHG* 2022). We also demonstrated that pathogenic mosaic activating variants in *KRAS* cause CCLA which respond to MEK inhibition in both organoid and zebrafish models. The lab's current interests include the application of long-read genome sequencing to patients without a known molecular etiology, investigation of candidate genes for CCLA, and therapeutic development for genes previously identified to cause CCLA (especially those within the RAS-MAPK pathway). Post-docs in the lab will answer these questions using both experimental and computational approaches.

Start Date: positions are available now

Qualifications: The position is open to individuals with a PhD degree and less than 5 years of postdoctoral experience. The successful applicant will be expected to lead their own projects, contribute to collaborative research efforts in the laboratory, and publish first author papers in peer reviewed journals. Experience in vascular, developmental, cell, zebrafish, or molecular biology or genetics as well as some computational proficiency is highly desirable, but not required. Applicants should have excellent communication and interpersonal skills.

Stipends/Benefits: Appointees may be US citizens, resident aliens, or non-resident aliens with or eligible to obtain a valid employment-authorized visa. Salary is commensurate with education and experience.

To apply: Please email to sarah.sheppard@nih.gov (use the subject: Postdoc Application - "*YourLastName*") and send a single PDF file containing: a cover letter (describe your motivation for pursuing postdoctoral training, why you are interested in our lab, how your background fits our research, and what type of projects you would like to work on), your current curriculum vitae, a representative published manuscript, and names of three references with email addresses and phone numbers. If you are unable to complete these application requirements due to a disability and would like to apply, please contact us for accommodations.

Deadline: Please email your application by September 1, 2022.

Federal agencies may request information regarding the vaccination status of selected applicants for the purposes of implementing other workplace safety protocols, such as protocols related to masking, physical distancing, testing, travel, and quarantine. Employees providing healthcare or services in support of healthcare (Healthcare Workforce) may be required to receive a COVID-19 vaccine because they are expected to perform duties that put them in contact or potential contact with patients. We may request COVID-19 vaccination, and other vaccination documentation from Healthcare Workforce personnel at any point during the onboarding process or at any time during your employment with NIH.

The NIH is dedicated to building a diverse community in its training and employment programs. Women and underrepresented minorities are especially encouraged to apply.