FELLOWSHIP PROGRAM IN PEDIATRIC UROLOGY
BOSTON CHILDREN’S HOSPITAL

Program Description:
The Alan B. Retik Fellowship Program in Pediatric Urology is a 3-year fellowship, two of which are ACGME-accredited. The first two years are dedicated to research and the third year is clinical. Fellows can choose from a multitude of research options, including basic science, clinical/health services research, and translational research. We support our fellows getting advanced degrees during this time. The third year is devoted to clinical training. We have 17 clinical pediatric urologists, all of whom conduct research, 4 full time research faculty, a clinical psychologist, and jointly appointed nephrologist and radiologist.

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
Stuart B. Bauer, MD
Joseph G. Borer, MD
Marc Cendron, MD
Bartley G. Cilento, Jr, MD, MPH
Julia B. Finkelstein, MD, MPH
Mélise 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 Research
Hatim Thaker, MD
Hsin-Hsiao Scott Wang, MD, MPH, MBAn
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
Michael Li, 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 and kidney 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 intellectual 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 two full years 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 this 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:**
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