

Radical Views...

from the Department of Radiology

January 2010

Mon	Tues	Wed	Thurs	Fri
3:00-4:00 ED section meeting (ED annex, WCC) check w/Sheila Blalock 4-2506	1:00 - 2:00 MRI meeting (weekly) TCC-484	11:00-12:00 MSK clinical conference (weekly)  12:00-1:00 (weekly): Thoracic Imaging meeting GI Oncology/GU Oncology meeting 300-4:00 Mammo meeting [TCC-484]	12:00 - 1:30 Abd meeting (weekly) WCC-354  12:00-1:00 MSK meeting (weekly)	1  12:00-1:00 Happy New Year! No Grand Rounds or Resident Conference
4 7:30-8:15 Facial/Orbit Trauma (Kleeefield) 8:15-9:00 Nuclear Medicine Emergencies (Donohoe)	5 7:30 - 8:15 RUQ U/S (Kane) 8:15-9:00 Brain Emergency/Trauma (Camacho)	6 7:30 - 8:15 Pelvic U/S (Levine) 8:15-9:00 Nontraumatic GU Emergencies (Shah)	7 7:30 - 8:15 Scrotal U/S (Kane) 8:15 - 9:00 Vascular U/S (Sheiman)	8 7:30 - 8:00 Grand Rounds: Common Emergencies in IR (Jeff Velez)  8:00 - 9:00 Update on Percutaneous Image-Guided Ablation of Liver and Renal Tumors (Debra A. Gervais) 12:00-1:00 Resident Case Conference (Rojas)
11 7:30-8:15 Upper Abdominal Pain (Lee) 8:15 - 9:00 Lower Abdominal Pain (Lee)	12 7:30 - 8:15 Blunt Abdominal Trauma I (Camacho) 8:15-9:00 Blunt Abdominal Trauma II (Camacho)  10:30-11:30 Nuc Med meeting (GZ-103)	13 7:30 - 8:15 Aortic Emergencies - Case Based (Levenson) 8:30 - 9:00 Abdominal Vascular Emergencies (Pedrosa)	14 7:30 - 8:15 Post-Op Abdomen (Siewert) 8:15-9:00 Bowel Obstruction/Ischemia (Siewert)	15 7:30 - 9:00 Grand Rounds: QA 12:00 - 1:00 Resident Case Conference (Teich) [Clouse Conf Rm]
18 MLK Holiday	19 7:30 - 8:15 Pelvic Trauma I (Camacho) 8:15 - 9:00 Pelvic Trauma II (Camacho)  8:00 - 9:00 IR meeting [West Recovery Rm]	20 7:30 - 8:15 Chest Emergencies: Trauma (Boiselle) 8:15 - 9:00 Chest Emergencies: Nontrauma (Spirn)	21 7:30 - 8:15 IR Emergencies (Ahmed) 8:15 - 9:00 Stroke Imaging (Rojas)	22 7:30 - 9:00 Grand Rounds: Chiefs Rounds 12:00 - 1:00 Resident Case Conference (Hackney) [Clouse Conf Rm]
25 8:15 - 9:00 Spine Trauma (Teich) 8:15 - 9:15 Coronary CTA in ED (Shah)	26 7:30 - 8:15 Lower Extremity Trauma (Hochman) 8:15 - 9:00 Upper Extremity Trauma (Mcmahon)  10:30-11:30 Nuc Med meeting (GZ-103)  EVENT: 12 Noon Mentoring Program: Negotiating the IRB Process (Levine) Kirstein Living Rm	27 7:30 - 8:15 MSK Case Conference (Yablon) 8:15 - 9:00 Nontraumatic MSK Emergencies (Wu)	28 7:30 - 8:15 Case Based Neuro (Moonis) 8:15 - 9:00 Cased Based Body (Shah)	29 7:30 - 9:00 Grand Rounds: Molecular Imaging and Breast Imaging Applications (Robyn Birdwell) 12:00 - 1:00 Resident Case Conference (Bhadelia) [Clouse Conf Rm]

Tuesday, January 26, 2010  
12 Noon Mentoring Program:  
**Negotiating the IRB Process (Dr. Levine)**  
Kirstein Living Rm

2010 Save the Date(s):

12 Noon Mentoring Program

- 2/23/10 - Critical Thinking in Research
- 3/30/10 - Literature Searches
- 4/20/10 - Approaches to Experimental Design
- 5/25/10 - Using EndNote
- 6/22/10 - Grantsmanship 101

(Kirstein Living Rm., Contact Dr. Deborah Levine, for more information.)



*Did you know...*  
that the Radiology  
Department published  
192 papers in 2009?  
Please see the  
Bibliography starting  
on pg. 6 for the  
cumulative list

Thanks to Jesse Wei for this view of our  
leader at RSNA 2009!

To all members of the Department of Radiology:



Thank you for what you do each day for our patients, for your colleagues and for our hospital. We are coming to the end of a memorable year, both for its tough financial challenges and the terrific progress and growth we have experienced as a department. I am so aware of the salary and benefit reductions that many of you experienced, and can only hope that the foundation we are laying will provide greater long term stability for all of us. Once again I am deeply touched by the wonderful spirit that continues to permeate our radiology family at this time of year – I am aware of numerous charitable gifts that have been made in many of your names (by many of you, especially technologist groups both at BIDMC and at community sites including Harrington Memorial Hospital and at Chestnut Hill) to homeless families, local food banks, the Heifer Foundation, the New England Home for Little Wanderers and others. You all know who you are and should know that these gifts are so much appreciated by so many people. What never ceases to amaze me is the generosity shown by those of our staff members who have experienced financial turmoil and setbacks and can least afford to make these generous donations. Thank you.

As we move into 2010 you will notice several changes in our Department. Firstly, the Executive Office Suite has now moved back to West Campus ( Suite 302B, 3rd floor Clinical Center) where Donna Hallett, Cynthia Webster, Bob Kane, Andrea Baxter and I now share my former office space. Allen Reedy has moved to the administrative suite on the West Campus as well. The offices on Shapiro 4 will be assessed for clinical expansion needs.

Secondly, the former resident room, next to Donna Wolfe’s office (304A), has been converted into a conference room with PACS, PC and projection, and will also serve as our Radiology Gallery. Here we plan to exhibit works of art of any form, shape and origin created by members of our Department. If interested in exhibiting, please contact Donna Wolfe at 4-2515. Also, stay tuned as we work towards cleaning up, refurbishing and modernizing the Clouse Conference Room.

Thirdly, we will soon be deploying our Annual Operating Plan for all to see and follow as we move towards each of our goals for this year. Allen Reedy, Donna Hallett, Laurie Pascal and I have been working on this dashboard and meeting with division, section and modality leaders to reach consensus on our objectives, measures and targets. While not a new process, this will be the first time that the plan will be made available to everybody and we will be displaying progress towards each goal during the year. By aligning our priorities with those of the hospital (specifically elimination of preventable harm, improving the patient’s experience, sustaining our financial status, deploying Lean improvement processes throughout our department and responding to health care reform) we plan to depict our progress towards each of the measures within each category. As an extension of these goals, you should expect to see much of our attention, this upcoming year, focusing on radiation dose/exposure reduction, auditing and managing compliance with the National Patient Safety Goals, and patient-focused care.

Fourthly, we have begun deploying Lean processes in each modality and will gradually be exposing the entire department to a series of tools that can be utilized to eliminate waste and improve efficiency and throughput. Lean processes, derived from the Toyota Manufacturing system, will allow us to understand and define the current status of our work environment, to set new targets and to introduce steps for achieving these goals.

Lastly, I cannot overemphasize the role that our Department of Radiology plays in improving quality and safety for patients and staff at the local and national level. You should all be extremely proud of what we have all done in this Department. We have developed and published guidelines for radiology quality metrics, for key performance indicators, for managing adverse events, for establishing quality and safety programs, for use of performance-enhancing dashboards, for following up abnormal results, and for training residents to complete their outcomes projects. Much of what we have created in our Quality and Safety portfolio is now being used around the country and we will continue to establish the standards that other radiology departments will try to meet.

I am looking forward to yet another exciting and productive year, and am so glad to have each of you on board.

Thank you for everything that you do.

– Jonny

Welcome David Magaram, MD



Dr. Magaram joins BIDMC Radiology as Clinical Director of Breast Imaging. A graduate of the University of California San Francisco (UCSF) School of Medicine, he also completed residency training in diagnostic radiology and a fellowship in CT/Ultrasound at UCSF. As an Assistant Clinical Professor of Radiology at UCSF and UCLA, he directed the St. Vincent Medical Center’s community mammography program where he spearheaded a mobile mammography screening initiative serving 17 community health centers between 1981 and 1993. In 1993, he became Director of the Comprehensive Breast Care Clinic of the State College, PA, where he developed the stereotactic biopsy program. Most recently, Dr. Magaram was recruited from Breast Imaging Associates in Bellevue, WA where he had devoted his practice to breast imaging and invasive procedures. We look forward to reaping the benefits of his experience and skills in breast imaging. *An avid runner, Dr. Magaram looks forward to one day competing in the Boston Marathon.*

Welcome Shayna Roberts-Klein, MD



We officially welcome Dr. Shayna Roberts-Klein as a member of our Breast Imaging faculty. She is a graduate of Albany Medical College, Albany, NY, and completed her internship in internal medicine and residency training in diagnostic radiology at Albany Medical Center. Shayna completed a Women’s Imaging Fellowship with us in July, 2009 and she has consented to stay on as staff. Most recently, she was awarded a Certificate of Merit at this year’s RSNA for her exhibit, Minimizing Risk: A pictorial review identifying pitfalls in breast imaging interpretation (Priscilla Slanetz and Elaine Iuanow, co-authors).

• **Passing the Torch...to Maria Barile and James Kang, Chief Residents**

Effective Monday, January 4, we welcome current 3rd years residents, **Maria Barile** and **James Kang**, as our new Chief Residents. Chief Residents are chosen by their peers (with input from the Residency Program Officials) and is a vote of confidence in their leadership abilities. Many thanks to outgoing Chief Residents, **Aaron Hochberg** and **Kei Yamada** for their year at the helm.



Maria joined our residency program as a second year transfer from Brown University in February 2009. She was already familiar with BIDMC as she had completed her internship in Internal Medicine here after graduating from the University of Connecticut School of Medicine at Farmington. Maria also holds a BS in Neuroscience from Bates College in Lewiston, ME.



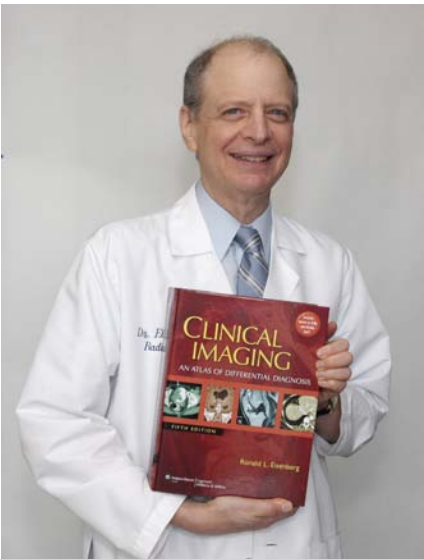
James completed a BS in Animal Physiology and Neuroscience at UC San Diego before going on for his MD at Johns Hopkins University School of Medicine. James spent his first year of residency training here at BIDMC trying not to be mistaken for graduating resident Jimmy Kang. We are glad to see him overcome this hurdle to become our newest Chief Resident.

**Did you know that...**

Chief Residents

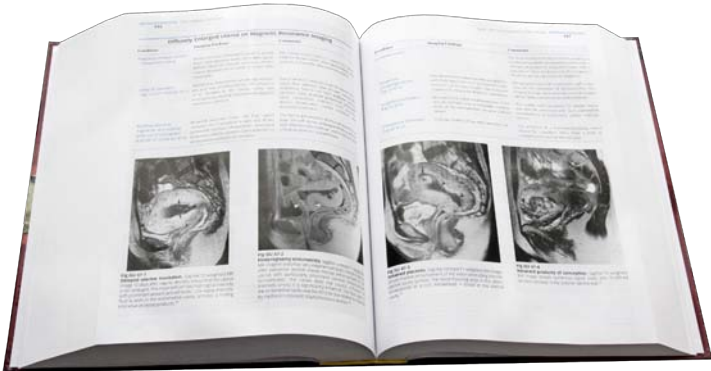
- Create and oversee the resident rotation and call schedules
- Serve as Faculty contact for daily resident morning conference schedule
- Represent residents at weekly Program Director meetings and act as a liaison between Program Directors and residents
- Represent residents at other departmental meetings, as needed
- Review results of annual resident Program Survey; find ways to pursue any suggested changes/improvements, as able
- Organize “Chief Rounds”
- Serve as Resident mentor and advocate

• **Books in Print: Congratulations Ronald Eisenberg!**



Ronald L. Eisenberg, MD  
Associate Professor of Radiology, HMS  
Section member, Thoracic Imaging/MSK  
Scientific Review Officer (SRO), BIDMC  
Institutional Review Board (IRB)  
Liaison for Resident QA and Research  
Projects in Chest and MSK

*“Pattern recognition leading to differential diagnoses is the essence of radiology.”* Building on his previous book, *Gastrointestinal Imaging: A Pattern Approach*, **Dr. Ronald Eisenberg** applied the same pattern concept to teach clinical imaging of all organ systems in a 3-column format: Differential Diagnosis, Imaging Findings, and Comments (clinical correlation and distinguishing features). This was so successful that his book, ***Clinical Imaging: An Atlas of Differential Diagnosis*** has now come out in a 5th edition which introduces new patterns in cross-sectional imaging, particularly in CT and MRI. At 1,458 pages, this book is designed to provide a handy reference for practicing radiologists and residents to arrive at a precise diagnosis; and in keeping with the digital age and our filmless environment, the book also provides a link for on-line access to the contents of the entire book in a fully-searchable format.



We are also indebted to Dr. Eisenberg for donating a copy of his book to our Residency Program Library! Please contact Richard Jennette (rjennett@bidmc.harvard.edu) for further information on donating to this worthy cause.

• **RSNA Addendum**

CHICAGO--*Molecular imaging is here to stay*, posed [sic] **David Gilmore, MS, CNMT**, Program Director of the School of Nuclear Medicine Technology at Beth Israel Deaconess Medical Center in Boston. Yet, molecular imaging continues to evolve and impact the technologist. Gilmore peered into the crystal ball to help techs better understand the coming molecular imaging revolution and its impact on them during a Tuesday morning educational session at the annual 2009 Radiological Society of North America (RSNA) meeting.

*Excerpted from HealthImaging.com*





MENTORING PROGRAM - Deborah Levine, MD

When we meet to discuss academic advancement at Harvard Medical School, one important criteria for faculty is the building of a national reputation. Involvement in Radiology Societies gives faculty members the opportunity to become leaders not only in their field of expertise, but also to become better known on the national stage. You can choose a subspecialty society or a national radiology society such as ACR or RSNA, but the important point is to become involved. It is gratifying how much you learn and gain by contributing time and effort at the national level. A great example from our department is our involvement in the American College of Radiology (ACR). We asked **Jay Pahade** to write about his experience with ACR as a resident and **Sanjay Shetty**, as a resident and junior faculty; and I will discuss how I came to be active on the Board of Chancellors.

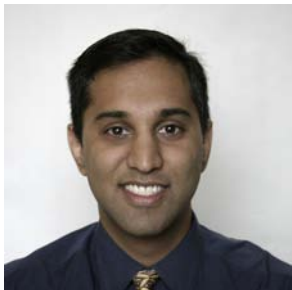
Jay Pahade, MD, 4th yr Resident



*The DRA, capitation/bundled payments, utilization criteria/rates, technical/professional fees, the new “oral” board exam, self referral...* Feel a bit clueless? So did I, until I started to get involved with the Resident and Fellow section of the American College of Radiology (ACR) and the Massachusetts Radiologic Society (MRS). These societies kept me aware of the issues facing our field and opened opportunities for even one person (radiology resident or fellow, etc) to help shape its future. Not only does resident ACR involvement allow us to expand our knowledge about radiology beyond basic image interpretation, but it is also a great way to meet colleagues from across the country, network with established practicing radiologists and enjoy some quality time in DC and on Capitol Hill. Remember, public awareness of radiology is less than that of most

other medical specialties: no other physician groups or patient advocacy groups regularly stand up for Radiologists and the role we play in healthcare. Without involvement, educating policy makers and the public on issues that will affect the future of our profession is not possible.

Sanjay Shetty, MD, MBA, Adjunct Faculty (MSK)



When discussing involvement in organized medicine, i.e., professional societies, the leaders in our field cite a common thread: that the initial step is usually a small one; a small committee assignment, raising your hand, or even informally offering to help a colleague. But what starts out as a very small step can quickly become a passion. My case is no different: at one meeting that I attended as a resident – the American Alliance of Academic Chief Residents in Radiology (A3CR2) – I drew a playing card that

allowed me to choose an opportunity to represent the group, and, when my turn came up, I chose to be a liaison to the American College of Radiology Resident and Fellows Section. It was a decision that quite literally changed my professional life. At my first ACR meeting, I was amazed at the passion of the participants and the importance of the issues being discussed; and I decided to get more involved in the ACR itself. Three years later, I was presenting to the ACR Council as the Chair of the National Residents and Fellows Section. As I transitioned into life as an attending, maintaining this involvement was very important to me. I am currently active at both the state level (now as Secretary of the Massachusetts Radiological Society) and also at the national level (through committee assignments in membership and economics). Each of these experiences has been fantastic. They have given me a much broader perspective on the governmental and economic forces that shape our specialty and introduced me to a network of committed radiologists who have now become very good friends over the six years of my involvement. The ACR, in particular, is very committed to making sure that young physicians become active in shaping the specialty, since decisions being made now will impact us for many years to come. So my advice is to put up your hand and ask to get involved – before you know it, you may find that a role in organized medicine is one of the most exciting aspects of your career.

A Sample of Sanjay’s Committee Assignments

Massachusetts Radiological Society	
2006-	Executive Committee
2006-	Subcommittee on Residents and Fellows
2006-	Legislative and Grassroots Liaison
American College of Radiology (ACR)	
2003-2004	Secretary, National Resident and Fellow Section Executive Committee
2003-2004	Task Force on Continuous Coverage
2004-2005	Vice Chair, National Resident and Fellow Section Executive Committee
2004-2006	Neuroradiology and Body MRI Guidelines and Standards Committee
2005-2006	Chair and Councilor, National Resident & Fellow Section Executive Committee
2005-2006	Council Steering Committee
2006-2008	Alternate Councilor from Massachusetts
2005-	Coding and Nomenclature Committee, Commission on Economics
2005-	Committee on Young Physicians, Commission on Membership
2007-	Commission on Government Relations
2007-	Web Advisory Committee

Deborah Levine, MD, Associate Chief, Academic Affairs/Co-Chief of Ultrasound, Chief, OB/GYN US



*“It is an honor to serve”* – How often have you heard that and wondered if the person truly felt that way? When I think of my ACR activities, that is exactly how I feel. I have been active in the ACR since I started my academic career. An appointment to the Ultrasound Human Resources committee (thank you, Bob Kane!) led to involvement in the Joint Review Committee on Diagnostic Medical Sonography (the group that gives recommendations for accreditation of schools that train sonogramers) which led to involvement in, and ultimately, Chair of the Economics Committee of the Commission on Ultrasound. This, among other activities in sonography education and accreditation, led to my election as Chair of the Ultrasound Commission and an appointment to the ACR Board of Chancellors. Throughout this process, I have traveled the country, discussed

issues that effect radiology both in private practice and in academia, and learned about politics on a national scale. The Board of Chancellors is a group of leaders in the field of Radiology. Their time is volunteered, and their effort on behalf of the ACR is remarkable. The discussions that we have via email and at our meetings are fascinating in their depth and breadth. The work that we do directly impacts the practice of Radiology across the country. It is truly amazing to hear how much work goes on “behind the scenes” in healthcare. Given the current healthcare debate going on in Congress, you can imagine how important this kind of work is to the future of Radiology. As with any issue worth fighting for, getting involved is the key.

January Visiting Professors: Grand Rounds January 8 and January 29

Debra A. Gervais, MD

Friday, January 8  
8:00 - 9:00 am, Sherman Auditorium

**Dr. Debra Gervais** will present “**Update on Percutaneous Image-Guided Ablation of Liver and Renal Tumors**” at Grand Rounds on January 8th. Dr. Gervais began her scientific career as an award-winning chemist (BS, University of Maine) prior to entering medical school. She is currently Associate Director of Abdominal Imaging and Intervention at Massachusetts General Hospital and Division Chief of Pediatric Radiology at MGH and MGH for Children. A graduate of Tufts University School of Medicine, she completed her residency in Diagnostic Radiology and fellowship training in Interventional Radiology and Abdominal Imaging and Intervention at Massachusetts General Hospital, Boston. She went on to earn her CAQ (Certificate of Addd Qualifications) in Vascular and Interventional Radiology in 1997. In 2007, she earned a Physician Leadership Development Certificate from the Massachusetts General Physician Organization (MGPO). Dr. Gervais has also served as Co-Chair of the RSNA Tumor Ablation Working Group (2006-2007) and is an editor for Techniques in Biopsy and Drainage, part of the Techniques in Interventional Radiology series published by Springer, UK. Currently, she is Chair of the Society of Interventional Radiology Interventional Oncology Task Force and Chair of the Subcommittee on Standards. Dr. Gervais has published 60 original articles and 59 reviews and chapters. She and her team received a Cum Laude citation for *Radiofrequency Ablation (RFA) of Renal Masses: Bowel Protection for Tumors within 1 cm of Bowel* presented at RSNA 2005 and a Certificate of Merit for *Ancillary Imaging Changes in Fat Following Radiofrequency Ablation of Renal Masses: Spectrum of Findings in PeriRenal/ParaRenal Fat, Collecting System Lipids, and PseudoSeeding* at RSNA 2007.

Robyn Birdwell, MD, FACR

Friday, January 29  
7:30 - 9:00 am, Sherman Auditorium

**Dr. Robyn Birdwell** will present “**Molecular Imaging and Breast Imaging Applications**” at Grand Rounds on January 29th. Dr. Birdwell graduated from Harvard Medical School and completed residency training in Internal Medicine and Diagnostic Radiology at the Peter Bent Brigham Hospital, Boston. Currently, she is an Associate Professor of Radiology at HMS and is section head for the Division of Breast Imaging and Program Co-Director for Ultrasound/Women’s Imaging at Brigham and Women’s Hospital, Boston. She has lectured extensively on multi-disciplinary breast cancer care, the old and new faces of molecular imaging of the breast, and most recently offered an “Overview of Molecular Imaging and Breast Imaging Applications” as part of the Breast/Nuclear Medicine/Molecular Imaging Series: Breast Imaging in the Era of Molecular Medicine at RSNA 2009. Dr. Birdwell will present an overview of the emerging tumor-specific findings and a paradigm for future individualized imaging.

**2009 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](mailto:dwolfe@bidmc.harvard.edu) to be included in next month’s issue.



2009 was a productive year for our department with a year end total of **192** publications consisting of original research, reviews, editorials, and society guidelines. Current\* trainees were co-authors on **26** papers.

\*Current = within one year of graduation

The number of papers published with former trainees (within 5 years of graduation) is **29** for a total of **54** trainee-authored papers in 2009.

Akram K, **Parker JA, Donohoe K, Kolodny G.** Role of single photon emission computed tomography/computed tomography in localization of ectopic parathyroid adenoma: a pictorial case series and review of the current literature. Clin Nucl Med. 2009 Aug;34(8):500-2.

Anderson SW, **Kruskal JB, Kane RA.** Benign hepatic tumors and iatrogenic pseudotumors. Radiographics 2009; 29:211-229.

Appelbaum E, Abraham JM, Pride YB, Harrigan CJ, Peters DC, Biller LH, **Manning WJ,** Gibson CM. Association of Thrombolysis in Myocardial Infarction Myocardial Perfusion Grade with cardiovascular magnetic resonance measures of infarct architecture after primary percutaneous coronary intervention for ST-segment elevation myocardial infarction. Am Heart J. 2009 Jul;158(1):84-91.

Appelbaum E, Kirtane AJ, Clark A, Pride YB, Gelfand EV, Harrigan CJ, Kissinger KV, **Manning WJ,** Gibson CM. Association of TIMI Myocardial Perfusion Grade and ST-segment resolution with cardiovascular magnetic resonance measures of microvascular obstruction and infarct size following ST-segment elevation myocardial infarction. J Thromb Thrombolysis 2009; 27:123-129.

Appelbaum E, **Manning WJ.** Science to practice: can the combination of resting first-pass myocardial perfusion and late gadolinium-enhanced cardiovascular MR imaging help identify myocardial infarction resulting from coronary microembolization? Radiology 2009; 250:609-611.

Appelbaum L, **Kane RA, Kruskal JB, Romero J,** Sosna J. Focal hepatic lesions: US-guided biopsy--lessons from review of cytologic and pathologic examination results. Radiology 2009; 250:453-458

Asch E, **Levine D, Pedrosa I,** Hecht JL, **Kruskal J.** Patterns of Misinterpretation of Adnexal Masses on CT and MR in an Academic Radiology Department(1). Acad Radiol. 2009 Apr 18. [Epub ahead of print]

Atkins MB, Bukowski RM, Escudier BJ, Figlin RA, Hudes GH, Kaelin WG Jr, Linehan WM, McDermott DF, Mier JW, **Pedrosa I,** Rini BI, Signoretti S, Sosman JA, Teh BT, Wood CG, Zurita AJ, King L. Innovations and challenges in renal cancer: summary statement from the Third Cambridge Conference. Cancer. 2009 May 15;115(10 Suppl):2247-51.

Bastos M, Lee EY, Strauss KJ, Zurakowski D, Tracy DA, **Boiselle PM.** Motion artifact on high-resolution CT images of pediatric patients: comparison of volumetric and axial CT methods. AJR Am J Roentgenol. 2009 Nov;193(5):1414-8.

Berg WA, Blume JD, Cormack JB, Mendelson EB, Lehrer D, Böhm-Vélez M, Pisano ED, Jong RA, Evans WP, Morton MJ, Mahoney MC, Larsen LH, Barr RG, Farria DM, Marques HS, Boparai K; ACRIN 6666 Investigators. **[Fein-Zachary V, Collaborator].** Combined screening with ultrasound and mammography vs mammography alone in women at elevated risk of breast cancer. JAMA. 2008 May 14;299(18):2151-63.

**Bhadelia RA,** Price LL, Tedesco KL, Scott T, Qiu WQ, Patz S, Folstein M, Rosenberg I, Caplan LR, Bergethon P. Diffusion tensor imaging, white matter lesions, the corpus callosum, and gait in the elderly. Stroke. 2009 Dec;40(12):3816-20. Epub 2009 Oct 1.



Blaha M, Budoff MJ, Shaw LJ, [Khosa F](#), Rumberger JA, Berman D, Callister T, Raggi P, Blumenthal RS, Nasir K. Absence of coronary artery calcification and all-cause mortality. JACC Cardiovasc Imaging. 2009 Jun;2(6):692-700.

**Boiselle PM**, O'Donnell CR, **Bankier AA**, Ernst A, Millet ME, Potemkin A, Loring SH. Tracheal collapsibility in healthy volunteers during forced expiration: assessment with multidetector CT. Radiology. 2009 Jul;252(1):255-62. Epub 2009 May 6.

**Boiselle PM**. Second World Congress of Thoracic Imaging: congratulations and a challenge for abstract authors. J Thorac Imaging. 2009 Aug;24(3):161.

**Boiselle PM**. Looking back (and) to the future. J Thorac Imaging. 2009 Nov;24(4):249.

Brodoefel H, Burgstahler C, Heuschmid M, Reimann A, [Khosa F](#), Kopp A, Schroeder S, Claussen CD, **Clouse ME**. Accuracy of dual-source CT in the characterisation of non-calcified plaque: use of a colour-coded analysis compared with virtual histology intravascular ultrasound. Br J Radiol. 2009 Oct;82(982):805-12. Epub 2009 Mar 30.

Brodoefel H, Burgstahler C, Sabir A, **Yam CS**, [Khosa F](#), Claussen CD, **Clouse ME**. Coronary plaque quantification by voxel analysis: dual-source MDCT angiography versus intravascular sonography. AJR Am J Roentgenol 2009; 192:W84-89.

Brook OR, Beck-Razi N, Abadi S, Filatov J, Ilivitzki A, **Litmanovich D**, Gaitini D. Sonographic detection of pneumothorax by radiology residents as part of extended focused assessment with sonography for trauma. J Ultrasound Med. 2009 Jun;28(6):749-55.

Brown DB, Cardella JF, Sacks D, **Goldberg SN**, et al. Millward SF, Quality improvement guidelines for transhepatic arterial chemoembolization, embolization, and chemotherapeutic infusion for hepatic malignancy. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S219-S226, S226.e1-10.

Brown DB, Gould JE, Gervais DA, **Goldberg SN**, Murthy R, Millward SF, Rilling WS, Geschwind JF, Salem R, Vedantham S, Cardella JF, Soulen MC; Society of Interventional Radiology Technology Assessment Committee and the International Working Group on Image-Guided Tumor Ablation. Transcatheter therapy for hepatic malignancy: standardization of terminology and reporting criteria. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S425-34.

Buell JS, Dawson-Hughes B, Scott TM, Weiner DE, Dallal GE, Qui WQ, Bergethon P, Rosenberg IH, Folstein MF, Patz S, **Bhadelia RA**, Tucker KL. 25-Hydroxyvitamin D, dementia, and cerebrovascular pathology in elders receiving home services. Neurology. 2009 Nov 25. [Epub ahead of print]

**Burstein D**. Tracking longitudinal changes in knee degeneration and repair. J Bone Joint Surg Am 2009; 91 Suppl 1:51-53.

**Burstein D**, Gray M, Mosher T, Dardzinski B. Measures of molecular composition and structure in osteoarthritis. Radiol Clin North Am. 2009 Jul;47(4):675-86. Review.

**Burstein D**, Hunter DJ. “Why aren’t we there yet?” Re-examining standard paradigms in imaging of OA Summary of the 2nd annual workshop on imaging based measures of osteoarthritis. Osteoarthritis Cartilage. 2009 May;17(5):571-8. Epub 2009 Feb 9.

Callstrom MR, York JD, Gaba RC, Gemmete JJ, Gervais DA, Millward SF, Brown DB, Dupuy D, **Goldberg SN**, Kundu S, Rose SC, Thomas JJ, Cardella JF; Technology Assessment Committee of the Society of Interventional Radiology. Research Reporting Standards for Image-guided Ablation of Bone and Soft Tissue Tumors. J Vasc Interv Radiol. 2009 Dec;20(12):1527-40. Epub 2009 Oct 27.

[Cantin L](#), **Bankier AA**, **Eisenberg RL**. Bronchiectasis. AJR Am J Roentgenol. 2009 Sep;193(3):W158-71.

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

Chan PG, **Smith MP**, Hauser TH, Yeon SB, Appelbaum E, **Rofsky NM**, **Manning WJ**. Noncardiac pathology on clinical cardiac magnetic resonance imaging. JACC Cardiovasc Imaging. 2009 Aug;2(8):980-6.

Chan J, **Manning WJ**, Appelbaum E, Smith P, Rice K. Large hiatal hernia mimicking left atrial mass: a multimodality diagnosis. J Am Coll Cardiol. 2009 Aug 4;54(6):569.

Choi HS, Ipe BI, Misra P, Lee JH, Bawendi MG, **Frangioni JV**. Tissue- and organ-selective biodistribution of NIR fluorescent quantum dots. Nano Lett. 2009 Jun;9(6):2354-9.

Choi HS, Liu W, Liu F, Nasr K, Misra P, Bawendi MG, **Frangioni JV**. Design considerations for tumour-targeted nanoparticles. Nat Nanotechnol. 2009 Nov 1.[Epub ahead of print]

Chuang ML, **Manning WJ**. Left ventricular hypertrophy and excess cardiovascular mortality is late gadolinium enhancement the imaging link? J Am Coll Cardiol 2009; 53:292-294.

Ciocan R, **Lenkinski RE**, Bernstein J, Bancu M, **Marquis R**, **Ivanishev A**, **Kourtelidis F**, Matsui A, Borenstein J, **Frangioni JV**. MRI contrast using solid-state, B(1)-distorting, microelectromechanical systems (MEMS) microresonant devices (MRDs). Magn Reson Med 2009; 61 (4): 860-866 APR 2009

Clark TW, Millward SF, Gervais DA, **Goldberg SN**, Grassi CJ, Kinney TB, Phillips DA, Sacks D, Cardella JF; Technology Assessment Committee of the Society of Interventional Radiology. Reporting standards for percutaneous thermal ablation of renal cell carcinoma. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S409-16.

**Clouse ME**. Coronary plaque quantification: is there a “gold standard?” J Cardiovasc Comput Tomogr 2009; 3:32-34.

Cypess AM, Lehman S, [Williams G](#), Tal I, **Rodman D**, Goldfine AB, Kuo FC, Palmer EL, Tseng YH, Doria A, **Kolodny GM**, Kahn CR. Identification and importance of brown adipose tissue in adult humans. N Engl J Med 2009; 360:1509-1517.

[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.

Dib MJ, Ferrada P, Challies T, Nasser I, **Brennan DD**, **Goldberg SN**, Chudzinski R, Karp SJ, Johnson SR, Hanto DW, Curry, MP. Tumor Burden as Determined by Radiological Volumetry Is an Accurate Predictor of Recurrence after Liver Transplantation for HCC Utilizing RFA as a Bridging Therapy AM J TRANSPLANT, 9: 445-445 Suppl. 2 2009

Dinh T, Doupis J, Lyons TE, Kuchibhotla S, Julliard W, Gnardellis C, Rosenblum BI, Wang X, Giurini JM, **Greenman RL**, Veves A. Foot Muscle Energy Reserves In Diabetic Patients Without And With Clinical Peripheral Neuropathy. Diabetes Care. 2009 Jun 9. [Epub ahead of print]

Dixon WT, Hancu I, Ratnakar SJ, Sherry AD, **Lenkinski RE**, **Alsop DC**. Amultislice gradient echo pulse sequence for CEST imaging. Magn Reson Med. 2009 Nov 13. [Epub ahead of print]

**Donohoe KJ**, Maurer AH, Ziessman HA, Urbain JL, Royal HD, Martin-Comin J. Procedure Guideline for Adult Solid-Meal Gastric-Emptying Study 3.0. J Nucl Med Technol. 2009 Aug 19. [Epub ahead of print]

Dugar A, Farley ML, Wang AL, Goldring MB, Goldring SR, Swaim BH, Bierbaum BE, **Burstein D**, Gray ML. The effect of paraformaldehyde fixation on the delayed gadolinium-enhanced MRI of cartilage (dGEMRIC) measurement. J Orthop Res 2009; 27:536-539.

Eckstein F, Wyman BT, Buck RJ, Wirth W, Maschek S, Hudelmaier M, Le Graverand MP; 9001140 Study Group [**Burstein D**]. Longitudinal quantitative MR imaging of cartilage morphology in the presence of gadopentetate dimeglumine (Gd-DTPA). Magn Reson Med. 2009 Apr;61(4):975-80. PubMed PMID: 19215048.

**Eisenberg RL**, **Romero J**, **Litmanovich D**, **Boiselle PM**, **Bankier AA**. Tuberculosis: Value of Lateral Chest Radiography in Pre-employment Screening of Patients with Positive Purified Protein Derivative Skin Test Results. Radiology. 2009 Sep;252(3):882-7. Epub 2009 Jun 9.

**Eisenberg RL**. Thickening of small bowel folds. AJR Am J Roentgenol. 2009 Jul;193(1):W1-6. Review.

**Eisenberg RL**. Bubbly lesions of bone. AJR Am J Roentgenol. 2009 Aug;193(2):W79-94.

Elliott R, **Bloch NB**, Dewolf W, Fu Y, Sanda M, Tomaszewski J, Wagner A, **Rofsky N**, Genega EM. Seminal Vesicle Invasion at Radical Prostatectomy: Correlation with Magnetic Reasonance [sic] Images. Modern Pathology. 2009; 22:167A-167A 753 Suppl. 1 Jan 2009.

Elliott R, **Bloch NB**, Dewolf W, Fu Y, Sanda M, Tomaszewski J, Wagner A, **Rofsky N**, Genega EM. Seminal Vesicle Invasion at Radical Prostatectomy: Correlation with Magnetic Reasonance [sic] Images. Laboratory Investigation. 2009; 89:167A-167A 753 Suppl. 1 Jan 2009

Ernst A, Rafeq S, **Boiselle P**, Sung A, Reddy C, Michaud G, Majid A, Herth FJ, Trentham D. Relapsing polychondritis and airway involvement. Chest 2009; 135:1024-1030.

Fox CS, Gona P, Hoffmann U, Porter SA, Salton CJ, Massaro JM, Levy D, Larson MG, D’Agostino RB, Sr., O’Donnell CJ, **Manning WJ**. Pericardial Fat, Intrathoracic Fat, and Measures of Left Ventricular Structure and Function. The Framingham Heart Study. Circulation. 2009 Mar 31;119(12):1586-91. Epub 2009 Mar 16.

**Frangioni JV.** The problem is background, not signal. Mol Imaging. 2009 Dec;8(6):303-4.

**Ganguli S, Camacho M, Yam CS, Pedrosa I.** Preparing first-year radiology residents and assessing their readiness for on-call responsibilities: results over 5 years. AJR Am J Roentgenol 2009; 192:539-544.

Gansler DA, McLaughlin NC, Iguchi L, Jerram M, Moore DW, **Bhadelia R**, Fulwiler C. A multivariate approach to aggression and the orbital frontal cortex in psychiatric patients. Psychiatry Res 2009; 171:145-154.

Genega EM, **Bloch NB**, Dewolf W, Elliot R, Fu Y, Sanda M, Tomaszewski J, **Rofsky N.** Correlation of Gleason Score and Tumor Size with Magnetic Reasonance [sic] Image-Detected Prostate Cancer. Modern Pathology. 2009; 22: 170A-170A 767 Suppl. 1 Jan 2009

Genega EM, **Bloch NB**, Dewolf W, Elliot R, Fu Y, Sanda M, Tomaszewski J, **Rofsky N.** Correlation of Gleason Score and Tumor Size with Magnetic Reasonance [sic] Image-Detected Prostate Cancer. Laboratory Investigation. 2009; 89: 170A-170A 767 Suppl. 1 Jan 2009

Gervais DA, **Goldberg SN**, Brown DB, Soulen MC, Millward SF, Rajan DK. Society of Interventional Radiology position statement on percutaneous radiofrequency ablation for the treatment of liver tumors. J Vasc Interv Radiol 2009; 20:3-8.

Gervais DA, **Goldberg SN**, Brown DB, Soulen MC, Millward SF, Rajan DK. Society of Interventional Radiology position statement on percutaneous radiofrequency ablation for the treatment of liver tumors. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S342-7.

Gioux S, Kianzad V, Ciocan R, Gupta S, Oketokoun R, **Frangioni JV.** High-power, computer-controlled, light-emitting diode-based light sources for fluorescence imaging and image-guided surgery. Mol Imaging. 2009 May-Jun;8(3):156-65.

Gioux S, Mazhar A, Cuccia DJ, Durkin AJ, Tromberg BJ, **Frangioni JV.** Three-dimensional surface profile intensity correction for spatially modulated imaging. J Biomed Opt. 2009 May-Jun;14(3):034045.

**Goldberg SN**, Grassi CJ, Cardella JF, Charboneau JW, Dodd GD 3rd, Dupuy DE, Gervais DA, Gillams AR, **Kane RA**, Lee FT Jr, Livraghi T, McGahan J, Phillips DA, Rhim H, Silverman SG, Solbiati L, Vogl TJ, Wood BJ, Vedantham S, Sacks D; Society of Interventional Radiology Technology Assessment Committee and the International Working Group on Image-guided Tumor Ablation. Image-guided tumor ablation: standardization of terminology and reporting criteria. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S377-90.

Gosset N, **Bankier AA, Eisenberg RL.** Tree-in-bud pattern. AJR Am J Roentgenol. 2009 Dec;193(6):W472-7.

Gourtsoyianni S, Zamboni GA, **Romero JY, Raptopoulos VD.** Routine use of modified CT Enterography in patients with acute abdominal pain. Eur J Radiol 2009; 69:388-392.

Guermazi A, Eckstein F, Hellio Le Graverand-Gastineau MP, Conaghan PG, **Burstein D**, Keen H, Roemer FW. Osteoarthritis: current role of imaging. Med Clin North Am 2009; 93:101-126, xi.

**Hackney DB.** Forget the diffusion--do we need T2-weighted MR images to detect early central nervous system injury? Radiology 2009; 250:303-304.

Hajjar I, Zhao P, **Alsop D**, Abduljalil A, Selim M, Novak P, Novak V. Association of Blood Pressure Elevation and Nocturnal Dipping With Brain Atrophy, Perfusion and Functional Measures in Stroke and Nonstroke Individuals. Am J Hypertens. 2009 Oct 1. [Epub ahead of print]

**Hall FM.** Computer-aided mammography screening. N Engl J Med. 2009 Feb 19;360(8):836.

**Hall FM.** Quantity counts: industrial-academic relationships and disclosures. Radiology. 2009 May;251(2):612; author reply 612.

**Hall FM.** The radiology report of the future. Radiology. 2009 May;251:313-6.

**Hall FM.** Single-pass continuous whole-body CT for polytrauma. AJR Am J Roentgenol. 2009 Aug;193(2):594; author reply 594.

**Hall FM.** Frequency of diagnosis of atypical ductal hyperplasia on breast biopsy. AJR Am J Roentgenol. 2009 Sep;193(3):W253; author reply W254.

**Hall FM.** Mammographic screening in younger women at high risk. AJR Am J Roentgenol. 2009 Oct;193(4):1188; author reply.

Han Y, Osborn EA, Maron MS, **Manning WJ**, Yeon SB. Impact of papillary and trabecular muscles on quantitative analyses of cardiac function in hypertrophic cardiomyopathy. J Magn Reson Imaging. 2009 Oct 23;30(5):1197-1202. [Epub ahead of print]

Han Y, Peters DC, Dokhan B, **Manning WJ.** Shorter difference between myocardium and blood optimal inversion time suggests diffuse fibrosis in dilated cardiomyopathy. J Magn Reson Imaging. 2009 Oct 23;30(5):967-972. [Epub ahead of print]

Hines N, **Mehta T, Romero J, Levine D.** What is the clinical importance of echogenic material in the fetal frontal horns? J Ultrasound Med. 2009 Dec;28(12):1629-37.

Hirsch AE, Mulleady Bishop P, Dad L, Singh D, **Slanetz PJ.** An increase in medical student knowledge of radiation oncology: a pre-post examination analysis of the oncology education initiative. Int J Radiat Oncol Biol Phys 2009; 73:1003-1008; quiz 1008 e1001-1008 e1002.

House M, **Bhadelia RA**, Myers K, Socrate S. Magnetic resonance imaging of three-dimensional cervical anatomy in the second and third trimester. Eur J Obstet Gynecol Reprod Biol. 2009 May;144 Suppl 1:S65-9. Epub 2009 Mar 17.

Humblet V, Misra P, Bhushan KR, Nasr K, Ko YS, Tsukamoto T, Pannier N, **Frangioni JV**, Maison W. Multivalent scaffolds for affinity maturation of small molecule cell surface binders and their application to prostate tumor targeting. J Med Chem 2009; 52:544-550.

Hwang SW, Abozed MM, Hale A, **Eisenberg RL**, Dvorak T, Yao K, Pfannl R, Mignano J, Zhu JJ, Price LL, Strauss GM, Wu JK. Adjuvant Gamma Knife radiosurgery following surgical resection of brain metastases: a 9-year retrospective cohort study. J Neurooncol. 2009 Nov 12. [Epub ahead of print]

Ibrahim T, Makowski MR, Jankauskas A, Maintz D, Karch M, Schachoff S, **Manning WJ**, Schömig A, Schwaiger M, Botnar RM. Serial contrast-enhanced cardiac magnetic resonance imaging demonstrates regression of hyperenhancement within the coronary artery wall in patients after acute myocardial infarction. JACC Cardiovasc Imaging. 2009 May;2(5):580-8.

Järnum H, Steffensen EG, Knutsson L, Fründ ET, Simonsen CW, Lundbye-Christensen S, Shankaranarayanan A, **Alsop DC**, Jensen FT, Larsson EM. Perfusion MRI of brain tumours: a comparative study of pseudo-continuous arterial spin labelling and dynamic susceptibility contrast imaging. Neuroradiology. 2009 Oct 20. [Epub ahead of print]

Jessel RH, Zurakowski D, Zilkens C, **Burstein D**, Gray ML, Kim YJ. Radiographic and patient factors associated with pre-radiographic osteoarthritis in hip dysplasia. J Bone Joint Surg Am. 2009 May;91(5):1120-9.

Jhaveri RR, Pond KK, Hauser TH, Kissinger KV, Goepfert L, Schneider B, Jones DB, **Manning WJ.** Cardiac remodeling after substantial weight loss: a prospective cardiac magnetic resonance study after bariatric surgery. Surg Obes Relat Dis. 2009 Feb 25. [Epub ahead of print]

Kajimura S, Seale P, Kubota K, Lunsford E, **Frangioni JV**, Gygi SP, Spiegelman BM. Initiation of myoblast to brown fat switch by a PRDM16-C/EBP-beta transcriptional complex. Nature. 2009 Jul 29. [Epub ahead of print]

Katoh M, Spuentrup E, Stuber M, Buecker A, **Manning WJ**, Günther RW, Botnar RM. Flow Targeted 3D Steady-State Free-Precession Coronary MR Angiography: Comparison of Three Different Imaging Approaches. Invest Radiol. 2009 Oct 23. [Epub ahead of print]

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]

Khaodhiar L, Brennan AM, Lima C, Chan JL, Mantzoros CS, **Manning WJ**, Danias PG, Veves A. Effect of valsartan on left ventricular anatomy and systolic function and aortic elasticity. Metabolism 2009; 58:682-688.

Kircher MF, Hines-Peralta A, Boisselle PM, Donohoe K, Siewert B. Implementation of Screen-Capture Video Recordings of Resident Conferences in an Academic Radiology Department Pilot Experience. Acad Radiol. 2009 Nov 14. [Epub ahead of print]

Kothavale AA, Yeon SB, **Manning WJ.** A systematic approach to performing a comprehensive transesophageal echocardiogram. A call to order. BMC Cardiovasc Disord. 2009 May 13;9(1):18. [Epub ahead of print]

Krajewski K, Siewert B, Eisenberg RL. Colonic dilation. AJR Am J Roentgenol. 2009 Nov;193(5):W363-72.

**Kressel HY.** Expression of concern from the editor. Radiology. 2009 Jul;252(1):318.

**Kressel HY.** Comment from the editor on Lambertz et al in the September 2008 issue. Radiology. 2009 Jun;251(3):950.

**Kressel HY.** Diagnosis please certificates of recognition awarded to three individuals and to International and North American Radiology Resident Groups. Radiology. 2009 Oct;253(1):6-8.

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

Kritsaneepaiboon S, Lee EY, Zurakowski D, Strauss KJ, **Boisselle PM.** MDCT pulmonary angiography Evaluation of pulmonary embolism in children. AJR Am J Roentgenol 2009; 192:1246-1252.



**Kruskal JB**, Anderson S, **Yam CS**, Sosna J. Strategies for Establishing a Comprehensive Quality and Performance Improvement Program in a Radiology Department. Radiographics. 2009 Mar-Apr;29(2):315-29. Epub 2009 Jan 23.

Lattanzi R, Sodickson DK, **Grant AK**, Zhu Y. Electrodynamic constraints on homogeneity and radiofrequency power deposition in multiple coil excitations. Magn Reson Med 2009; 61:315-334.

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, **Boiselle PM**. Tracheobronchomalacia in infants and children: multidetector CT evaluation. Radiology. 2009 Jul;252(1):7-22. Review.

Lee EY, Kritsaneepaiboon S, Zurakowski D, Arellano CM, Strauss KJ, **Boiselle PM**. Beyond the Pulmonary Arteries: Alternative Diagnoses in Children With MDCT Pulmonary Angiography Negative for Pulmonary Embolism. AJR Am J Roentgenol. 2009 Sep;193(3):888-94.

Lee EY, **Litmanovich D**, **Boiselle PM**. Multidetector CT Evaluation of Tracheobronchomalacia. Radiol Clin North Am 2009; 47:261-269.

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 EY, Zurakowski D, Diperna S, d'Almeida Bastos M, Strauss KJ, **Boiselle PM**. Parenchymal and pleural abnormalities in children with and without pulmonary embolism at MDCT pulmonary angiography. Pediatr Radiol. 2009 Oct 22. [Epub ahead]

**Lenkinski RE**, Wang X, Elian M, **Goldberg SN**. Interaction of gadolinium-based MR contrast agents with choline: Implications for MR spectroscopy (MRS) of the breast. Magn Reson Med 2009; 61 (6): 1286-1292 JUN 2009.

**Lin PJ**. Operational Logic and Functionality of Automatic Dose Rate and Image Quality Control of Conventional Fluoroscopy. Med. Phys 2009; 36 (5): 1486-1493.

**Litmanovich D**, **Bankier AA**, Cantin L, **Raptopoulos V**, **Boiselle PM**. CT and MRI in diseases of the aorta. AJR Am J Roentgenol. 2009 Oct;193(4):928-40.

**Litmanovich D**, **Boiselle PM**, **Bankier AA**. CT of pulmonary emphysema--current status, challenges, and future directions. Eur Radiol 2009; 19:537-551.

**Litmanovich D**, **Boiselle PM**, **Bankier AA**, Kataoka ML, **Pianykh O**, **Raptopoulos V**. Dose reduction in computed tomographic angiography of pregnant patients with suspected acute pulmonary embolism. J Comput Assist Tomogr. 2009 Nov-Dec;33(6):961-6.

**Litmanovich D**, Gourevich K, Israel O, Gallimidi Z. Unexpected foci of (18) F-FDG uptake in the breast detected by PET/CT: incidence and clinical significance. Eur J Nucl Med Mol Imaging. 2009 May 1. [Epub ahead of print]

Liu F, Misra P, Lunsford EP, Vannah JT, Liu Y, **Lenkinski RE**, **Frangioni JV**. A dose- and time-controllable syngeneic animal model of breast cancer microcalcification. Breast Cancer Res Treat. 2009 Sep 17. [Epub ahead of print]

Loui P, **Alsop D**, Schlaug G. Tone deafness: a new disconnection syndrome? J Neurosci. 2009 Aug 19;29(33):10215-20.

Ly HQ, Hoshino K, Pomerantseva I, Kawase Y, Yoneyama R, Takewa Y, Fortier A, Gibbs-Strauss SL, Vooght C, **Frangioni JV**, Hajjar RJ. In vivo myocardial distribution of multipotent progenitor cells following intracoronary delivery in a swine model of myocardial infarction. Eur Heart J. 2009 Aug 17. [Epub ahead of print]

MacMahon PJ, Taylor DH, Duke D, **Brennan DD**, Eustace SJ. Disc displacement patterns in lumbar anterior spondylolisthesis: contribution to foraminal stenosis. Eur J Radiol. 2009 Apr;70(1):149-54. Epub 2008 Feb 19.

Mahgerefteh S, **Kruskal JB**, **Yam CS**, Blachar A, Sosna J. Peer Review in Diagnostic Radiology: Current State and a Vision for the Future. Radiographics. 2009 Jun 29. [Epub ahead of print]

Malloy PC, Grassi CJ, Kundu S, Gervais DA, Miller DL, Osnis RB, Postoak DW, Rajan DK, Sacks D, Schwartzberg MS, Zuckerman DA, Cardella JF; Standards of Practice Committee with Cardiovascular and Interventional Radiological Society of Europe (CIRSE) Endorsement [**Goldberg SN**, Contributor]. Consensus guidelines for periprocedural management of coagulation status and hemostasis risk in percutaneous image-guided interventions. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S240-9. Epub 2009 Apr 25.

Maron MS, Maron BJ, Harrigan C, Buros J, Gibson CM, Olivotto I, Biller L, Lesser JR, Udelson JE, **Manning WJ**, Appelbaum E. Hypertrophic cardiomyopathy phenotype revisited after 50 years with cardiovascular magnetic resonance. J Am Coll Cardiol. 2009 Jul 14;54(3):220-8.

Maron MS, Appelbaum E, Harrigan CJ, Buros J, Gibson CM, Hanna C, Lesser JR, Udelson JE, **Manning WJ**, Maron BJ. Clinical profile and significance of delayed enhancement in hypertrophic cardiomyopathy. Circ Heart Fail. 2008 Sep;1(3):184-91. Epub 2008 Jun 23.

Matsui A, Lee BT, Winer JH, Kianzad V, **Frangioni JV**. Image-guided perforator flap design using invisible near-infrared light and validation with x-ray angiography. Ann Plast Surg. 2009 Sep;63(2):327-30.

Matsui A, Lee BT, Winer JH, Laurence RG, **Frangioni JV**. Quantitative assessment of perfusion and vascular compromise in perforator flaps using a near-infrared fluorescence-guided imaging system. Plast Reconstr Surg. 2009 Aug;124(2):451-60.

Matsui A, Lee BT, Winer JH, Laurence RG, **Frangioni JV**. Submental Perforator Flap Design with a Near-Infrared Fluorescence Imaging System: The Relationship among Number of Perforators, Flap Perfusion, and Venous Drainage. Plast Reconstr Surg. 2009 Oct;124(4):1098-104.

Matsui A, Lee BT, Winer JH, Vooght CS, Laurence RG, **Frangioni JV**. Real-time intraoperative near-infrared fluorescence angiography for perforator identification and flap design. Plast Reconstr Surg 2009; 123:125e-127e.

Matsui A, Lomnes SJ, **Frangioni JV**. Optical clearing of the skin for near-infrared fluorescence image-guided surgery. J Biomed Opt. 2009 Mar-Apr;14(2):024019.

**McMahon CJ**, **Bloch BN**, **Lenkinski RE**, **Rofsky NM**. Dynamic contrast-enhanced MR imaging in the evaluation of patients with prostate cancer. Magn Reson Imaging Clin N Am. 2009 May;17(2):363-83.

**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**, **Shetty SK**, Anderson ME, **Hochman MG**. Case report: Longitudinal stress fracture of the humerus: imaging features and pitfalls. Clin Orthop Relat Res. 2009 Dec;467(12):3351-5. Epub 2009 Jul 9.

**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.

MacMahon PJ, Taylor DH, Duke D, **Brennan DD**, Eustace SJ. Disc displacement patterns in lumbar anterior spondylolisthesis: contribution to foraminal stenosis. Eur J Radiol. 2009 Apr;70(1):149-54. Epub 2008 Feb 19.

Mertyna P, Goldberg W, Yang W, **Goldberg SN**. Thermal Ablation A Comparison of Thermal Dose Required for Radiofrequency-, Microwave-, and Laser-Induced Coagulation in an Ex Vivo Bovine Liver Model(1). Acad Radiol. 2009 Oct 14. [Epub ahead of print]

Miksad RA, Lai KC, Stein MC, Healy ME, **Rojas R**, Krajewski KM, Zhu AX. Imbalance and Gait Disturbance from Tyrosine Kinase Inhibition in Hepatocellular Cancer. J Gastrointest Cancer. 2009 Nov 6. [Epub ahead of print]

Miller JM, Dewey M, Vavere AL, Rochitte CE, Niinuma H, Arbab-Zadeh A, Paul N, Hoe J, de Roos A, Yoshioka K, Lemos PA, Bush DE, Lardo AC, Texter J, Brinker J, Cox C, **Clouse ME**, Lima JA. Coronary CT angiography using 64 detector rows: methods and design of the multi-centre trial CORE-64. Eur Radiol 2009; 19:816-828.

Moore DW, **Bhadelia RA**, Billings RL, Fulwiler C, Heilman KM, Rood KM, Gansler DA. Hemispheric connectivity and the visual-spatial divergent-thinking component of creativity. Brain Cogn. 2009 Aug;70(3):267-72. Epub 2009 Apr 7

Neema M, Goldberg-Zimring D, Guss ZD, Healy BC, Guttmann CR, Houtchens MK, Weiner HL, Horsfield MA, **Hackney DB**, **Alsop DC**, Bakshi R. 3 T MRI relaxometry detects T2 prolongation in the cerebral normal-appearing white matter in multiple sclerosis. Neuroimage. 2009 Jul 1;46(3):633-41. Epub 2009 Mar 10.

Nezafat R, **Manning WJ**. Coronary artery disease: High field strength coronary MRA--ready for prime time? Nat Rev Cardiol. 2009 Nov;6(11):676-8.

**Nikolic B**, Elian M, Mertyna P, **Yam S**, **Goldberg SN**. The effect of hepatic radiofrequency ablation on stem cell trafficking in the rat model. J Vasc Interv Radiol. 2009 May;20(5):640-7; quiz 571.

**Nikolic B**, **Faintuch S**, **Goldberg SN**, Kuo MD, Cardella JF. Stem cell therapy: a primer for interventionalists and imagers. J Vasc Interv Radiol. 2009 Aug;20(8):999-1012.



Nishino M, **Lee KS**, Hatabu H. The spectrum of pulmonary sarcoidosis: Variations of high-resolution CT findings and clues for specific diagnosis. Eur J Radiol 2009.

Novak V, Haertle M, Zhao P, Hu K, Munshi M, Novak P, Abduljalil A, **Alsop D**. White matter hyperintensities and dynamics of postural control. Magn Reson Imaging 2009 Jul;27(6):752-9. Epub 2009 Feb 28.

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**, Witttrup KD. A modular IgG-scFv bispecific antibody topology. Protein Eng Des Sel. 2009 Dec 17. [Epub ahead of print]

**Pahade JK, Litmanovich D, Pedrosa I, Romero J, Bankier AA, Boisselle PM**. Quality Initiatives: Imaging Pregnant Patients with Suspected Pulmonary Embolism: What the Radiologist Needs to Know. Radiographics. 2009 May-Jun;29(3):639-54. Epub 2009 Mar 30.

Pannier N, Humblet V, Misra P, **Frangioni JV**, Maison W. Multivalent peptidomimetics for tumor targeting. Adv Exp Med Biol. 2009;611:403-4.

Pannier N, **Frangioni JV**, Maison W. Mimicking natural globular structures with rigid scaffolds based on adamantane. Adv Exp Med Biol. 2009;611:99-100.

**Parker JA**. Improving Lung Scintigraphy. J Nucl Med. 2009 Nov 12. [Epub ahead of print]

**Paulin S**. Coronary angiography by 64-row CT. N Engl J Med. 2009 May 7;360(19):2027-8; author reply 2029-30.

**Pedrosa I**, Laforanara M, Pandharipande PV, Goldsmith JD, **Rofsky NM**. Pregnant patients suspected of having acute appendicitis: effect of MR imaging on negative laparotomy rate and appendiceal perforation rate. Radiology 2009; 250:749-757.

**Pedrosa I, Alsop DC, Rofsky NM**. Magnetic resonance imaging as a biomarker in renal cell carcinoma. Cancer. 2009 May 15;115(10 Suppl):2334-45.

**Pedrosa I**, Ngo L, **Wei J**, Schuster M, Mahallati H, **Smith M, Rofsky NM**. Dynamic half-Fourier single-shot turbo spin echo for assessment of deep venous thrombosis: initial observations. Magn Reson Imaging. 2009 Jun;27(5):617-24. Epub 2008 Dec 23.

Peters DC, Wylie JV, Hauser TH, Nezafat R, Han Y, Woo JJ, Taclas J, Kissinger KV, Goddu B, Josephson ME, **Manning WJ**. Recurrence of atrial fibrillation correlates with the extent of post-procedural late gadolinium enhancement: a pilot study. JACC Cardiovasc Imaging 2009; 2:308-316.

Peters DC, Appelbaum EA, Nezafat R, Dokhan B, Han Y, Kissinger KV, Goddu B, **Manning WJ**. Left ventricular infarct size, peri-infarct zone, and papillary scar measurements: A comparison of high-resolution 3D and conventional 2D late gadolinium enhancement cardiac MR. J Magn Reson Imaging. 2009 Oct;30(4):794-800.

Prasad V, Sacks BA, Kraus S, **Clouse ME**. Embolotherapy for lower urinary tract hemorrhage. J Vasc Interv Radiol. 2009 Jul;20(7):965-70. Epub 2009 Jun 5.

Rana RS, **Wu JS, Eisenberg RL**. Periosteal reaction. AJR Am J Roentgenol. 2009 Oct;193(4):W259-72.

**Reddy AS, Dinobile D, Orgeta JE, Peri N**. Transoral approach to CT-guided C2 interventions. Pain Physician 2009; 12:253-258.

Rempp H, Voigtl nder M, Clasen S, Kempf S, Neugebauer A, Schraml C, Schmidt D, Claussen CD, Enderle MD, **Goldberg SN**, Pereira PL. Increased Ablation Zones Using a Cryo-Based Internally Cooled Bipolar RF Applicator in Ex Vivo Bovine Liver. Invest Radiol. 2009 Oct 15. [Epub ahead of print]

Robson PM, Madhuranthakam AJ, **Dai W, Pedrosa I, Rofsky NM, Alsop DC**. Strategies for reducing respiratory motion artifacts in renal perfusion imaging with arterial spin labeling. Magn Reson Med. 2009 Jun;61(6):1374-87.

Romney BP, **Khosa F**, Costa DN, Chan P, **Rofsky NM, Manning WJ**. Non-Cardiac Findings on Cardiovascular Magnetic Resonance Imaging Are Common: Impact of Imaging Sequences and Reading Session Format. Circulation 2008;118(18):S784-S785.

Rosen Y, **Lenkinski RE**. Sodium MRI of a human transplanted kidney. Acad Radiol. 2009 Jul;16(7):886-9. Epub 2009 Apr 17.

Ruberg FL, Appelbaum E, Davidoff R, Ozonoff A, Kissinger KV, Harrigan C, Skinner M, **Manning WJ**. Diagnostic and prognostic utility of cardiovascular magnetic resonance imaging in light-chain cardiac amyloidosis. Am J Cardiol 2009; 103:544-549.

Salazar GM, **Faintuch S**, Gladstone SR, Lang EV. In vitro Analysis of Downstream Particulates with Mechanical Thrombectomy Devices: Comparison of 20-kHz Sonothrombolytic and Rotating Dispersion Wire Systems. J Vasc Interv Radiol 2009.

Sayegh RA, **Slanetz PJ**. Breast density, hormones, and screening mammography: should women be less concerned? Menopause. 2009 Sep 1. [Epub ahead of print]

Schor-Bardach R, **Alsop DC, Pedrosa I, Solazzo SA, Wang X, Marquis RP**, Atkins MB, Regan M, Signoretti S, **Lenkinski RE, Goldberg SN**. Does Arterial Spin-labeling MR Imaging-measured Tumor Perfusion Correlate with Renal Cell Cancer Response to Antiangiogenic Therapy in a Mouse Model? Radiology. 2009 Jun;251(3):731-742.

Schulman JM, Christison-Lagay ER, Kozakewich HP, **Boisselle PM**, Burrows PE, Fox VL, Fishman SJ. Macrocystic lymphatic malformation in the pulmonary parenchyma. Ann Thorac Surg 2009; 87:1607-1609.

Sherry AD, Caravan P, **Lenkinski RE**. Primer on gadolinium chemistry. J Magn Reson Imaging. 2009 Dec;30(6):1240-8.

**Siegal DS, Wu JS**, Newman JS, Del Cura JL, **Hochman MG**. Calcific tendinitis: a pictorial review. Can Assoc Radiol J. 2009 Dec;60(5):263-72.

**Siewert B, Kruskal JB, Eisenberg R, Hall F, Sosna J**. Quality Improvement Grand Rounds at Beth Israel Deaconess Medical Center: CT Colonography Performance Review after an Adverse Event. Radiographics. 2009 Nov 18. [Epub ahead of print]

Solomon SD, Appelbaum E, **Manning WJ**, Verma A, Berglund T, Lukashevich V, Cherif Papst C, Smith BA, Dahlof B. Effect of the direct Renin inhibitor aliskiren, the Angiotensin receptor blocker losartan, or both on left ventricular mass in patients with hypertension and left ventricular hypertrophy. Circulation 2009; 119:530-537.

Stankiewicz JM, Neema M, **Alsop DC**, Healy BC, Arora A, Buckle GJ, Chitnis T, Guttman CR, Hackney D, Bakshi R. Spinal cord lesions and clinical status in multiple sclerosis: A 1.5 T and 3 T MRI study. J Neurol Sci 2009; 279:99-105.

Stoeck CT, Han Y, Peters DC, Hu P, Yeon SB, Kissinger KV, Goddu B, Goepfert L, **Manning WJ**, Kozerke S, Nezafat R. Whole heart magnetization-prepared steady-state free precession coronary vein MRI. J Magn Reson Imaging. 2009 May 26;29(6):1293-1299. [Epub ahead of print]

**Sun MR**, Ngo L, Genega EM, Atkins MB, Finn ME, **Rofsky NM, Pedrosa I**. Renal cell carcinoma: dynamic contrast-enhanced MR imaging for differentiation of tumor subtypes--correlation with pathologic findings. Radiology 2009; 250:793-802.

**Sun MR, Pedrosa I**. Magnetic resonance imaging of renal masses. Semin Ultrasound CT MR. 2009 Aug;30(4):326-51.

Tanaka E, Chen FY, Flaumenhaft R, Graham GJ, Laurence RG, **Frangioni JV**. Real-time assessment of cardiac perfusion, coronary angiography, and acute intravascular thrombi using dual-channel near-infrared fluorescence imaging. J Thorac Cardiovasc Surg. 2009 Jul;138(1):133-40.

Thibert RL, Burns JD, **Bhadelia R**, Takeoka M. Reversible uncal herniation in a neonate with a large MCA infarct. Brain Dev. 2009 Nov;31(10):763-5. Epub 2008 Dec 18.

Thomas JD, Zoghbi WA, Beller GA, Bonow RO, Budoff MJ, Cerqueira MD, Creager MA, Douglas PS, Fuster V, Garcia MJ, Holmes DR, Jr., **Manning WJ**, Pohost GM, Ryan TJ, Van Decker WA, Wiegers SE. ACCF 2008 Training Statement on Multimodality Noninvasive Cardiovascular Imaging A Report of the American College of Cardiology Foundation/American Heart Association/American College of Physicians Task Force on Clinical Competence and Training Developed in Collaboration With the American Society of Echocardiography, the American Society of Nuclear Cardiology, the Society of Cardiovascular Computed Tomography, the Society for Cardiovascular Magnetic Resonance, and the Society for Vascular Medicine. J Am Coll Cardiol 2009; 53:125-146.

Tognolini A, Schor-Bardach R, **Pianykh OS, Wilcox CJ, Raptopoulos V, Goldberg SN**. Body Tumor CT Perfusion Protocols: Optimization of Acquisition Scan Parameters in a Rat Tumor Model. Radiology. 2009 Jun;251(3):712-20. Epub 2009 Mar 20.

Trattnig S, **Burstein D**, Szomolanyi P, Pinker K, Welsch GH, Mamisch TC. T1(Gd) gives comparable information as Delta T1 relaxation rate in dGEMRIC evaluation of cartilage repair tissue. Invest Radiol. 2009 Sep;44(9):598-602.

Troyan SL, Kianzad V, Gibbs-Strauss SL, Gioux S, Matsui A, Oketokoun R, Ngo L, Khamene A, Azar F, **Frangioni JV**. The FLARE() Intraoperative Near-Infrared Fluorescence Imaging System: A First-in-Human Clinical Trial in Breast Cancer Sentinel Lymph Node Mapping. Ann Surg Oncol. 2009 Jul 7. [Epub ahead of print]

Vadnais M, Awtrey C, **Pedrosa I**. Breaking point: magnetic resonance imaging evaluation of an obstetric emergency. Am J Obstet Gynecol 2009; 200:344 e341-343.

Vedantham S, Thorpe PE, Cardella JF, Grassi CJ, Patel NH, Ferral H, Hofmann LV, Janne d'Othée BM, Antonaci VP, Brountzos EN, Brown DB, Martin LG, Matsumoto AH, Meranze SG, Miller DL, Millward SF, Min RJ, Neithamer CD Jr, Rajan DK, Rholl KS, Schwartzberg MS, Swan TL, Towbin RB, Wiechmann BN, Sacks D; CIRSE and SIR Standards of Practice Committees [**Goldberg SN**, contributor]. Quality improvement guidelines for the treatment of lower extremity deep vein thrombosis with use of endovascular thrombus removal. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S227-39.

Walker LM, Katzir T, Liu T, Ly J, Corriveau K, Barzillai M, Chu F, O'Connor MG, **Hackney DB**, Chang BS. Gray matter volumes and cognitive ability in the epileptogenic brain malformation of periventricular nodular heterotopia. Epilepsy Behav. 2009 Aug;15(4):456-60. Epub 2009 Jun 21.

Werner MK, **Parker JA, Kolodny GM**, English JR, **Palmer MR**. Respiratory gating enhances imaging of pulmonary nodules and measurement of tracer-uptake in FDG-PET/CT. Am J Roentgenol Dec 2009; 193: 1640 - 1645.

Williams G, Kolodny GM. Retrospective study of coronary uptake of 18F-fluorodeoxyglucose in association with calcification and coronary artery disease: a preliminary study. Nucl Med Commun 2009.

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]

Wolff AB, Pesce LL, **Wu JS**, Smart LR, Medvecky MJ, Haims AH. Comparison of spin echo T1-weighted sequences versus fast spin-echo proton density-weighted sequences for evaluation of meniscal tears at 1.5 T. Skeletal Radiol. 2009 Jan;38(1):21-9. Epub 2008 Aug 12.

**Wu JS, Hochman MG**. Soft-tissue tumors and tumorlike lesions: a systematic imaging approach. Radiology. 2009 Nov;253(2):297-316.

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.

Wykrzykowska J, Lehman S, Williams G, Parker JA, Palmer MR, Varkey S, **Kolodny G**, Laham R. Imaging of Inflamed and Vulnerable Plaque in Coronary Arteries with 18F-FDG PET/CT in Patients with Suppression of Myocardial Uptake Using a Low-Carbohydrate, High-Fat Preparation. J Nucl Med. 2009 Apr;50(4):563-8. Epub 2009 Mar 16.

Xu G, Rowley HA, Wu G, Alsop DC, Shankaranarayanan A, Dowling M, Christian BT, Oakes TR, Johnson SC. Reliability and precision of pseudo-continuous 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]

Yao DF, DeWolf WC, Sanda MG, **Bloch BN**, Genega EM, Berry AM, Ngo L, **Rofsky NM**.Increased Positive Yield of Clinically Significant Prostate Cancer with Mri Prompted Biopsies. Journal of Urology 2009;181(4):2157.

Xu G, Rowley HA, Wu G, Alsop DC, Shankaranarayanan A, Dowling M, Christian BT, Oakes TR, Johnson SC. Reliability and precision of pseudo-continuous 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]

Young BC, Hamar BD, **Levine D**, Roqué H. Medical management of ruptured appendicitis in pregnancy. Obstet Gynecol. 2009 Aug;114(2 Pt 2):453-6.

Zaharchuk G, Bammer R, Straka M, Shankaranarayan A, **Alsop DC**, Fischbein NJ, Atlas SW, Moseley ME. Arterial spin-label imaging in patients with normal bolus perfusion-weighted MR imaging findings: pilot identification of the borderzone sign. Radiology. 2009 Sep;252(3):797-807. Epub 2009 Jul 31.

Zamboni GA, Gourtsoyianni S, Sourlas E, **Raptopoulos VD**. Value of customized scan timing determined by tracking liver enhancement in oncology patients. J Comput Assist Tomogr 2009; 33:253-258.

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

Zhao P, **Alsop DC**, Abduljalil A, Selim M, Lipsitz L, Novak P, Caplan L, Hu K, Novak V. Vasoreactivity and peri-infarct hyperintensities in stroke. Neurology 2009; 72:643-649.

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# Implementation of Screen-Capture Video Recordings of Resident Conferences in an Academic Radiology Department

Pilot Experience

Moritz F. Kircher, MD, PhD, Andrew Hines-Peralta, MD, Phillip M. Boiselle, MD, Kevin Donohoe, MD, Bettina Siewert, MD

**Rationale and Objectives:** Didactic lectures are an integral component of resident education, but many are missed because of postcall or away rotation status. The authors describe their pilot experience implementing an audiovisual recording program for didactic lectures and report residents' and faculty members' perceptions of this experience.

**Materials and Methods:** From July to October 2008, resident conference didactic lectures were recorded on a voluntary faculty basis and posted to a secure Web site using affordable (\$500) commercially available equipment. After the trial period, surveys were administered to residents and faculty members. Questions addressed residents' use of the system and its perceived usefulness, as well as its impact on conference attendance, lecture quality, and preparation time.

**Results:** The survey was completed by 32 of 37 residents (86%) and by 24 of 68 (35%) faculty. Median rankings of perceived usefulness of the system (1 = not useful, 5 = extremely useful) were 5 for residents and 3 for faculty members ( $P < .01$ , Wilcoxon's rank-sum test). The mean numbers of lectures viewed were 1.7 per week during regular rotations and 3.93 per week during away rotations or night float ( $P = .02$ ,  $t$  test). A majority (21 of 32 [66%]) of residents stated that lecture quality had improved. A majority (21 of 24 [88%]) of faculty members reported no increases in lecture preparation time compared to before the pilot program.

**Conclusions:** On the basis of its affordability, perceived usefulness by residents, and minimal impact on faculty members' preparation time, a recording system for didactic lectures has the potential to enhance residents' learning at only minimal costs to radiology departments.

**Key Words:** Lecture; recording; resident; distance learning; survey.

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Didactic conferences are an integral component of radiology residency training, but attendance by all residents can be challenging to achieve (1–3). For example, residents may be away because of night float and off-site rotations, vacation, and maternity or paternity leave. Following an assessment of our program's resident conference attendance, we found that our second-year and third-year residents missed an average of 40% of didactic lectures for these reasons. Thus, for our program and many others, there is a clear need to establish a method that would allow distance learning (4). Although the synchronous, “real-time” transmis-

sion of lectures has been previously reported (4) and is now commonly used, we are unaware of any previous reports describing the routine recording and storage of didactic resident lectures for future lecture viewing.

We therefore aimed to identify and implement a system to provide audiovisual recording of didactic conferences, with the dual goal of ease of use for faculty members recording lectures and residents accessing lectures. Our aims in this paper are twofold: (1) to describe our pilot experience implementing an audiovisual recording program for didactic lectures and (2) to report residents' and faculty members' perceptions of the pilot experience.

## MATERIALS AND METHODS

### Identification of Recording Software and Hardware

An Internet search using the search engine Google and combinations of the search terms “recording,” “video,”

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**Holiday Party 2009 - Photos are available on the S drive (Radiology Media Lab).** If you cannot access the S drive, contact Michael Larson (mlarson1@bidmc.harvard.edu) for alternative solutions. We are working with IS to give our entire department access to the S drive. In the meantime, those of you can, consider downloading the whole folder of >300 photos onto the desktop and burning 2 CDs or 1 DVD to share with your co-workers. Below is a tiny sample of all the fun!

