Potential CFAR Mentors		
Faculty	**Contact Info**	**Research Focus**
Jonathan Karn, Ph.D. Reinberger Professor of Molecular Biology Chair Department of Molecular Biology and Microbiology Director CWRU/UH CFAR	Jonathan.karn@case.edu Assistant: Brinn Omabegho brinn@case.edu Ph. 216.368.3915	HIV Eradication and Cure. Projects include: development of new methods to measure latent HIV reservoirs; engineering of NK cells to eliminate latently infected cells; development of new drug regimens to reactive the latent reservoir.
Ann Avery, M.D. Associate Professor of Medicine MetroHealth Medical Center	aavery@metrohealth.org 778.7828	HIV retention in care, depression screening and treatment in HIV, PrEP rollout, HIV testing
W. Henry Boom, M.D. Professor of Medicine Director, Tuberculosis Research Unit	whb@case.edu 216.368.4847	Epidemiology of MTB (TBRU with Charles Bark and/or Cathy Stein's help)
David Canaday, M.D. Associate Professor of Medicine, Case Western Reserve University Associate Director, Geriatric, Research, Education and Clinical Center (GRECC) Louis Stokes Cleveland VA Medical Center	dxc44@case.edu Ph. 216.368.8901	Human immunity to infectious diseases, understanding the mechanisms of increased pathogenesis during HIV/TB co-infection specifically involving properties of the interactions of T cells with macrophages and dendritic cells that foster loss of control of TB infection; defects in the human immune system that occur with aging
Amy Hise, M.D., MPH Assistant Professor Center for Global Health and Diseases	axh48@case.edu 216.368.4886	Innate immunology, inflammasomes, Rift Valley fever virus and fungal immunology

Christopher King, M.D., Ph.D. Professor of International Health, Medicine and Pathology Center for Global Health and Diseases	cxk21@case.edu 216.368.4817	HIV effects on pregnancy from Kenya (data analysis with Indu Malhotra).
Alan Levine, Ph.D. Professor Department of Medicine Division of Gastroenterology and Liver Disease.	alan.levine@case.edu 216.368.0342	Characterize the mucosal T cell and epithelial-mediated immune response in HIV patients both before and after effective and failed anti-retroviral therapy, and use this knowledge to design strategies that can stimulate host defenses in the gut to prevent an HIV infection in the first place
David McDonald, Ph.D. Associate Professor Department of Molecular Biology and Microbiology	djm41@case.edu 216.368.3715	Defining the mechanisms of HIV trafficking within dendritic cells with the long-term goal of understanding the complex interactions between pathogens and the cells they infect
Liem Nguyen, Ph.D. Assistant Professor Department of Molecular Biology and Microbiology	ldn7@case.edu 216.368.3148	Antibiotic resistance and bacterial pathogenesis
Pushpa Pandiyan, Ph.D. Assistant Professor Department of Biological Sciences	pxp226@case.edu 216.368.2939	Mechanisms of immune regulation. Ways to manipulate regulatory T cell and inflammatory Th17 cell development
Carlos Subauste, M.D. Associate Professor of Medicine, Ophthalmology and Pathology	css34@case.edu 216.368.2785	Host-pathogen interactions using Toxoplasma gondii, a major opportunistic pathogen in AIDS patients. In particular, we study: 1) The role of CD40 and autophagy in promoting protection against *T. gondii* and 2) The molecular mechanisms by which *T. gondii* alters signaling in host cells to avoid being killed by autophagy

John "Chip" Tilton, M.D. Assistant Professor Center for Proteomics and Systems Biology	jct63@case.edu 216368-3.360	Host and viral factors that regulate the susceptibility of primary immune cells to infection by HIV. Our research merges mutagenesis and molecular virology approaches with cellular immunology to identify critical host-viral protein interactions that can be blocked to reduce HIV transmission or promoted to improve retroviral-based gene therapy approaches
Saba Valadkhan, Ph.D. Assistant Professor Department of Biochemistry	sxv46@case.edu 216.368.1068	Role of long non-coding RNAs in host response to viral infections, with special emphasis on HIV. Using a combination of computational and molecular biology approaches, we aim to understand the mechanism of regulation of host response pathways by non-coding RNAs
Lance Vernon, DMD, MPH Senior Instructor Department of Biological Sciences	ltv1@case.edu 216.368.0712	Periodontal disease and cardiovascular disease in HIV+ adults
Allison Webel, R.N., Ph.D. Assistant Professor Frances Payne Bolton School of Nursing	arw72@case.edu 216.368.3939	Clinical and behavioral research on HIV patients.
Tsan Sam Xiao, Ph.D. Associate Professor Division of Anatomic and Experimental Pathology Department of Pathology	tsx@case.edu 216.368.3330	Role of the IFI16 inflammasome in the depletion of CD4 T cells upon HIV infection. The IFI16 inflammasome recognizes DNA derived from viral reverse transcripts and induces the activation of caspase-1 and pyroptotic cell death in CD4 T cells.
Wen-Quan Zou, M.D., Ph.D. Associate Professor Institute of Pathology	wxz6@case.edu 216.368.8993	Investigate the role of cellular prion protein in the pathogenesis of neurodegenerative disorders including prion disease, Alzheimer's disease and HIV-associated neurocognitive disorder using cell/animal models and patients' samples