



Philip M. Murphy, M.D.

Philip Murphy is a Senior Investigator and Chief of the Laboratory of Molecular Immunology (LMI) at the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health in Bethesda. Dr. Murphy received his undergraduate degree in biochemistry from Princeton in 1975 and medical degree from Cornell in 1981 and trained in Internal Medicine at New York University-Bellevue Hospital Center where he was Chief Resident from 1984-85. He has spent his entire research career at NIAID, starting in 1985 as a Medical Staff Fellow in the Laboratory of Clinical Investigation, under the mentorship of Harry L. Malech, M. D. and John I. Gallin, M. D. He was tenured in 1992 and promoted to Chief of the Molecular Signaling Section in 1997, and to Chief of the LMI in 2003. Dr. Murphy's research has focused on leukocyte chemotactic receptors, from their basic molecular and biologic properties to their roles in human disease. His laboratory's accomplishments include discovery of 1) the first neutrophil-, monocyte- and eosinophil-selective chemoattractant receptors (chemokine receptors CXCR2, CCR1 and CCR3), 2) the family of *N*-formylpeptide receptors, 3) the first virally-encoded chemokine receptors (ECRF3 of *Herpesvirus saimiri* and US28 of HCMV), 4) the HIV coreceptor CCR5 and the HIV genetic restriction factor *CCR5-Δ32*, 5) the role of CCR5 in West Nile virus pathogenesis; and 6) the role of CX3CR1 in atherogenesis. The work on HIV provided part of the proof of principle for development of the FDA-approved R5 HIV entry inhibitor Selzentry (maraviroc) by Pfizer. Currently, Dr. Murphy studies WHIM syndrome, a rare primary immunodeficiency disorder caused by mutations in the chemokine receptor CXCR4, in an attempt to better understand pathogenesis and to develop both drug treatment and genetic cure strategies. His laboratory is also investigating potential roles for chemoattractant receptors on non-hematopoietic cells and in non-immunologic contexts. Dr. Murphy has served on the editorial boards of many scientific journals, including the *Journal of Leukocyte Biology* since 1992, and has published over 300 peer-reviewed articles, mostly on basic, translational and clinical studies related to chemokines and other chemoattractants. He has received numerous patents and awards including the NIAID Mentor of the Year Award, the NIH Director's Award (twice), the Pillars of Immunology Award from the *Journal of Immunology* and both the Dolph Adams Award and the Bonazinga Award from the Society of Leukocyte Biology, and has had two papers selected as Classics by *Science* magazine. In addition, he has been elected to the Association of American Physicians, the American Society for Clinical Investigation, the American Society of Microbiology, the American Society of Biochemistry and Molecular Biology, and the Henry Kunkel Society.