David Masopust, PhD, associate professor in the Department of Microbiology and Immunology at the University of Minnesota Medical School, will deliver a special seminar, "Memory CD8 T Cells: Quantity, Location, and Function," at 3 p.m. on Wednesday, May 11, in Scaife Hall, Lecture Room 3.

Dr. Masopust’s research on CD8 and CD4 T-cell responses to a variety of viral and bacterial infections has furthered our understanding of the development of immunological protection from reinfection. He and colleagues elucidate the developmental cues that govern T-cell migration to different anatomical locations, commitment to the memory lineage, and the contribution of memory T-cell differentiation state and location to protection from reinfection. His lab seeks to advance vaccination strategies and is developing a protective HIV vaccine. Earlier this month, Nature published his laboratory’s study on recapitulating adult human immune traits in laboratory mice by normalizing the environment.

Dr. Masopust received his bachelor’s degree in biology and Spanish from Middlebury College and his PhD in immunology from the University of Connecticut in 2002. He completed a postdoctoral fellowship at Emory University before joining the faculty of the University of Minnesota Medical School in 2007. He is an alumnus of the Kavli Frontiers of Science program, and he has received the Beckman Foundation Young Investigators Award, the American Society for Microbiology ICAAC Young Investigator Award, and an NIH Director’s New Innovator Award.