
Nancy A. Kernan, MD, is an emeritus member of the Department of Pediatrics at Memorial Sloan Kettering Cancer Center (MSK). She was a pediatric hematologist and oncologist on the MSK Kids

Transplant and Cellular Service and has extensive experience in transplantation with bone marrow, cord blood, and peripheral blood stem cells, as well as other cellular therapies.

During a career that spanned more than 40 years, Dr. Kernan treated infants, children, adolescents, and young adults with leukemia and other blood cancers, as well as disorders of the immune system. The MSK Kids transplant program was among the first in the country to introduce transplantation as a treatment for pediatric chemotherapy-resistant leukemia.

This work contributed to increasing the survival rate for childhood leukemia from 20% in the 1980s to more than 90% today. The MSK Kids transplant program was also one of the first to use an unrelated marrow donor to treat patients with leukemia and immunodeficiencies who did not have a suitable family member to serve as a donor.

Dr. Kernan played a vital role in building the National Marrow Donor Program (NMDP). She served on several NMDP committees and its Board of Directors for a quarter century, including as Chair. The NMDP facilitates bone marrow and blood stem cell transplants from unrelated volunteer donors to help patients with life-threatening blood cancers and diseases who do not have a suitably matched relative to serve as a donor. Dr. Kernan feels privileged to have contributed to the founding and development of this vital registry, which now includes more than 20 million donors and has facilitated more than 100,000 unrelated transplants.

During her career, she directed clinical trials of blood stem cell transplants using stem cells from related donors, unrelated volunteers, and cord blood units. These clinical trials resulted in significant manuscripts published in the *New England Journal of Medicine* (*NEJM*), demonstrating that bone marrow transplantation can be a successful treatment for children with acute leukemia. The ability to perform these transplants also required the development of procedures for safely procuring bone marrow from matched sibling donors.

Dr. Kernan authored the first manuscript for the NMDP, also published in the *NEJM*, which demonstrated the feasibility of establishing a volunteer unrelated donor registry (10,000 donors at the time), safe procurement and transportation of bone marrow products, and the potential for a successful outcome in 462 donor-patient pairs.

She also chaired the National Heart Lung and Blood Institute (NHLBI)-sponsored study on cord blood transplantation which established the feasibility of large-scale storage of cord blood units and demonstrated positive clinical outcomes for patients lacking a family member or volunteer unrelated donor. She co-chaired an NHLBI multicenter phase 3 clinical trial in transplantation that established a framework for the present-day Blood & Marrow Transplant Clinical Trials Network, a collaboration between the NMDP and the Center for International Blood and Marrow Transplantation Research.

Later in her career, Dr. Kernan developed expertise in cellular therapies, including the use of CAR T cells to treat patients with acute lymphoblastic leukemia. These approaches also included adoptive therapies with T lymphocytes directed against Epstein-Barr virus (EBV) to treat post-transplantation EBV lymphoma, as well as T lymphocytes directed against cytomegalovirus, a serious infectious complication that can occur after transplantation.

At MSK, Dr. Kernan contributed her extensive experience designing and developing clinical trials to serve as a member and Associate Chair for 13 years of the Institutional Review Board, which is responsible for the ethical review of proposed new clinical protocols. For 14 years, she was also a member, Vice Chair, and Chair of the Research Council, which is responsible for the scientific review of proposed new clinical protocols. Dr. Kernan also served as Chair of the Pediatric Steering Committee for 18 years. This group oversees the approval process of new protocols led by MSK Kids investigators.

When she entered the field of blood stem cell transplantation, Dr. Kernan was excited by its potential to cure leukemia and by its translational nature. The timeline for a successful stem cell transplantation is lengthy. Dr. Kernan enjoyed getting to know her patients and their families as they navigated the ups and downs of their treatment course together. She feels enormously grateful when she receives notices of graduation, wedding, and birth announcements and other life updates showing her patients living healthy and fulfilling lives.

In recognition of her clinical expertise, Dr. Kernan received the MSK Willet E. Whitmore Award for Clinical Excellence in 2004 and was named a “top-doctor” by Castle Connolly for many years. She was also inducted into the 2025 Class of the American Society of Transplantation and Cellular Therapy Fellows Program.