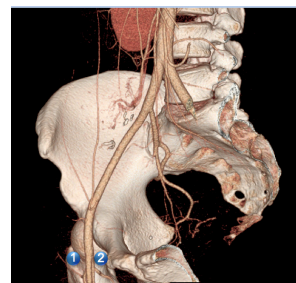


Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Department of Radiology: Abdominal Imaging & Intervention Fellowship Program



Abdominal Imaging • Body MRI • Breast Imaging • Cardiothoracic Imaging • Musculoskeletal Imaging • Neuroradiology

Department of Radiology
Beth Israel Deaconess Medical Center
330 Brookline Ave., TCC-4
Boston, MA 02215

Program Overview

Our department prides itself on being supportive of its fellows and places strong emphasis on the quality of teaching on a person-to-person basis. Please see our website:

<http://www.bidmc.org/MedicalEducation/Departments/Radiology/Fellowships.aspx>

Departmental

Daily didactic morning conferences are held for the residents. The fellows are welcomed to attend these conferences as their schedule permits. Department faculty, residents and fellows provide most didactic lectures, with frequent lectures from outside HMS faculty, past residents, as well as guest lecturers from around the world. Visiting professors from other major teaching centers in the United States and abroad spend varying periods of time in the Department. Some have taken sabbatical leave at the Beth Israel Deaconess Medical Center.

Medical Center

Radiology also has a close working relationship with a number of clinical services outside our department, which allows Radiology to participate in a number of management conferences, including Medical Management, Melanoma Management and Urology Management, as well as Chest, Pancreatico-biliary, and Liver conferences, and Medical and Surgical Grand Rounds.

Boston

There are many great medical conferences sponsored not only by Harvard-affiliated programs, but also by a number of other medical centers. The monthly New England Roentgen Ray Society meeting is one of the more popular Radiology meetings that also includes a special program for residents and fellows. Seminars and lectures in radiology are also held at adjacent Harvard-affiliated hospitals which include the Brigham and Women's Hospital and Boston Children's Hospital.

Current Radiology Fellowships*:

- Abdominal Imaging
- Body MRI
- Breast Imaging
- Cardiothoracic Imaging
- Musculoskeletal
- Neuroradiology

*Interventional Radiology:

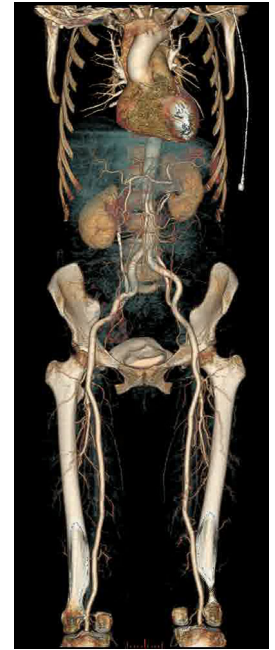
Due to the creation of the integrated and independent IR residency programs, the vascular and interventional radiology fellowship program is no longer accepting applications for matriculation.

For more information:

<https://www.bidmc.org/medical-education/medical-education-by-department/radiology/residencies-in-radiology/interventional-radiology-integrated-pathway-residency>



Abdominal Imaging & Intervention



Non-Match Programs	Timeline	Important Dates
*Interview Embargo Dates	Interviews may begin	December 1
	Interviews completed	March 31
Acceptance Embargo Date	No fellowship may offer acceptances before this date	December 1

**Exception: Internal candidates, international candidates, military candidates, and spouses are excluded from the embargo date timeline.*

Overview

This ACGME-accredited one year fellowship provides an in-depth abdominal imaging experience utilizing all high-tech imaging modalities. Fellows participate in the clinical work and responsibilities of the Abdominal Imaging section and coordinate and integrate all CT, MRI, US and fluoroscopy studies with clinico-pathologic findings. The program also includes exposure to a large volume of CT and MRI cases. Fellows become familiar with state-of-the-art equipment (including 3T MRI, endoluminal US, and 256- and 320-row CT scanners) and actively participate in the management of complex disease processes through presentation in multi-disciplinary conferences and in the interventional suite. The program offers a wealth of abdominal interventional training in all cross-sectional modalities including biopsies, drainages (including percutaneous cholecystostomy), fluid aspirations (paracentesis, thoracentesis), seed placement for cyberknife therapy and radio-frequency ablations. Fellows will become familiar with and utilize the image processing laboratory. Teaching opportunities include formal resident teaching assignments in conferences and teaching at the PACS workstation as well as supervision of residents on rotation. Academic opportunities include participation in existing and new research projects. Research mentors are assigned to every fellow and will assist the fellow in navigating a research project from IRB application to manuscript publication. Fellows will receive dedicated instruction in quality assurance, participate in QA conferences and learn how to complete a PQI project.

Applying - **Please DO NOT STAPLE any part of your application**

Please send (3) letters of recommendation, your CV, personal statement, transcript of medical school record, USMLE/LMCC, and application form to **Samantha Sarblah**.

Contact Information:

Samantha Sarblah
 Program Coordinator Residency & Fellowship
 Programs Department of Radiology
 Beth Israel Deaconess Medical Center
 330 Brookline Avenue, Sherman 231
 Boston, MA 02215
 T: 617-667-3524
 F: 617-667-3513
 ssarblah@bidmc.harvard.edu

Prerequisite training for entry into this fellowship program includes satisfactory completion of a diagnostic radiology residency program accredited by the ACGME or the Royal College of Physicians and Surgeons of Canada (RCPSC).

ABDOMINAL IMAGING FACULTY



Bettina Siewert, MD

Executive Vice Chair of Radiology
Vice Chair of Radiology for Quality, Safety & Performance Improvement
Associate Professor of Radiology, Harvard Medical School

Dr. Siewert earned her medical degree from Friedrich Wilhelm University Medical School in Bonn, Germany and completed residency training in radiology at Beth Israel Deaconess Medical Center, becoming Chief Resident in 2001. She also completed research fellowships in MRI at the New England Deaconess and Beth Israel Hospitals. In 1997, she completed a clinical fellowship in CT/MRI Body Imaging at what became the Beth Israel Deaconess Medical Center. Dr. Siewert has published more than 63 original articles and presents her work at professional conferences worldwide. She is the recipient of The Risa and Felix Fleischner Young Investigator Award for Outstanding Research and the Andrew Frank Berezin, MD Award for Excellence in Clinical Mentoring of Fellow Residents. Most recently, she was awarded the Robert E. Lenkinski Excellence in Academic Mentoring Award 2010.

Research interests:

- Imaging evaluation of acute abdominal pain
- CT Colonography
- Cyberknife therapy
- Quality Assurance

Contact: bsiewert@bidmc.harvard.edu



ABDOMINAL IMAGING FACULTY



A. Fourie Bezuidenhout, MD

Staff Radiologist, Abdominal Imaging, BIDMC
Instructor in Radiology, Harvard Medical School

Fellowships at BIDMC:

- Cardiothoracic Imaging
- Neuroradiology
- Abdominal Imaging

Residency

Diagnostic Radiology, Tygerberg Hospital/
University of Stellenbosch, Cape Town, South Africa

Medical School

MB ChB - University of Pretoria
Pretoria, Gauteng, South Africa

Recent Publications:

Bezuidenhout AF, Andronikou S, Ackermann C, Du Plessis AM, Basson D, Bhadelia RA. "Barbell Sign": A Diagnostic Imaging Finding in Progressive Multifocal Leukoencephalopathy. *J Comput Assist Tomogr.* 2018 Jul/Aug;42(4):527-530. PMID: 29787494.

Bezuidenhout AF, Boiselle PM, Heidinger BH, Alape D, Buitrago DH, Majid A, Gangadharan SP, Litmanovich DE. Longitudinal Follow-up of Patients With Tracheobronchomalacia After Undergoing Tracheobronchoplasty: Computed Tomography Findings and Clinical Correlation. *J Thorac Imaging.* 2018 Jun 27. PMID: 29957676.

Bezuidenhout AF, Kasper EM, Baledent O, Rojas R, Bhadelia RA. Relationship between pineal cyst size and aqueductal CSF flow measured by phase contrast MRI. *J Neurosurg Sci.* 2018 Feb 23. PMID: 29480683.

Contact: abezuide@bidmc.harvard.edu



Olga R. Brook, MD, FSBTMR

Staff Radiologist, Vascular & Interventional Radiology and
Abdominal Imaging
Clinical Director of CT Services
Associate Professor of Radiology, Harvard Medical School

Fellowships:

Clinical Fellowships, BIDMC

- Abdominal Imaging
- Body MRI
- Interventional Radiology
- Ultrasound/Women's Imaging

Residency:

Diagnostic Imaging
Rambam Medical Center, Haifa, Israel

Medical School:

Bruce Rappaport Faculty of Medicine,
Technion – Israel Institute of Technology
Haifa, Israel

Research Interests:

- Superselective vs lobar transarterial chemoembolization
- Gemstone Imaging/Cyberknife Therapy
- Pancreatic Imaging
- Quality Improvement and radiation dose reduction in Radiology

Contact: obrook@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Cinthia Cruz-Romero, MD

Staff Radiologist, Abdominal Imaging, BIDMC
Instructor in Radiology, Harvard Medical School

Fellowships at Massachusetts General Hospital:

- Nuclear Imaging
- Abdominal Imaging
- Nuclear Imaging

Residency

Radiology and Medical Imaging
San Juan de Dios Hospital-Universidad de Costa Rica

Medical School

MD - Medicine and Surgery,
Universidad de Costa Rica

Recent Publications:

Thrall JH, Li X, Li Q, **Cruz C**, Do S, Dreyer K, Brink J. Artificial Intelligence and Machine Learning in Radiology: Opportunities, Challenges, Pitfalls, and Criteria for Success. *J Am Coll Radiol*. 2018 Mar;15(3 Pt B):504-508. PMID: 29402533.

Contact: ccruzrom@bidmc.harvard.edu



Alexander Goehler, MD, PhD,
MPH, MSc

Staff Radiologist, Abdominal Imaging, BIDMC
Instructor in Radiology, Harvard Medical School

Fellowships:

- Abdominal Imaging and Interventions & Clinical Based Imaging, BWH
- Clinical/Research Fellow - Cost-Effectiveness of new technologies in cardiovascular disease, MGH - Institute for Technology Assessment

Residency:

Radiology
Yale New Haven Hospital, New Haven, CT

Medical Degrees:

MD - Medicine
PhD - Microbiology
Charite – Universitaetsmedizin, Berlin, Germany

MSc - Epidemiology
Technical University, Berlin

MPH - Quantitative Methods
Harvard T.H. Chan School of Public Health

Recent Publications:

Goehler A, Moore C, Manne-Goehler JM, Arango J, D'Amato L, Forman HP, Weinreb J. Clinical Decision Support for Ordering CTA-PE Studies in the Emergency Department-A Pilot on Feasibility and Clinical Impact in a Tertiary Medical Center. *Acad Radiol*. 2018 Oct 30. pii: S1076-6332(18)30432-X. PMID: 30389307.

Engel LC, Landmesser U, **Goehler A**, Gigengack K, Wurster TH, Manes C, Girke G, Jaguszewski M, Skurk C, Leistner DM, Lauten A, Schuster A, Noutsias M, Hamm B, Botnar RM, Bigalke B, Makowski MR. Noninvasive Imaging of Endothelial Damage in Patients With Different HbA(1c) Levels: A Proof-of-Concept Study. *Diabetes*. 2019 Feb;68(2):387-394. PMID: 30487264.

Contact: agoehler@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Sonia Gupta, MD

Staff Radiologist, Abdominal Imaging/Ultrasound
Modality Director, Ultrasound Services, BIDMC

Dr. Gupta earned a BA in Anthropology at the University of North Carolina, Chapel Hill and her MD from Wake Forest School of Medicine, Winston-Salem, NC. Following residency at the Christiana Care Hospital in Newark, DE and fellowship in abdominal imaging at Duke University Medical Center, Durham, NC, she served as an attending in abdominal imaging at Temple University School of Medicine, Philadelphia, PA. Also while at Temple University, she served as Director of the Abdominal Radiology Curriculum for Radiology residents. She comes to BIDMC as the modality director for ultrasound services. Beginning in 2010, she has pursued her interest in radiology advocacy through the American College of Radiology, attaining leadership roles and national recognition as Chair for ACR's Young Professionals and Early Career section and as a member of the ACR Committee for Women.

Contact: scgupta@bidmc.harvard.edu



Robert Kane, MD

Staff Radiologist, Abdominal Imaging/Ultrasound
Radiology Executive Committee, BIDMC
Professor of Radiology, Harvard Medical School

Dr. Kane graduated from Boston College with a *BS cum laude* in Biology in 1967 and earned his MD from Tufts Medical School in 1971. He completed his internship year at Mt. Auburn Hospital and his residency in diagnostic radiology at Massachusetts Hospital in 1975. He was certified by the American Board of Radiology in the same year. He completed a fellowship in angiography and ultrasound at the New England Deaconess Hospital and subsequently joined the Deaconess Radiology staff. Distinctions include election to Alpha Omega Alpha medical honor society and induction as Fellow of the American College of Radiology and the Society of Radiologists in Ultrasound. He serves on the Editorial Boards of Surgical Oncology and the Journal of Clinical Ultrasound and as a Reviewer for many other scientific journals. He is past president of the Massachusetts Radiological Society and the New England Ray Society, and is a member of the Commission on Ultrasound for the ACR.

Research interests:

- ultrasound guided hepatic cryosurgery
- intraoperative & laparoscopic ultrasonography
- prostate cancer

Contact: rkane@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY

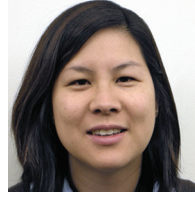


Jonathan Kruskal, MD, PhD

Chairman, Department of Radiology, BIDMC
Chairman, Radiology Executive Committee, HMS
Vice Chairman, Medical Executive Committee, BIDMC
Chairman, Interventional Procedures Committee, BIDMC
Professor of Radiology, Harvard Medical School

Dr. Kruskal received his medical training (MB, ChB) at the University of Cape Town in South Africa, and joined the South African Liver Research Center to pursue a PhD in molecular biology (specifically, liver tumor physiology) before coming to the USA as a research fellow in anesthesiology and toxicology at Vanderbilt University Medical Center in 1987. In 1994, he completed radiology residency training at New England Deaconess Hospital, Boston. He is the recipient of numerous research and teaching awards, twice receiving the Teacher of the Year and Resident Appreciation Awards from the Radiology residents at Beth Israel Deaconess Medical Center, the Bernard Pimstone Award for Best Young Laboratory Investigator, Faculty of Medicine, University of Cape Town, and the Radiological Society of North America's Scholar Award. He was awarded the International Traveling Professorship, and twice received the Roscoe E. Miller Award for best scientific paper presented from the Society of Gastrointestinal Radiologists. Dr. Kruskal has authored more than 150 scholarly publications and has been on the forefront of quality assurance initiatives in radiology.

Contact: jkruskal@bidmc.harvard.edu



Karen Lee, MD

Staff Radiologist, Emergency Radiology/Body MRI
Director of Radiology Fellowship Training Programs
Director, Body MRI Fellowship Program, BIDMC
Assistant Professor of Radiology, Harvard Medical School

Fellowship:

Body MRI, BIDMC

Residency:

Diagnostic Radiology, BIDMC

Internship:

Internal Medicine, BIDMC

Medical School:

Harvard Medical School, Boston, MA

Research interests:

- MRI for the diagnosis of acute appendicitis in pregnancy
- MRI prevalence of incidental pancreatic cysts
- Gadofosveset-enhanced MRA for the evaluation of pulmonary embolus
- MRI of tracheobronchomalacia with CT correlation
- Non-contrast MR techniques for detecting abdominal and pelvic neoplasms

Academic Activities/Achievements:

- Chief Resident (2006)
- Faculty Award for Excellence in Teaching (2010)

Contact: kslee@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Deborah Levine, MD

Co-Chief, Ultrasound
Director, Obstetric & Gynecological Ultrasound
Professor of Radiology, Harvard Medical School

Fellowship:

Ultrasound, University of California, San Francisco

Residency:

Diagnostic Radiology, University of California, San Diego

Internship:

Internal Medicine, University of California, San Diego

Medical School:

Ultrasound, University of California San Francisco School of Medicine

Research interests:

- Use of MR in pregnancy
- Imaging of adnexal cysts

Academic Awards/Accomplishments:

- Vice Chair of Academic Affairs, Department of Radiology, BIDMC
- Chair, American College of Radiology Ultrasound Commission
- Senior Deputy Editor, *Radiology*
- President, New England Roentgen Ray Society
- Gold Medal RSNA 2018

Contact: dlevine@bidmc.harvard.edu



Dinushi Perera, MD

Staff Radiologist, Community Radiology - Acute & Ambulatory Care, BIDMC
Chief of Radiology, BIDNeedham
Instructor in Radiology, Harvard Medical School

Fellowship:

- Body MRI, BIDMC, 2017

Residency:

- Diagnostic Radiology, Pennsylvania Hospital, Philadelphia, PA, 2012-2016

Internship:

Internal Medicine, Ochsner Medical Center
New Orleans, LA, 2012

Medical School and other Education:

MD, Tulane University, New Orleans, LA, 2011
MS, Physiology and Biophysics, Georgetown University Washington, DC, 2007
BS, Biology/Biochemistry and Spanish, Duke University Durham, NC, 2005

Academic Activities/Achievements:

- Chief Resident (2016)
- RSNA Roentgen Resident/Fellow Research Award, 2016

Contact: dperera@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Vassilios Raptopoulos, MD

Vice Chair for Clinical Affairs
Director, CT Services
Director, Radiology Imaging Lab, BIDMC
Professor of Radiology, Harvard Medical School

Dr. Raptopoulos is a graduate of Aristotelian University School of Medicine, Thessaloniki, Greece and trained in radiology at Georgetown University Hospital in Washington, D.C. He has served as president of the New England Roentgen Ray Society and the New England Society of Ultrasound in Medicine and has authored more than 100 peer-reviewed publications in CT scanning and abdominal imaging.

Research interests:

- CT dose reduction
- CT-angiography
- 3-dimensional and virtual imaging
- Dual energy CT

Contact: vraptopo@bidmc.harvard.edu



James V. Rawson, MD

Staff Radiologist, Abdominal Imaging
Vice Chair, Operations and Special Projects
Director, Radiology Center for Outcomes Research and Improvement (rCORI)

Dr. Rawson earned his BS (cum laude) in Chemistry, Religion and Biology as well as his MD at Tufts University, including an internship at Lemuel Shattuck Hospital in Jamaica Plain. He completed his residency at New York Medical College and a fellowship in Body MRI at the Mallinckrodt Institute of Radiology.

In addition to his clinical duties in abdominal imaging, Dr. Rawson also serves as Vice Chair of Operations and Special Projects and Director of our Radiology Center for Outcomes and Research and Improvement (rCORI). Fueled by his clinical experience as an abdominal imager, Dr. Rawson's became focused on health economics and policy and his career spans decades in improving the patient experience by incorporating patients and their families into radiology and hospital operations.

His work has been recognized world-wide and in 2015, he was appointed to the ACR Board of Chancellors to create a commission on patient experience. Most recently, he served as Chair of Radiology & Imaging and Chief of the Division of Health Policy at the Center for Bioethics and Health Policy at the Medical College of Georgia and is currently a project partner in the Collaborating Centre for Values-based Practice in Health and Social Care at St. Catherine's College, Oxford, UK.

Contact: jrawson@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Anuradha (Anu) Shenoy-Bhangle, MBBS, MD

Staff Radiologist, Abdominal Imaging/Community Radiology
Director, Abdominal Imaging Fellowship program
Associate Director, Radiology Residency Program, BIDMC
Instructor in Radiology, Harvard Medical School

Fellowships

- Pediatric Radiology, Kendang Kerbau Women's and Children's Hospital, Singapore
- Pediatric Radiology, Massachusetts General Hospital, Boston, MA
- Abdominal Imaging and Intervention, Massachusetts General Hospital, Boston, MA

Residency

Grant Medical College, Sir J.J. Group of Hospitals, Mumbai, India

MD

Mumbai University, India

MBBS

Lokmanya Tilak Municipal Medical College, Mumbai, India

Contact: abhangle@bidmc.harvard.edu

Recent Publications:

Kilcoyne A, **Shenoy-Bhangle AS**, Roberts DJ, Sisodia RC, Gervais DA, Lee SI. MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls. *AJR Am J Roentgenol.* 2017 Jan;208(1):214-221. PMID: 27762597.

Shenoy-Bhangle AS, Eisenberg RL, Fineberg T, Slanetz PJ. Residency Mini-fellowships in the PGY-5 Year: Is There Added Value? *Acad Radiol.* 2018 Jun;25(6):708-713. PMID: 29751857.

Sarkany DS, **Shenoy-Bhangle AS**, Catanzano TM, Fineberg TA, Eisenberg RL, Slanetz PJ. Running a Radiology Residency Program: Strategies for Success. *Radiographics.* 2018 Oct;38(6):1729-1743. PMID: 30303785.



Marty P. Smith, MD

Staff Radiologist, Abdominal Imaging / Body MRI, BIDMC
Director, Clinical Community MRI
Instructor in Radiology, Harvard Medical School

Fellowship:

MRI, BIDMC

Residency:

Diagnostic Radiology, University of Washington, Seattle, WA

Internship:

Internal Medicine, Lahey Clinic Medical Center, Burlington, MA

Medical School:

Harvard Medical School, Boston, MA

Research interests:

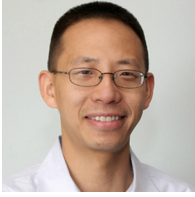
- MR Enterography, particularly in Crohn's disease
- 3D T2-weighted water-silicone separated techniques for evaluating breast implants
- 3D T2-weighted water-fat separated techniques in breast and body applications
- Multiparametric MRI of the prostate at 3T for diagnosis and staging of prostate cancer
- Incidence of nephrogenic systemic fibrosis in patients with chronic kidney disease undergoing MRI with Prohance or Multihance

Academic Activities:

- Liason for medical student and resident education in abdominal imaging
- Cum Laude Award for outstanding scientific paper, SCBT-MR (2008)

Contact: msmith13@bidmc.harvard.edu

ABDOMINAL IMAGING FACULTY



Leo L. Tsai, MD PhD MSc

Staff Radiologist, Abdominal Imaging/Body MRI, BIDMC
Assistant Professor of Radiology, Harvard Medical School

Fellowship:

Body MRI, BIDMC

Residency:

Diagnostic Radiology, BIDMC

Internship:

General Surgery, Brigham and Women's Hospital,
Boston, MA

Medical School and Graduate Education:

MD, PhD –Harvard Medical School-MIT Division
of Health Sciences and Technology

MSc –Cambridge University, United Kingdom

Research interests:

- Cancer imaging biomarkers
- MR pulse sequence development
- Medical device development

Academic Activities/Accomplishments:

- BIDMC Academy of Medical Educators
- Winner, Life Sciences Track, for Agile Devices
MIT 100K Launch Competition
- Co-Founder and Chief Technology Officer,
Agile Devices Inc. Cambridge, MA

Contact: lbsai1@bidmc.harvard.edu



Jesse L. Wei, MD

Staff Radiologist, Abdominal Imaging/Body MRI, BIDMC
Clinical Director, Radiology Informatics, BIDMC
Instructor in Radiology, Harvard Medical School

Fellowship:

MRI, BIDMC

Residency:

Radiology, BIDMC

Internship:

Medicine, Newton-Wellesley Hospital,
Newton, MA

Medical School:

Harvard Medical School, Division of Health
Sciences and Technology, Boston, MA

Research interests:

- Hepatic imaging
- Vascular Imaging
- Novel and emerging-use MRI contrast agents
- Novel and emerging-use MRI hardware
imaging techniques

Contact: jlwei@bidmc.harvard.edu