

## **Congratulations to Dr Sharee Basdeo recipient of the Health Research Board Emerging Investigator Award.**

Sharee Basdeo - Clinical Medicine, St James's Hospital

Dr Sharee Basdeo is an immunologist based in the Trinity Translational Medicine Institute at St James's Hospital. Her research studies our immune system with the aim of informing the development of new therapies to advance healthcare in Ireland, and across the world. Her particular interest is in the immune response to the bacteria *Mycobacterium tuberculosis*, which causes the disease Tuberculosis (TB).

TB is currently the world's most deadly infectious disease, killing approximately 1.6 million people annually. In Ireland last year we had 315 cases and 8 TB outbreaks, 14 deaths and a striking increase in TB notifications from patients on immunosuppressive therapies for diseases such as rheumatoid arthritis. This bacteria primarily infects the lungs, causing damage and inflammation which if untreated can be fatal. Normally, a patient is treated with a combination of antibiotics to help them clear the bacteria from their lungs. Alarmingly however, the bacteria is becoming resistant to antibiotics, meaning that new and innovative therapies must be developed to combat this global threat to public health.

Describing her research Dr Basdeo said: *"My work aims to develop new ways of combating the bacteria, harnessing the power of a patient's immune system to defeat the disease. Therefore the aims of my research is two-fold, firstly we must understand the exact mechanism that the human body uses in response to TB. Secondly, we must discover a way to manipulate this mechanism, to promote the clearance of the bacteria and prevent damage to the delicate lung tissue"*.

And explaining the significance of this award, she commented: *"This will enable me to start my own independent research team, allowing me to prioritise and develop this project further. The grant will also allow me to engage with international collaborators to combine our efforts to take first step to developing new innovative therapies against TB. In addition to experimental work, this award will also fund more holistic aims such as; public science education, developing the first research network of TB patients in Ireland and making my lab an early access point to STEM research for young people at risk of educational disadvantage."*