Infectious Diseases Labs

ID LABS

Dr. Andrés Pizzorno

Centre International de Recherche en Infectiologie (CIRI) - Team VirPath, Lyon, France

Tuesday, 5th September 2023
4:00pm to 5:00pm (SGT)
Venue: Codon A & B @ Matrix Level 5

Hide and seek: the study of early virus-host interactions in the upper respiratory tract and their implications for pathogenesis, transmission, and control

Respiratory viruses primarily enter and are transmitted through the upper respiratory tract. The airway epithelium plays a key role as the first line of defence of the lung against infections, acting not only as a physical barrier but also through the fine regulation of both innate and adaptive immune responses. Early immune responses locally induced in the nasopharynx are major determinants of the pathophysiology and fate of respiratory viral infections, including pathophysiology and transmission. Our group aims at bridging long-lasting gaps in our qualitative understanding of the preferential modulation of specific biological processes of the host by the most clinically relevant respiratory viruses, with particular attention to the interplay between the virus evasion strategies and the early innate immune responses in the anatomical compartment through which such infections are acquired and transmitted. Our research leverages the study of fundamental virus-host interactions at the transcriptomic, molecular, and cellular levels as the starting point to develop innovative host-directed preventive and therapeutic approaches and build better preparedness and resilience against respiratory viruses with epidemic, zoonotic and pandemic potential.

Dr Andrés Pizzorno holds a PhD in Microbiology Immunology and currently works as a postdoctoral researcher at the VirPath Team of the Centre International de Recherche en Infectiologie in Lyon (France). Building on +12 years of research experience in the field of respiratory viruses, antiviral resistance and therapeutics, his research focuses on the study of virus-host interactions at the transcriptomic, molecular and cellular level, with particular attention on the interplay between the virus and the early innate immune response as the starting point for the identification, characterization, pre-clinical and clinical evaluation of innovative host-targeted antiviral approaches. Dr Pizzorno is author of 40 scientific publications and co-inventor of several patents and leads/participates in different collaborative research projects at the national (France) and international level, including the French REACTing network (https://reacting.inserm.fr/) for the national response to the SARS-CoV-2 virus pandemic outbreak. He is also co-founder of Signia Therapeutics SAS.

Hosted by: Guillaume Carissimo

Questions? Contact us at **seminars@idlabs.a-star.edu.sg**

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