

Pediatric Hematology and Oncology Expert Joins Packard Children's

KATHLEEN SAKAMOTO IS NEW DIRECTOR OF BASS CENTER FOR CHILDHOOD CANCER AND BLOOD DISEASES

In November, Lucile Packard Children's Hospital welcomed a new member to its team of cancer and blood disease specialists. Kathleen Sakamoto, MD, PhD, a pediatric hematologist and oncologist with extensive clinical and research experience, joined Packard Children's as the director of the Bass Center for Childhood Cancer and Blood Diseases and the service chief of hematology, oncology and stem cell transplantation.

"She's an internationally recognized leader in cancer therapy," said Hugh O'Brodovich, MD, the Adalyn Jay physician in chief at Packard Children's. "She's bringing established leadership as a division chief, both in the clinical and the research and education arenas."

Before coming to Packard Children's, Sakamoto led the hematology-oncology division at Mattel Children's Hospital UCLA. Her team also conducted research on how normal blood cells become cancerous, discovering that excessive production of a protein named CREB might contribute to development of acute myeloid leukemia. For her PhD project, Sakamoto studied a new approach to cancer therapy: exploiting the cells' natural ability to get rid of unwanted proteins. By bringing cancer-causing proteins close to an enzyme that tagged them as junk, Sakamoto and her colleagues could direct those proteins to the cells' garbage disposal system.

At Packard Children's, Sakamoto will continue investigating possible therapies for cancer and bone marrow failure. Her team is testing a drug that blocks CREB's ability to bind to other proteins in mice to determine how well it can suppress growth of leukemic cells. She is also developing ways to screen new drugs for a rare blood disease called Diamond Blackfan anemia.

Sakamoto plans to further integrate the Bass Center's scientific research and clinical services. "It's a wonderful opportunity to merge the clinical activities of our division with translational and basic research," she said. "We have fantastic clinicians and scientists here. One of my goals is to bring them together more."

The Bass Center provides diagnosis and state-of-the-art treatments for children with blood diseases and cancer, including leukemia, sarcomas, lymphomas, and liver or kidney tumors. Services include hematology and oncology consultations, chemotherapy, stem cell transplants with bone marrow and cord blood, and long-term follow-up of cancer and stem cell transplant patients.

Bass Center physicians are pursuing many research projects to improve patient care. For example, Rajni Agarwal-Hashmi, MD, section chief of pediatric stem cell transplant at Packard Children's, is exploring better ways to prevent and manage infections in transplant patients. Her team is testing a new, orally administered form of the antiviral drug cidofovir, which may have fewer side effects and cause less kidney damage than the current intravenously



Kathleen Sakamoto, MD, PhD

administered form. Agarwal-Hashmi and her colleagues are also conducting a comprehensive program to annually screen transplant survivors for long-term effects of therapy, in areas such as organ function, neurocognition and development.

Another Bass Center physician, Matthew Porteus, MD, PhD, a pediatric physician-scientist at Packard Children's, is investigating a possible therapy for sickle cell disease and severe combined immunodeficiency. Porteus' team is developing a method to correct the genetic mutations that cause these diseases by editing the DNA in blood cells. The eventual goal is to harvest the patient's blood stem cells, correct their DNA and transplant those cells back into the patient. Porteus hopes to get approval for a clinical trial within three to five years.

For more information about the Bass Center for Childhood Cancer and Blood Diseases at Packard Children's, call **(650) 497-8953** or visit <http://basscenter.lpch.org>. To refer a patient, call **(800) 995-LPCH (5724)**.