

# Radical Views... from the Department of Radiology

Beth Israel Deaconess Medical Center

OCTOBER 2016 HARVARD MEDICAL SCHOOL

Volume 9, Number 4

## 2016 America's Best Breast Centers

"The purpose of life is to contribute in some way to making things better."



- Robert F. Kennedy

WOMEN'S CHOICE AWARD\* THE VOICE OF WOMEN

We would like to take a moment to share some recognition that we recently received. BIDMC BreastCare Center was recognized by the 'Women's Choice Award' as one of America's Best Breast Centers. BIDMC was the only breast center in the city of Boston to receive this recognition for 2016. Women's Choice Award recipients meet the high standards of the National Accreditation Program for Breast Centers (NAPBC), carry the seal of the American College of Radiologists as a Breast Imaging Center of Excellence (BICOE), and receive top patient recommendation ratings according to the Centers for Medicare and Medicaid Services.

This award reflects the phenomenal level of service and care that you all provide. Patients at the BreastCare Center benefit tremendously from your expertise, your dedication, and most importantly from your compassion.

So, congratulations on a job well done and for your many contributions to making things better for our patients!

This email also marks the introduction of a new monthly communication for news, updates, and special insights pertaining to the breast program.

Thanks again for all that you do for patient care.

- Ted and Tejas, BreastCare Center Co-Directors





Ted A. James, Chief, Breast Surgical Oncology

Tejas Mehta, MD, Chief, Breast Imaging

**QUALITY UPDATE:** Radiology **begins** Post Procedure Closeout November 1<sup>st</sup> (See pg. 4)



Etta D. Pisano, MD Vice Chair for

I am pleased to announce that VIR Chief Muneeb Ahmed has been awarded an NIH R01 grant for "Modulating systemic pro-oncogenic effects of focal image-guided tumor ablation".

Research

This NIH grant award is the result of several years of ongoing pilot study work on how tumor and tissue ablation biology can influence tumor growth. Original pilot studies in this area demonstrated for the first time in pre-

clinical models that ablation of normal liver and kidney tissue can stimulate distant tumor growth in some cases, and that by identifying potential mechanisms, these effects can also be

successfully suppressed with adjuvant drug inhibition. The pilot studies were developed through pilot grants from an RSNA Seed Grant and the NCI. Two recent papers from this research also received awards from international societies as Best papers in 2015 in the field of Interventional Oncology.



Muneeb Ahmed, MD

Did you know... that BIDMC Radiology has been scheduled to present 21 posters at RSNA (10 Poster Exhibits with discussions and 11 Education Exhibits) and that the RSNA Digital Presentation System is now available for you to upload your PDF copy of your hard copy exhibit.

Please be aware, to be eligible for an award this year, the **Education Exhibits Awards Committee** will only judge exhibits that have been uploaded as a PDF by Wednesday, October 26.



Please contact Donna Wolfe or Michael Larson as soon as possible if you need any help designing or printing/uploading your poster.

> **Radiological Society of North America** 102<sup>nd</sup> Scientific Assembly & Annual Meeting Sunday, Nov 27<sup>th</sup> - Friday, Dec 2<sup>nd</sup>, 2016 McCormick Place, Chicago, IL

Mon	Tues	Wed	Thurs	Fri
Weekly <b>Mon</b> Section Meetings: 3:00-4:00 ED section meeting [ED annex, WCC]		Weekly <b>Wed</b> Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 CardioThoracic, Gl/GU Oncology 3:00-4:00 Mammo [TCC-484]	Weekly <b>Thurs</b> Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK	Note that as of July 2016, our 12 noon Friday Grand Rounds will now be in the <b>Rabkin Board Room</b> , Shapiro-10, East Campus (except: when noted otherwise)
<b>3</b> 7:30 - 8:15 Mammo (TBD) 8:15 - 9:00 Mammo (TBD)	<b>4</b> 7:30 - 8:15 Mammo (TBD) 8:15 - 9:00 Mammo (TBD) 12:00 - 1:00 Neuro call prep session (Neuro fellows)	<b>5</b> 7:30 - 8:15 Mammo (TBD) 8:15 - 9:00 Mammo (TBD) 12:00 - 1:00 Neuro case conference (Neuro fellows)	6 7:30 - 8:15 Mammo (TBD) 8:15 - 9:00 Mammo (TBD) 3:00-4:00 West MedRads - Sr. Resident, West Body (T [Clouse]	7 7:30 - 8:00 Code Silver Training (Declan Carbery) 12:00 - 1:00 NERRS / No Grand Rounds
10 Columbus Day	<b>11</b> 7:30 - 8:15 Pleural Disease (Janneth Romero) 10:30-11:30 NMMI meeting [GZ-103]	<b>12</b> 7:30 - 9:00 Neuro (TBD) 12:00 - 1:00 Neuro case conference (Neuro fellows) 7:15-8:00 US meeting [WCC-304A]	<b>13</b> 7:30 - 8:15 Chest (Fourie Bezuidenhout) 8:15 - 9:00 Chest (Fourie Bezuidenhout)	<b>14</b> 7:30 - 9:00 12:00 - 1:00 Grand Rounds: Walmart Health and potential implications for imaging (Matt Hawkins)[RabkinBoardRoom]
<b>17</b> 7:30 - 8:15 Physics (TBD)	<b>18</b> 7:30 - 9:00 Physics (TBD) 8:00-9:00 IR Meeting [West Recovery]	<b>19</b> 7:30 - 9:00 Physics (TBD) 12:00 - 1:00 Neuro case conference (Neuro fellows)	20 7:30 - 9:00 Physics (TBD) 3:00-4:00 West MedRads - Sr. Resident, West Body CT [Clouse]	21 7:30 - 9:00 12:00 - 1:00 Grand Rounds: VIR cost analysis in the era of value-based health care (MarceloGuimares)[Sherman Auditorium]
<b>24</b> 7:30 - 8:15 Biliary Interventions (Olga Brook) 8:15 - 9:00 Advanced interventions in Women's imaging (Olga Brook)	25 7:30 - 8:15 Aortic Interventions (Barry Sacks) 8:15 - 9:00 Bronchial Embolization/Interventions (Seth Berkowitz) 10:30-11:30 NMMI meeting [GZ-103]	26 7:30 - 9:00 Neuro (TBD) 12:00 - 1:00 Neuro case conference (Neuro fellows)	27 7:30 - 8:15 IR in hemodialysis (Salomao Faintuch) 8:15 - 9:00 Venous Access (Seth Berkowitz) 3:00-4:00 West MedRads - Sr Resident, West Body CT [Clouse]	<b>28</b> 12:00 - 1:00 No Grand Rounds
<b>31</b> 7:30 - 8:15 Cardiac (Diana Litmanovich) 8:15 - 9:00 Cardiac (Diana Litmanovich)				





a great avenue to exercise both for my L health and photography skills. When I first started hiking, I lugged all my camera equipment

Artist & Director of CT

to the summits, setting up my tripod and getting that big picture shot across the ridges and blue bird skies. I've continued to carry all my gear and still appreciate the big picture shots from the summits but lately I've realized the hike up is a lot of looking down and around the trails getting there. So I present today a small sampling of the trails, some with still a bit of the big picture look and others with focused perspective, some with my Canon, and some with my iPhone.

If you would like to show in the Gallery, please contact Medical Editor Donna Wolfe (4-2515)



#### **October 2016 GRAND ROUNDS:**



### Friday, October 14, 2016: 12 noon - 1:00 PM • Rabkin Board Room, Shapiro-10 Walmart Health and potential implications for imaging

**Matt Hawkins, MD** - Pediatric Radiologist, Children's Healthcare of Atlanta, Egleston campus • Assistant Professor, Dept. of Radiology and Imaging Sciences, Emory University School of Medicine, Atlanta, GA

Dr. Hawkins is the director of pediatric interventional radiology, and specializes in the treatment of vascular malformations, liver transplant interventions, varicocele embolization, and venous thrombolysis. He also serves as Medical Director of the Telemedicine Division and the Vascular Anomalies Clinic at Children's

Healthcare of Atlanta. Dr. Hawkins' non-clinical interests include health policy, informatics, quality improvement, and social media – and specifically target healthcare challenges where these disciplines intersect. He currently chairs the ACR's Interventional Radiology Economics Committee, Informatics Innovation Advisory Council, and the Quality Experience Committee for the Patient-and Family-Centered Care Commission. He is also an associate editor for JACR and serves on the Society of Interventional Radiology's CPT Committee, RADPAC Board of Directors, ACR Coding and Nomenclature Committee, ACR Metrics Committee, RSNA Public Information Advisory Network, and the Society for Imaging Informatics' Content and Publications Committee. The goals for today's talk are to:

- Raise awareness of healthcare initiatives from large, commercial retailors
- Understand why breast and lung cancer screening are ideal service lines for these corporate entities to pursue.
- Learn how radiology's role in diagnosis will evolve over the coming years.
- Understand steps that be taken to meaningfully measure quality and performance in radiology.



#### Friday, October 21, 2016: 12 noon - 1:00 PM • Sherman Auditorium

#### VIR cost analysis in the era of value-based health care

**Marcelo Guimaraes, MD** - Director of Vascular & Interventional Radiology and Professor of Radiology, Medical University of South Carolina (MUSC), Charleston, SC.

Dr. Guimaraes joined MUSC in January 2008 as an Interventional radiologist and while he has presented over 300 talks worldwide, his contributions to this year's Society of Interventional Radiology Annual Meeting in Vancouver, Canada on April 3 were instrumental in his being invited to speak at BIDMC: "Time-Driven

Activity-Based Cost Accounting Methodology to Improve Cost-Effectiveness in Vascular and Interventional Radiology Service at a Large University Academic Medical Center" and "Radial access for Interventional Radiology procedures. Just an alternative access or an excellent model aligned with the upcoming changes of the healthcare reform?"

The objectives for today's talk are:

- Introduction to the accounting methodology "Time-drive activity based cost" (TDABC)
- Why TDABC could be considered in Vascular Interventional Radiology (VIR)
- How TDABC can be applied to VIR
- Requirements for the implementation of TDABC
- Goals of using a new accounting methodology
- VIR value in the era of Quality and Accountable Care Organizations

#### Please Welcome Marla Rosenfield Darling, MD:



In mid-September, Dr. Marla Rosenfield Darling joined BIDMC Radiology as a per diem staff member specializing in Breast Imaging. A *magna cum laude* graduate of Bowdoin College in Brunswick, ME, she majored in Biology/Environmental Studies with a minor in Chemistry and completed her MD at Case Western Reserve University in Cleveland, OH, residency at Yale-New Haven Hospital in Connecticut and fellowship training in Mammography/Oncoradiology at BWH/DFCI, Boston. Dr. Rosenfield Darling comes to BIDMC most recently with nearly 10 years of experience working at the Winchester Hospital Breast Care Center in Woburn, MA.

#### **QUALITY UPDATE: Radiology begins Post Procedure Closeout November 1st**



It has been 15 years since Dr. Pronovost introduced a short checklist for healthcare workers who insert central lines. While checklists were not completely new to medicine, Pronovost's work suggested that checklist could save lives. Born out of this work came our **Universal Protocol – Time Out** which is

Suzanne Swedeen, RN MSN CNIV Quality Improvement Specialist

done prior to the start of every procedure. The Universal Protocol and Time Out are credited for reducing complications and saving numerous lives.

Fast forward to 2016 more than a decade after the Time Out was first introduced to healthcare and we find that procedural errors are still occurring. When we look at the type of events occurring we find incidents, for example of improper specimen management, retained objects, sharps injury, and missed discharge instructions.

To close this safety gap Radiology developed a **Post Procedure Closeout** (PPC) in our multidisciplinary QA committee. The close-out was tested earlier this summer in several modalities. With your input, we have made multiple revisions and are now ready for the departmental roll-out in all procedure areas **beginning November 1st, 2016**. Over the next month you will hear more about this.

> Beth Israel Deaconess Medical Center

	Tech states:	What to check for:
Get Ready	Are we ready to closeout?	- All respond
Prior to the R	emoval of Sterile Access	
Reconcile Order	MD/NP/PA re-reads order	<ul> <li>Tech holds requisition and this close out script for MD to read</li> <li>MD/NP/PA reviews and reconciles order on requisition</li> <li>MD/NP/PA reviews and reconciles "special instructions" noted on order requisition</li> </ul>
Specimen	Are specimens adequate? (If NA, skip to next section) Who is going to manage specimen(s)?	<ul> <li>All specimens ordered have been obtained</li> <li>All specimen(s) are in the proper container/media</li> <li>Specimen label(s) match patient ID</li> <li>A person is verbally identified who is responsible for transport of specimen(s) to appropriate lab</li> </ul>
Deposited, Deployed, Detained Materials	Has all equipment been removed (wires) or accounted for? (If NA, skip to next section)	<ul> <li>MD/NP/PA verifies all stiffeners, threads, guidewires have been accounted for</li> <li>Confirm proper positioning of retained object (when applicable)</li> <li>MD/NP/PA confirms post-procedure imaging obtained or verbalizes plan for obtaining (if applicable)</li> </ul>
Upon Comple	tion of the Case	
Disposal of sharps & reusable equipment	Have all sharps been disposed?	<ul> <li>Verbally identify person who will be disposing of sharps and wires</li> <li>Identify person who will be disposing of reusable equipment</li> <li>All staff visually scan surrounding area including counters, floor and trash for any sharps, wires, reusable equipment</li> <li>Image: All staff visually scan surrounding area including counters, floor and trash for any sharps, wires, reusable equipment</li> <li>Image: All staff visually scan surrounding area including counters, floor and trash for any sharps, wires, reusable equipment</li> <li>Image: All staff visually scan surrounding area including counters, floor and trash for any sharps, wires, reusable equipment</li> </ul>
Documentation & Discharge	Is there anything we need to discuss for discharge planning? Has proper documentation and discharge planning been completed?	Consider: If applicable Patient's post procedure disposition plan The plan for medications that were held or stopped are reviewed Orders for new medications written Ald occumentation reviewed for completeness (dated, timed, signed, legible) All post procedure imaging has been completed or planned for Patient's questions are answered (if applicable)

SUZANNE SWEDEEN DONS HER OTHER HAT AS KIP COACH IN RADIOLOGY: Whether at home or BIDMC, you should never leave your mobile devices unattended. Below are tips to help you keep your equipment secure!

#### **Encrypt all mobile devices:**

- Lock the device then lock the office or lab where your device will be stored. Consider locking it in a filing cabinet or other secure out of sight location.
- When traveling do not check your electronic devices; treat them as "carry on" baggage and keep them close at all times.
- · Always be aware of your surroundings and belongings and do not leave them unattended.
- Leaving your mobile device in your car unattended puts you at risk of a breach of hospital and personal information.
- Don't forget to put your name, email and phone number on the KIP TIP before you post it!





Aideen Snell, MSW Manager, Service Excellence Program x72570 asnell@bidmc.harvard.edu

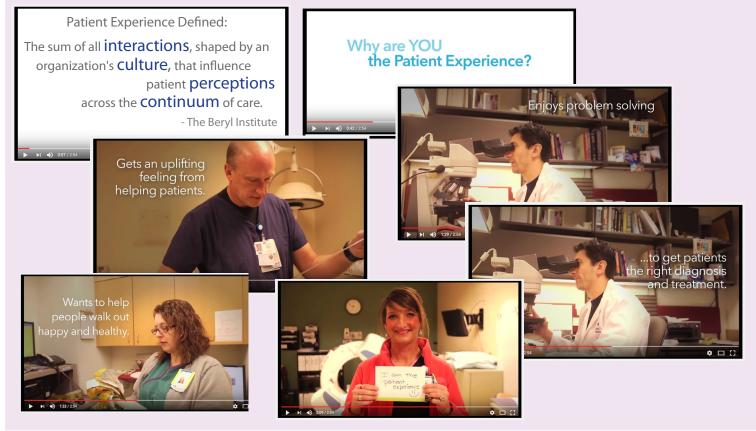
### AIDEEN SNELL ON THE PATIENT EXPERIENCE

# Radiology Action Planning Committee's Patient Engagement October TIP of the Month: YOU ARE THE PATIENT EXPERIENCE

Take time to remember why you work in healthcare.

As Fall rapidly approaches, when kids go back to school, nights get a little cooler, and days a little shorter, take a few minutes to reflect on why or how you came to work in the Radiology Department. Most of us want to help people and find joy in the work we do. You are the Patient Experience, every day! You make this department the great place that it is!

Check out the video from the Beryl Institute "You are the Patient Experience": <u>https://www.youtube.com/watch?v=iqf79jXEPO0</u>



# KUDOS to Dr. Olga Brook for this wonderful example of "Why you are the patient experience"!



Date: Sep 25, 2016 12:39 PM Subject: I'M PREGNANT!! **To: Brook,Olga R.** 

Dear Dr. Brook,

Thank you! Thank you! Thank you!! I don't know if you remember, but back in February you preformed a procedure on me to un-block both of my Fallopian tubes. I am beyond happy to tell you that I am now 21 weeks pregnant with a healthy baby boy! You are a miracle worker and I can not thank you enough for the gift you have given to me and husband! You and your staff were so

kind to me and I left the hospital that day feeling so hopeful and happy and loved. Thank you, a million times more! I will let you know when our little guy arrives so you can meet him if you would like!

Sincerely, [Name withheld per HIPPA compliance]

# Radiology **Residency** Program:



Priscilla J. Slanetz, MD, MPH, FACR, Director



Ronald Eisenberg, MD JD, Assoc. Director



Anu Shenoy-Bhangle, MD, Assoc. Director

ACADEMIC MEDICINE GOAL: TEACHING TEACHERS TO TEACH

# **10 Tips on How to Make Your Presentations More Effective**

Giving a lecture is an essential skill for any academic radiologist. Yet few, if any of us, receive any formal instruction on how to do this effectively. In addition to mastering the key components of PowerPoint, *lecturing is an art* – a performance that captures the audience and engages them so that they remember the intended message or content. If you think about some of the presentations you have attended over the past few years, I expect that there are only a few that are truly memorable. It is worth reflecting on what specific aspects made these presentations so effective to be able to incorporate some of them into your own teaching. Observing master teachers can be enlightening, although it can be challenging to find time to do so. Therefore, given increasing time constraints, consider incorporating the following 10 tips into your teaching, if you have not already. It is sure to be a success.

**Tip 1:** Speak clearly and slowly in a natural conversational tone and convey your enthusiasm and passion for the topic by varying your voice inflection.

**Tip 2:** Engage the audience by making eye contact, walking around the room, using gestures and appearing relaxed and in control..

**Tip 3:** Incorporate humor, anecdotes or stories into your teaching in order to help the audience remember important concepts

**Tip 4:** Set learning objectives up front and provide an outline of the presentation so that the audience knows what to expect.

**Tip 5:** Always start and end on time, summarize the key points and provide the audience with additional resources to further their understanding.

**Tip 6:** Face the audience and speak to them not the slides. Avoid reading off of a slide.

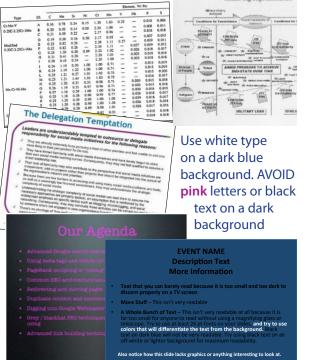
**Tip 7:** Avoid excessive use of the mouse or laser pointer and highlight key findings or points with annotations.

**Tip 8:** Text: Use Arial font of no less than 24 pts and ideally 40 pts and have no more than 3-5 lines of bulleted text per slide.

**Tip 9:** Present concepts in bite-sized segments and use images rather than words to emphasize key concepts.

#### Tip 10: Most importantly, have fun!

PowerPoint Overload - Too much information causes the mind to shut down because it is overwhelmed



Keep your color palette within reason. DO NOT imitate the rainbow: To keep you awake by wowing you with my technicolor skills in PowerPoint!







#### **3rd Annual Harvard Affiliated Residency Training Programs Showcase**



2nd year residents Chris Maxwell and Bonny Lee with Priscilla Slanetz and Pierre Sasson, MD Assoc. Chair of Radiology at Mt. Auburn Hospital, Cambridge, MA and Camilo Jaimes, MD Vice Chair of the Center for Diversity and Inclusion Resident and Fellow Committee at MGH, Boston.

Chris and Bonny represented BIDMC radiology at the HMS diversity event. (In the middle is HMS IV student Victor Babatunde who had rotated in to BIDMC in May 2016.)

#### Dear Dr. Slanetz,

Thank you for participating in the third annual Harvard Affiliated Residency Training Programs Showcase on Sat., Sept. 10th.

It was wonderful to see you and other colleagues from BIDMC Radiology, so engaged with the students.

We are very pleased to let you know that over 135 students registered and over ninety students attended the event. On the Harvard side, greater than 75 faculty, fellows, and residents from the Harvard affiliated training programs were attended.

Thank you again for making this event so successful. We hope to see you at next year<sup>1</sup>s Showcase.

Sincerely,

Mr. Fahri Ercem

Program Coordinator Student Educational/Research Programs Office for Diversity Inclusion and Community Partnership | Harvard Medical School



BIDMC

Radiology Residents' 2016 Welcome event at Bowl Haven - a good time was had by all!

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# **KOMMUNITY KORNER:**





A Breast Care Awareness Talk Featuring BIDMC's Finest!

Jeffrey Bernard, RT Manager, Community Radiology Network Services

Jane D. Corey Manager, HMFP Radiology Outpatient Practice

In anticipation of Breast Cancer Awareness month in October, the Newton-Needham Regional Chamber of Commerce hosted the Women's Breast Care Event at Avita of Needham. Our own **Dr. Sham Venkataraman**, Community Network Mammography Director, along with **Dr. Mary Jane Houlihan**, Surgical Oncologist, hosted an informative program regarding the latest treatments available and early detection guidelines. Also present were **Dr. Ted James**, Chief, Breast Surgical Oncology and Co-Director of the BIDMC BreastCare Center, **Dr. Michael Fishman**, mammography radiologist, and staff from the Windows of Hope shop at BID-Needham.

The event was well attended with approximately 50 Chamber Members as well as members of the BID Needham Community Outreach and Marketing and **John Fogarty**, President and CEO of BID-Needham. Many in attendance shared their personal story and gave very positive feedback regarding BID-Needham and the breast care they have received or are in process of receiving there.

Following the talk, the physicians remained available to the Chamber members to further answer questions. The event provided an avenue for socializing, fun, and "pink cocktails". The guests were invited to visit the exhibit tables for informational brochures and treats.

This Chamber event precedes BID–Needham's BreastCare Center Grand Opening, October 13th from 6 to 8pm. All are invited for a guided tour and to meet the dedicated, compassionate BreastCare Center team.

#### RSVP: events@bidneedham.org

In case you missed an issue of Radical Views!

All back issues are available on the BIDMC portal under "News and Events":

https://portal.bidmc.org/Intranets/Clinical/Radiology/news.aspx

and *we also have an outside link on the alumni site:* <u>http://radnet.bidmc.harvard.edu/education/newsletters.asp</u>

The portal will always have the most current/revised versions so please keep checking as needed

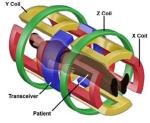




Members of the BreastCare Center at BID-Needham include Zinat J. Nassirzadeh, NP; Mary Jane Houlihan, MD; Shambhavi Venkataraman, MD; and Tejas S. Mehta, MD, MPH

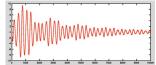
Please come celebrate the **GRAND OPENING** of the **BreastCare Center** at Beth Israel Deaconess Hospital-Needham Thursday, Octobor 13

Thursday, October 13 148 Chestnut Street, Needham



# BIDMC Radiology Residents & Fellows MRI Physics Course

2016-2017 Academic Year



National High Magnetic Field Laboratory

#### **Purpose:**

To provide fellows and residents with a basic understanding of MR physics, with emphasis on practical aspects of image acquisition such as protocol optimization and troubleshooting. A brief overview of fundamentals of nuclear magnetic resonance will provide an introduction to sources of image contrast in MRI. Techniques for image acquisition will be described, followed by an overview of the major families of MR pulse sequences. Topics such as accelerated imaging, fMRI, and diffusion tensor imaging will be discussed.

#### Format:

All sessions will be held on Wednesdays, 5-6pm at the MRI Learning Lab, Ansin 220, starting on August 31st.

### **Text and Topics:**

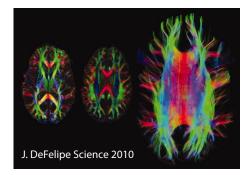
The recommended textbook is *"MRI in Practice," 4th Edition (2011)* by Catherine Westbrook. Supplementary reading from review articles will be recommended for advanced topics.

For more information, contact Aaron Grant, PhD: 7-3265

# TOPICS

- August 31: The origin of the NMR signal. Nuclear magnetism. Nutation, precession, signal reception. Chemical shift. Relaxation, T1, T2. Spin dephasing, impact of gradients and magnetic field inhomogeneities.
- 2. **September 14**: Sources of contrast in MRI: T1 and T2 weighting, magnetization transfer, diffusion.
- 3. **September 21**: Overview of MR hardware, Tour of MR equipment room.
- 4. **September 28**: Image formation (1). Phase and frequency encoding. Basic k-space concepts.
- October 5: Image formation (2), Field-ofview, and resolution. k-space sampling for given imaging parameters, and effects of undersampling (aliasing, pseudo-noise). Accelerated imaging methods.
- 6. **October 12**: Signal-to-Noise: Image parameters that govern SNR. Trade-offs in image optimization.
- October 19: Pulse sequences. Gradient echo, spin echo, steady state, EPI. STIR/FLAIR/IR etc. Fat suppression. Spectroscopy with PRESS, STEAM, CSI.

- 8. **October 26**: Effects of flow and diffusion. Flow compensation, time-of-flight, phase contrast, intro to diffusion.
- November 2: Contrast-enhanced MRI. Types of magnetic materials. Relaxivity and image contrast as a function of dose, TR, TE. Dynamic contrast enhanced imaging, angiography. BOLD effect, fMRI.
- 10. **November 9**: Accelerated imaging. Parallel imaging and compressed sensing.
- 11. **November 17**: Diffusion-weighted imaging and DTI in neuro applications.
- 12. **December 7**: Arterial spin labeling in the brain and body.
- 13. December 14: Artifacts and troubleshooting.



**2016 BIDMC Radiology Publications** - A PubMed search for new BIDMC publications is made each month; however, if we miss your paper, please send the reference to dwolfe@bidmc.harvard.edu. Note that 1) Epub dates are included only in publications where the Epub and paper publication dates occur in different years, i.e., Epub in 2015 and paper publication in 2016; and 2) doi addresses are only included until citations are updated with hard copy page citations [highlighted in yellow, new this academic year]

Afilalo J, Steele R, **Manning WJ**, Khabbaz KR, Rudski LG, Langlois Y, Morin JF, Picard MH. Derivation and Validation of Prognosis-Based Age Cutoffs to Define Elderly in Cardiac Surgery. Circ Cardiovasc Qual Outcomes. 2016 Jul;9(4):424-31. PMID: 27407052.

Ahmed M, <u>Kumar G</u>, <u>Moussa M</u>, Wang Y, Rozenblum N, Galun E, Goldberg SN. Hepatic Radiofrequency Ablation-induced Stimulation of Distant Tumor Growth Is Suppressed by c-Met Inhibition. Radiology. 2016 Apr;279(1):103-17. Epub 2015 Sep 29. PMID: 26418615; PMCID: PMC4819900.

<u>Alessandrino F</u>, Allard FD, **Mortelé KJ.** Ciliated pancreatic foregut cyst: MRI, EUS, and cytologic features. Clin Imaging. 2016 Jan-Feb;40(1):140-3. Epub 2015 Oct 31. PMID: 26526788.

Amabile C, **Ahmed M**, Solbiati L, Meloni MF, Solbiati M, Cassarino S, Tosoratti N, Nissenbaum Y, Ierace T, **Goldberg SN**. Microwave ablation of primary and secondary liver tumours: ex vivo, in vivo, and clinical characterisation. Int J Hyperthermia. 2016 Jul 25:1-9. PMID: 27443519.

Amabile C, Farina L, Lopresto V, Pinto R, Cassarino S, Tosoratti N, **Goldberg SN**, Cavagnaro M. Tissue shrinkage in microwave ablation of liver: an ex vivo predictive model. Int J Hyperthermia. 2016 Jul 20:1-9. PMID: 27439333.

Amamoto R, Huerta VG, Takahashi E, Dai G, **Grant AK**, Fu Z, Arlotta P. Adult axolotls can regenerate original neuronal diversity in response to brain injury. Elife. 2016 May 9;5. pii: e13998. doi: 10.7554/eLife.13998. PMID: 27156560; PMCID: PMC4861602.

Anderson ME, **Wu JS**, Vargas SO. CORR (\*) Tumor Board: Sacral Insufficiency Fractures are Common After High-dose Radiation for Sacral Chordomas Treated With or Without Surgery. Clin Orthop Relat Res. 2016 Mar;474(3):630-2. Epub 2015 Dec 7. PMID: 26642785; PMCID: PMC4746151.

Anderson ME, **Wu JS**, Vargas SO. CORR (\*) Tumor Board: Does Microwave Ablation of the Tumor Edge Allow for Joint-sparing Surgery in Patients with Osteosarcoma of the Proximal Tibia? Clin Orthop Relat Res. 2016 May;474(5):1110-2. Epub 2015 Dec 10. PMID: 26660089; PMCID: PMC4814440.

Anderson ME, **Wu JS**, Vargas SO. CORR (\*) Tumor Board: Is Prophylactic Intervention More Cost-Effective than the Treatment of Pathologic Fractures in Metastatic Bone Disease? Clin Orthop Relat Res. 2016 Jul;474(7):1560-2. PMID: 27172817; PMCID: PMC4887383.

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