

Anil Shanker, M.S., Ph.D.

Dr. Anil Shanker is Senior Vice President for Research and Innovation, and a tenured Professor of Biochemistry, Cancer Biology, Neuroscience and Pharmacology at Meharry Medical College. He is also a member of Vanderbilt-Ingram Cancer Center at Vanderbilt University. He is known for his seminal contributions to cancer immunology and immunotherapy. His pioneering studies established normal thymic development of T lymphocytes against cancer-germline self-antigen P1A, akin to human MAGE antigens, and discovered a paradigm of CD8T cells facilitating the function of natural killer cells in solid tumor microenvironments. Building on his 25 years of research experience, Dr. Shanker has conceived of and implemented transdisciplinary research directions by integrating tumor biology, immunology, bioengineering, computational biology, neuroscience and immunotherapy. His laboratory studies the dynamics of lymphocyte crosstalk as it pertains to the complex problems of cancer escape and neuropathological disorders. His team is invested in building computational models that guide immune cell fate/function and lymphocyte networks during neuroimmune interaction.

Working with the education committee of the American Association of Immunologists, he developed curriculum to assist universities and colleges in undergraduate tumor immunology instruction. He is a fellow of the International Union Against Cancer, Champion of the Society for Immunotherapy of Cancer, and an overseas Fellow of the Royal Society of Medicine (UK). He received the NIH Director's Award of Merit, the NCI Mentoring Award, and Minority-Serving Faculty Scholar awards from the AAI, SITC, and AACR. He is a prolific author of research articles, reviews and book chapters in the fields of immunology, immunogenomics, immunotherapy and health disparities.

In his executive role, he provides strategic direction for developing institutional, government and corporate partnerships to advance equity in health and education. One of several partnerships, he is leading efforts for developing a comprehensive Genomics and Equity Initiative for human diaspora. This initiative will support research capacity building at HBCUs and African institutions through an international consortium of legacy Black medical schools and Regeneron-initiated pharmaceutical corporate partners. Dr. Shanker also leads the Coordinating Center of NIH Artificial Intelligence/Machine Learning (AI/ML) Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) for the US Southeast hub. He is committed to voicing evidence-informed perspectives across a range of critical issues related to health care and education reforms.