

## Examples of Current and Recent ID Fellow Research Projects

- B-cell immunity to malaria in Malian children
- Genetic polymorphisms leading to susceptibility to mycobacterial infection
- Genetics of 1918, seasonal, and novel H1N1 influenza
- Pulmonary hypertension in Malian children with severe malaria
- Filarial and HIV co-infection in Indian adults
- Host factors in susceptibility to pulmonary nontuberculous mycobacterial infection
- Autoantibodies against cytokines and consequent susceptibility to chronic infections
- Multidrug-resistant (MDR)- and extensively drug-resistant (XDR)-TB clinical study
- Chemokine responses to fungal infections
- Role of Th17 cells in protection against opportunistic infections
- Chemokine responses to staphylococcal infections
- Preclinical studies of live, attenuated influenza vaccines
- HIV and hepatitis B co-infection in Mali
- NK-cell immunity to herpesvirus infections and potential for adoptive transfer of immunity in stem cell transplantation
- Cell biology and genetic studies of HIV long-term nonprogressors
- Large-scale epidemiology of nontuberculous mycobacterial infections
- Clinical and laboratory aspects of IRIS in HIV
- *Brugia malayi* IL-5 receptor binding protein studies using RNAi

- Identification of new epitopes for *Strongyloides stercoralis* vaccine
- Microscopic observation drug susceptibility (MODS) assays in a Malian TB-infected cohort
- Evaluation of naturally acquired immunity to malaria in Malian children using systems biology approaches
- Studies of alternatively activated macrophages and T-cell memory responses in helminth and tuberculosis co-infection
- Host-pathogen interface and inflammatory complications in chronic granulomatous disease, gastrointestinal complications in primary immunodeficiencies
- Immune-based methods toward eliminating the latent reservoir in HIV infection
- *Aspergillus* diagnostics; the vaginal microbiome and antibiotic-induced vaginal candidiasis
- Health care personnel colonization survey and fecal microbiota transplantation
- Study of virulence factors in *Mycobacterium abscessus* and its emerging subspecies
- Host correlates of viral clearance and mechanisms of treatment relapse for interferon-free treatment of hepatitis C
- Role of bone marrow-derived plasma cells in immune response and pathogenesis of HIV