We are trying to investigate the molecular basis of susceptibility and resistance in murine models of tuberculosis. It is well known that helper T (Th) cell subsets play a central role in the outcome of TB pathogenesis. While Th1 and Th17 cells confer resistance, Th2 and T regulatory cells enhance disease progression. However, the precise activity of these subsets of Th cells during the progression of infection has not been well studied. We are investigating the activity of different Th subsets in reporter knock-in and knock-out animals and their co-relation with disease progression.

**CURRENT RESEARCH**

**Topic**
Dissecting the roles of T-regulatory (Treg) cells in *Mycobacterium tuberculosis* infection in the murine model

**Methodology**
- T cell isolation, Differentiation of T cells, Proliferation of T cells, FACS sorting of specific T cells, Cytokine profiling by Luminex Technologies

**Application**
It will be interesting to identify the components that are responsible for the induction of Th2 cells and T-regs, which will enable us to design improved vaccines and therapies for tuberculosis.

**Past Researches**


**Future Interests**
Immunology of tuberculosis, Vaccine design.

**Extra Interests**
Reading scientific journals, listening music.