The NIH Clinical Center treats a diverse group of patients from all over the world. It also draws researchers from different cultures and backgrounds. Learn more about some of the many researchers who conduct their work on the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) at the Clinical Center.



Thomas C. Quinn, M.D., M.Sc., conducts research for the National Institute of Allergy and Infectious Diseases at the NIH Clinical Center. He is a senior investigator and chief of the International HIV/STD Section of the Laboratory of Immunoregulation.

Dr. Quinn obtained his M.D. from Northwestern University. He was a research associate in infectious diseases in the NIAID Laboratory of Parasitic Diseases and completed a fellowship in infectious diseases at the University of Washington.

Since 1981, he has been assigned to the division of infectious diseases at Johns Hopkins University, where he became a professor of medicine in 1991. Dr. Quinn is a member of the Institute of Medicine and the National Academy of Sciences and is a fellow of the American Association for the Advancement of Science.

His major areas of research are:

- Definition of epidemiologic features of HIV-1 and HIV-2 infections in developing countries and the United States
- Assessment of biomedical interventions to control HIV, including circumcision, prevention of mother-to-child transmission, pre-exposure prophylaxis, and vaccine development
- Assessment of the frequency of *Chlamydia trachomatis* infections in selected populations using noninvasive sensitive nucleic-acid amplification assays for diagnosis
- Evaluations of interventions to control blinding trachoma due to *Chlamydia trachomatis* in sub-Saharan Africa

See the full program description.



Mark N. Polizzotto, M.B., B.S., B.Med.Sc., conducts research which focuses on the pathophysiology and therapy of viral malignancies, particularly as they occur in individuals with HIV and other immune deficiencies at the NIH Clinical Center.

He is an assistant clinical investigator for the HIV and AIDS Malignancy Branch at the National Cancer Institute Center for Cancer Research.

Dr. Polizzotto completed his medical degree at the University of Western Australia, including training in laboratory research at the Walter and Eliza Hall Institute of Medical Research, leading to a bachelor of Medical Science from the University of Melbourne. He then completed specialty training in internal medicine at St. Vincent's Hospital Melbourne and the Peter MacCallum Cancer Center and subspecialty training in hematology and hematopathology at the Alfred Hospital Melbourne, leading to fellowships of the Royal Australasian College of Physicians and the Royal College of Pathologists of Australasia.

He received further subspecialty training in the HIV/AIDS Malignancy Branch of the Center for Cancer Research at the National Cancer Institute (NCI), including a Ph.D. jointly at NCI and the University of Melbourne.

He commenced his present position under the auspices of the competitive National Institutes of Health Clinical Investigator Development Program.

See more information on Dr. Polizzotto's research.



Dima A. Hammoud, M.D. is a tenure track investigator with Radiology and Imaging Sciences at the NIH Clinical Center.

Dr. Hammoud attended college at the American University of Beirut in Lebanon, where she earned a bachelor's degree in biology in 1992 and an MD degree in 1996. After completing a residency in diagnostic radiology at the American University of Beirut-Medical Center, she joined the division of neuroradiology at the Johns Hopkins Hospital as a fellow. After completion of her fellowships, she joined the neuroradiology faculty at Johns Hopkins as assistant professor for three years before joining the

neuroradiology faculty at NIH.

Dr. Hammoud is board-certified in diagnostic imaging by the American Board of Radiology, and has completed fellowships in neuroradiology and PET imaging. She is currently a tenure track investigator in the Center for Infectious Disease Imaging (CIDI), a joint initiative between Radiology and Imaging Sciences at the NIH Clinical Center and the National Institute of Allergy and Infectious Diseases (NIAID).

Dr. Hammoud's research interests target the development of preclinical, translational and clinical molecular imaging applications to improve the understanding of the pathophysiology of infection, and to provide reliable imaging biomarkers of infectious diseases.

Research in her laboratory focuses on further understanding the pathophysiology of cognitive dysfunction in the setting of HIV infection. Current projects include neurotransmitter PET imaging in SIV-infected monkeys, imaging neuro-inflammation in humans and in animal models of HIV, as well as studying the relationship between HIV-associated neurocognitive dysfunction and vasculopathy, both in animal models and in patients, using a variety of advanced techniques such as magnetic resonance imaging, magnetic resonance spectroscopy and positron emission tomography.

Hammoud is a member of the Society of Nuclear Medicine and serves as a member of the Center for Molecular Imaging Innovation and Translation (CMIIT) Program Task Force.

Learn more about Dr. Hammoud's research.



Julie E. Ledgerwood, D.O., is a senior clinician who conducts research for the National Institute of Allergy and Infectious Diseases at the NIH Clinical Center.

Dr. Ledgerwood is a vaccine clinical researcher and serves as chief of the Clinical Trials Program. She is also a principal investigator for Phase I and II vaccine clinical trials at the VRC, studying the safety and immunogenicity of vaccines and monoclonal antibodies targeting HIV, influenza, Ebola, malaria, and other emerging infectious diseases.

After completing a residency in internal medicine at Johns Hopkins Bayview Medical Center in Baltimore in 2002, Dr. Ledgerwood joined NIAID as a clinical fellow in allergy and immunology. In 2003, she joined the VRC as a clinical investigator.

Dr. Ledgerwood is board-certified in allergy and immunology by the American Board of Allergy and Immunology and board- certified in internal medicine by the American Board of Internal Medicine. She is a graduate of Phillips University and the Oklahoma State University Center for Health Sciences, College of Osteopathic Medicine.

Learn more about Dr. Ledgerwood's major areas of research within the <u>Vaccine Research Center</u> (VCR).



Irini Sereti, M.D., who conducts research for the National Institute of Allergy and Infectious Diseases at the NIH Clinical Center, is an investigator in the HIV Pathogenesis Unit.

Dr. Sereti received her M.D. from the University of Athens, Greece, in 1991. She did research for one year in Dr. Greg Spear's laboratory at Rush Presbyterian Hospital in Chicago and then completed an internship, residency, and chief residency in medicine at Northwestern University. In 1997,

Dr. Sereti came to the National Institutes of Health as a clinical associate in the Laboratory of Immunoregulation. She became a staff clinician in 2003. She was appointed to a clinical tenure-track position in 2009.

The primary research focus of the Laboratory of Immunoregulation is the study of immune reconstitution inflammatory syndrome (IRIS). IRIS is an aberrant immune response, frequently with an intense inflammatory component, that can occur in the context of immune restoration in patients with HIV infection and severe CD4 lymphopenia after initiation of antiretroviral therapy (ART).

Learn more about Dr. Sereti's major areas of research.