SIgN Immunology Seminar



Dr Aurelio Bonavia

AERAS, United States

TB Vaccines: Challenges and New Approaches

Host
Dr Amit Singhal
Singapore Immunology Network, A*Star

Date
Monday 19 September 2016

Time
11am – 12pm

Venue
SIgN Seminar Room
Immunos Building
Level 4
Biopolis

Tuberculosis (TB) kills more people than any other single infectious disease agent in the world, causing 9.6 million illnesses and 1.5 million deaths in 2014. Multidrug-resistant and extensively drug-resistant TB pose serious threats to global health, increasing treatment time and costs, and causing potentially debilitating side effects for patients. A new effective TB vaccine would be the ultimate game changer that could help end this epidemic.

Dr. Bonavia will discuss the current clinical pipeline for TB vaccines. He will also summarize the major hurdles that the TB vaccine field faces, focusing on the lack of correlates of protection, the major limitations of animal models, and the lack of in vitro functional assays. Dr. Bonavia will expand on the following current preclinical programs: A) CMV: long lasting unconventional effector T cells B) ChAd/MVA; aerosol immunization to elicit CD4 and CD8 T cells and C) Exploration of different routes of BCG-administration to maximize protection and identify correlates of protection. Aeras recognizes the need for pipeline diversification and is seeking collaborators to explore new platforms, to apply knowledge from other fields and to advance new early-stage candidates.

About Aeras: Aeras is a nonprofit, product development partnership developing new TB vaccines for the world, in partnership with other biotech, pharmaceutical, and academic organizations. No one organization or institution can conduct TB vaccine R&D alone, and Aeras fosters the sharing of knowledge and strengthening research capacity in multiple countries.