Angiotensin converting enzyme 2 (ACE2) is the cognate receptor for SARS-CoV-2 and plays a key role in the pathogenesis of COVID-19 pandemic. However, ACE2 is also a key regulator of the immune system in the context of the infectious and noninfectious lung inflammation. In his talk, Dr. Jia will present recent findings from his lab about the ACE2 as a potential therapeutic reagent for COVID and its immunoregulatory function in several disease settings.