

Wright Center KL2 Visiting Scholar Seminar Series

“Hepatic Macrophage and Stellate Cell Cross-Talk in Fibrogenesis”

Tuesday, April 13th 12:00 -1:00pm

Key Note Speaker

Annie J. Kruger M.D./Ph.D.



● ABOUT

Annie Kruger 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). 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.

● ABSTRACT

Non-alcoholic steatohepatitis (NASH) is an epidemic liver disease characterized by hepatic inflammation and progressive fibrosis affecting nearly 16 million Americans today. It will be the leading cause of cirrhosis and liver transplantation within this decade, yet no FDA approved therapies exist for NASH or NASH-related fibrosis. Macrophages may be master regulators of fibrogenesis in the NASH liver. Macrophage depletion prevents NASH fibrosis in mouse models, prompting the development of macrophage chemotaxis blockade to injured hepatocytes as a therapeutic strategy for human NASH. Cenicriviroc (CVC), a first-in-class dual chemokine receptor (CCR) 2 and 5 antagonist that prevents macrophage trafficking, is currently in phase 3 investigation for human NASH. Phase 2b clinical trial results demonstrated that CVC reduced fibrosis stage without improving hepatic inflammation after 1 year of therapy. This paradoxical finding of improvement in fibrosis despite ongoing hepatic inflammation is a paradigm shift in this field where the prevailing pedagogy is that inflammation promotes fibrosis. These trial data are evidence that not all inflammation promotes fibrosis in NASH, and it is the infiltrate composition that may be critical in determining disease progression.

To register:
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