

# Pediatric Kidney Transplantation



UPMC Children's Hospital of Pittsburgh performed its first kidney transplant in 1964. Since then, UPMC Children's transplant team has performed kidney transplants on hundreds of children and teenagers, making us one of the most active pediatric kidney transplant centers in the country. Our objective is to restore health and wellness to children suffering from end-stage kidney failure.

UPMC Children's Pediatric Kidney Transplant Program was the first in the world to use tacrolimus as its primary immunosuppressive agent. The use of tacrolimus has enabled the program to achieve outstanding long-term patient and graft survival rates, and also allowed the majority of children to be withdrawn from chronic maintenance steroids. The current regimens, which employ preconditioning with alemtuzumab, allow complete avoidance of steroids after transplant.

- We are one of the world leading centers in the management of transplant-related infections in particular in the management of EBV-related PTLD and BK virus.
- Our team is available to evaluate patients for autotransplantation in conditions such as renal artery stenosis, mid aortic syndrome, nutcracker syndrome, and loin pain hematuria syndrome.
- The Kidney Transplant Program is supported by world-class kidney transplant pathology and histocompatibility services.

### Key facts:

- Named a Pediatric Transplant Center of Excellence by Optum. Selection is evaluated annually and based on the overall volume and unique complexity associated with pediatric transplants.
- UPMC Children's is one of the largest and most active living-donor kidney transplant programs in the nation.
- Our pre-emptive kidney transplantation rate over the previous five years is nearly double the average rate performed across all pediatric kidney transplant centers nationwide (45% vs. 25%) based on data from UNOS/OPTN.
- A member of the Improving Renal Outcomes Collaborative (IROC) Network.
- UPMC Children's is able to perform kidney transplants in children as small as 6-7kg.
- Native nephrectomy is usually not necessary. The UPMC Children's Pediatric Kidney Transplant team does not routinely require native nephrectomies for patients with FSGS and nephrotic syndrome or patients with high-grade reflux without recurrent UTIs.
- Our surgeons have expertise in performing kidney transplant in children with limited vascular access.
- UPMC Children's specializes in multi-organ transplants, including combined liver-kidney, heart-kidney, and multivisceral (liver, pancreas, small bowel, and kidney) transplants. We have also performed a simultaneous living-donor liver and kidney transplant that was featured on the Discovery channel.

### Outcomes

Our kidney transplant survival rates are among the best in the country, which is even more remarkable since we have successfully transplanted more complex patients than national pediatric averages.

#### SURVIVAL RATES\*

##### Patient Survival Rates

1 Year 100% (national average 99%)  
3 Year 100% (national average 99%)

##### Graft Survival Rates

1 Year 100% (national average 98%)  
3 Year 94% (national average 95%)

\*Source: Scientific Registry of Transplant Recipients ([www.srtr.org](http://www.srtr.org)), Jan. 2023 release

### Volumes

Transplant Type	Yearly Average (2015-2022)	Program Inception through 12/31/2022
Living Donor	8	265
Deceased Donor	8	368
<b>Total</b>	<b>129</b>	<b>633</b>

## About UPMC Children's Hospital of Pittsburgh

Regionally, nationally, and globally, UPMC Children's Hospital of Pittsburgh is a leader in the treatment of childhood conditions and diseases, a pioneer in the development of new and improved therapies, and a top educator of the next generation of pediatricians and pediatric subspecialists. With generous community support, UPMC Children's Hospital has fulfilled this mission since its founding in 1890. UPMC Children's is named consistently to several elite lists of pediatric hospitals, including ranking on the prestigious *U.S. News & World Report* annual Honor Roll of Best Children's Hospitals for 2023-2024.



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# Meet the Team

## Our Leadership

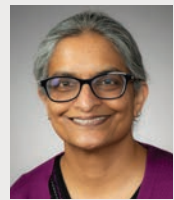


**Armando Ganoza, MD**  
*Surgical Director  
Pediatric Kidney Transplant Program*

Dr. Ganoza is the surgical director of the Pediatric Kidney Transplant Program at UPMC Children's Hospital of Pittsburgh.

He is an assistant professor of surgery at the University of Pittsburgh School of Medicine. He oversees all clinical and research activities for UPMC's Kidney Transplant Program. Dr. Ganoza's clinical interests include kidney, liver, pancreas, and intestinal transplantation in children and adults. He is also experienced in autologous islet-cell transplantation for chronic pancreatitis.

Dr. Ganoza received fellowship training in kidney, pancreas, and small bowel transplant surgery from the Thomas E. Starzl Transplantation Institute and UPMC Children's. He also trained in transplant and hepatobiliary surgery at Medstar Georgetown University Hospital.



**Juhi Kumar, MD**  
*Medical Director, Pediatric Kidney Transplant Program*

Dr. Kumar is the medical director of the Pediatric Kidney Transplant Program at UPMC Children's Hospital of Pittsburgh.

She is an associate professor of Pediatrics at the University of Pittsburgh School of Medicine. Dr. Kumar's clinical interests include kidney transplantation and improving outcomes in pediatric kidney transplant recipients. Her research interests include evaluating biomarkers of kidney allograft injury in children and therapies to mitigate morbidities of mineral bone disorder in pediatric chronic kidney disease.

Dr. Kumar completed her residency in Pediatrics at SUNY Downstate Medical Center, NY, and received her fellowship training in Pediatric Nephrology at the Children's Hospital of Montefiore, Albert Einstein College of Medicine, NY. She is board certified by the American Board of Pediatrics.

## Our Experts



**Melissa Anslow, MD**  
*Pediatric Nephrology*



**Cassandra Formeck, MD**  
*Pediatric Nephrology*



**Dana Fuhrman, DO**  
*Pediatric Nephrology*



**Jacqueline Ho, MD**  
*Pediatric Nephrology*



**Emily Horosko, PA**  
*Pediatric Nephrology*



**Abhinav Humar, MD**  
*Clinical Director, Thomas E. Starzl Transplantation Institute  
Chief, Division of Transplant Surgery at UPMC*



**Michael Moritz, MD**  
*Clinical Director, Pediatric Nephrology  
Medical Director, Pediatric Dialysis*



**Parmjeet Randhawa, MD**  
*Director, Renal Transplant Pathology  
Quality Assurance Program*



**Amit Tevar, MD**  
*Surgical Director, UPMC Kidney and Pancreas Transplant Program*



**Adriana Zeevi, PhD (D) ABHI**  
*Director, Histocompatibility Laboratory*



**Michael Green, MD**  
*Co-Director, Transplant Infectious Diseases*



**Marian Michaels, MD**  
*Co-Director, Transplant Infectious Diseases*



**Glenn Cannon, MD**  
*Chief, Division of Pediatric Urology*



**Rajeev Chaudhry, MD**  
*Pediatric Urology*



**Michael Ost, MD**  
*Pediatric Urology  
Director of Pediatric Surgical Outreach*



**Francis Schneck, MD**  
*Pediatric Urology*



**Jessica Walters, PsyD**  
*Behavioral Pediatrics*

## How To Refer

Physicians can refer patients for transplant evaluation through our outpatient transplant clinic.

Our clinicians are on-call 24-hours a day and are an excellent resource for all aspects of referrals and consultations.

### Transplant Referral Process:

- Referred for transplant
- Preliminary clinical review
- Insurance authorization
- Multidisciplinary evaluations

## Contact Us

Phone: 412-692-6428  
Monday - Friday

Phone: 877-640-6746  
24-hour physician referral service

Fax: 412-692-7443