



## **Sunil Palani, MS**

Graduate Student

University of Texas Medical Branch

*A Complex Role of IFN-I on Antibacterial Immunity During Influenza A Virus and Streptococcus pneumoniae Co-pathogenesis*

Sunil Palani is a 5th-year Ph.D. student in the M&I program at UTMB. He graduated with a Bachelor of Engineering in Biotechnology in 2014 from M S Ramaiah Institute of Technology, India. His love for immunology and microbiology led him to pursue his master's degree in medical biotechnology from the University of Illinois at Chicago, where he studied the cellular mechanisms in B-1 cells in response to an immunization strategy termed "suppressed immunization" using dexamethasone as an adjuvant as a therapeutic strategy to treat autoimmune diseases. He enjoyed being on the bench and doing research. Shortly after graduation, he moved to Boston and briefly worked for a biotech company before moving to Takeda Vaccines Inc. His team and he worked on the Dengue vaccine candidate, TAK003, at Takeda. He performed an RVP-based serotype-specific neutralization assay for sera samples from the Phase II clinical trial to determine the TAK003's serum potency, antibody titer, and efficacy. The whole experience was rewarding.

Coming from a family of teachers, he has an innate interest in sharing and imparting the knowledge he loves and enjoys. Combined with his deep love for research, he started his Ph.D. in 2019 under the guidance of Dr. Keer Sun. For his Ph.D. thesis, he is investigating the role of Alveolar macrophages in pulmonary infections and the synergistic effect of Type I and Type II IFNs on antibacterial immunity during influenza-induced pneumococcal pneumonia. His journey so far has been a rollercoaster; that being said, it's his journey, and he wouldn't trade it for anything else. UTMB is a fantastic school to study immunology and infectious diseases. He is passionate about immunology, microbiology, infectious diseases, global health, and nutrition.