



Loyda Meléndez, MT, Ph.D.
Professor of Microbiology and Medical Zoology
Key Activity Director, RCMI Translational Proteomics Center

Dr. Loyda M. Meléndez is Professor in the Department of Microbiology, School of Medicine and directs the RCMI Clinical Proteomics Discovery Core Facility at the University of Puerto Rico Medical Sciences Campus (UPR-MSC). The Facility provides clinical and basic researchers the proteomics instrumentation and services necessary to determine biomarkers for diseases that involve health disparities. Dr. Meléndez earned her Ph.D. degree in Experimental Pathology & Immunology *cum laude* from Emory University School of Medicine, where she also completed post-doctoral training in Hematology and Pediatric Infectious Diseases in collaboration with the Centers for Disease Control. She also has a M.S. degree *magna cum laude* in Microbiology from University of Georgia, Athens, and a Medical Technology degree *magna cum laude* from University of Puerto Rico Medical Sciences Campus. She worked in the industry from 1981-82 as Quality Control Microbiologist, and thereafter joined the UPR-MSC as Professor of Microbiologist in the School of Allied Health. After three years of teaching (1982-85), she was awarded a pre-doctoral MARC faculty fellowship. After completion of her PhD and Post-doctoral experience, she joined the Department of Microbiology and Medical Zoology of the School of Medicine at the UPR-MSC. She was Director of the Biosafety Committee at this Institution for six years. She is currently Professor of Virology and Principal Investigator of and NIH funded study to understand the mechanisms of macrophage-induced HIV neuropathogenesis using proteomics approaches. Dr. Meléndez has been a mentor of more than 30 graduate and undergraduate students in the field of HIV, macrophages, and vertical transmission with active funding from NIH-NCRR-RCMI (*Role of HIV variants in vertical transmission*), MBRS (*Role of the placenta in vertical transmission and protein profiling of "putative" anti-retroviral factors in placental macrophages*). Since 2001 she joined the Specialized Neuroscience Program in NeuroAIDS sponsored by NIH-NINDS as a PI in the project entitled: *Monocyte immunity and HIV Dementia*. With this interdisciplinary project, knowledge transfer of proteomic technology was achieved from her collaborator, Dr. Howard Gendelman's Laboratory at University of Nebraska Medical Center. The development of five publications in the field of NeuroAIDS and proteomics was instrumental in obtaining funding for an RCMI Core in Proteomics at UPR-MSC and subsequent R01 funding from NIHMH for the study entitled *Cystatins and Cathepsins in HIV Neuropathogenesis*. Dr. Meléndez is a co-inventor of three patents, has written two book chapters, and is an ad hoc reviewer for NIDA and the Journals of Leukocyte Biology and Placenta. She has published twenty-nine manuscripts in National and International Journals in the areas of HIV and macrophages, and NeuroAIDS.

Research Areas: HIV, Macrophages, Proteomics, Cognitive Impairment, Placental Macrophages, SELDI-TOF

Contact Information

UPR Medical Sciences Campus
School of Medicine
Department of Microbiology and Medical Zoology A-355
PO Box 365067
San Juan, PR 00936-5067

Phone: 787-758-6132
E-mail: loyda.melendez@upr.edu

