

MGH Next-Gen PSTP Participating Faculty and Research Focus

DEPARTMENT OF MEDICINE

- Amy Barczak, MD (ID) – TB host-pathogen interface
- Ingrid Bassett, MD, MPH (ID) – HIV and TB epidemiology; clinical research and implementation science
- Shannon Bromley, PhD (CIID) – Lymphocyte migration in normal and inflamed non-lymphoid tissues
- Richelle Charles, MD (ID) – Global burden of mucosal and enteric infections
- Raymond Chung, MD (GI) – Hep C liver disease
- Andrea Ciaranello, MD, MPH (ID) – Clinical outcomes and cost-effectiveness for HIV-infected women and their children
- Joseph El Khoury, MD (ID) – macrophages and microglia in infection, host defense, and neurodegeneration
- Kenneth Freedberg, MD (ID) – HIV/AIDS clinical strategies, outcome research, cost-effectiveness analysis, and HIV cohort studies
- Marcia Goldberg, MD (ID) – Molecular mechanisms of bacterial pathogen manipulation of host signaling
- Steven Grinspoon, MD (Endo) – Inflammatory complications in HIV
- David Hooper, MD (ID) – Molecular mechanisms and epidemiology of antibiotic resistance
- Sabina Islam, MD (AI) – Chronic skin inflammation and host immunity
- Georg Lauer, MD, PhD (GI) – Immunology of viral infections
- Cammie Lesser, MD, PhD (ID) – Modeling mechanisms of bacterial pathogenesis
- Andrew Luster, MD, PhD (RAI) – Chemokines, lipid chemoattractants, immune cell trafficking, and human translational immunology
- Michael Mansour, MD, PhD (ID) – Innate immunity and fungal infections
- Thorsten Mempel, MD, PhD (RAI) – *In vivo* imaging and immune cell interaction/trafficking
- Edward Ryan, MD (ID) – Immune responses and vaccines for enteric bacteria
- Mark Siedner, MD, MPH (ID) – HIV/AIDS treatment outcomes in sub-Saharan Africa, HIV/AIDS and aging, and implementation science of HIV/AIDS care delivery in sub-Saharan Africa
- Allen Steere, MD (RAI) – Infection-induced autoimmunity in Lyme arthritis and rheumatoid arthritis
- Jatin Vyas MD, PhD (ID) – Innate immunity response to fungal pathogens
- Ramnik Xavier, MD, PhD (GI) – Gut immunology and the microbiome
- Markella Zanni, MD (Endo) – Metabolic and cardiovascular complication immunology

DEPARTMENT OF SURGERY

- Gilles Benichou, PhD, DSc – Immune mechanism by T and B cells in transplant rejection and tolerance
- Joren Madsen, MD, DPhil – Transplantation tolerance, chronic rejection, innate immunity, and desensitization protocols
- James Markmann, MD, PhD – B cells and transplant tolerance
- Seyed Alireza Rabi, MD, PhD – Transplant immunology and the effects of cardiac surgery interventions on the immune system and inflammatory-mediated outcomes
- Laurence Rahme, PhD – Molecular host-pathogen interactions, bacterial pathogenesis, and host-responses to infection
- Heidi Yeh, MD – Disparities in access to transplantation care and *ex vivo* machine perfusion to improve organ quality

BROAD INSTITUTE

- Bruce Birren, PhD – Host-pathogen interactions and the microbiome
- Paul Blainey, PhD – DNA-protein interaction, evolutionary processes and cell differences

Updated July 2023

- Nir Hacohen, PhD – Innate immune system processes
- Deborah Hung, MD, PhD – Molecular diagnoses of infectious disease progression
- David Liu, PhD – Engineering evolution and delivery of genomic editing proteins
- Pardis Sabeti, MD, DPhil – Evolutionary adaptations in humans and pathogens

RAGON INSTITUTE

- Todd Allen, PhD – Viral sequence diversity and immune control in HIV-1 infection
- Facundo Batista, PhD – B cell biology
- Douglas Kwon, MD, PhD – Mucosal tissues in HIV acquisition and disease progression
- Daniel Lingwood, PhD – B cell antigen interactions, antibody targeting, HIV, and influenza
- Shiv Pillai, MD, PhD – Biology of B cell and IgG4-related diseases
- Bruce Walker, MD – Immune control and immune failure in HIV infection
- Xu Yu, MD – Molecular and cellular mechanisms in immune control of HIV-1

INTERESTED IN SOMEONE NOT LISTED HERE? MENTORS WOULD NEED TO BE ADDED TO THE R25 GRANT

It is possible to add a mentor not listed above. These individuals were selected based on NIAID funding and listed in the grant application. Typically, the Internal Steering Committee is willing to have an outside mentor if [1] the research project is relevant to the National Institutes of Allergy and Infectious Diseases (NIAID), [2] they have funding to support research efforts, and [3] the individual is willing to mentor the resident.

For more questions or interest in becoming a mentor in the MGH Next-Gen PSTP program, please contact the Program Manager (Becca Ward, raward@mgh.harvard.edu).