



ChildrensHospitalLosAngeles

International Leader in Pediatrics

Richard D. Cordova President and Chief Executive Officer

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Dear Friend,

I am continually amazed by the ability of our transplant surgeons and physicians and their teams of nurses and other caregivers to infuse new life into terribly sick children who might otherwise perish – children like Mitchell Blakey. Mitchell was diagnosed with dilated cardiomyopathy – an enlarged, weakened heart – when he was just eight months old. His mother, a pediatrician, and his uncle, a cardiothoracic surgeon who had just completed a fellowship at Childrens Hospital Los Angeles, knew that our hospital was the very best place for Mitchell. They waited for a donor heart to become available. Finally, just before Valentine’s Day, they received Mitchell’s gift of life. Now, he is laughing, playing and, most importantly, growing, like every child should.

Mitchell’s story illustrates the miracles that happen in a special area of excellence here at Childrens Hospital Los Angeles – transplant medicine. Our transplant programs at Childrens Hospital are very important to us, and I’d like to share with you some of our accomplishments, including our research in the field of transplantation, as well as our vision for the future of transplant medicine here – including cardiothoracic, liver and intestinal, kidney, cornea and hematopoietic stem cell transplantation.

Surgeons at Childrens Hospital performed the hospital’s first kidney transplant in 1967, and our first bone marrow transplant in 1983. Vaughn Starnes, MD, director of the Heart Institute at Childrens Hospital, performed the world’s first pediatric living-donor double lobar lung transplant, right here at Childrens Hospital in 1993. Our first liver transplant was performed in 1998. Today, we are a leader in pediatric transplant medicine, with an extraordinary record of success in heart, lung and heart-lung transplantation; liver, including living-donor and “bloodless” liver transplantation; and kidney transplantation. Our Hematopoietic Stem Cell Transplant Program attracts patients from throughout the United States and around the world – children with leukemia and other malignancies, aplastic anemia and other marrow failures and complex diseases including immunodeficiencies – children with advanced-stage and high-risk diseases for whom there may be no other treatment. The Cornea Institute within our new Vision Center performs more pediatric cornea transplants per year than any other program in the United States, and it was the first hospital in the United States to implant an artificial cornea in a pediatric patient.

Respect ● **Service** ● **Excellence** ● **Knowledge** ● **Teamwork**

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Advances in immunosuppressive therapies over the past decade have decreased organ rejection and, combined with the extraordinary skill of our transplant physicians and surgeons, have led to survival rates generally at, or higher, than the national average for pediatric patients, despite often accepting the most difficult surgeries. This makes it possible for children to live longer, healthier lives.

Leadership and Education

We are good at what we do. But we want to be better still, and we have established a new Pediatric Transplant Center at Childrens Hospital. Henri Ford, MD, vice president and chief of surgery at Childrens Hospital Los Angeles and vice chair of the Department of Surgery at the Keck School of Medicine of the University of Southern California (USC), is working with Smitha Ravipudi, MPH, administrator of Transplant Services, who oversees the liver, kidney and intestinal transplant programs at Childrens Hospital, and partners with colleagues in the Heart Institute to coordinate cardiothoracic transplantation, bringing all of the hospital's solid organ transplant programs together under one umbrella, and aligning the necessary resources and infrastructure to ensure the center's success. When a patient receives an organ transplant, it is a life-long commitment, and we honor this commitment with a dedicated, comprehensive approach to the continuum of care required for such complex procedures.

Our doctors are experts in the field of transplantation. In October, Childrens Hospital hosted The Winston Pediatric Overview of Solid Organ Transplantation, the result of a collaborative vision of Dr. Starnes, the Hastings Distinguished Professor and chair of the Department of Cardiothoracic Surgery at the Keck School of Medicine, and executive director of the new Cardiovascular Thoracic Institute at USC, and our generous donor, Robert L. Winston. The Winston Symposium brought together national leaders in the field of solid organ transplantation, including members of the faculty at Childrens Hospital and the Keck School, as well as transplant ethics expert Robert M. Veatch, PhD, from Georgetown University, to discuss issues, research, leading-edge technology and techniques. Mr. Winston and his wife, Judy, sponsored the symposium as a memorial to their grandson, Ryan. We are thrilled that The Winston Symposium will be an annual event, with the next symposium scheduled for fall of 2007.

In April, the Pediatric Transplant Center hosted the hospital's inaugural Educational Workshop on Pediatric Solid Organ Abdominal Transplantation. The hospital's health plan partners and Childrens Hospital staff attended the educational discussion on pre- and post-transplant care management, aimed at improving the quality of care for the children we treat.

Cardiothoracic Transplantation

The first heart transplant at Childrens Hospital Los Angeles was performed on March 4, 1993; Childrens Hospital is a pioneer and international referral center in pediatric heart, lung and combined heart-lung transplants. Surgeons at Childrens Hospital Los Angeles have performed 54 living-donor lobar lung transplants, and of more than 200 that have been done worldwide, Dr. Starnes has performed 140 such procedures on children and adults.

Physician-scientists at Childrens Hospital are conducting a clinical research initiative to evaluate the benefits of living-donor lobar transplantation. Their research has found that in children and young adults who receive these types of transplants, the lung volume adapts as the patient grows, not by developing new tissue, but by expanding existing tissue to handle increased capacity. They also found that living-

donor transplant patients have a significantly lower incidence of acute and chronic rejection after transplant, compared to patients who receive cadaveric lung transplants.

Liver and Intestinal Transplantation

The hospital's Liver and Intestinal Transplant Program, led by Pediatric Surgical Director Yuri Genyk, MD, assistant director of pancreas and liver transplant surgery at the Keck School of Medicine, and Daniel W. Thomas, MD, head of the Division of Gastroenterology and associate professor of pediatrics at the Keck School, is one of the fastest growing programs of its kind in the western United States. The program now performs more living-donor liver transplants than any pediatric transplant center in the nation, and it has some of the highest pediatric patient survival rates in the country. Partnering closely with the hospital's Division of Gastroenterology, the program continues to educate physicians and case managers in Southern California and beyond about the importance of early identification of potential transplant candidates.

Our investigators are collaborating in a nationwide multi-center research study on acute liver failure, the reason for many transplants. The hospital also has pioneered "bloodless" liver transplants, which involve medical and surgical care without the transfusion of blood or blood products, reducing the risk of infection and immunologic complications.

Kidney Transplantation

Our Kidney Transplant Program, part of the hospital's Division of Nephrology, is led by Brian Hardy, MD, head of the Division of Urology at Childrens Hospital and associate professor of clinical urology at the Keck School of Medicine, and Carl M. Grushkin, MD, professor of clinical pediatrics at the Keck School of Medicine. It is now one of the largest and most experienced kidney transplant programs in the nation. The program's patient survival rates continue to reinforce its place as a leading transplant program in the country, offering living donor transplants and laparoscopic surgery, among other options. The Division of Nephrology also houses the Childrens Dialysis Unit, caring for patients either before transplantation becomes necessary or until a viable organ is available.

Researchers in our Developmental Biology Program at The Saban Research Institute of Childrens Hospital Los Angeles are working with stem cells harvested from amniotic fluid. Their goal is to eventually rescue failing kidneys with cell therapy and tissue engineering, and someday bypass the need for kidney transplants. The team, led by Roger De Filippo, MD, a surgeon in Pediatric Urology and assistant professor of urology at the Keck School of Medicine, has succeeded in using amniotic stem cells to regenerate kidney cells in a developing fetal animal kidney. Unexpectedly, their research has led to regeneration of lung cells as well.

Hematopoietic Stem Cell Transplantation

Nearly four decades ago, transplants of hematopoietic (blood-forming) stem cells first offered the promise of new therapies for cancer, immunodeficiencies and some genetic disorders. These rare stem cells, which can replicate themselves and develop into many functional cell types, were first harvested from bone marrow for the benefit of patients in need. Hematopoietic stem cells also can be retrieved from circulating blood and umbilical cord blood. We now perform nearly 50 percent of the pediatric bone marrow transplants in Los Angeles County.

Our physician-scientists are conducting laboratory research within the Gene, Immune and Stem Cell Therapy Research Program at The Saban Research Institute, directed by Donald B. Kohn, MD, professor of pediatrics and molecular microbiology and immunology at the Keck School of Medicine. We also are using clinical research to constantly develop safer and more effective treatment protocols for HSCT. As one of the largest pediatric HSCT transplant programs in the country, we are uniquely positioned to help the children of tomorrow by improving the treatments of today.

Transplantation and the New Hospital Building

Surgeons operating in our state-of-the-art Burtie Green Bettingen Surgery Center perform the most advanced surgical treatments available. When it is complete in 2009, the New Hospital Building will enhance our ability to care for all of our children – in particular our many pre- and post-transplant patients. This new inpatient facility will further improve our surgical capabilities, too. For example, caregivers in the Cardiothoracic Intensive Care Unit (CTICU) will be able to convert patient rooms into emergency operating rooms in seconds, if necessary, with the use of an innovative surgical “boom” attached to the ceiling.

The New Hospital Building will have leading-edge infection control features, helping us protect patients throughout the hospital. High Efficiency Particulate Air (HEPA) filters will be installed throughout the building. Each unit in the hospital also will have negative pressure rooms – lower-pressure rooms into which air flows when the door is opened – for patients with airborne diseases who are highly contagious, and the new building’s HSCT Inpatient Unit will expand from 11 to 14 advanced-laminar air flow isolation rooms. Each one will be a positive pressure room, into which clean air is continuously filtered, protecting severely immune-compromised children inside.

All of our families will be better served by the design of the New Hospital Building. Family-centered care is a priority at Childrens Hospital, and this will be particularly beneficial to our transplant patients, who often spend weeks or even months at a time in the hospital. Full-sized beds and bathrooms for families right in patient rooms, Internet connectivity and family lounges in every inpatient unit in the hospital will make families feel more comfortable, more welcome and more at ease during one of the most stressful events they will face in their lifetime.

I invite you to call us if you would like to make a difference in the lives of children. We would be happy to give you a tour of our current hospital facilities, and show you the progress of our New Hospital Building as it rises on Sunset Boulevard. Please call 323-361-1742 if you would like more information.

Sincerely,



Richard D. Cordova
President and Chief Executive Officer