

Minsoo Kim



During my post-doc studies at Harvard Medical School, I demonstrated for the first time in a live cell that leukocyte integrin LFA-1 (CD11a/CD18) activation is mediated by cytoplasmic tail separation. This work was published in *Science* 2003 and has been cited more than 800 times by other investigators. As a professor of Microbiology and Immunology in the David H. Smith Center for Vaccine Biology and Immunology of the University of Rochester School of Medicine and Dentistry, I have a sustained interest in trying to understand the pathological mechanism that underpin the molecular processes which mediate establishment/maintenance of inflammatory diseases in a variety of tissue.

Research program: I have strong research expertise in molecular and cellular biology of integrin mediated cell adhesion and leukocyte migration. My main research is focused on leukocyte migration (neutrophil, monocyte, macrophage, and T cell) during local infection as well as systemic inflammation like sepsis. In addition, my lab has developed many *in vitro* and *in vivo* molecular & cellular imaging systems to visualize dynamic host immune responses at infection/inflammation sites (Lim et al. *Science* 2015 and Kim et al. *Science* 2003). I have written over 45 papers in highly prestigious peer reviewed journals and have presented my work internationally many times at scientific conferences and invited lectures. I currently serve as a permanent member of the atherosclerosis and Inflammation of the Cardiovascular Systems Study Section at NIH. I also serve as an associated editor of *Journal of Immunology*. I currently maintain five NIH funded research projects in my laboratory.

Mentoring and teaching experience: I served as the thesis advisor for three Ph.D. degree students previously, and currently I am the advisor of two Ph.D. candidates. I have served as a thesis committee member for 25 graduate students. Besides these formal advising experiences, I had numerous informal mentoring opportunities. I mentored 14 undergraduate students and 21 first year graduate rotation students. I trained 14 post-doctoral fellows. Among them, eight former post-doctor fellows are currently holding an independent investigator position at academic institutes. For the past 7 years I have organized a Research in Progress Seminar where Rochester faculty present and discuss their research. I am also active in graduate studies within the Department of Microbiology & Immunology: I serve on the MS admission committee and am involved in the department curriculum development program. Last year, I received 2015 School of Medicine and Dentistry Trainee Academic Mentoring Awards.