

Dr. David Miklos is the Chief of Stanford BMT and Cell Therapy Division of Medicine and Clinical Director of Cancer Cell Therapy Program leading a multi-modality research group that fosters the development of both laboratory immunologists, and clinical translational researchers. The Miklos lab first pioneered protein microarray technologies to discover clinically relevant allogeneic antibodies, especially those targeting H-Y antigens following sex mismatched transplantation. Our discovery that allogeneic HY antibodies develop in association with chronic GVHD revealed a critical B cell role in cGVHD pathogenesis and our clinical trials established cGVHD therapeutic benefits using anti-B cell drugs rituximab and FDA approval of Ibrutinib in 2017. The Miklos lab developed high-throughput sequencing of the B and T cell immune receptor thereby enabling: 1) lymphoid disease quantification, 2) detailed B and T cell donor reconstitution kinetics, and 3) clonal analysis of antigen specific responses following allo-HCT.

Dr. Miklos led chimeric antigen receptor (CAR-T) trials supporting the FDA approval of axicabtagene ciloleucel for patients with rel/ref aggressive large B cell lymphoma and brexucabtagene autoleucel for mantle cell lymphoma. His clinical translational CAR-T research lab quantifies tumor antigen density with multiplexed immune quantification, quantifies and single cell characterizes CAR-T expansion in blood & tumor, and pioneered lymphoma circulating tumor DNA MRD.

Dr. David Miklos was an undergraduate at the University of Notre Dame. He earned his MD and a PhD in Genetics at Yale Medical School before training as a hematologist – oncologist and bone marrow transplant clinician at Brigham and Woman’s hospital and Dana-Farber Cancer Institute at Harvard University. Dr. Miklos Joined Stanford University in 2004 and became Chief of BMT & Cell Therapy Program in 2020.