ABSTRACT

This mini-symposium will highlight various methods that can be used in basic science research to assess the functional activities of immune cells across various in vivo and in vitro, normal and diseased states. Immune cell function can often be difficult to accurately assess based on cells harvested and processed at snapshots in time during the course of a biological process. The dynamic nature of immune cells, especially antigen presenting and antigen processing cells, can be captured with several in vivo microscopy techniques. This symposium will showcase these unique methods and also bring together scientists from different disciplines to discuss the current barriers in accurately identifying immune cell function using traditional methods. Our keynote speaker will be Dr. Paul Kubes from the University of Calgary, Canada, who will speak about his research in using various microscopic methods to visualize immune cells performing their activities in diseased states in vivo.

KL2 SCHOLAR

Annie Kruger, MD, PhD is an Assistant Professor of Medicine in the Division of Gastroenterology at Georgetown University Medical Center. Her research focuses on the role of macrophages in the progression and regression of fibrosis in liver diseases such as non-alcoholic fatty steatohepatitis (NASH). She has had a long-term interest in studying the innate immune response to infectious and inflammatory conditions. Her work has included studying the innate immune response in type 1 diabetes, Dengue fever, hepatitis C, hepatitis B, and NASH. She previously conducted her basic and translational research studies at the Harvard School of Public Health, the University of Massachusetts Medical School, and Massachusetts General Hospital.

KEYNOTE SPEAKER

Paul Kubes, PhD, Professor, Department of Physiology and Pharmacology; Director, Calvin, Phoebe and Joan Snyder Institute for Chronic Diseases; Canada Research Chair in Leukocyte Recruitment in Inflammatory Disease. The Kubes lab is committed to understanding complex immune responses in the context of human clinical disease. The primary focus of the lab is to directly visualize the roles of immune cells during inflammation, infection and tissue injury. They are leading the way in directly imaging the immune system using cutting edge technology, including spinning-disk confocal, resonant-scanning confocal, and multi-photon microscopy. By imaging complex cellular behaviors in real time, both in vitro and in vivo, we can now begin to understand how immune cells, such as neutrophils, monocytes, NKT cells and Kupffer cells function under physiological and pathological disease states.

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Link to Live Stream:
https://georgetown.zoom.us/j/620320875

Link to RSVP:
https://forms.gle/VyLoHG1GN18qQwhZ7

Space is limited.
Breakfast will be provided.