Radical Views... from the Department of Radiology

March 2010

Mon	Tues	Wed	Thurs	Fri
1 7:30 - 9:00 Board Review (Smith) 3:00-4:00 ED section meeting (monthly) [ED annex, WCC] check w/Sheila Blalock 4-2506	2 7:30 - 8:15 Breast Radiation Therapy (Recht) 8:15-9:00 The Irradiated Breast (Slanetz) 1:00 - 2:00 MRI meeting (weekly) [TCC-484]	3 7:30 - 8:15 US: When to suggest MRI (Levine) 8:15-9:15 Nuc Med Cases (Kolodny) Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 Thoracic Imaging, Gl Oncology/GU Oncology 3:00-4:00 Mammo [TCC-484]	4 7:30 - 8:15 Board Cases (Hochman) 8:15-9:15 Board Cases (Wu) Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK	5 12:00-1:00 No Resident Case Conference No Grand Rounds 3:45 - 6:45 EVENT: NERRS - NeuroImaging
8 7:30-9:00 Board Review (Tyagi) EVENT: ED Exam	9 7:30 - 8:15 (Reddy) 8:15-9:00 (Reddy) EVENT: ED Exam 10:30-11:30 Nuc Med meeting (GZ-103)	10 7:30 - 8:15 Solitary Pulmonary Nodule (Boiselle) 8:15-9:00 Chest Cases (Spirn)	11 7:30 - 8:15 Neuro Conference (Mani) 8:15 - 9:00 Neuro Conference (Rojas)	12 7:30 - 9:00 Grand Rounds: QA 12:00-1:00 Resident Case Conference (Rojas) [Clouse Conf]
15 7:30-9:00 Board Review (Kruskal)	16 7:30 - 9:00 Breast Cases (Shaheen) 8:00 - 9:00 IR meeting [West Recovery Rm]	17 7:30 - 8:15 Ultrasound Cases (Mehta) 8:15 - 9:00 Nuc Med Cases (Donohoe)	18 7:30 - 8:15 Board Cases (Yablon) 8:15-9:00 Board Cases (Hall)	19 7:30 - 8:00 Sonography of the Acute Female Pelvis (Shaheen) 8:00-9:00 Grand Rounds: Intro to MSK Ultrasound (Levon Nazarian) 12:00 - 1:00 Resident Case Conference (Teich) [Clouse Conf]
22 7:30 - 9:00 Board Review (Rofsky)	23 7:30 - 8:15 (Ahmed) 8:15 - 9:00 (Reddy) 10:30-11:30 Nuc Med meeting (GZ-103)	24 7:30 - 8:15 Chest Cases (O'Donnell) 8:15 - 9:00 Chest Cases (Spirn)	25 7:30 - 8:15 Neuro Conference (Appel) 8:15 - 9:00 Neuro Conference (Teich)	26 7:30 - 8:00 Grand Rounds: New Directions in Imaging Clinical Dysplasias (Madan) 8:00-9:00 Emergency* (Stephen Ledbetter) [see full title on pg 2] 12:00 - 1:00 Resident Case Conference (Bhadelia) [Clouse Conf]
29 7:30 - 9:00 Board Review (Smith) EVENT: 12 Noon Mentoring Program: Literature Searches (Countway Librarian, Levine) [Kirstein Living Rm]	30 7:30 - 9:00 Breast Cases (Gross)	31 7:30 - 8:15 US Board Review (Romero) 8:15 - 9:00 Nuc Med Cases (Donohoe)		

MARCH GRAND ROUNDS: Visiting Professors

Levon Nazarian, MD - Introduction to Musculoskeletal Ultrasound



Friday, March 19 8:00 - 9:00 am, Sherman Auditorium

Following the 7:30-8:00 am Bread & Butter lecture, "Sonography of the Acute Female Pelvis" presented by Dr. Rola Shaheen, **Dr. Levon Nazarian** will present **"Introduction to Musculoskeletal Ultrasound"** at

Grand Rounds on March 19. Dr. Nazarian is a Professor of Radiology at Thomas Jefferson University Hospital, Philadelphia, PA where he also serves as Vice Chair for Education, Director of the Diagnostic Radiology Residency Program, and Director of Musculoskeletal Ultrasound. He received his MD from Cornell University Medical College, NY, NY as well an AB (*magna cum laude*) in Biology from Harvard College. Postdoctoral training included internship in medicine at McGaw Medical Center, Northwestern University, radiology residency at The New York Hospital-Cornell Medical Center, and fellowship in body imaging at Thomas Jefferson University Hospital. Since 1999 he has served as Program Director of the Musculoskeletal Ultrasound topics such as US-guided MSK interventions and minimally invasive musculoskeletal surgery subacromial impingement, differential diagnosis of popliteal fossa pathology, and ultrasound turf issues. In 2008, he received the Presidential Recognition Award of the American Institute of Ultrasound in Medicine.

March Visiting Professors: Grand Rounds March 26th



M. Stephen Ledbetter, MD, MPH - Achieving 24/7 Attending Radiology Coverage: Emergency Radiology Subspecialization as a Strategy for Success in the Modern Academic Radiology Department

Friday, March 26 8:00 - 9:00 am, Sherman Auditorium

Following the 7:30-8:00 am Bread & Butter lecture on "New Directions in Imaging Clinical Dysplasias" presented by Dr. Neel Madan (Fellow, Neuroradiology), **Dr. Stephen Ledbetter** will present "**Achieving 24/7 Attending Radiology Coverage: Emergency Radiology Subspecialization as a Strategy for Success in the Modern Academic Radiology Department**" at Grand Rounds on March 26th. Dr. Ledbetter is an Assistant Professor of Radiology, HMS and Director of Emergency Radiology, and Director and Founder of NightWatch and Daywatch Emergency Teleradiology Services at Brigham & Women's Hospital, Boston. He received his MD from Wake Forest University, Bowman Gray School of Medicine and his MPH from Harvard School of Public Health. Postdoctoral training included Internship in Medicine at Newton-Wellesley Hospital, and Radiology Residency and Fellowships in Emergency Radiology and Evidence Based Medicine at Brigham and Women's Hospital. He co-directs the Emergency Radiology Fellowship program at BWH and under his leadership, Dr. Ledbetter's Emergency Radiology section has expanded to provide coverage to BWH and 10 other hospital emergency departments.

DEPARTMENTAL NEWS, AWARDS & HONORS



FROM THE CHIEF Jonathan B. Kruskal, MD, PhD

In Memoriam: Eli Romeus

We were all so saddened at the loss of our friend Eli Romeus. Eli worked at BIDMC for 30 years. He retired in the fall of 2009 to return home to his native Haiti. The following is a fitting farewell from our own Reverend Julia Dunbar:



Eliezer "Eli" Romeus, Image Archive Assistant, Radiology, is missing and presumed to have died from injuries as a result of the Jan. 12 earthquake in Haiti. He was 70.

"Eliezer was a warm, generous and outgoing person who would give you his dinner and go hungry," said his colleague and friend **Arleitte Moore**, Supervisor, Mail/Motor Services. "He was loved and admired by all who knew him."

"Eli was a family man who was dedicated to his three sons and the Haitian community at large," said, **Peter Cousins**, Radiology Support Manager. "He was a tireless worker who could be called upon for assistance in a time of need at work or in the community."

Eli, who served as Deacon at the Boston Missionary Church, received his BS in Human Services from UMASS Boston in 2000.

"My fondest and most profound memories of Eli include how he worked tirelessly for so many hours in at least two full-time positions, one being full-time evenings at BIDMC," recalled **Jim Brophy**, Radiology PACS/ Informatics Manager. "He did so for the sole purpose of caring for his family and seeing to it that his three sons had the opportunity to make it through college. He would always come to me and say, 'Whenever you have open shifts on the weekend, let me know!' He always had a smile on his face. He was a caring, unselfish, hardworking person who will be very sorely missed by all whose lives he touched, including mine."

Eli is survived by his wife, Theresa, sons Rick, Carl and Dave, family and friends. Memorial Services were held Saturday, Feb 13, at the Boston Missionary Baptist Church, 336 Dudley Street, Boston. For information go to www. mybmbc.org or call (617) 427-4448. -- *Rev. Julia Dunbar, Director, Pastoral Care and Education 2/10/10*

Congratulations Rising Stars in Research: Jim Wu and Aaron Grant

Friday, March 5th is Research Day 2010, a day-long event at the Sherman Auditorium celebrating some of the important research being done by talented young investigators at BIDMC, including two from Radiology: 11:15 am "Hyperpolarization: Increasing the Sensitivity of MRI for Functional and Metabolic Imaging" – Aaron Grant, PhD and 3:30 pm "Evaluation of Statin-Associated Myopathy with 31P-MR Spectroscopy" – Jim Wu, MD. (Please see page 8 for the full program)

• New Staff: Douglas Bober and Monik Lala

Our Community/Mammography sections are expanding and it is my pleasure to welcome Drs. **Douglas Bober** and **Monik Michael Lala** to BIDMC Radiology. **Douglas Bober** comes to us from a private practice group in Bloomfield, CT. He received his medical degree from George Washington University School of Medicine, Wash., D.C. and completed residency and fellowship training in diagnostic radiology at SUNY Upstate Medical Center, Syracuse, NY. Dr. Bober will be based in Harrington/Hubbard Mammography.

Monik Lala received his medical degree from the American University of the Caribbean, Netherlands Antilles following a BS in Biology from the University of Michigan, Ann Arbor. His postdoctoral training include an internship in Medicine and Radiology Residency at Providence Hospital, Southfield, MI, and a fellowship in Body Imaging at Henry Ford Hospital, Detroit. Dr. Lala comes to us from the Henry Ford Hospital where he specialized in Emergency Radiology. His skills will be shared among our community sites at 1101 Beacon St., Harrington, Hubbard, and BID-Needham.

– Jonny

DEPARTMENTAL NEWS, AWARDS & HONORS

Congratulations to Felipe Collares, JVIR Distinguished Reviewer 2009

Our own IR staff member **Felipe Collares** was recognized in the February issue of the Journal of Vascular and Interventional Radiology (JVIR) as a Distinguished Reviewer of 2009. Bestowed on just over 10% of JVIR reviewers, this is an honor based on a combination of quality, timeliness and number of reviews completed.

• The Gallery

The **Gallery at WCC-304A** has met with universal approval and appreciation. Many thanks to **Kevin Donohoe** for making the first show so memorable with his photos, particularly as, among the residents, the Gallery is becoming known as the "Ballerina room".



• Exciting news from the Nuclear Medicine Certification Boards

If you recall, I had let everyone know that our first class (2008) did very well on their boards and we (BIDMC) were ranked 4th in the country with scores. This was excellent news for our first class!!!!

We have received the rankings for 2009. All 6 of our students last year passed with either distinction or passed with highest distinction. I do believe that I have let you all know this; however the new piece is that we are now ranked 2nd in the country with score results--in the 99th percentile! Currently, there are 122 programs in the country. I will be sharing this with our affiliates and others that are part of this program!!!

Thank you all for the continued support!!!! The validation of this comes from our clinical affiliates of the program, such as Mass General, the Brigham, Dana Farber and Children's when they say that we've set a huge bar for all of the programs in the area and that they are proud to be a part of this program!

– David Gilmore, MS, CNMT, NCT, RT(R)(N), FSNMTS Program Director, School of Nuclear Medicine Technology

SAVE THE DATES: Friday May 21, 2010 and Thursday June 10, 2010

The Annual **Morrison Research Day** will be held on Friday, May 21st on Shapiro 10 and the **Fleischner Graduation** Ceremony and Dinner will be held at the Museum of Fine Arts on Thursday, June 10th.

• Radiology staff in the news: Colm McMahon, Neil Rofsky and Ivan Pedrosa

RSNA JOURNALS

Journal Highlights

The following are highlights from the current issues of RSNA's two peer-reviewed journals.

Lymphatic Metastases from Pelvic Tumors: Anatomic Classification, Characterization and Staging

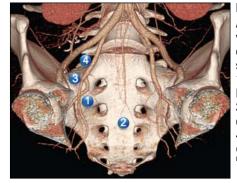
HE SPREAD OF pelvic tumors to lymph nodes is an important means of tumor dissemination and substantially affects prognosis and management. It is essential to have knowledge of the regional nodal spread of each

tumor in formulating effective

Radiology

search strategies for cross-sectional imaging studies performed for staging and to be aware of the different regional nodes for each type of tumor and the N-stage categorization for each tumor.

In a review article in the January issue of *Radiology (RSNA.org/Radiology)*, Colm J. McMahon, M.B., Neil M. Rofsky, M.D., and Ivan Pedrosa, M.D., of Beth Israel Deaconess Medical Center in Boston, present patterns of



regional nodal spread and N-stage classification for carcinomas of the anus, bladder, cervix, endometrium, ovary, penis, prostate, rectum, testis, vagina and vulva. The authors also review pelvic lymph node anatomy and nomenclature with schematic illustrations and clinical examples from patients with pelvic tumors. Internal iliac lymph nodes.

Axial contrast-enhanced CT image and volume-rendered reformation of contrastenhanced CT image show location of named subgroups of internal iliac lymph nodes: 1 =lateral sacral, which are adjacent to lateral sacral artery *(arrow)*; 2 =presacral; 3 =anterior, which are anterior to anterior division of internal iliac artery *(arrowhead)*; 4 =hypogastric. *(Radiology* 2010; 254;1:31-46) © RSNA, 2010. All rights reserved. Printed with permission.

"Routine cross-sectional imaging studies have less-than-optimal diagnostic test performance, but improvements are likely to be delivered by functional imaging modalities such as PET and ultrasmall superparamagnetic iron oxide-enhanced MR imaging, as well as by molecular imaging strategies," the authors conclude.

Monthly Section Updates: Clinical Magnetic Resonance Imaging, Neil Rofsky, MD - Chief



Neil Rofsky





Karen Lee



Ivan Pedrosa







Jesse Wei

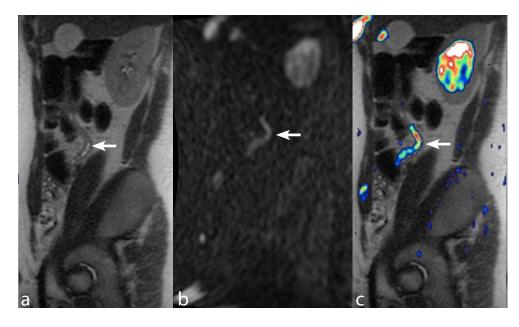
The Body MRI section is comprised of 7 full- and part-time staff and 3 fellows. All staff members of the section are fellowship-trained in Body MRI and offer timely expert interpretations of a variety of thoracic, abdominal, pelvic, and MR angiographic studies. Additional expertise in other diagnostic techniques and interventional procedures related to body imaging among the MRI staff provides the foundation for a dynamic section with a broad and comprehensive approach to diseases. Overall leadership for MRI services and translation is spearheaded by Dr. Neil Rofsky as Chief of MRI and Dr. Ivan Pedrosa provides leadership as Director of the Body MRI section. Dr. Martin Smith, in his role as Director of Community MRI, coordinates the clinical activities of the section in the community while he brings his expertise in MR imaging of the GI tract and bowel to the entire enterprise. Dr. Jesse Wei contributes to resident teaching and offers his computer programming skills to close the gap between physicists and physicians, facilitating the implementation of new MR techniques for non-contrast MR angiography and novel hepatobiliary agents. Dr. Karen Lee has a leadership role in the fellowship candidate selection, coordinates the education in the section during the weekly journal clubs, and strengthens the use of MRI in the acutely ill. Dr. Maryellen Sun is a key participant in resident education and brings a broad expertise to the section based on her knowledge and skills in MRI and sonography. Dr. Herbert Kressel offers unique pearls and insights to the clinical service that stem from his wealth of experience, enhancing the training of residents and fellows both at the workstation and particularly at our journal club meetings. The MRI fellows provide an essential role coordinating all clinical activities, monitoring cases to insure a level of care that provides differentiation from all other sites in Boston and supplementing the residents' education. Claire Odom facilitates the activities in the section by providing outstanding administrative support.

The mission of the Body MRI section is to offer the highest standard in diagnostic evaluations of the body with expert interpretations and continuous development of new MRI techniques that are implemented into clinical practice in a safe and timely manner. The section has received regional, national, and international recognition for its contribution to the care of men with prostate cancer, pregnant women with abdominal pain, patients with renal cancer, patients with vascular disease and young patients with inflammatory bowel disease. The international reputation of the Body MRI section is bolstered by our open door policy, welcoming many residents and fellows from other programs in the country and abroad to learn with us.

The translational success of the section derives from the strong relationship with the remarkable team of MR scientists at BIDMC. The interplay between technical development and clinical relevance occurs daily on Ansin 2 where MDs and PhDs share programmatic space, and biweekly, at the MR research meetings. Meaningful results of the collaborations can be found in manuscripts that are recently published and in press, including carotid artery angiography with arterial spin labeling, increased positive biopsy yield in patients with previously occult prostate cancer and early determination of response to anti-angiogenesis therapies for renal cell cancer.

Translational successes:

As a national leader in developing and promoting the use of MR in the diagnosis of acute appendicitis in pregnancy the MR team was one of the first institutions to not only describe an MR protocol to image the appendix in pregnancy, but also demonstrate the excellent diagnostic performance of this exam in pregnant individuals. Currently, our team is investigating the utility of diffusion-weighted sequences in the diagnosis of acute appendicitis. Based on the success have had at our institution in using MR to diagnose acute appendicitis in pregnancy, MR has virtually supplanted CT to become the primary imaging modality in the evaluating pregnant patients with acute abdominal pain, thereby avoiding the risk of ionizing radiation.



Sagittal T2-W SSFSE image (a) of a pregnant patient with right lower quandrant pain shows a distended, fluid-filled appendix (arrow). Diffusion weighted image (DWI) (b) at the same level shows restricted diffussion along the entire appendix (arrow). Fused image (T2W and DWI image) (c)facilitates the demonstration of restricted diffusion in the appendix. Appendicitis was confirmed at pathology after surgical appendectomy.

Due to space and time issues, a separate report on MRI research will be published in a later issue of Radical Views.

4

Do you know... what an AOP is?

For the first time, we have developed and are distributing an **Annual Operating Plan** (AOP) for radiology. This AOP is a schedule of our Department's priorities and responsibilities and is aligned with the goals and objectives that have been laid out in the BIDMC strategic plan. The AOP ensures that everyone knows what needs to get done, coordinates our efforts to get it done, provides a timeline, responsible person and target, and keeps close track of whether things get done or not. A lot of work, careful thought and meetings have gone into developing this plan, and we look forward to sharing it with everybody. I'd like to thank the modality managers, section and division chiefs, and in particular Donna Hallett, Allen Reedy and Laurie Pascal for their dedication and tremendous effort.

Imagine you are driving a car on a camping vacation. It is important to have a destination in mind -- your "long-range goal." The destination alone, however, is not enough to get you there successfully. You need to have detailed instructions about which roads to take, when to make turns, estimated distance and time, where you can stop for food and gas, gauges that tell you how much gas you have in your tank, and warning systems to tell you if the engine gets overheated. And this only addresses getting there!

Now imagine that you are not driving the car alone, but instead in your ginormous oversized SUV you have 12 people doing different jobs simultaneously: **Donna Hallett** is at the steering wheel with four modality managers looking over her shoulder giving conflicting advice, and four others are at each of the wheels making them spin but in different directions; residents are looking out each window, all reporting what they see to the driver at the same time, and **Max Rosen** is in the back of the SUV making sandwiches. It is going to take an impressive plan to move this crew in the same direction.

This is the stuff of operating plans: which programs and management functions are going to do what, by when, and how much "gas" (money and person power) it will require. This level of detail is unnecessary in a strategic plan itself -- in fact, it would clutter up the presentation of the long-range vision: the strategic plan focuses on the swimming hole at the camp you are going to, not which gas station to stop at along the way.

Below I outline the basic components of our AOP: on the left you see our five BIDMC priorities (the larger areas we will focus on). Each priority is then broken down into more specific objectives. For example, our priority #1 in radiology is to eliminate preventable harm; within this category, our priorities are to reduce preventable errors and sources of harm, to reduce employee injuries and to improve quality of care through decreased diagnostic time. Within our first objective (reduce errors), we have defined six radiology priorities which include reducing radiation exposure to staff and patients, reducing preventable errors and sources of harm, developing a system for auditing and measuring compliance with our critical results reporting, policy etc. Each priority has a defined person or committee that is responsible, a timeline, specific measures and specific targets.

What I am most excited about is that in parallel to this clinical AOP, we are developing an Education AOP (under the leadership of **Deborah Levine**) and will also be developing a Research AOP. You will all hear a lot more about this and I hope that this serves as a brief introduction to a process you will all become quite familiar with.

BIDMC AOP Priorities FY10	Radiology AOP Objectives FY10	Radiology AOP Priorities FY10	Who Responsible and to Whom	Measures	Targets
	A. Reduce Preventable Errors & Sources of Harm	1. Support radiation safety initiative to collect and measure fluoroscopy radiation cumulative dose to BIDMC patients	Radiation Safety Cmte, reports qtrly to Clin Ops Cmte	System created for compliance with DPH fluoroscopy dose tracking regulations	a) Implementation of system to collect, measure & report cumulative radiation dose on individual patients
		2. Reduce/eliminate harmful events	QA Cmte, reports qtrly to Clin Ops Cmte	a) Number of wrong patient events	0
				b) Number of wrong site events	0
				d) Number of medication errors	reduce 50-100%
				e) Number of patient falls	reduce 50-100%
				f) Hand hygiene rate	100% compliance
		3. Develop a system for auditing and measuring compliance with critical results reporting policy	QA Cmte, reports qtrly to Clin Ops Cmte	Definition of methodology to measure compliance with policy	System developed
		4. Minimize variation in recommendations for follow-up for: lung nodules, thyroid nodules, pancreatic cysts, renal masses, liver masses, adnexal masses	Section Chiefs, report qtrly to Clin Ops Cmte	Develop recommendations and departmental standards	0% variation from standards on selected findings
		5. Improve compliance with MD peer review policy	QA Cmte, reports qtrly to Section Chiefs	Number of cases reviewed by radiologist	100% compliance with policy
		6. Reduce radiation dose to patients from CT	QA Cmte, reports qtrly to Clin Ops Cmte	Expand system created in A.1. to include CT	TBD
	B. Reduce Employee Injury	1.Eliminate needle sticks	QA Cmte, reports qtrly to Clin Ops Cmte	a) Number of employee needle sticks	0
		2. Eliminate splash exposure	QA Cmte, reports qtrly to Clin Ops Cmte	a) Number of employee splashes	0
		3. Increase accurate reporting of, and reduce, ergonomic injuries	Ergonomics Cmte, reports qtrly to Clin Ops Cmte	a) Number of staff educated on repetitive stress injuries	TBD
				b) Number of reported body mechanics injuries	TBD
				c) Number of reported repetitive stress injuries	TBD
	C. Improve Quality of Care Through Decreased Diagnostic Time	1. Increase timeliness of exams done- to-result-reported for IP and OP	Section Chiefs, report qtrly to Clin Ops Cmte	a) Time done to time reported	100% compliance with departmental standards

Do you know... FAQ about the IRB?

Q: What type of investigation do we need an IRB for?

A: Research on human subjects.

Research is defined as testing of concepts by the scientific method of formulating a hypothesis or research question, systematically collecting and recording relevant data, and interpreting the results in terms of the hypotheses in question. Key components are systematic investigation designed to contribute generalizable knowledge (not to provide immediate and continuous improvement and feedback in the local setting). Human subjects involvement involves any of the following: intervention, interaction and identifiable private information.

Q: Do I need an IRB to do a preliminary database search when considering potential future research projects and their feasibility?

A: Accessing patient identifiers is a HIPAA issue. The CCI is also the Privacy Board, so they review all HIPAA requests as well. In order to query a database with identifiers to review for feasibility of conducting research, the investigators should submit a "Review Preparatory to Research Form".

Here's the link to the form: http://research.bidmc.harvard.edu/OST/CCI/Documents/HIPAAPermissiontodoReviewPreparatorytoResearch.doc

Q: I have completed a QA/QI project which I now want to publish - do I need an IRB?

A: If the investigator is very sure that the project is QA/QI, then IRB review is not necessary. Publication does not necessarily mean that it requires IRB review. The key questions are intent and generalizability. Is the project undertaken with the sole intent to improve local practice? Is the project truly generalizable beyond BIDMC or is it being published so that others can benefit from knowing about a good QI project? If unclear, a request for determination of need for IRB can be submitted. The link to the form is within the explanation.

http://research.bidmc.harvard.edu/OST/CCI/Determination.asp

Q: Who needs to be on an IRB application?

A: Key personnel should be listed on the protocol particularly if they have access to subject identifiers. This would include a person accessing a database on behalf of the investigator if the database has subject identifiers. Statisticians do not necessarily have to be listed. However, they should be listed if they have access to identifiers. A co-author whose role is limited to manuscript preparation does not need to be listed on the application. The deciding factor should be the extent of an individual's access to PHI.

Q: Do case reports/series need IRB?

A: "case reports" of three or fewer patients is NOT considered human-subject research and does NOT typically require IRB review and approval because case reporting on a small series of patients does not involve the formulation of a research hypothesis that is subsequently investigated prospectively and systematically for publication or presentation.

Do you know.... is a monthly feature designed to keep us up to date on necessary and relevant policies. Please contact the Radiology Quality Management Team for more information.

2010 Publications from our Faculty Members [New citations in Blue]. We do a monthly PubMed search for new BIDMC publications and may miss those in which your affiliation is not noted. If we miss your paper, please send the reference to dwolfe@bidmc.harvard.edu to be included in next month's issue. Please note that publications with Epub dates in Dec 2009 are retained here as the paper publication date will indeed be in 2010.

Alazemi S, Majid A, Ruiz Al, **Litmanovich D**, Feller-Kopman D, Ernst A. An elderly woman with chronic dyspnea and endobronchial lesion. Chest. 2010 Feb;137(2):460-6.

Appelbaum L, **Sosna J**, Pearson R, Perez S, Nissenbaum Y, <u>Mertyna</u> <u>P</u>, Libson E, **Goldberg SN**. Algorithm optimization for multitined radiofrequency ablation: comparative study in ex vivo and in vivo bovine liver. Radiology. 2010 Feb;254(2):430-40.

Beeghly M, Ware J, Soul J, Plessis AD, Khwaja O, Senapati GM, Robson CD, Robertson RL, Poussaint TY, Barnewolt CE, Feldman HA, Estroff JA, **Levine D**. Neurodevelopmental outcomes of fetuses referred for ventriculomegaly. Ultrasound Obstet Gynecol. 2010 Jan 12. [Epub ahead of print]

Boiselle PM. Celebrating 25 years of the journal of thoracic imaging. J Thorac Imaging. 2010 Feb;25(1):1.

Boiselle PM, Reddy GP. Reviewer awards and acknowledgments: editors' recognition awards for distinction in reviewing in 2009. J Thorac Imaging. 2010 Feb;25(1):2.

Cantin L, Bankier AA, Eisenberg RL. Multiple cystlike lung lesions in the adult. AJR Am J Roentgenol. 2010 Jan;194(1):W1-W11.

Dewey M, Vavere AL, Arbab-Zadeh A, Miller JM, Sara L, Cox C, Gottlieb I, Yoshioka K, Paul N, Hoe J, de Roos A, Lardo AC, Lima JA, **Clouse ME**. Patient characteristics as predictors of image quality and diagnostic accuracy of MDCT compared with conventional coronary angiography for detecting coronary artery stenoses: CORE-64 Multicenter International Trial. AJR Am J Roentgenol. 2010 Jan;194(1):93-102.

Dixon WT, Ren J, Lubag AJ, Ratnakar J, **Vinogradov E**, Hancu I, **Lenkinski RE**, Sherry AD. A concentration-independent method to measure exchange rates in PARACEST agents. Magn Reson Med. 2010 Feb 25;63(3):625-632. [Epub ahead of print]

Eyal E, Bloch BN, **Rofsky NM**, Furman-Haran E, Genega EM, **Lenkinski RE**, Degani H. Principal Component Analysis of Dynamic Contrast Enhanced MRI in Human Prostate Cancer. Invest Radiol. 2010 Feb 19. [Epub ahead of print]

Gioux S, Ashitate Y, Hutteman M, **Frangioni JV**. Motion-gated acquisition for in vivo optical imaging. J Biomed Opt. 2009 Nov-Dec;14(6):064038.

Goddeau RP Jr, Caplan LR, **Hackney DB**, Alhazzani AA, Searls DE. A very small but very symptomatic vertebral artery dissection. Arch Neurol. 2010 Feb;67(2):248-9.

Gottlieb I, Miller JM, Arbab-Zadeh A, Dewey M, **Clouse ME**, Sara L, Niinuma H, Bush DE, Paul N, Vavere AL, Texter J, Brinker J, Lima JA, Rochitte CE. The Absence of Coronary Calcification Does Not Exclude Obstructive Coronary Artery Disease or the Need for Revascularization in Patients Referred for Conventional Coronary Angiography. J Am Coll Cardiol. 2010 Feb 16;55(7):627-634.

Hall FM. E-mail alert for important imaging findings. Radiology. 2010 Feb;254(2):635; author reply 635-6.

Hall FM. Identification, biopsy, and treatment of poorly understood premalignant, in situ, and indolent low-grade cancers: are we becoming victims of our own success? Radiology. 2010 Mar;254(3):655-9.

Han Y, Chan J, Haber I, Peters DC, Zimetbaum PJ, **Manning WJ**, Yeon SB. Circumferential myocardial strain in cardiomyopathy with and without left bundle branch block. J Cardiovasc Magn Reson. 2010 Jan 5;12(1):2.

Hansell DM, **Boiselle PM**, Goldin J, Kauczor HU, Lynch DA, Mayo JR, Patz Jr EF. Thoracic imaging. Respirology. 2010 Jan 28. [Epub ahead of print]

<u>Hines N</u>, **Slanetz PJ**, **Eisenberg RL**. Cystic masses of the breast. AJR Am J Roentgenol. 2010 Feb;194(2):W122-33.

Hu P, Chuang ML, Kissinger KV, Goddu B, Goepfert LA, **Rofsky NM**, **Manning WJ**, Nezafat R. Non-contrast-enhanced pulmonary vein MRI with a spatially selective slab inversion preparation sequence. Magn Reson Med. 2010 Jan 23;63(2):530-536. [Epub ahead of print]

Hu P, Chuang ML, Ngo LH, Stoeck CT, Peters DC, Kissinger KV, Goddu B, Goepfert LA, **Manning WJ**, Nezafat R. Coronary MR imaging: effect of timing and dose of isosorbide dinitrate administration. Radiology. 2010 Feb;254(2):401-9.

Jones RN, Fong TG, Metzger E, Tulebaev S, Yang FM, **Alsop DC**, Marcantonio ER, Cupples LA, Gottlieb G, Inouye SK. Aging, brain disease, and reserve: implications for delirium. Am J Geriatr Psychiatry. 2010 Feb;18(2):117-27.

Kesavan K, Ratliff J, Johnson E, Dahlberg W, Asara JM, Misra P, **Frangioni JV**, Jacoby DB. Annexin A2 is a molecular target for TM601, a peptide with tumor-targeting and anti-angiogenic effects. J Biol Chem. 2009 Dec 15. [Epub ahead of print]

<u>Kircher MF</u>, <u>Hines-Peralta A</u>, **Boiselle PM**, **Donohoe K**, **Siewert B**. Implementation of Screen-Capture Video Recordings of Resident Conferences in an Academic Radiology Department: Pilot Experience. Acad Radiol. 2010 Feb;17(2):255-263.

<u>Kircher MF</u>, Lee E, Alomari A. MRI Findings of Persistent Sciatic Artery Associated with Pelvic Infantile Hemangioma. Clin Radiol. 2010 Feb;65(2):172-5.

Kressel HY. Radiology online: a new look. Radiology. 2010 Jan;254(1):4-6.

Lee BT, Matsui A, Hutteman M, Lin SJ, Winer JH, Laurence RG, **Frangioni** JV. Intraoperative Near-infrared Fluorescence Imaging in Perforator Flap Reconstruction: Current Research and Early Clinical Experience. J Reconstr Microsurg. 2009 Dec 21. [Epub ahead of print]

Lee EY, McAdam AJ, Chaudry G, Fishman MP, Zurakowski D, **Boiselle PM**. Swine-Origin Influenza A (H1N1) Viral Infection in Children: Initial Chest Radiographic Findings. Radiology. 2009 Dec 23. [Epub ahead of print]

Lee KS, Zeikus E, DeWolf WC, Rofsky NM, Pedrosa I. MR urography versus retrograde pyelography/ureteroscopy for the exclusion of upper urinary tract malignancy. Clin Radiol. 2010 Mar;65(3):185-92. Epub 2009 Dec 14.

Lindenberg R, Renga V, Zhu LL, Betzler F, **Alsop D**, Schlaug G. Structural integrity of corticospinal motor fibers predicts motor impairment in chronic stroke. Neurology. 2010 Jan 26;74(4):280-7.

Ma Y, Huang C, Dyke JP, Pan H, **Alsop D**, Feigin A, Eidelberg D. Parkinson's disease spatial covariance pattern: noninvasive quantification with perfusion MRI. J Cereb Blood Flow Metab. 2010 Jan 6. [Epub ahead of print]

Manor B, Hu K, Zhao P, Selim M, **Alsop D**, Novak P, Lipsitz L, Novak V. Altered control of postural sway following cerebral infarction: a crosssectional analysis. Neurology. 2010 Feb 9;74(6):458-64. Matsui A, Tanaka E, Choi HS, Kianzad V, Gioux S, Lomnes SJ, **Frangioni JV**. Real-time, near-infrared, fluorescence-guided identification of the ureters using methylene blue. Surgery. 2010 Jan 29. [Epub ahead of print] Matsui A, Tanaka E, Choi HS, Winer JH, Kianzad V, Gioux S, Laurence RG, **Frangioni JV**. Real-time intra-operative near-infrared fluorescence identification of the extrahepatic bile ducts using clinically available contrast agents. Surgery. 2010 Jan 29. [Epub ahead of print]

McMahon CJ, **Rofsky NM**, **Pedrosa I**. Lymphatic metastases from pelvic tumors: anatomic classification, characterization, and staging. Radiology. 2010 Jan;254(1):31-46.

McMahon CJ, Vollmer CM Jr, Goldsmith J, Brown A, Pleskow D, **Pedrosa I**. An unusual variant of anomalous pancreaticobiliary junction in a patient with pancreas divisum diagnosed with secretin-magnetic resonance cholangiopancreatography. Pancreas. 2010 Jan;39(1):101-4.

Meng J, Peters DC, Hsing JM, Chuang ML, Chan J, Fish A, Josephson ME, **Manning WJ**. Late Gadolinium Enhancement of the Esophagus is Common on Cardiac MR Several Months after Pulmonary Vein Isolation: Preliminary Observations. Pacing Clin Electrophysiol. 2010 Jan 4. [Epub ahead of print]

Nour SG, **Goldberg SN**, Wacker FK, Rafie S, Paul S, Heidenreich JO, Rodgers M, Abdul-Karim FW, Duerk JL, Lewin JS. MR monitoring of NaClenhanced radiofrequency ablations: observations on low- and highfield-strength MR images with pathologic correlation. Radiology. 2010 Feb;254(2):449-59. Epub 2010 Jan 20.

O'Donnell CR, **Bankier AA**, Stiebellehner L, Reilly JJ, Brown R, Loring SH. Comparison of Plethysmographic and Helium Dilution Lung Volumes: Which is Best in COPD? Chest. 2009 Dec 18. [Epub ahead of print]

Orcutt KD, Ackerman ME, Cieslewicz M, Quiroz E, Slusarczyk AL, **Frangioni JV**, Wittrup KD. A modular IgG-scFv bispecific antibody topology. Protein Eng Des Sel. 2009 Dec 17. [Epub ahead of print]

Solazzo SA, Ahmed M, Schor-Bardach R, Yang W, Girnun GD, Rahmanuddin S, Levchenko T, Signoretti S, Spitz DR, Torchilin V, Goldberg SN. Liposomal Doxorubicin Increases Radiofrequency Ablation-induced Tumor Destruction by Increasing Cellular Oxidative and Nitrative Stress and Accelerating Apoptotic Pathways. Radiology. 2010 Feb 16. [Epub ahead of print]

Taclas JE, Nezafat R, Wylie JV, Josephson ME, Hsing J, **Manning WJ**, Peters DC. Relationship between intended sites of RF ablation and postprocedural scar in AF patients, using late gadolinium enhancement cardiovascular magnetic resonance. Heart Rhythm. 2009 Dec 13. [Epub ahead of print] [new in PubMed Feb 2010]

Tsukada H, Ernst A, Gangadharan S, Ashiku S, Garland R, **Litmanovich D**, DeCamp M. Tracheal replacement with a silicone-stented, fresh aortic allograft in sheep. Ann Thorac Surg. 2010 Jan;89(1):253-8.

Van Boven RW, Harrington GS, **Hackney DB**, Ebel A, Gauger G, Bremner JD, D'Esposito M, Detre JA, Haacke EM, Jack CR Jr, Jagust WJ, Le Bihan D, Mathis CA, Mueller S, Mukherjee P, Schuff N, Chen A, Weiner MW. Advances in neuroimaging of traumatic brain injury and posttraumatic stress disorder. J Rehabil Res Dev.2009;46(6):717-57.

Winer JH, Choi HS, Gibbs-Strauss SL, Ashitate Y, Colson YL, **Frangioni JV**. Intraoperative Localization of Insulinoma and Normal Pancreas Using Invisible Near-Infrared Fluorescent Light. Ann Surg Oncol. 2009 Dec 22. [Epub ahead of print]

Wykrzykowska JJ, Arbab-Zadeh A, Godoy G, Miller JM, Lin S, Vavere A, Paul N, Niinuma H, Hoe J, Brinker J, Khosa F, Sarwar S, Lima J, **Clouse ME**. Assessment of in-stent restenosis using 64-MDCT: analysis of the CORE-64 Multicenter International Trial. AJR Am J Roentgenol. 2010 Jan;194(1):85-92.

Xu G, Rowley HA, Wu G, **Alsop DC**, Shankaranarayanan A, Dowling M, Christian BT, Oakes TR, Johnson SC. Reliability and precision of pseudocontinuous arterial spin labeling perfusion MRI on 3.0 T and comparison with (15)O-water PET in elderly subjects at risk for Alzheimer's disease. NMR Biomed. 2009 Dec 1. [Epub ahead of print]

Zamboni GA, **Romero JY**, **Raptopoulos VD**. Combined vascularexcretory phase MDCT angiography in the preoperative evaluation of renal donors. AJR Am J Roentgenol. 2010 Jan;194(1):145-50.

Contact us:

To submit news, comments, and publications, please email: dwolfe@bidmc.harvard.edu or call 617-754-2515



RISING STARS Beth Israel Deaconess Medical Center

	FRIDAY, MARCH 5, 2010 SHERMAN AUDITORIUM					
8:00	"Introduction and Welcome" Vikas P. Sukhatme, M.D., Ph.D., Chief Academic Officer Eric Buehrens, Executive Vice President and Chief Operating Officer					
8:20	"Making Blood Vessels in Muscle" Zolt Arany, M.D., Department of Medicine					
8:45	"Novel Approaches for Breaking Immune Tolerance to Prostate Tumor Antigens" Simo Arredouani, Ph.D., Department of Surgery					
9:10	"Sleep in Brain Slices: Cellular Mechanisms of Sleep and Muscle Atonia" Elda Arrigoni, Ph.D., Department of Neurology					
9:35	"From Fossil Bones to Functional Assays in Cancer: Mass Spectrometry is an Indispensible Tool" John Asara, Ph.D., Department of Medicine					
10:00	Break – refreshments available outside of Auditorium					
10:25	"Dynamical Assays: Finding Hidden Information in Data" Madelena Costa, Ph.D., Department of Medicine					
10:50	"High Content Screens Implicate an Acetyl Lysine Signaling Network in the DNA Damage Response" Scott Floyd, M.D., Ph.D., Department of Radiation Oncology					
11:15	"Hyperpolarization: Increasing the Sensitivity of MRI for Functional and Metabolic Imaging" Aaron Grant, Ph.D., Department of Radiology					
11:40	"Stromal Determinants of Cancer Metastasis" Tony Karnoub, Ph.D., Department of Pathology					
12:05	Break for Lunch					
1:00	"Novel Signaling Pathways During Liver Regeneration and Their Therapeutic Implications" Seth Karp, M.D., Department of Surgery					
1:25	"Angiopoietins: Regulators of Vascular Leak in Sepsis" Samir Parikh, M.D., Department of Medicine					
1:50	"Large Intergenic Non-Coding RNAs: From Discovery to Function" John Rinn, Ph.D., Department of Pathology					
2:15	"Epigenomic Approaches to Adipocyte Biology" Evan Rosen, M.D., Ph.D., Department of Medicine					
2:40	"To Screen or not to Screen: Breast Cancer Detection Among Elderly Women" Mara Schonberg, M.D., Department of Medicine					
3:05	"Dynamic Markers of Intraoperative Instability" Balachundhar Subramaniam, M.D., M.P.H., Department of Anesthesiology					
3:30	"Evaluation of Statin-Associated Myopathy with 31P-MR Spectroscopy" Jim Wu, M.D., Department of Radiology					
3:55	Reception in CLS Lobby					