FELLOWSHIP PROGRAM IN PEDIATRIC UROLOGY
BOSTON CHILDREN’S HOSPITAL

Program Description:
The Alan B. Retik Fellowship Program in Pediatric Urology is a 2-year ACGME-accredited fellowship (with an optional 3rd research year). The first year is a busy clinical year during which fellows are exposed to the full spectrum of pediatric urological care. During the 2nd year fellows can choose from a multitude of research options, including clinical/health services research, basic research, and translational research. We fully support our fellows getting various advanced degrees through Harvard University. Fellows can elect to extend their research fellowship by one year, which some advanced degree programs require. Our faculty includes 16 pediatric urologists, 3 pediatricians, 4 research faculty, a clinical psychologist, and a jointly appointed nephrologist and radiologist.

We have switched back to offering two fellow positions per year. In order to implement these changes to our fellowship structure we will be interviewing for one fellow position for the next interview cycle (2024) and two fellow positions in 2025 with the goal of having two clinical fellows at a time.

Inpatient Clinical Volume:
- 500 admissions per year
- 1,200 consults per year
- 2,800 surgical cases per year

Clinical Facilities:
- Inpatient services: Boston Children’s Hospital, Longwood (Boston); Boston Children’s Hospital at Waltham
- Outpatient locations: Boston Children’s Hospital, Longwood; Boston Children’s Hospital at Waltham; Boston Children’s Hospital at Lexington

Clinical Faculty:
Carlos R. Estrada, Jr, MD, MBA – Urologist-in-Chief
Erin R. McNamara, MD, MPH – Program Director
Shima Anwar, MD, PhD
Stuart B. Bauer, MD
Joseph G. Borer, MD
Bartley G. Cilento, Jr, MD, MPH – Vice Chair, Clinical Operations
Julia B. Finkelstein, MD, MPH
Christine FitzGerald, MD, PhD
Méline A. Keays, MD, MSc
Michael P. Kurtz, MD, MPH
Richard S. Lee, MD - Vice Chair, Research
Ted Lee, MD, MSc
Siam Oottamasathien, MD
Caleb P. Nelson, MD, MPH - Director, Clinical and Health Services Research
Hatim Thaker, MD
Hsin-Hsiao Scott Wang, MD, MPH, MBA
Margaret Werner, MD
Rena Xu, MD, MBA
Richard N. Yu, MD, PhD
Lillian Hayes, PhD
Jeanne S. Chow, MD - Radiology
Deborah R. Stein, MD – Nephrology

Urological Diseases Research Center:
Rosalyn M. Adam, PhD – Director, Basic Research
Min Dong, PhD
John Froehlich, PhD
Zohreh Izadifar, PhD

Conferences:
- Pediatric Urology/Radiology Conference; weekly
- Pediatric Urology Indications Conference; weekly
- Pediatric Urology Grand Rounds; weekly
  - Journal Club; monthly
  - Department Research Meeting; monthly
  - M&M; monthly
- Endocrine/Pediatric Urology joint conference; bi-annually
- Clinical Research Work-in-Progress meeting; weekly
- Laboratory Work-in-Progress meeting; weekly
- Laboratory Journal Club; bi-weekly

Residency Training Programs (4-6 residents on service each month):
- Beth Israel Deaconess Medical Center Urology Residency
- Brigham & Women’s Urology Residency
- Lahey Hospital & Medical Center Residency
- Boston Medical Center Urology Residency (Boston University)
- Harvard Urologic Surgery Residency (Mass General)
Clinical Research Program Description: Fellows opting to pursue the clinical research track may participate in the Program in Clinical Effectiveness through the Harvard School of Public Health. This program is designed for the clinician seeking to develop quantitative and analytic skills needed for clinical research, and begins with a summer curriculum in clinical epidemiology, biostatistics, health policy, decision analysis, and research methodology. The program culminates in a Master of Public Health degree. Current research projects range from health service utilization and disparities in urologic surgery to surgical outcomes research.

Basic Science Research Program Description: The basic science research program comprises 4 full time basic science researchers and 4 surgeon-scientists conducting research on a range of topics relevant to urology. The principal investigators receive extramural funding from federal agencies, including the NIH and DOD, as well as foundations and industry. Research projects include: pathophysiology of urinary tract obstruction, tissue engineering, mass spectrometry-based proteomics and glycoproteomics to identify urinary biomarkers of urologic disease, bladder inflammation, novel drug delivery mechanisms, physiology of neurotoxins and fundamental studies of bladder function.

There is now an opportunity for our fellows who choose the basic-science track to obtain a formal degree. The Master of Medical Science in Clinical Investigation (MMSCI) program is designed to provide training for postgraduate clinician-scientists to facilitate successful research careers upon graduation. Newly launched in 2020, the addition of a translational investigation track provides in-depth training in contemporary techniques in bench research and places strong emphasis on systems biology and omics analysis, in addition to biostatistics and epidemiology. The two-year program combines innovative pedagogical methods with an individual mentored research experience under the direct supervision of a Harvard mentor.

Clinical, Translational, and Health Services Research Program Description: Fellows opting to pursue a non-laboratory research experience have a number of areas of concentration from which to choose. Most of our fellows have completed a Master's program at the Harvard-Chan School of Public Health (HSPH) during their research years. The longest-running pediatric research training program in the country is the Harvard-Wide Pediatric Health Services Research Fellowship Program, a highly-structured, comprehensive two-year program involving mentorship from research faculty across the Harvard institutions, including of the Division of General Pediatrics and Department of Urology at BCH. This fellowship requires a separate application process, and several of our pediatric urology fellows have been accepted to this program. Most of our fellows have also completed the Program in Clinical Effectiveness through the Harvard School of Public Health, an intensive summer program focused on skills needed for clinical research including epidemiology, biostatistics, health policy, decision analysis, and research methodology. Additional areas of interest that various fellows
have pursued during their Master’s program include health policy, genetic epidemiology and statistical genetics, and advanced analytics and machine learning. Our fellows have also been accepted into the Harvard Medical School (HMS) Fellowship in Safety and Quality and the HMS Master’s in Medical Education.

Pediatric urology fellows at Boston Children’s Hospital have access to the most wide-ranging, comprehensive selection of academic opportunities available in any fellowship in the world. Recent and ongoing research projects range from translational work on biomarkers and diagnostic testing, to analysis of practice patterns and trends through administrative data analysis, to surgical trials and outcomes, as well as health service utilization and disparities in delivery of urological care. With one full year and an optional additional year completely protected for academic efforts, our fellows have the time and resources to truly expand their horizons and master complex topics, and this is consistently reflected in their academic productivity.

Please review link for a list of programs in the Boston/Harvard ecosystem. Program selection is a collaborative process between the fellow and the urology faculty. Tuition for approved graduate degree programs is fully covered by the Department.

Contact Information:
Jill Harris Tucker, Program Manager
Boston Children’s Hospital
Department of Urology
300 Longwood Avenue, HU-390
Boston, MA 02115

Phone: 617-355-3341
Fax: 617-730-0474
Email: jill.tucker@childrens.harvard.edu