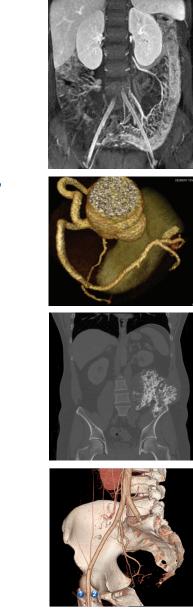
Beth Israel Deaconess Medical Center



HARVARD MEDICAL SCHOOL TEACHING HOSPITAL



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

Department of R

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

# Department of Radiology: Body MRI Fellowship Program

# **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, Pancreaticobiliary, and Liver conferences; Medical Grand Rounds, Surgical Grand Rounds, and others.

#### 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

# **Body MRI**

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 one year fellowship has intensive involvement in clinical and research MRI activities and is equally suited to prepare for a career in academic radiology and private practice. The strong academic component represents a key opportunity within this fellowship. The fellows will be involved in all aspects of clinical body MRI under the supervision of the program director and the MRI faculty. The body MRI fellowship focuses on achieving a deep understanding of the basic principles of MRI and protocol development with a hands-on approach. The fellows also have a 1 month elective period during which there is an opportunity to spend time on other radiology services including musculoskeletal radiology, Women's imaging, cardiothoracic imaging, abdominal CT/ultrasound and abdominal interventions. Close involvement with the dedicated MR scientists in our world-renowned Research MRI division enhances the experience. The fellow will be taught fundamental MR principles through an MRI physics course designed specifically for Body MRI fellows, taught by MR physicists in an intimate small group setting, utilizing both a didactic and interactive teaching format with unique hands-on sessions at the magnets. In addition to clinical activities, the fellow will be trained in research methodology, manuscript preparation, and other activities essential both to an academic career and to objective interpretation of current literature and clinical guidelines.

Clinical facilities consist of eight in-house clinical Siemens and GE scanners including three 3T magnet systems, five 1.5T units, and two scanners with wide bores. A 1.5T and a 3T GE MR system are utilized for both clinical and research scanning. MR-guided prostate biopsy and MR elastography capabilities are routinely utilized. Operated in conjunction with the Cardiology department, there is also a 1.5T whole body Philips MRI system dedicated to cardiac imaging. Research facilities include a 9.4T horizontal bore small animal magnet and Hypersense hyperpolarizer unit.

The MR division treasures its close collaborative relationships with referring services and its contributions to several multidisciplinary conferences per week are highly valued by their clinical colleagues. Translational MRI research projects, including hyperpolarized MRI, health science services, and radio-genomics are recent and current research endeavors of the MR division.

#### Applying

Please send three letters of recommendation, your CV, personal statement, USMLE board scores, ECFMG certificate (if applicable), and application form to:

#### Samantha Sarblah

Program Coordinator Residency & Fellowship Program Department of Radiology Beth Israel Deaconess Medical Center 330 Brookline Avenue, Sherman 231 Boston, MA 02215

Samantha Sarblah can be reached at: T: 617-667-3524 | F: 617-667-4923 ssarblah@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

<u>Residency</u>: Diagnostic Radiology, BIDMC

Internship:

Internal Medicine, BIDMC

<u>Medical School</u>: 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



Koenraad J. Mortele, MD

Section Chief, Abdominal Imaging Director, Division of Clinical MRI Co-Director, Abdominal Imaging Fellowship Program Associate Professor of Radiology, Harvard Medical School

Dr. Mortele received his MD degree and completed his radiology training at Ghent University in Ghent, Belgium. In 2000, he completed a fellowship in Radiology Management at Brigham and Women's Hospital after which he joined the Faculty in the Division of Abdominal Imaging and Intervention. At BWH, Dr. Mortele served as Associate Director of the Division of Abdominal Imaging and Intervention, as Director of Abdominal and Pelvic MRI, as Director of Continuing Medical Education in the Department of Radiology, as Director of the BWH Contrast Agent Safety Committee, and as Assistant Fellowship Director in the Division of Abdominal Imaging and Intervention. Currently, Dr. Mortele is Director of the Division of Clinical MRI at BIDMC and Associate Professor of Radiology at Harvard Medical School.

A prolific lecturer and author of over 150 scientific manuscripts, Dr. Mortele has a particular interest in imaging of the pancreas, the hepatobiliary system and the Gl tract. Dr. Mortele has received numerous awards, including the Society of Gastrointestinal Radiology Visiting Professorship Award in 2009 and 2 BWH Radiology George Marina Teaching Awards. Dr. Mortele has edited a textbook on CT and MRI of the Abdomen and Pelvis, authored 15 book chapters, and is frequently invited to lecture and present workshops nationally and internationally.

#### Contact: kmortele@bidmc.harvard.edu



Sonia Gupta, MD

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

Dr. Gupta earned a BA in Anthropolgy at the University of North Carolina, Chapel Hill and her MD from Wake Forest School of Medicine, Wiston-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



#### Dinushi Perera, MD

Staff Radiologist, Community Radiology - Acute & Ambulatory Care, BIDMC Assistant Professor of Radiology, Harvard Medical School

#### Fellowship:

• Body MRI, BIDMC, 2017

#### Residency:

• Dignostic 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



Anuradha (Anu) Shenoy-Bhangle, MBBS, MD

Staff Radiologist, Abdominal Imaging and Community Radiology 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

#### <u>MD</u>

Mumbai University, India

#### <u>MBBS</u>

Lokmanya Tilak Municipal Medical College, Mumbai, India

#### Contact: abhangl@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.

Luk L, **Shenoy-Bhangle AS**, Jimenez G, Ahmed FS, Prince MR, Samstein B, Hecht EM. Additive value of noncontrast MRA in the preoperative evaluation of potential liver donors. Clin Imaging. 2017 Jan - Feb;41:132-136. PMID: 27840265.



#### Marty P. Smith, MD

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

#### Fellowship:

Body MRI, BIDMC

#### <u>Residency</u>:

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



#### Jesse L. Wei, MD

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

#### Fellowship:

Body MRI, BIDMC

<u>Residency</u>: Diagnostic 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



#### Leo L. Tsai, MD PhD MSc

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

<u>Fellowship</u>: Body MRI, BIDMC

<u>Residency</u>: 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: ltsai1@bidmc.harvard.edu

### **MRI Research Faculty**



#### David Alsop, PhD

Vice Chair of Research Director, MRI Research, BIDMC Professor of Radiology, Harvard Medical School

Dr. David Alsop, currently Staff Scientist within the Center for Advanced Imaging and Professor of Radiology at Harvard Medical School, came to Beth Israel Deaconess Medical Center from the University of Pennsylvania Medical Center (Department of Radiology). Dr. Alsop received his Ph.D. in Physics from the University of California (Berkeley, CA).

Dr. Alsop's research interests include techniques for rapid Magnetic Resonance Imaging (MRI), high field MRI, perfusion imaging, neuroimaging, aging and dementia, and stroke.

He serves as Deputy Editor and member of the Editorial Board of *Magnetic Resonance in Medicine* and on the Governing committee of the Diffusion and Perfusion Study Group of the International Society for Magnetic Resonance in Medicine.

Labs & Centers: Division of MR Research

#### Contact: dalsop@bidmc.harvard.edu



#### Aaron Grant, PhD

Research Associate, Body MRI Director, Hyperpolarization Lab, MR Research, BIDMC Assistant Professor of Radiology, Harvard Medical School

#### Fellowship:

Theoretical Physics, University of California, LA Theoretical Physics, Harvard University, Cambridge

#### Education:

BA, Physics, University of Colorado, Bouder PhD, Physics, University of Chicago, Chicago

Research interests:

- Development of radio frequency impedance mapping (RFIM) imaging systems
- Development of hyperpolarized contrast agents using parahydrogen-induced polarization
- Parallel magnetic resonance imaging

#### Academic Activities:

• Supervisor of graduate students and fellows in MR research

#### Contact: akgrant@bidmc.harvard.edu