

Cluster Seminar

Debattama Sen

Post Doc Fellow, Haining Lab, Dana-Farber Cancer Institute, Harvard



Debattama Senn

“Epigenetic Determinants of CD8+ T cell Exhaustion”

Dr. Sen is a post doc at the Dana-Farber-Cancer Institute, Harvard. Her work looks into the epigenetic determinants of CD8+ T cell exhaustion. T cell exhaustion describes an acquired dysfunction common in settings of chronic viral infection. Despite clinical efforts to rescue exhaustion, the fundamental mechanisms specifying this state, and the potential for reprogramming exhausted T cells, remain poorly understood. Since the epigenome can govern cell state, we profiled accessible chro-

matin in exhausted CD8+ T cells. Exhausted cells acquired a state-specific landscape of enhancers that profoundly differed from functional memory. Comparison of mouse cells to those isolated from HCV and HIV infection identified a conserved epigenetic program of exhaustion. Critically, CD8+ tumor infiltrating lymphocytes (TILs) also shared epigenetic and transcriptional features with chronic viral infection, suggesting that T cell exhaustion is a fundamental adaptation to settings of chronic stimulation.

WHERE

Big Lecture Hall, BMZ (Building 13)
Venusberg-Campus 1, 53127 Bonn

WHEN

Tuesday, June 18, 2019 at 11:00 a.m.

HOST

Prof. Christian Kurts & Dr. Zeinab Abdullah

MORE INFORMATION

<http://haining.dfci.harvard.edu/people>