

Radical Views... from the Department of Radiology

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September 2012



Beth Israel Deaconess
Medical Center



A teaching hospital of
Harvard Medical School



FROM THE CHIEF

Jonathan B. Kruskal, MD PhD

➤ HMS 5-yr Review of Radiology

Our department's Harvard Medical School Five year review will be held in March 2013. We have a tremendous amount of work ahead to meet a January deadline for providing a slew of required information, synopses and reports. The medical school has provided us with a list of what they need and I have asked Donna Wolfe and Andrea Baxter to set about collecting this information for me immediately. They will be contacting each and every physician for required information, ranging from updated resumes (from everybody) and for section and modality and site reports. This is an extremely in-depth review of every aspect of our work and is an opportunity for us to showcase the wonderful work that we do. This will require an enormous amount of time and effort from all of us and I ask that when contacted by Donna or Andrea that you respond in a timely manner.

I have asked Donna to make this her priority task until January which means that RSNA preparations will need to begin right away if you anticipate needing her help. Hopefully, the overwhelming majority of our educational exhibits this year will be electronic and not paper. Donna will simply not have enough time for the usual RSNA and related meeting poster editing and preparation and I ask that you be utterly respectful of her time. Thank you.

➤ New Departmental Research Committee

Based on recommendations of our internal research task force (with much appreciation to the efforts of Alex Bankier, Vassili Raptopoulos and Dave Alsop), I am pleased to announce the formation of our departmental Radiology Research Committee. To be chaired by Alex Bankier, the committee comprises faculty at all academic ranks with demonstrated interest and experience in research, and will meet quarterly to oversee departmental research efforts. The charge is to provide our Vice Chair for Research, Dave Alsop, and me with broad strategic direction relating to research topics and investments, and to ensure that our research direction and focus matches the goals, priorities and vision of our department.

The appointed members of the committee are:



Alexander
Bankier, Chair



David Hackney



Debborah
Levine



Muneeb Ahmed



Jim Wu



Diana
Litmanovich



Priscilla Slanetz

I look forward to the sage advice and recommendations of this expert committee.

➤ Muneeb Ahmed – Co-Director of the Vascular & Interventional Fellowship program

I am pleased to announce that Assistant Professor of Radiology Muneeb Ahmed, MD, has been appointed Associate Director of our ACGME-approved Interventional Radiology Fellowship Program. A graduate of our own residency program, Muneeb completed his IR Fellowship at Johns' Hopkins Medical Center and joined our faculty in Oct., 2009. An outstanding clinician, researcher and teacher, Muneeb directs our Minimally Invasive Tumor Laboratory where, collaborating with Dr. Nahum Goldberg, he explores methods for improving effectiveness of ablation techniques for solid tumors. His current work focuses on the use of percutaneous electroporation for enhancing tumor cell apoptosis and targeted drug delivery into solid organ tumors. I am very pleased that Muneeb has agreed to assist IR Section Chief Barry Sacks to administer our very popular IR fellowship program here at BIDMC.

cont'd on pg. 3

Radiology Calendar September 2012

Mon	Tues	Wed	Thurs	Fri
3 3:00-4:00 ED section meeting (monthly) [ED annex, WCC] call Trish Gardner 4-2506 Labor Day	4 7:30 - 9:00 Professionalism (Program Directors)	5 Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 Thoracic Imaging, GI/GU Oncology 3:00-4:00 Mammo [TCC-484] 7:30 - 8:15 Spinal Interventions 8:15-9:00 Cerebral angiography (Reddy)	6 Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK 7:30-8:15 Brain Infections (Moonis) 8:15-9:00 Phakomatosis (Peri) 1:30-2:00 East MedRads - Nukes Senior (TCC 484)	7
10 7:30 - 8:15 Lytic lesions (Hochman) 8:15 - 9:00 Cases (Hochman)	11 7:30 - 8:15 CT/MRI bone tumors (Wu) 8:15 - 9:00 Cases (Wu) 10:30-11:30 Nuc Med meeting [GZ-103]	12 7:30 - 8:15 MR of soft tissue tumors (Hochman) 8:15 - 9:00 Cases (Hochman) 7:15 - 8:00 US meeting (WCC-304A Gallery)	13 7:30 - 8:15 Metabolic bone diseases (Didolkar) 8:15 - 9:00 Cases (Didolkar) 12:00 - 1:00 Abdominal Q/A conference -Knutson 1:30-2:00 East MedRads - Nukes Senior (TCC 484) 2:00-3:00 West MedRads - Body Senior (TCC 484)	14 12:00 - 1:00 No Grand Rounds, NERRS
17 7:30 - 8:15 Approach to Abnormal CXR (Bankier) 8:15 - 9:00 The Radiology Report (Spirm)	18 7:30 - 9:00 Congenital Thoracic Abnormalities in Adults (Beatrice Trotman-Dickenson - BWH) 8:00-9:00 IR Meeting [West Recovery Rm]	19 7:30 - 8:15 Nephroureteric interventions (Perry) 8:15 - 9:00 Biliary interventions (Perry)	20 7:30 - 8:15 Spine anatomy and non-degenerative spine (Hackney) 8:15 - 9:00 Spine cases (Neuro Fellow) 1:30-2:00 East MedRads - Nukes Senior (TCC 484)	21 12:00 - 1:00 Grand Rounds: Imaging of the wrist - Andrew Haims, Yale School of Medicine
24 7:30 - 8:15 Sonohysterography and hysterosalpingography (Levine) 8:15 - 9:00 Radiopharmacy (Peggy Stokes) 5:00-6:00 MR Sequences: Unraveling the Alphabet Soup (David Alsop) Shapiro 10 - Rabkin Board Rm	25 7:30 - 8:15 Fetal GI/GU abnormalities (Romero) 8:15 - 9:00 Gamma cameras (Palmer) 10:30-11:30 Nuc Med meeting (GZ-103)	26 7:30 - 8:15 US-guided biopsies (McArdle) 8:15-9:00 Non-thyroid therapy (Parker)	27 7:30-8:15 Uterus and endometrium (Ghosh) 8:15 - 9:00 Infection (Kolodny) 1:30-2:00 East MedRads - Nukes Senior (TCC 484) 2:00-3:00 West MedRads - Body Senior (TCC 484)	28 12:00 - 1:00 Chiefs Rounds - MHO, ROE, SAR, MEH, PIN, ACO

FYI: Mandatory Flu Vaccination This Fall

BIDMC's goal is 100 percent vaccination for employees in patient care areas, so this year influenza vaccination will again be mandatory for staff who have patient contact as part of their job (Health Care Worker 1, 2 and 3). For those with non-patient contact jobs, the goal is mandatory 100% response while vaccinating as many staff as possible. BIDMC strongly encourages staff who do not work in patient care areas to be vaccinated.

As always, the overall aim is to increase the vaccination rate of all staff to help protect our patients and each other from the flu. After last year's efforts, BIDMC received high praise from health care experts and industry leaders for our 100% effort and we have consulted with many other hospitals who are taking their programs in the same direction.

SAVE THE DATE
Sven Paulin Lecture
by Andrew Arai, MD
Fri., Oct. 12, 2012
8:00-9:00 am
Sherman Auditorium

DEPARTMENTAL Grand Rounds



Friday, September 21, 2012

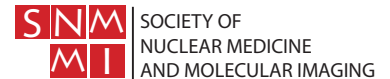
8:00 AM - 9:00 AM • Sherman Auditorium

Imaging of the Wrist

Andrew H. Haims, MD, Associate Professor of Diagnostic Radiology and of Orthopaedics and Rehabilitation; Co-Director of MSK Imaging, Yale School of Medicine

Andrew Haims graduated *Suma cum laude* in biology from Clark University in Worcester, MA and received his MD from New York University, NY, NY. He interned in pathology at St. Lukes/Rosevelt Hospital Center also in New York City and completed radiology residency training at Yale New Haven Hospital. He completed fellowship training in musculoskeletal radiology at Thomas Jefferson School of Radiology in Philadelphia before returning to Yale where he is currently Associate Professor of Radiology and Orthopaedics and Rehabilitation, Co-Chief of Musculoskeletal Radiology, Director of the Musculoskeletal Radiology Fellowship program, and Associate Director of Medical Student Education. His clinical specialties include Emergency Radiology, sports related injuries, and orthopaedic trauma/oncology. Someone who has first hand experience with Dr. Haims is our own Dr. Jim Wu as they worked together on presentations and publications of image guided bone biopsy for osteomyelitis; comparison between zirconium coated ceramic total knee prostheses versus cobalt chrome prostheses; bone biopsy in osteomyelitis; and comparison of spin echo T1-weighted sequences versus fast spin-echo proton density-weighted sequences for evaluation of meniscal tears at 1.5 T.

DEPARTMENTAL NEWS, AWARDS & HONORS:



➤ What's in a name ...

I am pleased to announce that in keeping with the national society, other Harvard hospitals and developments in the nuclear medicine field, we are changing the name of our Nuc Med section to the **Division of Nuclear Medicine and Molecular Imaging**. As Dr. George Seagall, immediate past president of the Society of Nuclear Medicine, explains, "Over the past five years, SNM has made a concerted effort to embrace other modalities that, like nuclear medicine, utilize the tracer principle. The name Society of Nuclear Medicine and Molecular Imaging retains our rich history and identity while recognizing the growing diversity in our field. Retaining nuclear medicine as part of the society's name also recognizes the therapeutic, medicinal aspects of nuclear medicine." [Excerpted from *RSNA News Sept. 2012, Vol 22, No. 9*]. Section Chief Gerald Kolodny agrees entirely! Thanks to Larry Barbaras for updating our web pages to reflect this change. – Jonny

➤ Valerie Fein-Zachary – Director of Breast Imaging Education



One of the missions of the Breast Imaging Section is to better organize and standardize the teaching of trainees, not just our residents and fellows, but also HMS students, and residents/fellows in other subspecialties. This year, the Breast Imaging section will also participate in the education and

training of HMS students in (Radiology curriculum and Principal Clinical Experience Longitudinal Curriculum for Ob/GYN), advanced medical students (HMS and outside), medical residents, surgical residents, and Pathology fellows. Many non-imaging subspecialties have asked to spend time with us, as Breast Imaging is pertinent to many fields of medicine. **Valerie Fein-Zachary** has agreed to coordinate these educational experiences for these various groups and as such, I have officially appointed her the "Director of Breast Imaging Education". As part of this role she will also be the "Breast Imaging Educational Liaison" as it relates to our own Radiology residency program.

Congratulations Valerie, and thank you all.

– Tejas Mehta, Chief of Breast Imaging

➤ Welcome (back) Erica Gupta as new faculty



Recent graduate Erica Gupta joins Community Radiology this month. She will be supporting our community sites remotely until her fellowship in Vascular and Interventional Radiology begins in July 2013.

➤ Congratulations Ammar Sarwar 4th yr Resident

Ammar has been accepted for the ACR's Moorefield health policy and economics fellowship for the upcoming year. It will involve a paid 2 week visit to the ACR headquarters in Reston, Virginia where he will work with the ACR Commission on Economics to learn about the economics of radiology and other related health policy issues.

DEPARTMENTAL NEWS, AWARDS & HONORS:

➤ Radiology well represented in the BIDMC Academy of Medical Educators

Dear Dr. Kruskal,

We received another enthusiastic response to our annual request for membership in the BIDMC Academy of Medical Educators, and have recently confirmed membership of 68 faculty, fellows, and senior residents. The applicants' teaching experiences and letters of interest were impressive, and we feel fortunate to have so many dedicated and talented teachers and educators here at BIDMC. Below are the names of the new members from your department.

<u>Senior Academy Members</u>	<u>Academy Members</u>	<u>Associate Academy Members</u>		
Valerie Fein-Zachary	Ron Eisenberg	Monica Agarwal	Ammar Sarwar	Mai-Lan Ho*
Gillian Lieberman	Justin Kung	Seth Berkowitz	Gunjan Senapati	James Knutson*
Priscilla Slanetz*		Oga Brook	Samir Shah	Yiming Gao*
		Dell Dunn	Leo Tsai	

*Existing members

We also wanted to inform you of the commitment and participation that each of your department's faculty, fellows, and/or residents who are already members of the Academy demonstrated over the past year. We had robust attendance at all of the Academy events and truly appreciate such commitment to the promotion of teaching excellence and innovation across the Medical Center.

Sincerely,

David Roberts, MD - Director / Lori Newman, MEd - Co-director • Academy of Medical Educators at BIDMC

➤ BIDMC Radiology well represented at the RSNA Honored Educator Awards 2012



The RSNA Honored Educator Award is given to RSNA members who show dedication to furthering the profession of radiology by delivering high-quality educational content for the RSNA.

Congratulations to the following BIDMC staff and alumni who have been recognized with RSNA Honored Educator Awards:

Phillip M. Boiselle, MD

Ronald L. Eisenberg, MD, JD

Jonathan B. Kruskal, MD, PhD

Damian E. Dupuy, MD - former resident, now Director of Tumor Ablation, Warren Alpert Medical School, Brown University

Jacob Sosna, MD - former fellow, now Director of Radiology & Medical Imaging, Hadassah-Hebrew University Medical Center, Jerusalem

Atif Zaheer, MD - former resident and research fellow, now Assistant Professor of Radiology, Johns Hopkins

Established in 2011, the RSNA Honored Educator Award recognizes RSNA members who have produced an array of RSNA educational resources in the past calendar year. This annual award is given to individuals invested in furthering the profession of radiology by delivering high-quality educational content in their field of study. In order to be eligible for the award, RSNA members may participate in a wide array of qualifying educational activities, including:

- Serving as faculty at one or more of RSNA's educational meetings
- Authoring an education exhibit, Quality Storyboard and/or Cases of the Day track for the RSNA Annual Meeting
- Authoring educational articles in RSNA premier journals, Radiology and RadioGraphics
- Authoring online education materials, including online modules or original SAMs, and/or creating CME questions in support of repurposed for online SAMs
- Donating a refresher course and writing CME questions for online learning

The Gallery

Call for Artists in Radiology: Please contact Michael Larson (4-2510) or Donna Wolfe (4-2515) if you would like to show your work in The Gallery aka Conference Room, West Campus Clinical Center, Rm. 304A. Photographs, paintings, sculptures, welcome.

DEPARTMENTAL NEWS, AWARDS & HONORS:

HMS CME Course – Practical MR Imaging of the Abdomen & Pelvis

On June 25th, 2012 BIDMC Radiology hosted its first Harvard Medical School CME Course on Practical MR Imaging of the Abdomen and Pelvis. Directed by Dr. Koenraad Morteale, Clinical Director of MRI, the 3-day conference was held at the Boston Marriott Long Wharf Hotel. Faculty included Karen Lee, Maryellen Sun, Marty Smith, Jesse Wei and Debbie Levine as well as departmental alumni such as Ivan Pedrosa, Avneesh Gupta and Stephan Voss. The course drew 116 attendees from all over the world, including Belgium, Israel, Paraguay, Taiwan, Singapore, Slovenia, Australia, Chile, and Latvia and was very well received.

In June 2013, Dr. Morteale will again offer a CME in Abdominal & Pelvic Imaging, a review of GI and GU tracts, also at the Boston Marriott Long Wharf location. Stay tuned for more details!



*Dr. Koenraad Morteale,
Course Director*



Enola Mosley from Harvard CME Office and Lois Gilden, BIDMC admin support for MRI and Radiology Research.



Ivan Pedrosa, MD, and his wife Carolina and daughters Cecelia and Elsa.



Dr. Morteale completes one of several presentations.



Left: In addition to delivering course lectures, Drs. Karen Lee and Maryellen Sun each presented a "Case of the Day" where the person with the winning answer received a prize.

Below: Course participants in the Ballroom

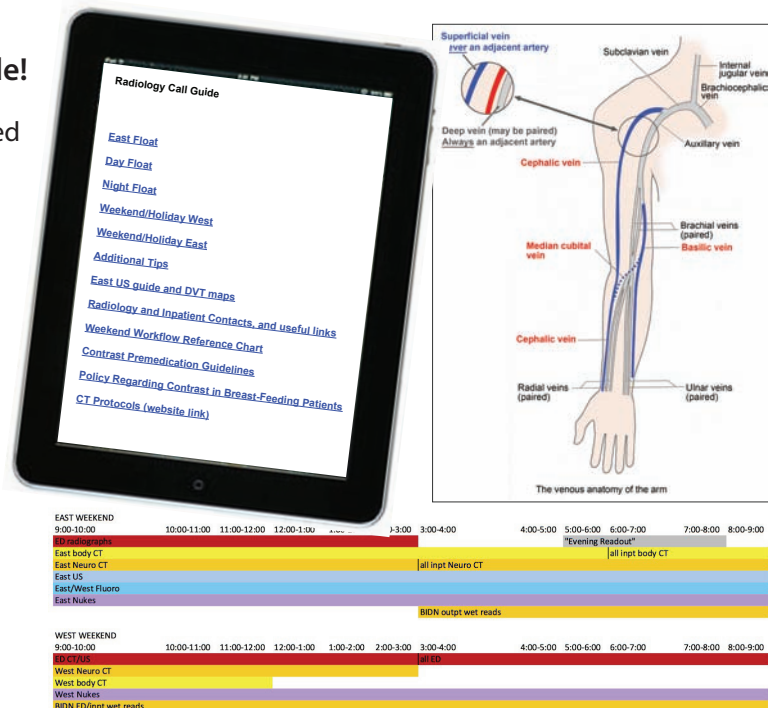


RESIDENCY NEWS: Resident iPad projects

The Latest iPad Project - Radiology Resident Call Guide!

A new updated call guide that is iPad-friendly has been prepared by **Liz Asch**, **Leo Tsai**, and **James Knutson**. It can be easily uploaded into iBooks, other document reader like GoodReader, or on a regular PC workstation. It contains active links to call schedules, the CT protocol list, and the paging system. As an added security measure, the links will work only if the iPad is connected to the hospital network. There are also updated hours, a color-coded weekend workflow guide, clarifications to the responsibilities for each shift, updates on the various changes to Needham coverage, premedication and contrast in pregnancy guidelines, and a startup US guide with venous anatomy diagrams. Just another example of the residency utilizing technology to make resident call clearer and safer.

- **James Knutson**
Chief Resident



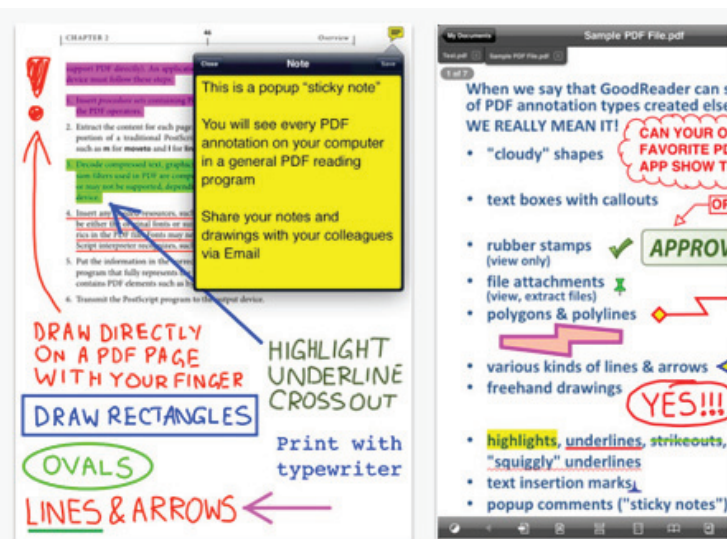
Speaking of GoodReader:



The iPad has proven to be a great educational and clinical resource for radiology residents. My personal experience has shown that it's useful in many ways including viewing images from home, taking notes during

morning conference and of course for studying. Some popular apps among the radiology residents include but are not limited to **One Night in the ED**, **E-Anatomy**, and **Radiology Assistant**. One that I have particularly found essential is **GoodReader**. This app allows you to read, organize and annotate just about any file that you would want to. It's main function is to provide a way to easily review and annotate PDF documents but can also work with other file formats such as microsoft office documents. Documents can be sent to GoodReader from many different sources including email and cloud storage such as Dropbox. Files can be managed into folders for easy organization. Once a document is selected, swiping left or right turns the page and one tap in the center brings up the main menu. Tabs across the top list the open documents and the sidebar on the right shows bookmarking and annotation options. This app has obviated the need for carrying around heavy books and allows you to read journal articles, textbooks or just about anything on the go. The \$4.99 investment is worth considering if you haven't already!

- **Rashmi Jayadevan**
2nd yr



The GoodReader PDF hyperlink feature allows you to quickly jump back and forth within the document. Tapping a link quickly whisks you across a huge PDF book in an instant, and the "Go Back" button will take you back to the page you came from.

ANNOTATE! Annotation is a feature long sought by users who want to add their own mark-ups to PDFs, especially those collaborating as a team on shared documents. The types of annotations that can be created and edited in GoodReader include typewriter text boxes, popup comments ("sticky notes"), text highlights, freehand drawings, lines, arrows, rectangles, ovals, cloudy shapes, text underlines, strikeouts, text insertion marks.

- <http://iphone4appsfree.blogspot.com/2012/01/goodreader-for-ipad.html>

KUDOS - Please join us in congratulating the following staff for outstanding patient care and service

BREAST IMAGING

- Letter from patient: **Gina Donaher** was so kind and lovely during my last mammogram. She was patient, tender and unbelievably sweet to me. I felt as if she really and truly cared about my physical and emotional comfort. There is tremendous power in kindness and what a gift it was for me to have her as my technician on that day!



IMAGE ARCHIVE

- Over the past few weeks, **Maryann Michalik** and **Natalee Frazer** have stepped up to the plate to help out within the Image Archive area. Help was not requested, but it was volunteered, and it was very much appreciated. I'm very thankful to know that this type of attitude exists. Thank you both for your efforts.

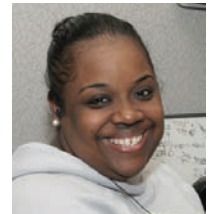


Maryann Michalik

Natalee Frazer

SUPPORT SERVICES

- For the past couple of months **Kaiesha Harry** and **Saliha Gardner** have been part of a dedicated Interventional/biopsy scheduling team. During this period all stakeholders involved in the process have expressed how efficiently and courteous these schedulers have been in carrying out their tasks. They worked collaboratively as a team which is what the department strives to maintain. An example of the appreciation of the schedulers was recently shared with the team by one of the managers. "I just wanted to let you know that I think you are doing a great job with scheduling the interventional cases. This has been mentioned a number of times at various meetings and I wanted to be sure you heard how well we all feel the scheduling is going. You folks have done a tremendous job. We know how many details are needed to make the process run smoothly and you have successfully captured all the important pieces."
- Jackie Vernon** is the embodiment of what it means to be a team player to both her immediate unit and the department on a whole. She is a wonderful role model in the Radiology call center. She is a dedicated employee who always completes and helps with the tasks given to her with no hesitation. She works closely with some of the radiologists to coordinate exams according to their schedules. For example she reschedules Dr. McArdle's patients frequently; does the Protocol edits for MRI and CT, books the Hydration studies, and makes follow up calls to patients with efficiency. Jackie can also be counted on to provide coverage for mammography and biopsy dedicated schedulers during absences. In addition to being a knowledge resource to her team; she is consistent and makes herself available to assist when she is called upon.



Kaiesha Harry

IR/INR

- Many thanks to **Richard Plaistowe**, **Mary Cacciatore**, **Patricia MacDonald**, and **Breige Kerr** for going above and beyond, volunteering to work on her days off to help with staffing shortages. And to **Virginia Benway** for coming in on her days off to help with the staffing shortage.



Richard Plaistowe



Mary Cacciatore



Patty MacDonald



Breige Kerr



Ginny Benway



QA with Misti Mullins, RN: BIDMC Medical Emergency Codes

The First Aid Response: To provide urgent medical attention for patients, visitors, or staff who sustain minor injury or develop an acute medical condition in any area in the medical center. This response is appropriate only for conscious patients (awake and talking), and is not intended for events or conditions in which an immediately life-threatening condition is suspected.

A **FIRST AID** response is not intended for the inpatient population; should a patient be admitted to an inpatient unit suffer acute critical decompensation requiring personnel/medications/equipment not immediately available in the local care environment, a **CODE BLUE** response should be activated.

When the event is paged out to the first aid team, an ambulance will be dispatched simultaneously by the BIDMC Public Safety department. In these situations, if local staff or the first aid team assesses that a patient/staff/visitor and determines that they do not need transport to the emergency department via ambulance, they should request that the responding ambulance be cancelled by informing the on scene public safety officer. A patient should not be transported via the first aid team or any other staff member from the East campus to the Emergency Department. If a patient on the East Campus requires evaluation in the Emergency Department, they should be transported by the responding ambulance. On the west campus, transport to the emergency department can be facilitated by first aid team members if the patient is deemed stable enough to not require an ambulance. *Please reference policy CP-39*

Code Blue Response: To provide immediate advanced cardiac life support intervention for patients, visitors, or staff who suffer cardiac arrest, respiratory failure, and/or other acute critical illness requiring personnel, medications, and/or equipment not immediately available in the local care environment. BIDMC has a protocol to provide a structured response to those who require immediate advanced cardiac life support intervention, who suffer cardiac arrest, respiratory failure, and/or other acute critical illness requiring personnel, medications, and/or equipment not immediately available in the local care environment. The response for a “Code Blue” is provided by the **Code Blue Response Team**.

The **Code Blue response team** will be activated for all patients/staff/visitors within the Medical Center requiring emergency or specialized medical care beyond that which is immediately available in the local care environment.

The response teams shall be activated for assistance in all areas of the East and West Campuses of Beth Israel Deaconess Medical Center, including the Lowry Medical Office building. For all other affiliated or off-site premises, emergency clinical response shall be activated via direct call to 911 as necessary.

Special Circumstances:

In accordance with EMTALA statute, the code blue response team will be activated for and respond to potential cardiac arrest situations occurring immediately outside the medical center (sidewalks adjacent to the medical center) as well as the following garages: Lowry Garage, Feldberg Garage, Shapiro Garage, and Pilgrim Garage. For all of these locations, Cataldo ambulance will be alerted through MASCO to provide simultaneous ALS ambulance response to assist with care and transfer of any potential victims.

If a patient suffers acute respiratory failure requiring intubation outside of an ICU/PACU/OR/ED setting, without co-existing hemodynamic compromise or cardiac arrest, a “**CODE BLUE**” response should be activated in order to provide the requisite multidisciplinary expertise (including ICU resident, anesthesiology, critical care nursing, and pharmacy) to manage both the intubation and the likely possibility of post-intubation hemodynamic instability.

An “ANESTHESIA STAT” activation does not initiate the appropriate response in this situation and is strongly discouraged except in ICU areas.

If the event occurs in a non-inpatient area, and the initial caller is uncertain whether a “code blue” activation is requested/required, MASCO operator will be instructed to ask the caller whether or not the victim is able to speak.

If the patient is able to speak, then a “**FIRST AID**” response will be activated and deployed to the specified location.

If the patient is unable to speak, or the caller is uncertain whether or not the patient is able to speak, then a “**CODE BLUE**” response will be activated and deployed to the specified location.

If no team leader has been identified upon arrival of the ICU Resident, the ICU Resident shall don the Team Leader lanyard and assume the role of code team leader.

If the event occurs in a non-inpatient area, Cataldo EMS will be automatically alerted by MASCO operator to provide ambulance transport to the BIDMC ED if needed. *Please reference policy CP-40.*

- Bridgid G. Joseph BSN, MSN, CCNS



Kathleen West

HMFP contracts with McKesson for Revenue Cycle Management services including diagnosis coding, claims scrubbing, allowables monitoring, accounts receivable and insurance denial management, compliance and reporting. We offer this column by **Kathleen West**, McKesson's Senior Director of Account Management for Radiology, as an opportunity to keep you informed. During this time of revenue and utilization reductions, compliance scrutiny and increased payer denials, our partnership with McKesson has been vital to our ability to maintain our financial stability. Feel free to contact Kathy.west@mckesson.com should you have any specific questions or concerns related to the Revenue Cycle Management process.



Centers for Medicare and Medicaid Services (CMS) Physician Fee Schedule Proposal, CY 2013

On July 6, 2012, the Centers for Medicare & Medicaid Services (CMS) released their annual proposed rules that would update payment policies and payment rates for the Physician Fee Schedule (PFS) on or after January 1, 2013 (CY 2013). The proposed rule also proposes changes to several of the quality reporting initiatives that are associated with PFS payments –the Physician Quality Reporting System (PQRS), the Electronic Prescribing (eRx) Incentive Program, and the PQRS-EHR Incentive Pilot – as well as changes to the Physician Compare tool on the Medicare.gov website. Finally, the proposed rule includes proposals for implementing the physician value-based payment modifier (Value Modifier) required by the Affordable Care Act that would affect payment rates to physician groups based on the quality and cost of care they furnish to beneficiaries enrolled in the traditional Medicare Fee-for-Service program.

The proposed rule will appear in the July 30, 2012, Federal Register. CMS will accept comments on the proposed rule until September 04, 2012, and will respond to them in a final rule with comment period to be issued on or about November 1, 2012. The PFS Proposed Rule in its entirety is available by clicking www.regulations.gov/#!documentDetail;D=CMS-2012-0083-0075 (Revisions to Payment Policies Under Physician Fee Schedule, DME Face to Face Encounters, etc.) Follow the preceding link to submit a comment.

BACKGROUND OF THE MEDICARE PHYSICIAN FEE SCHEDULE PAYMENT METHOD

Since 1992, Medicare has paid for the services of physicians, non-physician practitioners (NPPs), and certain other suppliers under the Medicare Physician Fee Schedule (PFS). This payment system pays for covered physicians' services furnished to a beneficiary enrolled under Medicare Part B. The payment calculation for the PFS, in general, is based on a relative value unit (RVU) assigned to each of the designated physician services to capture the amount of work involved in the services. This includes the direct and indirect (overhead) practice expenses (PE), and the malpractice (MP) insurance expenses typically involved in furnishing the services. The higher the number of RVUs assigned to a service produces a

higher payment for that given service. The RVUs for a particular service are then multiplied by a fixed-dollar conversion factor (CF) and a geographic practice cost index (GPCI) adjustment factor to determine the payment amount for each service. The current formula used for this calculation is expressed as:

$$\text{PFS Payment} = [(\text{RVU work} \times \text{GPCI work}) + (\text{RVU PE} \times \text{GPCI PE}) + (\text{RVU Malpractice} \times \text{GPCI Malpractice})] \times \text{CF}$$

I. Calendar Year (CY) 2013 PFS Proposed Changes in Payment Rates

- a. **Conversion Factor:** CMS estimated the CY 2013 conversion factor (CF) to be **\$24.7124 (includes Sustainable Growth Rate, SGR)**. This is a projected **reduction of -27.4%** for CY 2013 and CMS is required by law to include this reduction in these calculations. However, Congress has acted to avert the cuts every year since 2003. CMS stated they are committed to fixing the SGR formula in a fiscally responsible way.
- b. CMS issued a proposed rule that would increase payments to family physicians and other practitioners providing primary care services. Most of this increased reimbursement would result from a separate payment that Medicare would make to physicians for coordinating a patient's care for the first 30 days after discharge from a hospital, skilled nursing facility, or certain outpatient services. Under CMS' proposal, Medicare will increase some specialty pay while decreasing other specialties. Below is the percentage impact projected with this proposal:

Sample of Specialties with an increase:

- Family Physicians +7%
- Internists +5%
- Geriatric +4%
- Neurology +1%
- Nurse Practitioner +5%
- Physician Assistant +3%

To pay for these increases, CMS said that it has to lower reimbursement for other clinician specialties to achieve budget neutrality.

Sample of Specialties with a decrease from RVU & other factors:

- Radiation Oncologists -15%
- Radiology -4%
- Anesthesiology -3%
- Cardiology -3%
- Interventional Radiology -3%
- Vascular Surgery -3%
- Pathology -2%
- Urology -2%
- Neurosurgery -1%

Sample of Specialties with no anticipated change in reimbursement:

- Allergy/Immunology
- Gastroenterology
- General Surgery
- Plastic Surgery
- Rheumatology

The table below provides the specific cuts for the Radiology and Radiation Oncology specialties based on the payment impact on PFS services. CMS noted that the impacts in the table do not include the effects of the January 2013 conversion factor change under current law, which would further reduce the overall payment.

TABLE 1- CY 2013 PFS Proposed Rule Estimated Impact of RVUs on Total Allowed Charges

Specialty	Allowed Charges (in millions)	Impact of Work & MP RVU Changes	Impact of Work & PE RVU Changes	Combined Impact
Radiology	\$4791	-1%	-3%	-4%
Interventional Radiology	\$203	-1%	-2%	-3%
Nuclear Medicine	\$49	-1%	-3%	-3%
Diagnostic Testing Facility	\$875	-1%	-7%	-8%

- c. **Multiple Procedure Payment Reduction (MPPR) Policy**
The CY 2012 Final Rule expanded the MPPR to the PC of Advanced diagnostic Imaging, (CT, MR and ultrasound). In the CY 2012 Proposed Rule the reduction was 50% for the second and succeeding ADI procedures performed same day, same session, same physician or physician group. After comments and logistical considerations, CMS adapted in the CY 2012 Final Rule a 25% PC reduction and limited it to same physician, not physician group. The CY 2013 Proposed Rules seeks to redefine back to the original physician and physician group. Additionally, CMS corrects an oversight involving two Nuclear Medicine codes, 78306, (whole body bone imaging), when followed by 78320, (bone imaging SPECT). These codes were to have been previously subject to the TC MPPR. The MPPR reduction for these codes will begin January 1, 2013. CMS has also designated certain cardiology and ophthalmology codes to be subject to the TC MPPR reduction. Please see details for the MPPR in the Proposed Rule beginning on page 89.

II. Physician Quality Reporting System (PQRS)

Brief Summary of PQRS:

The PQRS bonus incentive remains at 0.5% through 2013. Eligible Professionals (EPs) who successfully report quality data for the quality reporting period designated by the Secretary for the applicable year will receive a bonus in 2013.

PQRS penalty: The 2013 reporting period data will be used to establish the 2015 payment penalty adjustment. EPs who do not successfully report quality data during the 2013 reporting period will have their Medicare payments reduced by 1.5% in 2015 and by 2.0% in 2016 and each subsequent year. Successful reporting requirements for the program are proposed to remain as they were in 2012 requiring that participants report a minimum of 3 individual measures or 1 group measure via claims based reporting on 50% or more of all eligible Medicare patients, or report a minimum of 3 individual measures or 1 group measure via registry reporting on 80% or more of all eligible Medicare patients.

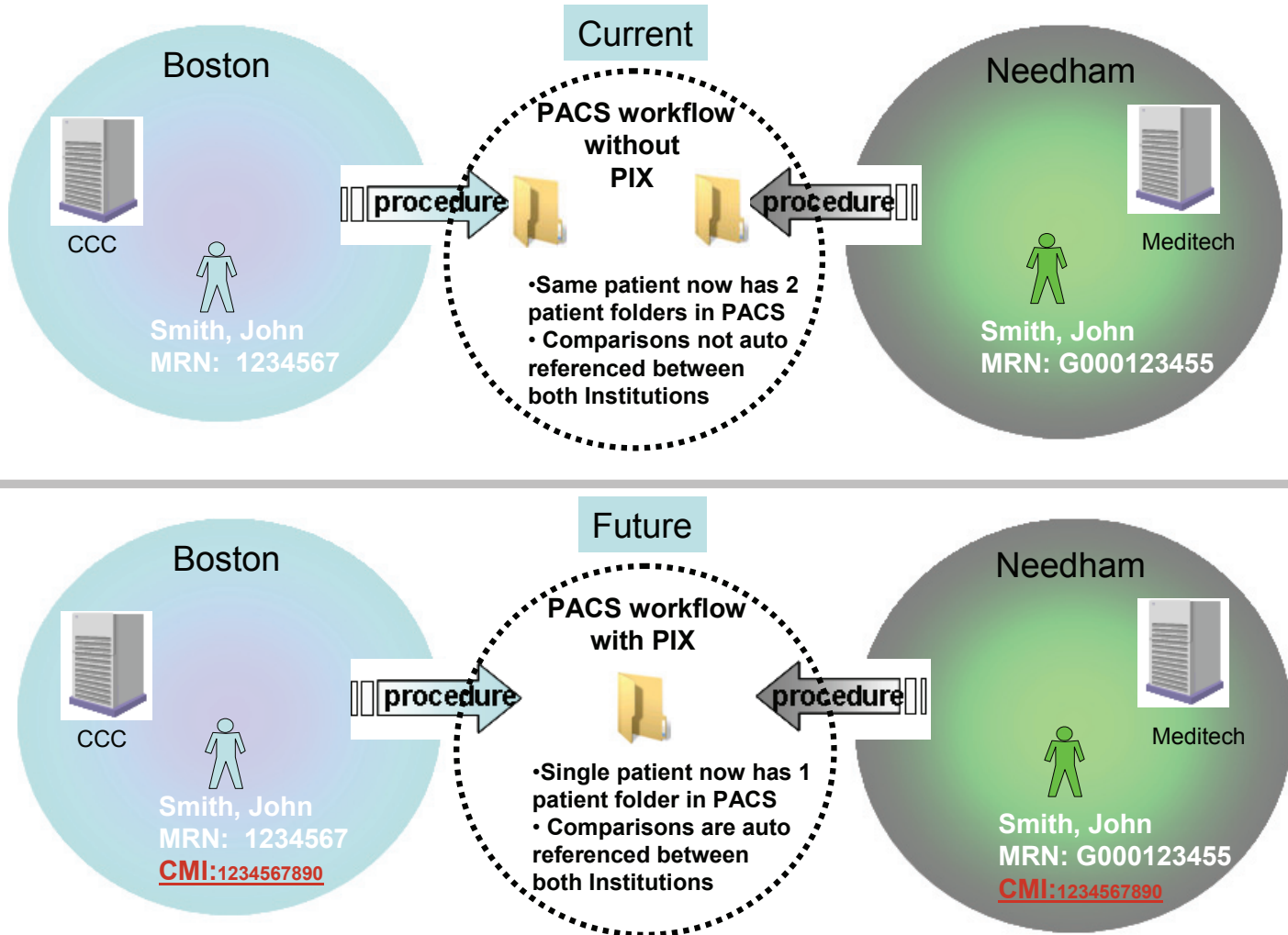
Did you know... about the GE PIX Upgrade?

The long-awaited GE PIX (Patient Cross-Identifier) Software was successfully installed on our Radiology Centricity PACS System on Thursday August 16, 2012. The GE PIX software will allow you to view all exams performed at both our Boston and Needham sites in the patient jacket palette on PACS, regardless of which institution's MRN you enter into the system. See the PIX Reference Guide for a more detailed explanation of the software.

If you have any questions please call the 4-PACS helpline at (617) 754-7227: Leave message to Page Tech

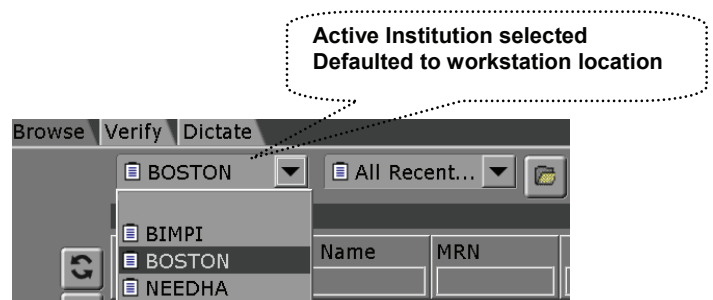
- Jim Brophy
Mgr., Radiology PACS/Informatics

What problem does PIX address?



What does the solution look like in PACS

When you first login to Centricity, you will see an additional dropdown box in the Upper left corner of the Work Modes palette. By default, the dropdown box will Auto populate based on the workstations location. Alternatively, you can toggle between BOSTON and NEEDHAM at any time by clicking on the dropdown box. It is important to note that no matter what institution you have selected, it will not effect how you currently view studies in your worklist.



* BIMPI is the Master Patient Index Domain and should not be used for viewing studies in PACS.

How does this effect my workflow when reading from PACS

BOSTON				
Clip No.	Patient Name	MRN	Procedure	Mod
G000346317	PIX1, NETTIE	1039596	CT CERVICAL SPINE W...	CT
G000346321	PIX1, NETTIE	1039596	TORSO WITH CONTRAST	CT
G000346332	PIX2, ALISON		CT NECK WITH CONTR...	CT
6125921	PIX3, SYBIL	0860013	CT HEAD W/O CONTR...	CT
6117981	PIX4, WILLIAM	1402097	MR HEAD W AND W O...	MR

With Boston Selected

1. Patients imaged in Boston will display the Boston MRN # (Patients PIX3 and PIX4)
2. Patients imaged in Needham that have had studies in Boston will display the Boston MRN # (Patients PIX1)
3. Patients imaged in Needham that have not had studies in Boston will display no MRN # (Patients PIX2)

NEEDHA				
Clip No.	Patient Name	MRN	Procedure	Mod
G000346317	PIX1, NETTIE	G000288825	CT CERVICAL SPINE W...	CT
G000346321	PIX1, NETTIE	G000288825	TORSO WITH CONTRAST	CT
G000346332	PIX2, ALISON	G000296420	CT NECK WITH CONTR...	CT
6125921	PIX3, SYBIL		CT HEAD W/O CONTR...	CT
6117981	PIX4, WILLIAM	G000309121	MR HEAD W AND W O...	MR

With Needham Selected

1. Patients imaged in Needham will display the Needham MRN # (Patients PIX1 and PIX2)
2. Patients imaged in Boston that have had studies in Needham will display the Needham MRN # (Patients PIX4)
3. Patients imaged in Boston that have not had studies in Needham will display no MRN # (Patients PIX3)

Additional Info

• You may switch between both institutions at any time. Doing so will not change the current worklist or any user defined criteria entered as a filter.

• If you place your mouse cursor over the MRN #, it will briefly display the Patients MRN from both Institutions.

MRN	Procedure
G000288825	CT CERVICA
G000288825	TORSO WIT
1039596 - BIDMC	
1000388689 - BIMPI	
G000288825 - NEEDHA	

The end result in PACS

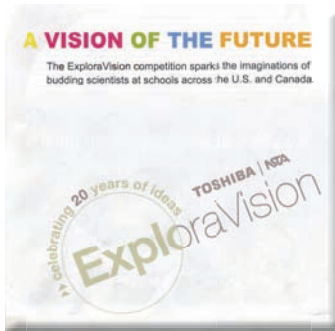
Patient PIX1, NETTIE has had imaging done at both the Boston and Needham hospitals. Regardless of the Institution selected, all examinations for any patients fitting this criteria will now be available for comparison in PACS

BOSTON					
Patient Historical Exams					
	Acc. #	Patient Name	Patient ID	Procedure	Mdl
	G000346321	PIX1, NETTIE	1039596	TORSO WITH CONTRAST	CT
	G000346317	PIX1, NETTIE	1039596	CT CERVICAL SPINE W/O ...	CT
	G000346316	PIX1, NETTIE	1039596	E DEPT HEAD CT W/O	CT
	G000346318	PIX1, NETTIE	1039596	RAD CHEST PA & LATERAL	CR
	G000346320	PIX1, NETTIE	1039596	CT CTA CHEST	CT
	5859379	PIX1, NETTIE	1039596	DIG SCREENING WITH CA...	MG
	5689192	PIX1, NETTIE	1039596	DIG DIAGNOSTIC MAMMO ...	MG
	5689193	PIX1, NETTIE	1039596	UNILAT BREAST US	US
	5480193	PIX1, NETTIE	1039596	UNILAT BREAST US	US
	5480141	PIX1, NETTIE	1039596	DIG DIAGNOSTIC MAMMO ...	MG
NEEDHA					
Patient Historical Exams					
	Acc. #	Patient Name	Patient ID	Procedure	Mdl
	G000346321	PIX1, NETTIE	G000288825	TORSO WITH CONTRAST	CT
	G000346317	PIX1, NETTIE	G000288825	CT CERVICAL SPINE W/O ...	CT
	G000346316	PIX1, NETTIE	G000288825	E DEPT HEAD CT W/O	CT
	G000346318	PIX1, NETTIE	G000288825	RAD CHEST PA & LATERAL	CR
	G000346320	PIX1, NETTIE	G000288825	CT CTA CHEST	CT
	5859379	PIX1, NETTIE	G000288825	DIG SCREENING WITH CA...	MG
	5689192	PIX1, NETTIE	G000288825	DIG DIAGNOSTIC MAMMO ...	MG
	5689193	PIX1, NETTIE	G000288825	UNILAT BREAST US	US
	5480193	PIX1, NETTIE	G000288825	UNILAT BREAST US	US
	5480141	PIX1, NETTIE	G000288825	DIG DIAGNOSTIC MAMMO ...	MG

Publication Call Out: *Maryellen Sun in*

TIME

Reprinted from June 11, 2012 issue of TIME magazine
TIME US Business Edition



REMEMBER THE CLUNKY HANDHELD calculators of the early '90s? Back then a quartet of third graders at Chattahoochee Elementary School in Duluth, Ga., pondered a serious question: How would the calculator evolve over the years, and what would the device look like in 2012 or so?

Twenty years ago they entered

their projections, accompanied by a video presentation, into the first ExploraVision, a science and technology competition sponsored by Toshiba, one of the world's leading high-tech innovators and a manufacturer of a broad range of advanced electronic and electrical products. Toshiba is also a major supporter of education in STEM (Science, Technology, Engineering and Math) fields, and the program was designed to help inspire young people to excel-and maybe even continue on to careers in science and high-tech.

The kids from Georgia were among the first of the over 300,000 American and Canadian youngsters in grades K through 12 who have participated in the contest, which has become the world's largest of its kind, this year celebrating its 20th anniversary. "We wanted to create a program that would get children excited about science," says Yoshihide Fujii, chairman and CEO, Toshiba America, Inc., explaining the competition's origins. So Toshiba asked the National Science Teachers Association to create what became ExploraVision. Students working in teams of two to four are challenged to research scientific principles and current technologies as the basis for designing innovative technologies that could exist 20 years later.

Among the winners in the first year of the contest were Brandon Luders, currently working for a Ph.D. in aeronautics and astronautics at MIT, and Dr. Maryellen Sun, now a radiologist at a Boston hospital. Luders was part of the third-grade team at the above-mentioned school in Georgia. (The other members were Roshni Bhimani, Ashley Freeman and Jonathan Rich.) They imagined-with remarkable clairvoyance for 8-and 9-year olds-that the calculator would become part of a far more complex instrument that would also be a telephone, a radio, a color TV and a link to the owner's bank account. The miniature instrument, which they dubbed PAL (Personal Automated Lifeguard), would be worn as a wristwatch. "What we didn't foresee was the Internet," admits Luders. "But it was amazing how close we were to the way technology developed. To me a great value of the ExploraVision competition was that it taught us to be very forward thinking." Luders' work at MIT is focused on autonomous vehicles, and specifically on creating systems that ensure safe movement.

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West might anticipate looking like 20 years in the future? Dr. Sun wondered back in 1993, when she was a senior at Warwick Veterans Memorial High School, in Rhode Island. So she and three classmates—Lynn Marsella, Laurie Haley and Emily Gallagher—envisioned the Bio-prosthetic Arm of the Future, as they named their ExploraVision project. Suppose someone lost an arm in an accident. Her bone, muscle and other tissue might be lost, but the neurological network based in her spine that once directed the movements of that limb would survive. Cultured or transplanted muscle tissue could be integrated with a synthetic framework in this prosthetic arm and connected to the existing nerves. Electrical signals would stimulate the bio-prosthetic arm into movements much more natural than those of mechanical limbs.

The project both stimulated Sun's interest in neuroscience and made her aware of the importance of service to the community. She concentrated in biology and neurosci-



ExploraVision alumni: MIT's astrophysicist Luders; Harvard's Dr. Sun

ence as an undergraduate at Harvard and then went on to Harvard Medical School. Now she is a radiologist at Boston's Beth Israel Deaconess Medical Center, where she specializes in abdominal imaging, with a particular interest in the imaging diagnosis and evaluation of patients with renal cancer. As an instructor in radiology, she also teaches medical students and physicians.

How will today's familiar technologies evolve in the next 20 years? Will PCs be miniaturized to the size that they can be injected into humans to detect and correct body malfunctions? Kids, start thinking. ©

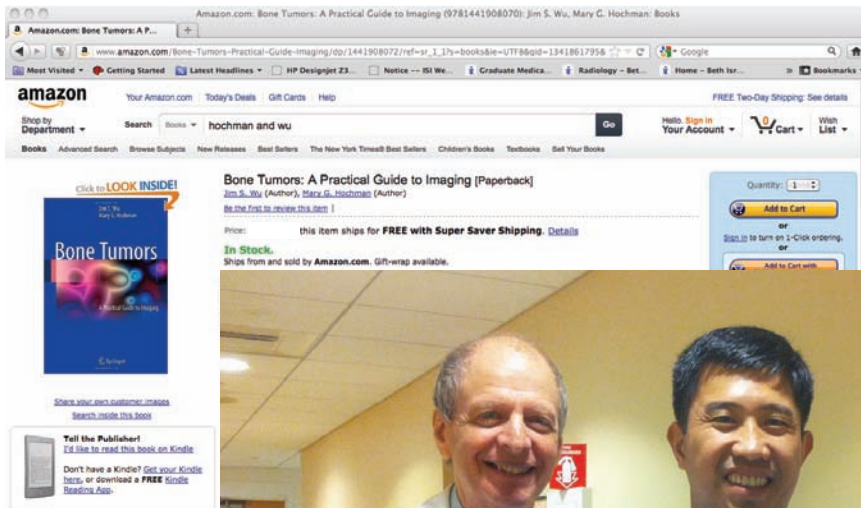
A large advertisement for the ExploraVision competition. It features a blue background with a young girl smiling and looking up. The text reads: "celebrating 20 years of ideas TOSHIBA | NSTA ExploraVision". Below this, it says: "Congratulations to this year's outstanding winners of the 20th TOSHIBA / NSTA ExploraVision program. As the world's largest K-12 science competition, ExploraVision continues to empower young minds to explore their fullest potential in science, technology, engineering and math. For 20 years, we've helped inspire students to become the next-generation scientists, entrepreneurs and innovators, who will lead the fields of innovation for all our tomorrows." At the bottom, the Toshiba logo is displayed with the tagline "Leading Innovation >>>".

What might artificial limbs look like 20 years in the future? Dr. Sun wondered back in 1993, when she was a senior at Warwick Veterans Memorial High School, in Rhode Island. So she and three classmates—Lynn Marsella, Laurie Haley and Emily Gallagher—envisioned the Bio-prosthetic Arm of the Future, as they named their ExploraVision project. Suppose someone lost an arm in an accident. Her bone, muscle and other tissue might be lost, but the neurological network based in her spine that once directed the movements of that limb would survive. Cultured or transplanted muscle tissue could be integrated with a synthetic framework in this prosthetic arm and connected to the existing nerves. Electrical signals would stimulate the bio-prosthetic arm into movements much more natural than those of mechanical limbs.

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How will today's familiar technologies evolve in the next 20 years? Will PCs be miniaturized to the size that they can be injected into humans to detect and correct body malfunctions? Kids, start thinking.

Publication Call Out: *Bone Tumors: A Practical Guide to Imaging* by Jim Wu and Mary Hochman



*Successful delivery: Ron Eisenberg stands with fellow MSK staff members and authors Jim Wu and Mary Hochman upon the publication of their book, *Bone Tumors: A Practical Guide to Imaging*, a copy of which they have donated to the Radiology Residents' Library on the East Campus.*

Publication Date: June 2, 2012 | ISBN-10: 1441908072 | ISBN-13: 978-1441908070 | Edition: 2012

Bone Tumors: A Practical Guide to Imaging is a concise guide to common tumors encountered by physicians in daily practice. The authors make use of high-yield facts, differential diagnoses, and extensive radiological images to introduce a wide range of bone tumors, focusing on their classic appearance and location in order to provide readers with a solid foundation of knowledge for tumor recognition and evaluation. The book includes explanations of methods for properly evaluating bone lesions, common imaging modalities used for diagnosis, and individual chapters covering different classes of benign and malignant tumors, including cartilage, osseous, fibrous, miscellaneous, and bone metastases. The book concludes with a comprehensive selection of 75 unknown cases, including brief clinical history, description of imaging findings, best differential diagnoses, and short discussion revealing the most likely diagnosis. *Bone Tumors is an ideal resource for practicing physicians and residents in radiology, orthopedic surgery, pathology, and primary care.* About the Authors Jim S. Wu, MD, is Assistant Professor of Radiology at Beth Israel Deaconess Medical Center, Harvard Medical School. Mary G. Hochman, MD, is Chief of the Section of Musculoskeletal Imaging and Assistant Professor of Radiology at Beth Israel Deaconess Medical Center, Harvard Medical School.

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Note that publications do not always appear in Pubmed in the same month they are actually published and publications listing an Epub date may be updated into the new year, thus their paper publication will appear in 2012.

Aberle DR, Henschke CI, McCloud TC, **Boiselle PM**. Expert Opinion: Barriers to CT Screening for Lung Cancer. *J Thorac Imaging*. 2012 Jul;27(4):208.

Agrawal JR, Travis AC, **Mortele KJ**, Silverman SG, Maurer R, Reddy SI, Saltzman JR. Diagnostic yield of dual-phase computed tomography enterography in patients with obscure gastrointestinal bleeding and a non-diagnostic capsule endoscopy. *J Gastroenterol Hepatol*. 2012 Apr;27(4):751-9. doi:10.1111/j.1440-1746.2011.06959.x.

Ahmed M, **Moussa M**, **Goldberg SN**. Synergy in cancer treatment between liposomal chemotherapeutics and thermal ablation. *Chem Phys Lipids*. 2012 May;165(4):424-37. Epub 2011 Dec 14. Review.

Akçakaya M, Basha TA, Chan RH, Rayatzadeh H, Kissinger KV, Goddu B, Goepfert LA, **Manning WJ**, Nezafat R. Accelerated contrast-enhanced whole-heart coronary MRI using low-dimensional-structure self-learning and thresholding. *Magn Reson Med*. 2012 May;67(5):1434-43. doi: 10.1002/mrm.24242. PMID: PMC3323762.

Akçakaya M, Rayatzadeh H, Basha TA, Hong SN, Chan RH, Kissinger KV, **Hauser TH**, Josephson ME, **Manning WJ**, Nezafat R. Accelerated Late Gadolinium Enhancement Cardiac MR Imaging with Isotropic Spatial Resolution Using Compressed Sensing: Initial Experience. *Radiology*. 2012 Sep;264(3):691-9. Epub 2012 Jul 19. PMID: PMC3426855.

Akuthota P, **Litmanovich D**, Zutler M, **Boiselle PM**, **Bankier AA**, Roberts DH, Celli BR, Decamp MM, Berger RL. An Evidence-Based Estimate on the Size of the Potential Patient Pool for Lung Volume Reduction Surgery. *Ann Thorac Surg*. 2012 Jul;94(1):205-11. Epub 2012 May 8.

Aberle DR, Henschke CI, McCloud TC, **Boiselle PM**. Expert Opinion: Barriers to CT Screening for Lung Cancer. *J Thorac Imaging*. 2012 Jun 12.

Alsop DC. Arterial spin labeling: its time is now. *MAGMA*. 2012 Apr;25(2):75-7.

Appelbaum L, Ben-David E, **Sosna J**, Nissenbaum Y, **Goldberg SN**. US Findings after Irreversible Electroporation Ablation: Radiologic-Pathologic Correlation. *Radiology*. 2012 Jan;262(1):117-25. Epub 2011 Nov 21.

Appelbaum E, Maron BJ, Adabag S, Hauser TH, Lesser JR, Haas TS, Riley AB, Harrigan CJ, Delling FN, Udelson JE, Gibson CM, **Manning WJ**, Maron MS. Intermediate-signal-intensity late gadolinium enhancement predicts ventricular tachyarrhythmias in patients with hypertrophic cardiomyopathy. *Circ Cardiovasc Imaging*. 2012 Jan 1;5(1):78-85.

Arbab-Zadeh A, Miller JM, Rochitte CE, Dewey M, Niinuma H, Gottlieb I, Paul N, **Clouse ME**, Shapiro EP, Hoe J, Lardo AC, Bush DE, de Roos A, Cox C, Brinker J, Lima JA. Diagnostic Accuracy of Computed Tomography Coronary Angiography According to Pre-Test Probability of Coronary Artery Disease and Severity of Coronary Arterial Calcification The CORE-64 (Coronary Artery Evaluation Using 64-Row Multidetector Computed Tomography Angiography) International Multicenter Study. *J Am Coll Cardiol*. 2012 Jan 24;59(4):379-87.

Arbab-Zadeh A, Miller JM, Rochitte CE, Dewey M, Niinuma H, Gottlieb I, Paul N, **Clouse ME**, Shapiro EP, Hoe J, Lardo AC, Bush DE, de Roos A, Cox C, Brinker J, Lima JA. Reply. *J Am Coll Cardiol*. 2012 Aug 14;60(7):642-3.

Ashitate Y, Lee BT, Laurence RG, Lunsford E, Hutteman M, Oketokoun R, Choi HS, **Frangioni JV**. Intraoperative Prediction of Postoperative Flap Outcome Using the Near-Infrared Fluorophore Methylene Blue. *Ann Plast Surg*. 2012 Mar 6. [Epub ahead of print]

Ashitate Y, Kim SH, Tanaka E, Henary M, Choi HS, **Frangioni JV**, Flaumenhaft R. Two-wavelength near-infrared fluorescence for the quantitation of drug antiplatelet effects in large animal model systems. *J Vasc Surg*. 2012 Apr 14. [Epub ahead of print].

Balbir-Gurman A, **Brook OR**, Chermesh I, Braun-Moscovici, Y. Pneumatosis cystoides intestinalis in scleroderma-related conditions: A report of three cases and review of the literature. *Internal Medicine Journal*. 2012 Mar;42(3):323-9.

Bedayat A, Rybicki FJ, Kumamaru K, Powers SL, Signorelli J, Steigner ML, Steveson C, Soga S, Adams K, Mitsouras D, **Clouse M**, Mather RT. Reduced exposure using asymmetric cone beam processing for wide area detector cardiac CT. *Int J Cardiovasc Imaging*. 2012 Feb;28(2):381-8. Epub 2011 Feb 19. PMID: PMC3111872.

Ben-David E, **Appelbaum L**, **Sosna J**, Nissenbaum I, **Goldberg SN**. Characterization of irreversible electroporation ablation in in vivo porcine liver. *AJR Am J Roentgenol*. 2012 Jan;198(1):W62-8.

Berg WA, Zhang Z, Lehrer D, Jong RA, Pisano ED, Barr RG, Böhm-Vélez M, Mahoney MC, Evans WP 3rd, Larsen LH, Morton MJ, Mendelson EB, Farria DM, Cormack JB, Marques HS, Adams A, Yeh NM, Gabrielli G; ACRIN 6666 Investigators (**Fein-Zachary V**). Detection of breast cancer with addition of annual screening ultrasound or a single screening MRI to mammography in women with elevated breast cancer risk. *JAMA*. 2012 Apr 4;307(13):1394-404.

Bhatia S, **Frangioni JV**, Hoffman RM, Iafrate AJ, Polyak K. The challenges posed by cancer heterogeneity. *Nat Biotechnol*. 2012 Jul 10;30(7):604-10. doi: 10.1038/nbt.2294.

Bloch BN, Genega EM, Costa DN, Pedrosa I, **Smith MP**, **Kressel HY**, Ngo L, Sanda MG, Dewolf WC, Rofsky NM. Prediction of prostate cancer extracapsular extension with high spatial resolution dynamic contrast-enhanced 3-T MRI. *Eur Radiol*. 2012 Jun 3.

Boiselle PM. A New JTI Milestone. *J Thorac Imaging*. 2012 Jan;27(1):1.

Boiselle PM. "Readers' opinion". *J Thorac Imaging*. 2012 Mar;27(2):72.

Boiselle PM. Jeff kanne appointed as consulting editor for electronic media. *J Thorac Imaging*. 2012 Mar;27(2):71.

Boiselle PM. "Quality matters". *J Thorac Imaging*. 2012 May;27(3):137.

Boiselle PM, Abbara S, Blanke P, A Leipsic J, Sundaram B, Quint LE. Expert Opinion: MDCT Aortic Root Measurements for Transcatheter Aortic Valve Implantation. *J Thorac Imaging*. 2012 May;27(3):140.

Boiselle PM, Collins J, Dodd JD, Herold CJ, Leung AN. Expert Opinion: What are the Greatest Challenges and/or Barriers to Applying Evidence-based Medicine in the Daily Practice of Cardiopulmonary Radiology? *J Thorac Imaging*. 2012 Sep;27(5):271.

Boiselle PM, Goodman LR, **Litmanovich D**, Rémy-Jardin M, Schaefer-Prokop C. Expert Opinion: CT Pulmonary Angiography in Pregnant Patients With Suspected Pulmonary Embolism. *J Thorac Imaging*. 2012 Jan;27(1):5.

Boiselle PM, Michaud G, Roberts DH, Loring SH, Womble HM, Millett ME, O'Donnell CR. "Dynamic expiratory tracheal collapse in COPD: Correlation with clinical and physiological parameters". *Chest*. 2012 Jun 21.

Boiselle PM, Nikolaou K, Schoepf UJ, Seo JB. Expert Opinion: Dual Energy CT: Most and Least Relevant Cardiopulmonary Imaging Applications. *J Thorac Imaging*. 2012 Jan;27(1):6.

Boiselle PM, Reddy GP. Editors' recognition awards for distinction in reviewing in 2011. *J Thorac Imaging*. 2012 Jan;27(1):2.

Bollen TL, Singh VK, Maurer R, Repas K, van Es HW, Banks PA, **Mortele KJ**. A comparative evaluation of radiologic and clinical scoring systems in the early prediction of severity in acute pancreatitis. *Am J Gastroenterol*. 2012 Apr;107(4):612-9. doi: 10.1038/ajg.2011.438. Epub 2011 Dec 20.

Brennan IM, Ahmed M. Portal vein thrombosis following percutaneous transhepatic cholangiography-An unusual presentation of Prothrombin (Factor II) gene mutation. *World J Radiol*. 2012 May 28;4(5):224-7. PMID: PMC3386535.

Brook OR, Gourtsoyianni S, Mendiratta-Lala M, Mahadevan A, **Siewert B, Sheiman RR**. Safety profile and technical success of imaging-guided percutaneous fiducial seed placement with and without core biopsy in the abdomen and pelvis. *AJR Am J Roentgenol*. 2012 Feb;198(2):466-70.

Brook OR, Gourtsoyianni S, **Brook A**, Mahadevan A, **Wilcox C, Raptopoulos V**. Spectral CT with Metal Artifacts Reduction Software for Improvement of Tumor Visibility in the Vicinity of Gold Fiducial Markers. *Radiology*. 2012 Jun;263(3):696-705. Epub 2012 Mar 13.

Bulman JC, Toth R, Patel AD, Bloch BN, **McMahon CJ**, Ngo L, Madabhushi A, **Rofsky NM**. Automated Computer-derived Prostate Volumes from MR Imaging Data: Comparison with Radiologist-derived MR Imaging and Pathologic Specimen Volumes. *Radiology*. 2012 Jan;262(1):144-51. PMID: PMC3262981.

Canto MI, Hruban RH, Fishman EK, Kamel IR, Schulick R, Zhang Z, Topazian M, Takahashi N, Fletcher J, Petersen G, Klein AP, Axilbund J, Griffin C, Syngal S, Saltzman JR, **Mortele KJ**, Lee J, Tamm E, Vikram R, Bhosale P, Margolis D, Farrell J, Goggins M; American Cancer of the Pancreas Screening (CAPS) Consortium. Frequent detection of pancreatic lesions in asymptomatic high-risk individuals. *Gastroenterology*. 2012 Apr;142(4):796-804. Epub 2012 Jan 12. PMID: PMC3321068.

Chansakul T, **Lai KC, Slanetz PJ**. The postconservation breast: part 1, expected imaging findings. *AJR Am J Roentgenol*. 2012 Feb;198(2):321-30. Review.

Chansakul T, **Lai KC, Slanetz PJ**. The postconservation breast: part 2, imaging findings of tumor recurrence and other long-term sequelae. *AJR Am J Roentgenol*. 2012 Feb;198(2):331-43. Review.

Chou CP, Chiou SH, **Levenson RB**, Huang JS, Yang TL, Yu CC, Chiang AJ, Pan HB. Differentiation between pelvic abscesses and pelvic tumors with diffusion-weighted MR imaging: a preliminary study. *Clin Imaging*. 2012 Sep;36(5):532-8. Epub 2012 Jun 8.

Chuang ML, Gona P, Salton CJ, Yeon SB, Kissinger KV, Blease SJ, Levy D, O'Donnell CJ, **Manning WJ**. Usefulness of the left ventricular myocardial contraction fraction in healthy men and women to predict cardiovascular morbidity and mortality. *Am J Cardiol*. 2012 May 15;109(10):1454-8.

Collins KC, Odell DD, **Sheiman RG**, Gangadharan SP. Critically compromised airway secondary to expanding esophageal mucocele. *Ann Thorac Surg*. 2012 Aug;94(2):635-6.

Corwin MT, Smith AJ, Karam AR, **Sheiman RG**. Incidentally detected misty mesentery on CT: risk of malignancy correlates with mesenteric lymph node size. *J Comput Assist Tomogr*. 2012 Jan-Feb;36(1):26-9.

Cullen G, Vaughn B, Ahmed A, Peppercorn MA, **Smith MP**, Moss AC, Cheifetz AS. Abdominal phlegmons in Crohn's disease: outcomes following antitumor necrosis factor therapy. *Inflamm Bowel Dis*. 2012 Apr;18(4):691-6. doi: 10.1002/ibd.21783. Epub 2011 Jun 6.

Cypess AM, Chen YC, Sze C, Wang K, English J, Chan O, Holman AR, Tal I, **Palmer MR, Kolodny GM**, Kahn CR. Cold but not sympathomimetics activates human brown adipose tissue in vivo. *Proc Natl Acad Sci U S A*. 2012 Jun 19;109(25):10001-5. Epub 2012 Jun 4.

Dai W, Shankaranarayanan A, Alsop DC. Volumetric measurement of perfusion and arterial transit delay using hadamard encoded continuous arterial spin labeling. *Magn Reson Med*. 2012 May 22. doi: 10.1002/mrm.24335.

Delbeke D, Chiti A, Christian P, Darcourt J, **Donohoe K**, Flotats A, Krause BJ, Royal HD. SNM/EANM Guideline for Guideline Development 6.0. *J Nucl Med Technol*. 2012 Jun 28.

Demetri-Lewis A, **Slanetz PJ, Eisenberg RL**. Breast calcifications: the focal group. *AJR Am J Roentgenol*. 2012 Apr;198(4):W325-43.

Dewhurst CE, Mortele KJ. Cystic tumors of the pancreas: imaging and management. *Radiol Clin North Am*. 2012 May;50(3):467-86.

Dialani V, Lai KC, Slanetz PJ. MR imaging of the reconstructed breast: What the radiologist needs to know. *Insights Imaging*. 2012 Jun;3(3):201-13. Epub 2012 Mar 17. PMID: PMC3369124.

Didolkar MM, Malone AL, Nunley JA 2nd, Dodd LG, Helms CA. Pseudotumor of the peroneus longus tendon on MRI, secondary to a fibrocartilaginous node. *Skeletal Radiol*. 2012 Feb 15.

Donohoe KJ, Agrawal G, Frey KA, Gerbaudo VH, Mariani G, Nagel JS, Shulkin BL, Stabin MG, Stokes MK. SNM Practice Guideline for Brain Death Scintigraphy 2.0. *J Nucl Med Technol*. 2012 Jun 28.

Ellis RJ, Norton AC, Overy K, Winner E, **Alsop DC**, Schlaug G. Differentiating maturational and training influences on fMRI activation during music processing. *Neuroimage*. 2012 Apr 15;60(3):1902-12. Epub 2012 Feb 9.

Erbay SH, Brewer E, French R, Midle JB, Zou KH, Lee GM, Erbay KD, **Bhadelia RA**. T2 hyperintensity of medial lemniscus is an indicator of small-vessel disease. *AJR Am J Roentgenol*. 2012 Jul;199(1):163-8.

Ferris-James DM, Iuanow E, Mehta TS, Shaheen RM, Slanetz PJ. Imaging approaches to diagnosis and management of common ductal abnormalities. *Radiographics*. 2012 Jul;32(4):1009-30.

Francis JM, **Palmer MR, Donohoe K**, Curry M, Johnson SR, Karp SJ, Evenson AR, Pavlakis M, Hanto DW, Mandelbrot DA. Evaluation of native kidney recovery after simultaneous liver-kidney transplantation. *Transplantation*. 2012 Mar 15;93(5):530-5.

Ginat DT, Singh AD, **Moonis G**. Multimodality imaging of hydrogel scleral buckles. *Retina*. 2012 Sep;32(8):1449-52.

Goldberg SN. Mechanisms matter. *J Vasc Interv Radiol*. 2012 Jan;23(1):114-5.

Goldberg SN. Science to Practice: What Do Molecular Biologic Studies in Rodent Models Add to Our Understanding of Interventional Oncologic Procedures including Percutaneous Ablation by Using Glyceraldehyde-3-Phosphate Dehydrogenase Antagonists? *Radiology*. 2012 Mar;262(3):737-9.

Hall FM. Digital mammography versus full-field digital mammography. *AJR Am J Roentgenol*. 2012 Jan;198(1):240.

Hall FM, Glynn CG, Farria DM, Monsees BS, Salzman JT, Wiele KN. Transition to digital mammography. *Radiology*. 2012 Jan;262(1):374.

Hall FM, Yue JJ, Murtagh RD, Quencer RM, Castellvi AE. Transpedicular fusions and lice. *Radiology*. 2012 Jan;262(1):372.

Hall FM. The ABR and Resident Recall "Cheating". *Radiology*. 2012 May;263(2):323-5.

Hall FM, Brennan SB, Sung JS, Dershaw DD, Liberman L, Morris EA. Prudence in breast imaging. *Radiology*. 2012 May;263(2):618.

Handley R, Zelaya FO, Reinders AA, Marques TR, Mehta MA, O'Gorman R, **Alsop DC**, Taylor H, Johnston A, Williams S, McGuire P, Pariante CM, Kapur S, Dazzan P. Acute effects of single-dose aripiprazole and haloperidol on resting cerebral blood flow (rCBF) in the human brain. *Hum Brain Mapp*. 2012 Mar 25. doi: 10.1002/hbm.21436. [Epub ahead of print]

Havla L, Basha T, Rayatzadeh H, Shaw JL, **Manning WJ**, Reeder SB, Kozerke S, Nezafat R. Improved fat water separation with water selective inversion pulse for inversion recovery imaging in cardiac MRI. *J Magn Reson Imaging*. 2012 Aug 23. doi: 10.1002/jmri.23779. [Epub ahead of print]

Heitkamp DE, Mohammed TL, Kirsch J, Amorosa JK, Brown K, Chung JH, Dyer DS, Ginsburg ME, Kanne JP, Kazerooni EA, Ketai LH, **Parker JA**, Ravenel JG, Saleh AG, Shah RD. ACR Appropriateness Criteria(®) Acute Respiratory Illness in Immunocompromised Patients. *J Am Coll Radiol*. 2012 Mar;9(3):164-9.

Hendee W, Bernstein MA, **Levine D.** Scientific journals and impact factors. *Skeletal Radiol*. 2012 Feb;41(2):127-8.

Hennessey JV, **Parker JA**, Kennedy R, Garber JR. Comments regarding Practice Recommendations of the American Thyroid Association for radiation safety in the treatment of thyroid disease with radioiodine. *Thyroid*. 2012 Mar;22(3):336-7; author reply 337-8. Epub 2012 Feb 3.

Ho ML, Rojas R, Eisenberg RL. Cerebral edema. *AJR Am J Roentgenol*. 2012 Sep;199(3):W258-73.

Honigman L, Jesus J, Pandey S, **Camacho M**, Tibbles C, Friedberg R. Sacral Decubitus Ulcers and Bacterial Meningitis. *J Emerg Med*. 2012 Feb 22.

Hussein-Jelen T, **Bankier AA, Eisenberg RL.** Solid pleural lesions. *AJR Am J Roentgenol*. 2012 Jun;198(6):W512-20. PubMed PMID: 22623565.

Hutteman M, van der Vorst JR, Gaarenstroom KN, Peters AA, Mieog JS, Schaafsma BE, Löwik CW, **Frangioni JV**, van de Velde CJ, Vahrmeijer AL. Optimization of near-infrared fluorescent sentinel lymph node mapping for vulvar cancer. *Am J Obstet Gynecol*. 2012 Jan;206(1):89.e1-5. Epub 2011 Jul 30. PMID: PMC3246078.

Inoue K, Liu F, Hoppin J, Lunsford EP, Lackas C, Hesterman J, **Lenkinski RE**, Fujii H, **Frangioni JV.** High-resolution Computed Tomography Of Single Breast Cancer Microcalcifications In Vivo. *Mol Imaging*. 2012;11(0):1-10.

Ip IK, **Mortele KJ**, Prevedello LM, Khorasani R. Repeat abdominal imaging examinations in a tertiary care hospital. *Am J Med*. 2012 Feb;125(2):155-61.

Jeffers AB, Saghir A, Camacho M. Formal reporting of second-opinion CT interpretation: experience and reimbursement in the emergency department setting. *Emerg Radiol*. 2012 Jan 13.

Johnson CD, Herman BA, Chen MH, Toledano AY, Heiken JP, Dachman AH, Kuo MD, Menias CO, **Siewert B**, Cheema JI, Obregon R, Fidler JL, Zimmerman P, Horton KM, Coakley KJ, Iyer RB, Hara AK, Halvorsen RA Jr, Casola G, Yee J, Blevins M, Burgart LJ, Limburg PJ, Gatsonis CA. The National CT Colonography Trial: assessment of accuracy in participants 65 years of age and older. *Radiology*. 2012 May;263(2):401-8. Epub 2012 Feb 23. PMID: PMC3329269.

Khosa F, Warraich H, **Khan A**, Mahmood F, Markson L, **Clouse ME, Manning WJ.** Prevalence of non-cardiac pathology on clinical transthoracic echocardiography. *J Am Soc Echocardiogr*. 2012 May;25(5):553-7.

Khullar OV, Griset AP, Gibbs-Strauss SL, Chirieac LR, Zubris KA, **Frangioni JV**, Grinstaff MW, Colson YL. Nanoparticle migration and delivery of Paclitaxel to regional lymph nodes in a large animal model. *J Am Coll Surg*. 2012 Mar;214(3):328-37. Epub 2012 Jan 5. PMID: PMC3288886.

Koo BB, Bergethon P, Qiu WQ, Scott T, Hussain M, Rosenberg I, Caplan LR, **Bhadelia RA.** Clinical Prediction of Fall Risk and White Matter Abnormalities: A Diffusion Tensor Imaging Study. *Arch Neurol*. 2012 Feb 13.

Kruskal JB, Reedy A, Pascal L, Rosen MP, Boieselle PM. Quality initiatives: lean approach to improving performance and efficiency in a radiology department. *Radiographics*. 2012 Mar-Apr;32(2):573-87.

Lai KC, Slanetz PJ, Eisenberg RL. Linear breast calcifications. *AJR Am J Roentgenol*. 2012 Aug;199(2):W151-7.

Lee EY, Restrepo R, Dillman JR, **Ridge CA**, Hammer MR, **Boieselle PM.** Imaging evaluation of pediatric trachea and bronchi: systematic review and updates. *Semin Roentgenol*. 2012 Apr;47(2):182-96.

Lee EY, Neuman MI, Lee NJ, Johnson VM, Zurakowski D, Tracy DA, **Boieselle PM.** Pulmonary Embolism Detected by Pulmonary MDCT Angiography in Older Children and Young Adults: Risk Factor Assessment. *AJR Am J Roentgenol*. 2012 Jun;198(6):1431-7.

Lee JH, Choi HS, Nasr KA, Ha M, Kim Y, **Frangioni JV.** Correction to High-Throughput Small Molecule Identification Using MALDI-TOF and a Nanolayered Substrate. *Anal Chem*. 2012 Feb 17.

Lee KS, Muñoz A, Báez AB, Ngo L, **Rofsky NM, Pedrosa I.** Corticomedullary differentiation on T1-Weighted MRI: Comparison between cirrhotic and noncirrhotic patients. *J Magn Reson Imaging*. 2012 Mar;35(3):644-9. doi: 10.1002/jmri.22852. Epub 2011 Oct 26. PMID: PMC3275662.

Leung AN, Bull TM, Jaeschke R, Lockwood CJ, **Boieselle PM**, Hurwitz LM, James AH, McCullough LB, Menda Y, Paidas MJ, Royal HD, Tapson VF, Winer-Muram HT, Chervenak FA, Cody DD, McNitt-Gray MF, Stave CD, Tuttle BD; On Behalf of the ATS/STR Committee on Pulmonary Embolism in Pregnancy. American Thoracic Society Documents: An Official American Thoracic Society/Society of Thoracic Radiology Clinical Practice Guideline-Evaluation of Suspected Pulmonary Embolism in Pregnancy. *Radiology*. 2012 Feb;262(2):635-646.

Levenson RB, Camacho MA, Horn E, Saghir A, McGillicuddy D, Sanchez LD. Eliminating routine oral contrast use for CT in the emergency department: impact on patient throughput and diagnosis. *Emerg Radiol*. 2012 Jun 29.

Levine D, Kressel HY. Editors' Response to Krishna S, Mittal V, Saxena AK, Sodhi KS. Biliary Atresia in Neonates and Infants. doi: 10.1148/radiol.11110959 December 2011 *Radiology*, 261, 997-998.

Liszewski MC, Sahni VA, Shyn PB, Friedman S, Hornick JL, Erturk SM, Mortele KJ. Multidetector-row computed tomography enterographic assessment of the ileal-anal pouch: descriptive radiologic analysis with endoscopic and pathologic correlation. *J Comput Assist Tomogr*. 2012 Jul;36(4):394-9.

Liu F, Lunsford EP, Tong J, Ashitate Y, Gibbs SL, Yu J, Choi HS, Henske EP, **Frangioni JV.** Real-time monitoring of tumorigenesis, dissemination, & drug response in a preclinical model of lymphangioleiomyomatosis/tuberous sclerosis complex. *PLoS One*. 2012;7(6):e38589. Epub 2012 Jun 15. PMID: PMC3376142.

Lu XQ, Mahadevan A, Mathiowitz G, **Lin PJ**, Thomas A, Kasper EM, Floyd SR, Holupka E, La Rosa S, Wang F, Stevenson MA. Frameless Angiogram-Based Stereotactic Radiosurgery for Treatment of Arteriovenous Malformations. *Int J Radiat Oncol Biol Phys*. 2012 Jan 25. PubMed PMID: 22284685.

Madhuranthakam AJ, **Smith MP**, Yu H, Shimakawa A, Reeder SB, **Rofsky NM**, McKenzie CA, Brittain JH. Water-silicone separated volumetric MR acquisition for rapid assessment of breast implants. *J Magn Reson Imaging*. 2012 Jan 13. doi: 10.1002/jmri.22872. [Epub ahead of print]

Madhuranthakam AJ, Sarkar SN, Busse RF, Bakshi R, **Alsop DC**. Optimized double inversion recovery for reduction of T₁ weighting in fluid-attenuated inversion recovery. *Magn Reson Med*. 2012 Jan;67(1):81-8. doi: 10.1002/mrm.22979. Epub 2011 May 16.

Maleki N, Dai W, Alsop DC. Optimization of background suppression for arterial spin labeling perfusion imaging. *MAGMA*. 2012 Apr;25(2):127-33.

Marquand AF, O'Daly OG, De Simoni S, **Alsop DC**, Maguire RP, Williams SC, Zelaya FO, Mehta MA. Dissociable effects of methylphenidate, atomoxetine and placebo on regional cerebral blood flow in healthy volunteers at rest: a multi-class pattern recognition approach. *Neuroimage*. 2012 Apr 2;60(2):1015-24. Epub 2012 Jan 14. PMID: PMC3314973.

Maron MS, Rowin EJ, Lin D, Appelbaum E, Chan RH, Gibson CM, Lesser JR, Lindberg J, Haas TS, Udelson JE, **Manning WJ**, Maron BJ. Prevalence and Clinical Profile of Myocardial Crypts in Hypertrophic Cardiomyopathy. *Circ Cardiovasc Imaging*. 2012 May 4.

McMahon CJ, Madhuranthakam AJ, **Wu JS**, **Yablon CM**, **Wei JL**, **Rofsky NM**, **Hochman MG**. High-resolution proton density weighted three-dimensional fast spin echo (3D-FSE) of the knee with IDEAL at 1.5 tesla: Comparison with 3D-FSE and 2D-FSE-initial experience. *J Magn Reson Imaging*. 2012 Feb;35(2):361-9. doi: 10.1002/jmri.22829. Epub 2011 Oct 27.

Moonis G, Cunnane MB, Emerick K, Curtin H. Patterns of perineural tumor spread in head and neck cancer. *Magn Reson Imaging Clin N Am*. 2012 Aug;20(3):435-46.

Moragianni VA, Hamar BD, **McArdle C**, Ryley DA. Management of a cervical heterotopic pregnancy presenting with first-trimester bleeding: case report and review of the literature. *Fertil Steril*. 2012 May 12. [Epub ahead of print]

Morgan DE, Morteale KJ. Pancreatic imaging. Preface. *Radiol Clin North Am*. 2012 May;50(3):xi.

Mottola JC, Sahni VA, Erturk SM, Swanson R, Banks PA, **Morteale KJ**. Diffusion-weighted MRI of focal cystic pancreatic lesions at 3.0-Tesla: preliminary results. *Abdom Imaging*. 2012 Feb;37(1):110-7.

Mullan CP, Siewert B, Eisenberg RL. Small bowel obstruction. *AJR Am J Roentgenol*. 2012 Feb;198(2):W105-17.

Nam S, Akçakaya M, Basha T, Stehning C, **Manning WJ**, Tarokh V, Nezafat R. Compressed sensing reconstruction for whole-heart imaging with 3D radial trajectories: A graphics processing unit implementation. *Magn Reson Med*. 2012 Mar 5. doi: 10.1002/mrm.24234. [Epub ahead of print]

Nasir K, Clouse M. Role of Nonenhanced Multidetector CT Coronary Artery Calcium Testing in Asymptomatic and Symptomatic Individuals. *Radiology*. 2012 Sep;264(3):637-49.

Nguyen JT, Ashitate Y, Buchanan IA, Ibrahim AM, Gioux S, Patel PP, **Frangioni JV**, Lee BT. Face transplant perfusion assessment using near-infrared fluorescence imaging. *J Surg Res*. 2012 Apr 27. [Epub ahead of print] PubMed PMID: 22572616.

Nguyen JT, Ashitate Y, Buchanan IA, Ibrahim AM, Gioux S, Patel PP, **Frangioni JV**, Lee BT. Bone flap perfusion assessment using near-infrared fluorescence imaging. *J Surg Res*. 2012 May 24.

Nguyen KS, Sanford RA, Huberman MS, Goldstein MA, McDonald DM, Farquhar M, Gangadharan SP, Kent MS, Michaud G, Majid A, Berman SM, Aronovitz JA, Nedeia EA, **Boiselle PM**, Cohen DW, Kobayashi S, Costa DB. Patterns of care for non-small-cell lung cancer at an academic institution affiliated with a national cancer institute-designated cancer center. *J Oncol Pract*. 2012 Jan;8(1):57-62. Epub 2011 Nov 22. PMID: PMC3266318.

Orcutt KD, Rhoden JJ, Ruiz-Yi B, **Frangioni JV**, Wittrup KD. Effect of Small Molecule Binding Affinity on Tumor Uptake In Vivo. *Mol Cancer Ther*. 2012 Apr 5. [Epub ahead of print]

Parker JA, Coleman RE, Grady E, Royal HD, Siegel BA, Stabin MG, Sostman HD, Hilson AJ; Society of Nuclear Medicine. SNM practice guideline for lung scintigraphy 4.0. *J Nucl Med Technol*. 2012 Mar;40(1):57-65.

Patel B, Mottola J, Sahni VA, Cantisani V, Ertruk M, Friedman S, Bellizzi AM, Marcantonio A, **Morteale KJ**. MDCT assessment of ulcerative colitis: radiologic analysis with clinical, endoscopic, and pathologic correlation. *Abdom Imaging*. 2012 Feb;37(1):61-9.

Pedrosa I, Rafatzand K, **Robson P**, Wagner AA, Atkins MB, **Rofsky NM**, **Alsop DC**. Arterial spin labeling MR imaging for characterisation of renal masses in patients with impaired renal function: initial experience. *Eur Radiol*. 2012 Feb;22(2):484-92.

Pianykh O. Finitely-Supported L2-Optimal Kernels for Digital Signal Interpolation." *Signal Processing*, IEEE Transactions. 2012 (Jan);60(1): 494-498. (IEEE Signal Processing Society)

Pianykh OS. Perfusion linearity and its applications in perfusion algorithm analysis. *Comput Med Imaging Graph*. 2012 Apr;36(3):204-14.

Ranganath SH, Lee EY, Restrepo R, **Eisenberg RL**. Mediastinal masses in children. *AJR Am J Roentgenol*. 2012 Mar;198(3):W197-216.

Ranganath SH, Lee EY, **Eisenberg RL**. Focal cystic abdominal masses in pediatric patients. *AJR Am J Roentgenol*. 2012 Jul;199(1):W1-W16.

Rauch P, **Lin PJ**, Balter S, Fukuda A, Goode A, Hartwell G, LaFrance T, Nickoloff E, Shepard J, Strauss K. Functionality and operation of fluoroscopic automatic brightness control/automatic dose rate control logic in modern cardiovascular and interventional angiography systems: a report of Task Group 125 Radiography/Fluoroscopy Subcommittee, Imaging Physics Committee, Science Council. *Med Phys*. 2012 May;39(5):2826-8.

Robich MP, Chu LM, Burgess TA, Feng J, Han Y, Nezafat R, Leber MP, Laham RJ, **Manning WJ**, Sellke FW. Resveratrol Preserves Myocardial Function and Perfusion in Remote Nonischemic Myocardium in a Swine Model of Metabolic Syndrome. *J Am Coll Surg*. 2012 Aug 3. [Epub ahead of print]

Rosen MP, Corey J, Siewert B. Establishing a computed tomography screening clinic. *J Thorac Imaging*. 2012 Jul;27(4):220-3.

Rosenkrantz AB, Sekhar A, Genega EM, Melamed J, Babb JS, Patel AD, Lo A, Najarian RM, **Ahmed M, Pedrosa I**. Prognostic implications of the magnetic resonance imaging appearance in papillary renal cell carcinoma. *Eur Radiol*. 2012 Aug 21.

Rowin EJ, Maron BJ, Appelbaum E, Link MS, Gibson CM, Lesser JR, Haas TS, Udelson JE, **Manning WJ**, Maron MS. Significance of False Negative Electrocardiograms in Preparticipation Screening of Athletes for Hypertrophic Cardiomyopathy. *Am J Cardiol*. 2012 Jul 16. [Epub ahead of print]

Schaafsma BE, van der Vorst JR, Gaarenstroom KN, Peters AA, Verbeek FP, de Kroon CD, Trimpos JB, van Poelgeest MI, **Frangioni JV**, van de Velde CJ, Vahrmeijer AL. Randomized comparison of near-infrared fluorescence lymphatic tracers for sentinel lymph node mapping of cervical cancer. *Gynecol Oncol*. 2012 Jul 10.

Sekhar A, Eisenberg RL, Yablon CM. Enhancing the resident experience with global health electives. *AJR Am J Roentgenol.* 2012 Feb;198(2):W118-21.

Sheiman RG, Mullan C, Ahmed M. In vivo determination of a modified heat capacity of small hepatocellular carcinomas prior to radiofrequency ablation: Correlation with adjacent vasculature and tumour recurrence. *Int J Hyperthermia.* 2012;28(2):122-31.

Shinagare AB, Meylaerts LJ, Laury AR, **Mortele KJ.** MRI features of ovarian fibroma and fibrothecoma with histopathologic correlation. *AJR Am J Roentgenol.* 2012 Mar;198(3):W296-303.

Silberstein EB, Alavi A, Balon HR, Clarke SE, Divgi C, Gelfand MJ, Goldsmith SJ, Jadvar H, Marcus CS, Martin WH, Parker JA, Royal HD, Sarkar SD, Stabin M, Waxman AD. The SNM Practice Guideline for Therapy of Thyroid Disease with ¹³¹I 3.0. *J Nucl Med.* 2012 Jul 11.

Simon BA, Kaczka DW, **Bankier AA,** Parraga G. What can computed tomography and magnetic resonance imaging tell us about ventilation? *J Appl Physiol.* 2012 Aug;113(4):647-57. Epub 2012 May 31.

Slanetz PJ, Boieselle PM. Mentoring matters. *AJR Am J Roentgenol.* 2012 Jan;198(1):W11-2.

Srivastava T, Darras BT, **Wu JS,** Rutkove SB. Machine learning algorithms to classify spinal muscular atrophy subtypes. *Neurology.* 2012 Jul 4;79(4):358-64. Epub 2012 Jul 11. PubMed Central PMCID: PMC3400094.

Stolen CM, Lam YM, Siu CW, Lau CP, **Parker JA, Hauser TH,** Tse HF. Pacing to reduce refractory angina in patients with severe coronary artery disease: a crossover pilot trial. *J Cardiovasc Transl Res.* 2012 Feb;5(1):84-91.

Sun MR, Wagner AA, San Francisco IF, Brook A, Kavoussi L, Russo P, Steele G, Viterbo R, Pedrosa I. Need for Intraoperative Ultrasound and Surgical Recommendation for Partial Nephrectomy: Correlation With Tumor Imaging Features and Urologist Practice Patterns. *Ultrasound Q.* 2012 Mar;28(1):21-27.

Thadhani R, Appelbaum E, Pritchett Y, Chang Y, Wenger J, Tamez H, Bhan I, Agarwal R, Zoccali C, Wanner C, Lloyd-Jones D, Cannata J, Thompson BT, Andress D, Zhang W, Packham D, Singh B, Zehnder D, Shah A, Pachika A, **Manning WJ,** Solomon SD. Vitamin D therapy and cardiac structure and function in patients with chronic kidney disease: the PRIMO randomized controlled trial. *JAMA.* 2012 Feb 15;307(7):674-84.

Thornton E, Brook OR, Mendiratta-Lala M, Hallett DT, Kruskal JB. Application of failure mode and effect analysis in a radiology department. *Radiographics.* 2011 Jan-Feb;31(1):281-93. Epub 2010 Oct 27. Review.

van der Vorst JR, Hutteman M, Mieog JS, de Rooij KE, Kaijzel EL, Löwik CW, Putter H, Kuppen PJ, **Frangioni JV,** van de Velde CJ, Vahrmeijer AL. Near-infrared fluorescence imaging of liver metastases in rats using indocyanine green. *J Surg Res.* 2012 May 15;174(2):266-71. PMCID: PMC3138836.

van der Vorst JR, Schaafsma BE, Verbeek FP, Hutteman M, Mieog JS, Lowik CW, Liefers GJ, **Frangioni JV,** van de Velde CJ, Vahrmeijer AL. Randomized Comparison of Near-infrared Fluorescence Imaging Using Indocyanine Green and ^{99m}Tc Tcnetium With or Without Patent Blue for the Sentinel Lymph Node Procedure in Breast Cancer Patients. *Ann Surg Oncol.* 2012 Jul 3.

van Vorst JR, Vahrmeijer AL, Hutteman M, Bosse T, Smit VT, van Velde CJ, **Frangioni JV,** Bonsing BA. Near-infrared fluorescence imaging of a solitary fibrous tumor of the pancreas using methylene blue. *World J Gastrointest Surg.* 2012 Jul 27;4(7):180-4. PMCID: PMC3420986.

Varma G, Lenkinski RE, Vinogradov E. Keyhole chemical exchange saturation transfer. *Magn Reson Med.* 2012 Jan 13. doi: 10.1002/mrm.23310. [Epub ahead of print]

Verbeek FP, van der Vorst JR, Schaafsma BE, Hutteman M, Bonsing BA, vanLeeuwen FW, **Frangioni JV,** van de Velde CJ, Swijnenburg RJ, Vahrmeijer AL. Image-guided hepatopancreatobiliary surgery using near-infrared fluorescent light. *J Hepatobiliary Pancreat Sci.* 2012 Jul 13.

Vavere AL, Simon GG, George RT, Rochitte CE, Arai AE, Miller JM, Di Carli M, Arbab-Zadeh A, Dewey M, Niinuma H, Laham R, Rybicki FJ, Schuijff JD, Paul N, Hoe J, Kuribayashi S, Sakuma H, Nomura C, Yaw TS, Kofoed KF, Yoshioka K, **Clouse ME,** Brinker J, Cox C, Lima JA. Diagnostic performance of combined noninvasive coronary angiography and myocardial perfusion imaging using 320 row detector computed tomography: design and implementation of the CORE320 multicenter, multinational diagnostic study. *J Cardiovasc Comput Tomogr.* 2011 Nov-Dec;5(6):370-81. Epub 2011 Nov 12. Erratum in: *J Cardiovasc Comput Tomogr.* 2012 Mar-Apr;6(2):146. Zadeh, Armin A [corrected to Arbab-Zadeh, Armin].

Venkataraman S, Dialani V, Gilmore HL, **Mehta TS.** Stereotactic core biopsy: Comparison of 11 gauge with 8 gauge vacuum assisted breast biopsy. *Eur J Radiol.* 2012 Oct;81(10):2613-9. Epub 2011 Nov 27.

Vinocur DN, Lee EY, **Eisenberg RL.** Neonatal intestinal obstruction. *AJR Am J Roentgenol.* 2012 Jan;198(1):W1-W10.

Vinogradov E, Soesbe TC, Balschi JA, Dean Sherry A, **Lenkinski RE.** pCEST: Positive contrast using Chemical Exchange Saturation Transfer. *J Magn Reson.* 2012 Feb;215:64-73. Epub 2011 Dec 27.

Viswanath SE, Bloch NB, Chappelw JC, Toth R, **Rofsky NM,** Genega EM, **Lenkinski RE,** Madabhushi A. Central gland and peripheral zone prostate tumors have significantly different quantitative imaging signatures on 3 tesla endorectal, in vivo T2-weighted MR imagery. *J Magn Reson Imaging.* 2012 Feb 15. doi: 10.1002/jmri.23618.

Wang K, Chen YC, **Palmer MR,** Tal I, Ahmed A, Moss AC, **Kolodny GM.** Focal physiologic fluorodeoxyglucose activity in the gastrointestinal tract is located within the colonic lumen. *Nucl Med Commun.* 2012 Jan 11.

Wasilewska E, Lee EY, **Eisenberg RL.** Unilateral hyperlucent lung in children. *AJR Am J Roentgenol.* 2012 May;198(5):W400-14.

Wilhelm MJ, Ong HH, Wehrli SL, Li C, Tsai PH, **Hackney DB,** Wehrli FW. Direct magnetic resonance detection of myelin and prospects for quantitative imaging of myelin density. *Proc Natl Acad Sci U S A.* 2012 May 24.

Yang W, Ahmed M, Tasawwar B, Levchenko T, Sawant RR, Torchilin V, **Goldberg SN.** Combination radiofrequency (RF) ablation and IV liposomal heat shock protein suppression: reduced tumor growth and increased animal endpoint survival in a small animal tumor model. *J Control Release.* 2012 Jun 10;160(2):239-44. Epub 2011 Dec 30. PMCID: PMC3412588.

You JJ, Singer DE, Howard PA, Lane DA, Eckman MH, Fang MC, Hylek EM, Schulman S, Go AS, Hughes M, Spencer FA, **Manning WJ,** Halperin JL, Lip GY. Antithrombotic Therapy for Atrial Fibrillation: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. *Chest.* 2012 Feb;141(2 Suppl):e531S-75S.

Yu A, Teich DL, Moonis G, Wong ET. Superior semicircular canal dehiscence in East Asian women with osteoporosis. *BMC Ear Nose Throat Disord.* 2012 Jul 25;12(1):8.

Note that publications with PMCID numbers denote NIH-funded author manuscripts. (PMCID's are also required by BIDMC grant administration policy for further funding applications and are included in this bibliography for your convenience.)

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The editor apologizes for any confusion!

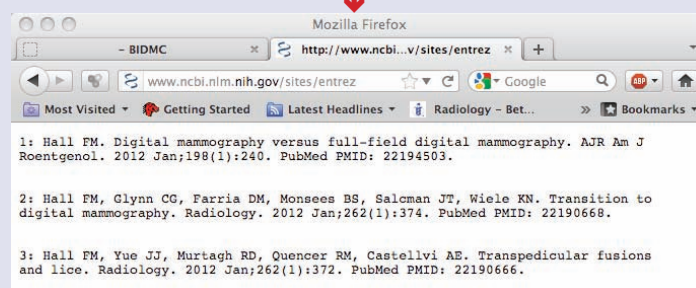
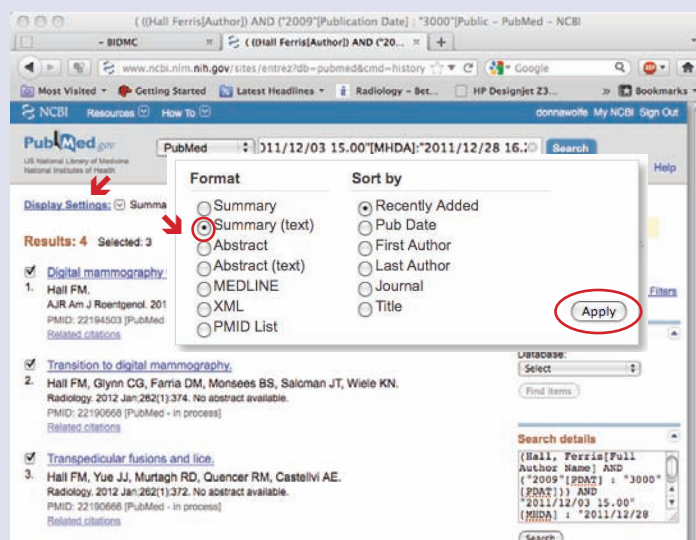
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Thanks to Meredith Cunningham for suggesting this tip be included in Radical Views. Please contact Donna Wolfe (dwolfe@bidmc.harvard.edu) if there are other tips you would like to share with the Radiology community.