Combined Harvard Urologic Oncology Fellowship Program
Combined Harvard Fellowship

Mass General Brigham

MGH 1811

BWH

Dana-Farber Cancer Institute

HARVARD MEDICAL SCHOOL

HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH
History of Fellowship Program

- Urologic Oncology Fellowship at MGH 2005
- SUO Accreditation at MGH 2011
- Brigham & Women’s Hospital as Affiliate member 2013
  - First combined fellows entered July 2014
- SUO Accredited Combined Harvard Urologic Oncology Fellowship between MGH & BWH 2015
Goals of Urologic Oncology Fellowship

• Provide a comprehensive and outstanding clinical education in all aspects of urologic oncology

• Build upon and capitalize on the already solid foundation in urologic oncology from residency

• Provide the opportunity for quality and meaningful research – Clinical, Translational, Basic Science
  • Clinical Effectiveness Program – Harvard School of Public Health
  • Mentorship, collaboration and teamwork

• Provide the tools necessary to launch your career and achieve your goals
SUO Fellowship Curriculum

Year 1:

- Summer Program Clinical Effectiveness Course at Harvard School of Public Health (if redundant for fellow, can arrange other educational endeavor)
- Development of research projects
- 80% research, 20% clinical
- Participate in one half-day GU Oncology Multidisciplinary Clinic
- MGH – fusion biopsy clinic and prostate imaging conference
- During first year, there will be some periodic surgical exposure after completion of the Clinical Effectiveness Course
- Fellow will share weekend call with Urology Cabot Attending at Mass General (one weekend per month) or attending call at Brigham & Women’s
- 6 months at MGH, 6 months at BWH
SUO Fellowship Curriculum

• Year 2

  ▪ 6 months at MGH, 6 months at BWH/Dana Farber
  ▪ 80% clinical, 20% research
  ▪ GU Medical Oncology and Radiation Oncology Rotation: 4 dedicated weeks with GU Medical and Radiation Oncologists at MGH or BWH/Dana Farber Cancer Institute
  ▪ GU Oncology Pathology – one morning a week during rad onc/med onc month
  ▪ Surgical exposure in the operating room will increase during second year with attention to specific urologic oncologic cases.
  ▪ Fellow will maintain and manage his/her own clinic session for a one half-day session per week → operative cases booked with fellow as attending surgeon
  ▪ Fellow will continue to share in the weekend on-call at MGH or weekly attending call at BWH
MGH – First surgery using Ether (1846)
MGH Urologic Oncology Faculty

Michael Blute, MD (Chair – Department of Urology)
Adam Feldman, MD, MPH
Douglas Dahl, MD
Niall Heney, MD
Francis McGovern, MD
Matthew Wszolek, MD
Dimi Zlatev, MD
Keyan Salari, MD, PhD
MGH (non-oncology) Urology Faculty

Elise De, MD – Female & neurourology
Martha Dyer, MD – General urology
Brian Eisner, MD – Stones & endourology
Jack Elder, MD – Pediatric urology
Pablo Gomery, MD – Female & neurourology
Steven Kahan, MD – General urology
Michelle Kim, MD, PhD – General & female urology
Matt Massicotte, MD – General urology
Jason Michaud, MD, PhD – Pediatric urology
Ajay Nehra, MD – Sexual medicine & andrology
Siam Oottamasathien, MD – Pediatric urology
Dianne Sacco, MD – Stones & endourology
Ajay Singla, MD – Female & neurourology
Anton Wintner, MD – Reconstructive urology
MGH Adjunct Faculty

Medical Oncology:
Othon Iliopoulos, MD, PhD
Richard J. Lee, MD, PhD
Dror Michaelson, MD
Phil Saylor, MD
Matthew Smith, MD, PhD
Xin Gao, MD, PhD

Radiation Oncology:
Jason Efstathiou, MD, DPhil
Sofia Kamran, MD
David Miyamoto, MD, PhD
Christine Olsen, MD
William Shipley, MD
Anthony Zietman, MD

Pathology:
Esther Oliva, MD
Peter Sadow, MD, PhD
Chin-Lee Wu, MD, PhD
Robert Young, MD

Radiology:
Ron Arellano, MD
Debra Gervais, MD
Mukesh Harisinghani, MD
Peter Mueller, MD
Outpatient Visits: 33,935
- 19% increase FY 17 → FY 19

Outpatient Office Procedures: 9,710
- Cystoscopy, laser fulguration bladder tumors, vasectomies, stent placement and removal, minor surgical procedures, periurethral injections, prostate biopsies, urodynamics
- 50% increase FY 17 → FY 19

Main OR Procedures (six operating rooms): 1,190 cases
- 21% increase FY 17 → FY 19

Inpatient Admissions: 1,110
- 9% decrease FY 17 → FY 19
MGH to Longwood Campus -
BWH – First organ transplant (kidney) 1954
BWH Faulkner Hospital
BWH Urologic Oncology Faculty

Adam Kibel, MD (Chair – Division of Urologic Surgery)
Steven Chang, MD, MS
Matt Mossanen, MD
Mark Preston, MD, MPH
Graeme Steele, MD
Quoc-Dien Trinh, MD
Daniel Wollin, MD
BWH (non-oncology) Urology Faculty

Elodi Dielubanza, MD – Female & neurourology
George Haleblian, MD – Stones & endourology
Martin Kathrins, MD – Sexual medicine & andrology
Michael Malone, MD – General urology
Michael McDonald, MD – General urology
Michael O’Leary, MD, MPH – General urology
BWH Adjunct Faculty

**Medical Oncology:**
- Atish Choudhury, MD, PhD
- Toni Choueiri, MD
- William Hahn, MD
- Lauren Harshman, MD
- Elizabeth Henske, MD
- Mark Pomerantz, MD
- Christopher Sweeney, MD
- David Takada, MD, PhD
- Mary-Ellen Taplin, MD
- Eliezer Van Allan, MD
- Matthew Vander Heiden, MD, PhD
- Xiao Xiao Wei, MD
- Himisha Beltran, MD
- Bradley McGregor, MD
- Kerry Kilbridge, MD
- Daniel Roberts, MD
- Srinivas Viswanathan, MD, PhD
- David Braun, MD, PhD
- Arvind Ravi, MD, PhD

**Radiation Oncology:**
- Anthony D’Amico, MD, PhD
- Neil Martin, MD
- Paul Nguyen, MD
- Kent Mouw, MD, PhD
- Martin King, MD

**Pathology:**
- Michelle Hirsch, MD, PhD
- William Welch, MD

**Radiology:**
- Claire Tempany, MD
BWHC Clinical Volume: FY 2019

Outpatient E&M Visits - 29,725

  20% increase FY17 – FY19

Outpatient Office Procedures - 24,953

  Cystoscopy, vasectomies, stent placement and removal, Urodynamics Studies,
  Prostate BX, MRI Prostate BX, minor surgical procedures, etc.

  18% increase FY17 – FY19

New Patient Volume – 6999

  18% increase - FY17 – FY19

OR Cases - 4425

  FY17 – FY19 – over all 10% growth
MGH and BWH Residency Format

- 3 residents/yr at MGH and 3 residents/yr at BWH
- 1 year general surgery
- 4 mo, 8 mo or 12 mo research (MGH)
- 4 years urology
- At MGH an additional 4 months attending position: Cabot Service Chief
Academic Productivity-MGH

• >150 publications per year between the two institutions
• Many externally funded research grants
Basic/Translational Research Labs:
• Adam Feldman, MD, MPH
• Siam Oottamasathien, MD
• Keyan Salari, MD, PhD
• Chin-Lee Wu, MD, PhD
• Othon Iliopoulos, MD, PhD
• Leo Cheng, PhD
• David Miyamoto, MD, PhD/
  Jason Efstathiou, MD, Dphil

Imaging Research:
• Mukesh Harisnghani, MD
• Ron Arellano, MD/ Deb Gervais, MD
Research - MGH

Specimen Biobanks:
- Urine bank – Bladder Cancer (Hematuria), Prostate Cancer
- Blood – Partners Biobank

Specimen Biobanks:
- Fresh Frozen Tissue:
  - Prostate (3547)
  - Kidney (1091)
  - Bladder (244)
  - Testis (140)
  - Adrenal (221)
Clinical Databases:

- Prostate Cancer – Active Surveillance, RP, EBRT
- Prostate Cancer – mpMRI-US fusion biopsy, Transperineal biopsy
- Renal Cell Carcinoma – Radical Nephrectomy, Partial Nephrectomy, Percutaneous Ablation
- Renal Mass Biopsy
- Bladder Cancer – Radical Cystectomy
- Bladder Cancer – Tri-modal Therapy (Bladder Sparing)
- Penile Cancer
Funded Trials

- **Prostate** – Biomarker studies (Kibel), Pre-treatment genomic assessment (PRO-IMPACT, Kibel), Neoadjuvant ADT prior to prostatectomy (PROTEUS, Kibel), Role of PARP2 in prostate cancer (Jia), Androgen receptor and WNT signaling (Jia), PSA studies (Preston), Implantable microdevice for prostate cancer (Kibel)

- **Bladder** – ERAS (Preston), Entereg (Preston), BCG and T cell (Preston), Pembrolizumab for NMIBC (Preston), Neoadjuvant immunotherapy (Mossanen),

- **Kidney** – Biomarkers for RCC and Renal function (Chang), Organoids for kidney development (Chang)

- **HSR** – Radical/ethnic disparities (Trinh), Fiscal/Readiness Impact of Complex Care (Trinh), ACO and GU cancers (Trinh), mobile health app and ADT (Trinh)
MGH & BWH/DFCI at Forefront of Progress

1846

1954-First successful human organ transplant

Joseph Murray, MD
1990 Nobel Laureate in Physiology / Medicine
BWH

Jack W. Szostak, PhD
2009 Nobel Laureate in Physiology / Medicine
MGH

William Kaelin, MD
2019 Nobel Laureate in Physiology / Medicine
DFCI