

## The Student Urinary Tract Program in Education and Research

National Institutes of Health-Funded Fellowship in Nephrology and Urology Research at The Ohio State University and the Kidney and Urinary Tract Center at Nationwide Children's Hospital



When your child needs a hospital, everything matters.

The National Institutes of Health (NIH)-funded Student Urinary Tract Program in Education and Research (SUPER) Summer Training Program is for undergraduate, graduate and medical students interested in research and clinical experiences. The **SUPER Summer Training** Program is designed to attract a talented pool of trainees to the fields of nephrology and urology. This competitive program can fill key training gaps, increase the pediatric nephrology and urology workforce, and ultimately improve patient care through new clinical experiences and research opportunities that accelerate scientific discoveries. Participants in this 10-week summer program will: (A) increase their understanding of urinary tract development, physiology and disease pathogenesis, (B) enhance their knowledge in the basic skills required to be a successful biomedical researcher, (C) be immersed in a research project where they develop a hypothesis and generate data that result in an abstract and poster presentation and (D) have exposure to multidisciplinary careers focused on nephrology and urology.

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#### **Funding**

- Program participants receive a summer salary
- Financial support to attend a national meeting
- Local housing and relocation assistance is available (when applicable)

#### **Eligibility**

- Applicants must be interested in pursuing a graduate or professional degree in medicine, nursing, dentistry, pharmacy, health and rehabilitation services, public health, veterinary medicine or research
- Undergraduate students are eligible to apply after completing their freshman year
- Students must have passing grades in all courses
- Graduate, medical students, veterinary, pharmacy and nursing students are encouraged to apply after their first training year



## Application period with rolling admissions is from October 8 to December 24, 2025.

For more information, email SuperSupport@NationwideChildrens.org

NationwideChildrens.org/Super-Summer-Apply



#### **Program Leadership**



Brian Becknell, MD, PhD
Pediatric Nephrologist
Research Interests: Kidney Obstruction, Pyelonephritis



**Ashley R. Jackson, PhD**Basic Scientist
Research Interests: Urinary Tract Obstruction



Kirk McHugh, PhD
Developmental Biologist
Research Interests: Bladder Development
and Disease



John David Spencer, MD
Pediatric Nephrologist
Research Interests: Urinary Tract Infections



Scan the QR code to learn more about our labs or visit NationwideChildrens.org/kidney-and-urinary-tract-center

#### **Program Mentors**



Linda Baker, MD
Pediatric Urologist
Research Interests: Prune Belly Syndrome



Christina Ching, MD
Pediatric Urologist
Research Interests: Urinary Tract Infections



Gabriel Cara Fuentes, MD, PhD
Pediatric Nephrologist
Research Interests: Nephrotic Syndrome



Vanessa Hale, DVM, MAT, PhD
Principal Investigator (OSU College of Veterinary Medicine)
Research Interests: Gut microbiome and disease



Sheryl Justice, PhD Associate Professor (OSU College of Nursing) Research Interests: Bacterial-host interactions enhancing bacterial persistence during UTI



Bryce A. Kerlin, MD
Pediatric Hematologist
Research Interests: Nephrotic Syndrome



Kirsten Kusumi, MD Pediatric Nephrologist Research Interests: Kidney Stones



Daryl McLeod, MD, MPH
Pediatric Urologist
Research Interests: Congenital Kidney Disease



Nina Mann, MD Pediatric Nephrologist Research Interest: Kidney Genetics



Tahagod Mohamed, MD
Pediatric Nephrologist
Research Interests: Neonatal Acute Kidney Injury



Navjot Pabla, PhD Basic Scientist Research Interests: Acute Kidney Injury



Juan de Dios Ruiz-Rosado, PhD Immunologist Research Interests: Urinary Tract Infections



William E. Smoyer, MD, FASN
Pediatric Nephrologist
Research Interests: Nephrotic Syndrome

Laura Schwartz, PhD



Basic Scientist Research Interests: Urinary Tract Infections



Diana Zepeda-Orozco, MD, MS Pediatric Nephrologist Research Interests: Acute Kidney Injury

# The Student Urinary Tract Program in Education and Research (SUPER)



#### **PUBLICATIONS**

4

#### Including:

- Journal of Robotic Surgery
- · Cell Reports
- Experimental & Molecular Medicine



#### AWARDS

10

#### Including:

- American Society of Pediatric
   Nephrology Trainee
   Research Award
- American Society of Nephrology Kidney Stars
- Abstract of Distinction
- Arts and Sciences Honors Committee Undergraduate Research Scholarships
- Undergraduate Research Forum Presentation
- Featured Poster Award

#### ABSTRACTS COMPLETED

25



#### Including:

- Societies for Pediatric Urology Fall Conference
- Nationwide Children's Kidney and Urinary Tract Symposium
- Midwest Society for Pediatric Research
- American Society of Nephrology Kidney Week
- Pediatric Academic Societies
- Nationwide Children's Research Retreat

- The Ohio State University Research Retreat
- The American Chemical Society Buckeye Chapter: Undergraduate Research Symposium
- Great Minds in STEM Annual Conference





#### **SUPER Testimonials**

#### Natalia Cuyler, Spencer Lab 2024, Chapman University, Orange CA

The SUPER Scholar Program allowed me to grow in ways I never imagined. Coming from across the country, I initially felt nervous and uncertain, but I was quickly embraced by my inspiring mentors, peers and educators who made me feel valued from the start. In the lab, I was given the independence to explore and contribute meaningfully. This autonomy encouraged me to look into new areas of study I might not have considered otherwise. One of the most impactful takeaways came from a mentor whose dedication to the Ronald McDonald House Charity deeply inspired me. Located just across the street from Nationwide Children's Hospital, the charity quickly became a cause close to my heart and one I have continued to support upon returning to California. The SUPER program culminated in an incredible summer symposium where I had the opportunity to present my research and hear from my peers about theirs. Since then, I've shared this same presentation with hundreds of peers and faculty at Chapman University. In February, I was honored to be invited to present at Nationwide's Children's Annual Kidney and Urinary Tract Symposium. It was a full-circle moment, revisiting my research, reconnecting with mentors and learning from researchers from across the country. The SUPER Program has been an incredible experience, opening doors both within and outside the research realm.

#### Livia Bogdan, Kerlin Lab 2024, Purdue University, West Lafayette, IN

Participating in the SUPER scholar program was a truly eye-opening experience that deepened my passion for research, medicine and nephrology. As someone committed to a career as a physician-scientist, the opportunity to lead an independent research project while shadowing physicians at the Kidney and Urinary Tract Center was incredibly meaningful. I had the privilege of working with exceptional scientists and physicians whose insight, mentorship and support solidified my desire to pursue research and clinical practice. I would endlessly recommend SUPER to any student interested in nephrology and urology!

#### Rishil Patel, Becknell Lab 2023, The Ohio State University, Columbus, OH

The SUPER program is a unique experience that combines research and medical opportunities into one great summer! Not only did I learn from principal investigators at the forefront of their respective fields, but I also gained invaluable shadowing experience both in the clinic and the operating room. With the support of my mentors, I was able to present projects completed during this program at several conferences and symposiums to further advance my career. I am incredibly grateful for my time here and proud to be a SUPER graduate!

## Vanessa Arias, Becknell Lab 2024, Ohio University Heritage College of Osteopathic Medicine, Athens, OH

The SUPER program has had a positive impact on my education. It allowed me to expand my knowledge in both clinical and laboratory settings, giving me hands-on experience. Everyone involved in the program was incredibly welcoming and supportive, always willing to help and guide me. I had the opportunity to present at Nationwide Children's Kidney and Urinary Tract Symposium which was an unforgettable and rewarding experience that pushed me outside of my comfort zone and helped build my confidence. With the guidance of my mentors, I've grown both personally and professionally. I've learned so much from them. I will always be grateful for their support and encouragement.

#### Mrina Murali, Spencer Lab 2024, The Ohio State University, Columbus, OH

The SUPER program at Nationwide Children's provided me with valuable and exciting opportunities to become more exposed to the field of research while also expanding my knowledge of nephrology and urology. During my internship, I had the privilege of working with Dr. Spencer's dedicated lab team where I gained insights into the relationship between UTIs and kidney disease. This experience motivated me to continue my research with this lab into the academic year. I really liked how the program also offered exposure to clinical settings, allowing me to have first-hand experience in both research and patient care. This program has been an extraordinary learning experience, and I am grateful I was able to participate.

### Matthew Ruge, Cara Fuentes Lab 2024, Central Michigan University, Saginaw, MI

I thoroughly enjoyed my time in the SUPER Scholars Program! The program provided the perfect mix of research and shadowing opportunities. Since my time there I have been able to continue my work and present my research at regional conferences!

#### Andrew Hardman, Jackson Lab 2023, The Ohio State University, Columbus, OH

Being a SUPER Summer student was an extremely impactful and exciting experience. I gained exposure to basic science and wet lab techniques while working on my own research project. Beyond just the science, though, the SUPER program put me in contact with inspirational mentors who constructively challenged me and a cohort of other research students whose fellowship and collaboration culminated in an educationally and socially enriching summer for us all.



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