

Radical Views... from the Department of Radiology

Volume 9, Number 9 MARCH 2017

Beth Israel Deaconess Medical Center

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL



Seth Berkowitz, MD Dir., Infomratics Innovation and VIR interventionalist

IRIS Digital Whiteboards

Dear All,

Starting February 15th you will notice new electronic whiteboards appearing throughout many of our procedural spaces. The IRIS Daily Whiteboard will display the same information from the Daily dashboards that many of you have been using for several months. With the arrival of the large 70-inch screen monitors, and replacement of our dry erase boards, it is now time to embrace a completely electronic workflow!



New boards are already installed in the West RCU and Neuro interventional suite.

Soon, new screens will be installed in the East campus IR suite, "East board" in the west IR hallway, and both procedural CT scanner control rooms.

As we continue to test and verify functionality, a new screen will replace the "West" dry erase board in the west IR hallway. We will also install new screens in the West US reading room and East US/CT reading room.

Like any machine, the IRIS dashboard is only as good as the data it receives. I urge all of you to be vigilant in keeping the dashboard up to date. With accurate, timely information, the whiteboard should improve our efficiency, decrease wasted time, reduce the need for interruptive phone calls, and improve patient safety.

We've been testing for a long time, but no system is perfect. There is a feedback link in the top right of the screen that sends bug reports, enhancement requests, and suggestions to the entire team. I'm really proud of the product which provides a deep level of integration with lab, transport, and other systems that is

not possible at other hospitals.

Lastly, I've been a relative newcomer to this effort. These displays represent a culmination of several years work by a great team including **Tim Parritt, Donna Hallett, Marge Guthrie, Bridget O'Bryan, Bernie Kennedy, Peggy Carr, Erica Zissman**, and **Jeanne McNeil. Muneeb Ahmed** and **Ammar Sarwar** laid the groundwork and Allen Reedy pushed us through the finish line The software you see is the product of a Herculean effort to overcome both technical and personal challenges.



Thanks, Seth (on behalf of the IRIS team)

Reminder: 10th ANNUAL SILVERMAN SYMPOSIUM POSTER DEADLINE

Wednesday May 3, 2017 - The Silverman Institute for Health Care Quality and Safety sponsors an annual Symposium that features a Poster Session showcasing process improvement efforts across the BID system.

Poster Submission Deadline Friday March 3, 2017 at 5:00p

See page 7 for more details

Radiology Calendar MARCH 2017

Check for the most up-to-date schedule at: https://apps.bidmc.org/departments/radiology/residency/conferences/displayMonth.asp

Mon	Tues	Wed	Thurs	Fri
Weekly Mon Section Meetings: 3:00-4:00 ED section meeting [ED annex, WCC]		Weekly Wed 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 Thurs 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 Rabkin Board Room , Shapiro-10, East Campus (except when noted otherwise)
		1 7:30 - 9:00 Body (TBD)	2 7:30 - 9:00 Body (TBD)	3 7:30 - 8:15 Congenital Spine Anomalies (Mai-Lan Ho) 12:00 - 1:00 Grand Rounds: Phakomatoses: Molecules to Morphology (Mai-Lan Ho)
6 7:30 - 8:15 MSK (TBD) 8:15 - 9:00 MSK (TBD)	7 7:30 - 8:15 MSK (TBD) 8:15 - 9:00 MSK (TBD) 12:00-1:00 Neuro call prep (Neuro fellows)	8 7:15-8:00 US meeting [WCC-304A] 7:30 - 8:15 MSK (TBD) 8:15 - 9:00 MSK (TBD) 12:00-1:00 Neuro case conference (Neuro fellows)	9 7:30 - 8:15 MSK (TBD) 8:15 - 9:00 MSK (TBD) 3:00-4:00 West MedRads - Sr. Resident, West Body CT [Clouse]	10 7:30 - 8:15 Psychology Topics in Radiology (Michael Fishman) 12:00-1:00 No Grand Rounds NERRS
13 7:30 - 8:15 FDG PET (J. Anthony Parker) 8:15 - 9:00 Non-FDG PET (J. Anthony Parker) 12:00-1:00 MRI meeting [Ansin 2]	14 7:30 - 8:15 Brain Imaging (Kevin Donohoe) 8:15 - 9:00 Cases (Kevin Donohoe) 10:30-11:30 NMMI meeting [GZ-103]	15 7:30 - 8:15 Neuro case conference (Neuro fellows) 8:15 - 9:00 Neuro Tumors - Pineal, ventricular, CP angle, posterior fossa (Rafeeque Bhadelia) 12:00-1:00 Neuro case conference (Neuro fellows)	16 7:30 - 8:15 Radionuclide Decay (Kevin Donohoe) 8:15 - 9:00 Radiation Exposure (Kevin Donohoe)	17 12:00 - 1:00 Chief Rounds (Tom Anderson, Ron Mercer, Chris Hostage, Jason Song)
20 7:30 - 8:15 Body (TBD) 8:15 - 9:00 Body (TBD)	21 7:30 - 8:15 Body (TBD) 8:00-9:00 IR Meeting [West Recovery]	22 8:00 - 9:00 Body (TBD) 12:00-1:00 Neuro case conference (Neuro fellows)	23 3:00-4:00 West MedRads - Sr. Resident, West Body CT [Clouse]	24 7:30 - 8:15 Professionalism (Ron Eisenberg) 12:00 - 1:00 Grand Rounds: Appropriate Use Criteria for Advanced Diagnostic Imaging Studies (Kevin Donohoe)
27 7:30 - 8:15 Pulmonary Nodules - New Guidelines (Alexander Bankier) 8:15 - 9:00 Cases (Alexander Bankier)	28 7:30 - 8:15 Cases (Janneth Romero) 8:15 - 9:00 TBD (Fourie Bezuidenhout) 10:30-11:30 NMMI meeting [GZ-103]	29 7:30 - 8:15 Neuro fellow case conference (Neuro fellow) 8:15 - 9:00 Temporal Bone cases (Yu-Ming Chang) 12:00-1:00 Neuro case conference (Neuro fellows)	30 7:30 - 8:15 Pulmonary Fibrosis (Alexander Bankier) 8:15 - 9:00 Cases (Alexander Bankier)	31 7:30 - 8:15 Psychology Topics in Radiology (Michael Fishman) 12:00 - 1:00 Grand Rounds (TBD)

The Gallery presents a show by Tabitha Fineberg

Photographer & Program Education Manager

Fáilte go hÉirinn – You are most welcome to Ireland! Tabitha shares her adventure across 11 counties in Ireland during an 11-day journey circling the entire outer perimeter of the country and Northern Ireland in October 2015.





March 2017 Radical Views / 2

MARCH 2017 GRAND ROUNDS: 12 noon - 1:00 PM • Shapiro-10, Rabkin Board Room



Friday, March 3, 2017

Phakomatoses: Molecules to Morphology

Mai-Lan Ho, MD - Pediatric Neuroradiologist; Assistant Professor of Radiology, Mayo Clinic, Rochester, MN

Dr. Ho returns to BIDMC where she completed radiology residency training in 2013 which also included Mini-fellowships in MRI and MSK before going on to the University of California at San Francisco for a fellowship in Neuroradiology and Pediatric Neuroradiology. With a strong engineering and research background, she focuses on translational approaches to practice, education, and research and her clinical interests include congenital malformations, neuro-metabolic disorders, and neonatal/fetal imaging. Her research investigations include genomic, clinomic, and radiomic data utilizing morphometric, diffusion, perfusion, functional, metabolic, and spectroscopic techniques. She also serves on the bi-monthly Phakomatosis clinic at the Mayo Clinic and as Guest Editor of the AJNR News Digest, Pediatric Advanced Imaging, 2017.

Of note, Mai-Lan, with cardiothoracic imager Ron Eisenberg, published **"Neuroradiology Signs"** in 2014, a comprehensive, fullcolor guide to neuroradiology signs across all imaging modalities (McGraw-Hill).





Friday, March 24, 2017

Appropriate Use Criteria for Advanced Diagnostic Imaging Studies

Kevin Donohoe, MD - Attending, Nuclear Medicine & Molecular Imaging, BIDMC; Assistant Professor of Radiology, HMS

"The Protecting Access to Medicare Act (PAMA) of 2014 laid the groundwork for substantial changes in the ordering and reimbursement for advanced diagnostic imaging studies such as CT, MRI and Nuclear Medicine. These changes have been slated to go into effect January 1, 2018, yet many health care facilities are unprepared. At the same time, imaging specialty societies such as the American College of Radiology (ACR) and the Society of Nuclear Medicine and Molecular Imaging (SNMMI) are struggling to keep up with the changing and incomplete regulations so that patients in need of imaging services are able to receive the appropriate diagnostic imaging study.

As Chair of the SNMMI Guidance Oversight Committee, I have been asked to oversee the development of **Appropriate Use Criteria** describing the appropriate use of nuclear medicine imaging studies. These documents will be an integral part of the ordering and reimbursement process outlined by the new regulations, and therefore critical to the future availability of nuclear medicine studies." Kevin's practice guidelines related to his Grand Rounds talk at BIDMC include:

- Boellaard R, Delgado-Bolton R, Oyen WJ, Giammarile F, Tatsch K, Eschner W, Verzijlbergen FJ, Barrington SF, Pike LC, Weber WA, Stroobants S, Delbeke D, Donohoe KJ, et al. FDG PET/CT: EANM procedure guidelines for tumour imaging: version 2.0. Eur J Nucl Med Mol Imaging. 2015 Feb;42(2):328-54. PMID: 25452219; PMCID: PMC4315529.
- Tsai LL, Donohoe KJ, Stokes MK, Hauser TH, Kolodny GM, Hill TC, Parker JA. Sources of apical defects on a highsensitivity cardiac camera: experiences from a practice performance assessment. J Nucl Med Technol. 2013 Sep;41(3):197-202. PMID: 23949876.
- Johnson KA, Minoshima S, Bohnen NI, Donohoe KJ, Foster NL, Herscovitch P, Karlawish JH, Rowe CC, Hedrick S, Pappas V, Carrillo MC, Hartley DM; Amyloid Imaging Task Force of the Alzheimer's Association and Society for Nuclear Medicine and Molecular Imaging. Update on appropriate use criteria for amyloid PET imaging: dementia experts, mild cognitive impairment, and education. Amyloid Imaging Task Force of the Alzheimer's Association and Society for Nuclear Medicine and Molecular Imaging. Alzheimers Dement. 2013 Jul;9(4):e106-9. PMID: 23809369.



Friday, February 24, 2017

Making the Unconscious Conscious: The Impact of Unconscious Bias in Healthcare

Sherri-Ann Bowie-Burnett, MD, MPH - Assistant Professor of Medicine and Faculty Assistant Dean for Student Affairs at HMS; and Director of Multicultural Affairs, Dept. of Medicine and Associate Director of the Center for Diversity & Inclusion at MGH.

Dr. Bowie-Burnett shared her insights and experience with us at Grand Rounds where she spoke to a packed room of Radiology staff and trainees. This was a great introduction

to Dept. Chief Jonny Kruskal's announcement of new diversity efforts both in the department and across more than 50 radiology groups to prioritize diversity and recognize unconcious bias for better healthcare and patient outcomes. Following Dr. Bowie-Burnett's understanding that we all have some unconscious bias, she countered with assurance that it is okay to disagree but not to blame, shame or attack oneself or others and went on to give examples of how to address health disparities and create a more inclusive environment in healthcare.

For example:

- When Conflict occurs -
- Be directly curious and open-ended (focus the impact on you)
- Be compassionate
- Apologize when you offend (Do not say you are being oversensitive or politically incorrect)



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

March TIP of the Month: When we work together we can accomplish great things!

TEAMWORK IN RADIOLOGY

Last month we talked about BIDMC's rich history in patient advocacy and how the healthcare environment can be very intimidating for patients. It's our obligation to make sure that their needs are met, so what does this mean for us today in radiology? Our environment is

constantly changing, growing more technical, with increasing volume and more difficult cases. We have equipment that is intimidating, prep-requirements that may be unpleasant and "radiation" which to many patients is downright scary! This requires us to be more diligent by making sure we keep up with these changes and always putting the patient needs first. We can't expect referring physicians to keep up with our changing technology and protocols, so it's our responsibility to educate our patients and ease their fears.

If there are circumstances that are creating frustration, resentment, added stress and anxiety to our patients, our patient experience survey helps draw attention to problem areas and is a tool for you to use in service recovery. We also need to work as a team to improve communication, support each other especially during busy times, to be respectful of each other, and go above and beyond when necessary. In a recent article in Radiology Business, Dr. Ella Kazerooni at University of Michigan Medical Center said of their Patient Experience program that one of the most surprising (and important) results of the initiative has been improvement in both the employee experience and the department's relationship with referring physicians. "We did a session on managing up and managing others who may not be in your scope of influence," she reports. "For the staff, that could mean managing up to a physician who might not have been engaged yet in service excellence. For a physician that could mean working with a physician or staff in another department" (Radiology Business Radiology and the Patient Experience: Oxymoronic or Exigent? Apr 23, 2014 | Cheryl Proval)

Put yourself in your co-workers shoes and learn from those who are supportive and often go above and beyond! We all want to be appreciated and we have tools in place to support that such as the *In The Moment* program or *MyApplause* which recognizes these individuals. In a complex environment like radiology we need to work as a team whether you're administrative, transport, support, technologist, radiology nurse or radiologist – take any one of these individuals out of the system and it's broken. Working together with mutual respect will have a positive impact on our work environment and it will absolutely come across to our patients.

The Institute for Health care Improvement also recognizes the importance of teamwork. In their book, "Crossing the Quality Chasm: A New Health System for the 21st Century," teamwork is cited as essential in caring for patients with complex problems. They strongly conclude that "effective working teams must be created and maintained." Based on these stakeholder recommendations, the hospital of the future will be more dependent than ever upon effective and efficient teamwork to coordinate care. In order for hospitals and primary care practices to survive, the culture of teamwork must be supported. The essence of this teamwork will be a collaborative environment in which advanced care practitioners, bedside nurses, and others work and share in the process and systems of care. (Jennifer Ward in *The Importance of Team Work 2013*).

If you have ideas on ways to improve teamwork in Radiology, send me an email! I would love to share your ideas with our SEAP Committee: Aideen x72570 or asnell@bidmc.harvard.edu

Patient & Family Advisors -A Free Valuable Resource for Staff and Providers

Patient and Family Advisors are volunteers whose role is to help BIDMC continually improve. They do this by providing feedback based on their experiences and perspectives as patients or family members of a patient at BIDMC. Recent radiology and hospitalwide initiatives in which advisors have been involved include: providing written feedback about service excellence in Radiology; doing a walk-through of Radiology waiting rooms with staff members and giving suggestions; making video testimonials about radiology experiences that can be used in staff trainings; presenting on the importance of OpenNotes; doing a survey about their phone experiences; participating in ambulatory staff trainings; teaching us how to talk to families about advance care planning; participating in staff retreats; reviewing a cancer center welcome packet; giving feedback on ICU waiting room renovations; giving feedback on food services; and doing interviews for research studies, radio programs, and newspaper articles about patient experience.

As Patient and Family Engagement Program Leader, Caroline Moore, MPH



Moore, MPH recruits, screens, and trains the advisors; she Caroline Moore, MPH Program Leader, BIDMC Patient & Family Engagement

assists with determining the best way for advisors to participate in each initiative; she also helps coordinate the advisors' involvement, and assists with gathering and presenting advisor feedback to the project team.

To learn more about how advisors could contribute to your work, contact Caroline Moore at cpmoore@BIDMC.Harvard.Edu.

QUALITY UPDATE: A Lesson from Warren Beatty



Suzanne Swedeen, RN MSN CNIV Quality Improvement Specialist

It was hard to avoid one of the top news stories on Monday. The headlines read: in a stunning turn of events, "Moonlight" won the best picture Oscar after "La La Land" was incorrectly named. The "La La Land" team were in the process of giving thanks when it was announced that the wrong film had been read and that "Moonlight" was the real winner.

Stagehands, actors, production crew and journalists were stunned. Oscar show producer Michael De Luca was peering into his monitor, trying to figure out what had happened. Champagne glasses sat on the table next to him. They had been poured moments earlier to celebrate a good show. What had happened was human error and for people like us who deal with human lives every day it' was a painful reminder that no system is perfect.

You're probably thinking how could something like this have happened? PricewaterhouseCoopers has been tallying the Oscars votes and authenticating the winners since 1934. Like healthcare, PWC has well established practices to avoid errors and like healthcare they have done this many many times before. Like healthcare PWC even has built-in redundancies to intercept errors with two PWC partners counting the votes, memorizing the winners, sealing the envelopes and placing two sets of result envelopes, each packed in its own briefcase. They even have the two partners stand on opposite sides of the stage for the entire evening handing the respective envelope to the presenters. How could this happen? This isn't rocket science; all you have to do is make sure you're giving the presenter the right envelope.

When I look at this event I see a lot of similarity to healthcare. We have systems and processes in place to steer us away from error. We also have redundancies like confirming the patient's ID prior to medical care. We even use not one but two patient identifiers. Despite all this we still have errors. Many of the errors that occur in Radiology are a result of missing a single step or a single detail like ensuring the correct patient label is on the specimen, removing the retained material or not reading the comment section on a requisition for further instructions. Just like handing the presenter the incorrect envelope, missing a small or simple detail in our world can have significant consequences.

As I watched the Sunday nights events unfold I was also struck by presenter Warren Beatty's reaction. Watching the video clip it is very clear that Warren knew something was wrong. In fact he paused to the point that his co-presenter Faye Dunaway thought he was trying to be funny and suspenseful. He suspected something was wrong when he realized the card read "Emma Stone, La La Land" and yet he did not speak up. In the video you can see he is very concerned; he looks off stage as if to say "what should I do?". It was in that moment, during that pause that he had the opportunity to speak up and stop one of the biggest blunders in Academy Award history and yet he simply handed the card to Faye Dunaway to read.

Why do you think Warren Beatty didn't speak up – what were his barriers to speaking up? We know here in Radiology that not being 100% sure you are correct is the reason given by 69% of staff who don't always speak up. What would you have done? Would your reasons be the same if it involved a patient?

> It is in this moment that Warren Beatty had the opportunity to intercept the error and prevent it from occurring.



http://time.com/4683501/oscars-2017-best-picture-warren-beatty/

Radiology Residency **Program:**



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



Ronald Eisenberg, MD JD, Assoc. Director



Anu Shenoy-Bhangle, MD, Assoc. Director

- Anu

Teaching Tips: HOW MILLENIALLS LEARN

Millennials are defined as individuals who reached adulthood around the turn of the 21st century, i.e., anyone born in 1976 or thereafter. As educators, we are confronted with a new set of challenges in training millennials that stems from the fact that they have grown up in an electronics-filled and increasingly online

"Millennials ... really seem to benefit from the personalization and customization of assignments"

and socially-networked world. They have access to a vast amount of information at their fingertips – literally. Hence, their learning style has moved away from conventional textbook and classroom learning to a digital world. "So to just sit and listen to a talking head is often not engaging enough for them," says Dalton State College psychology professor Christy Price, EdD.

What can we do better – to engage our residents and trainees, who are learners engaged in this shifting paradigm?

Here are some ideas directed towards addressing both individual as well as group learning:

- 1. Use digital teaching tools: Audience response system (ARS) based tools such as RSNA Diagnosis Live, Poll Everywhere. These interactive tools promote active participation thereby demanding more attention compared to passive learning. These tools can be embedded in powerpoint slides with multiple choice questions – simulating the new core exam curriculum and enhancing resident board preparation.
- 2. Learning games such as "Eyes and Ears" or "Radiology Jeopardy". Although the former is a more conventional method where one trainee has their back to the image while another tries to describe the image using radiology terms, this game is particularly useful in Radiology – where narrative is all.
- 3. Multimedia classrooms: incorporating social media sites such as Facebook or twitter for Posting "Case of the Day" or "Quiz of the Day".

To summarize, in Miami Dade College psychology professor Sheryl Hartman's words, "millennials seem to be more experiential and exploratory learners, so they really seem to benefit from the personalization and customization of assignments." As radiologists, we can become better teachers once we understand how millennials learn.

WELCOME NEW ARRIVALS IN THE RESIDENCY PROGRAM

My wife Amy and I welcomed our daughter, Elise Sylvia ("Ellie"), on January 17. Everyone is home and doing well...including our doggie, who still wants to be the center of attention! - Anthony Esparaz









3rd yr resident

Melissa and I joyfully welcomed our second son, Adrian, Feb 1, 2017. Everyone is healthy and well. Sending best wishes.

Sincerely, Alexei Kudla 2nd yr resident





March 2017 Radical Views / 6

Best Wishes to CT Manager Tim Parritt & Dx Tech Joe Messina

Feb. 24, 2017 -Managers, freinds and colleagues bid a final farewell to CT Manager **Tim Parritt** who leaves BIDMC after 15 years to fulfill his dream of hiking the Appalacian Trail, all 2,180 miles of it between Georgia and Maine.





I love to go a-wandering, Along the mountain track, And as I go, I love to sing, My knapsack on my back. Val-deri, Val-dera, Val-deri, Val-dera-ha-ha-ha-ha-ha ...



Say farewell to Diagnostic Tech **Joe Messina** who will retire in Mid-March after 44 years of dedicated service in Radiology at BIDMC. Stop by and wish him well on his next adventure!

REMINDER: Updated Radiology Technologist Rosters & Staff Posters are available on InfoRadiology in pdf

format for viewing, downloading, and printing. Log in to the portal:

https://portal.bidmc.org/

If you don't already have InfoRadiology displayed in **My Applications**, click on the **Applications** tab and then under **Clinical**, click on **Inforadiology**. Log



into Inforadiology, click on **Staff Posters Tab** to view/ download/print the most current Tech Rosters, etc.

Managers: Please contact Michael Larson at <u>mlarson1@</u> <u>bidmc.harvard.edu</u> to update rosters as needed

10th ANNUAL SILVERMAN SYMPOSIUM

Wednesday May 3, 2017

The Silverman Institute for Health Care Quality and Safety sponsors an annual Symposium that features a Poster Session showcasing the process improvement efforts across the BID system.

Poster Submission Deadline Friday March 3, 2017 at 5:00p

Click below for templates and information to prepare a paper poster or ePosterboard presentation, AND/OR to submit your poster!

https://portal.bidmc.org/Intranets/ Administrative/Silverman-Institute-for-Health-Care-Quality/Divisions/PARC/Silverman-Symposium-Poster-Submission.aspx

If you have other questions or would like assistance preparing your team's poster, contact piprojects@bidmc.harvard.edu

RADIOLOGY IN THE COMMUNITY: BIDMC No Ringers Once Again Climb One Boston Place



No Ringers: (Back row, 1st five L to R) Alex Wu, Ann Wu, MSK Research Fellow Ching-Di-Chang, MSK Chief Jim Wu, Samir Bhangle; (Middle row) Allison Wu, MSK Jenny Ní Mhuircheartaigh, Jim Syder, Ashley Taylor, Yolanda Taylor, Kyle Taylor. (Front row) 1st year Resident Ronald Mercer, Abdominal Imager Anu Shenoy-Bhangle, and Laura Perry.

On February 4th, the "No Ringers" BI Radiology team, climbed the Boston Place Building (3rd tallest building in Boston) in the Fight for Air Stair Climb, one of the signature fundraising events of the American Lung Association. The climbs are held in prominent skyscrapers across the country, giving participants the opportunity to join together with friends, family and co-workers as they climb the stairs of the building to raise money to fight lung disease. Each member climbed of 41 floors (or 82 flights or 789 steps) and the 14 member team raised over \$2,000! The team place 3rd out of 45 teams and team members, Laura Perry, Jim Wu, Alex Wu, Yolanda, Taylor, and Ashley Taylor won age division awards. We hope to recruit more folks in the department to participate and/or sponsor the runners next year. Please join us!

- Jim Wu

[MSK Chief]

MORE CONGRATULATIONS: Georgeta Mihai, PhD



Congratulations **Georgeta Mihai, PhD** on being promoted to Assistant Professor of Radiology at Harvard Medical School! Great news and very well deserved. Currently, she is working on diagnostic physics compliance and QA activities in all modalities, with an emphasis on MRI, Mammography and radiation shielding design, as well as being very active in educational programs for technologists' inservice and radiology residents' physics training. She is a reviewer for numerous academic journals, an active member of the medical physics community and a researcher in MRI and contrast-enhanced Mammography". Well done, Georgeta!

PUBLICATION CALL OUT: Former resident Chad Brecher, MD publishes The Lost Book of Wonders*



Announcing the upcoming publication of Chad Brecher's debut novel, *The Lost Book of Wonders*, which will be released on April 6, 2017. While this section normally honors the scientific achievements of faculty and staff, it is a pleasure to feature Chad's accomplishments as a fiction author worthy of Dan Brown.

The Lost Book of Wonders takes readers on a high-energy adventure in search of the secrets Marco Polo reportedly took to his grave. Following the travails of Ellie Griffith, a fierce, if damaged, archeologist, and Alex Stone, an untested historian, it unravels a complex mystery, whose clues Polo had set in place centuries ago. As Ellie and Alex unravel Polo's mystery, they quickly learn that they are not alone. Facing foes at every turn—each differently motivated—their quest becomes a race against time to find Polo's ancient endgame, one that has the potential to change the world.

Chad earned his medical degree at Brown University School of Medicine before he came to BIDMC for residency training in 1999 and served as a chief-resident. He then went on to complete a fellowship in Vascular and Interventional Radiology at Johns Hopkins Medical Center. When not working on his works of fiction, Chad practices outside of Philadelphia at Southeast Radiology, Ltd., where he specializes in vascular and interventional radiology. He is the medical director of the Vein Center at Brinton Lake and the Dialysis Access Center of the Crozer-Chester Medical System. He is also the president of the Philadelphia Angiography and Interventional Radiology Society, the oldest interventional radiology society in the nation.

*Available in both paperback and e-book format and can be purchased on Amazon at https://www.amazon.com/dp/B01MVAQCQT or through the publisher, Deeds Publishing at http://deedspublishing.goodsie.com/the-lost-book-of-wonders.



ABOUT CHAD

Chad Brecher was born in Long Island, New York in 1972, the youngest of three sons. From an early age, two things captivated him: science and literature. After studying to become a physician (attaining degrees from Brown University and Brown University School of Medicine, and later training at Harvard Medical School and Johns Hopkins Medical Center), he settled with his family in suburban Philadelphia. There, he completed his debut novel, The Lost Book of Wonders, a fast-paced thriller that brings together his interests in science, history, and religion. Brecher continues to write in his free time, creating stories that aim both to entertain and to educate.



Read more on his website: www.chadbrecher.com

Stay in touch: Check out our **BIDMC Radiology Alumni Society page** and receive our monthly Radical Views http://radnet.bidmc.harvard.edu/education/newsletters.asp

You can also contact Radical Views Editor Donna Wolfe at dwolfe@bidmc.harvard.edu with updates, especially after completion of your fellowships!



2017 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 calendar year]

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. 2017 Feb;33(1):34-42. PMID: 27443519.

Anderson TJ, Lu N, **Brook OR**. Disease-Specific Report Templates for Your Practice. J Am Coll Radiol. 2017 Feb 17. pii: S1546-1440(16)31376-X. PMID: 28223115.

Asch E, Shah SH, **Berkowitz S**, **Mehta S**, **Eisenberg RL**, <u>Jayadevan R</u>, <u>Connolly C</u>, **Slanetz PJ**. Resident Idea System: A Novel Tool to Engage Trainees in Quality Improvement at the Institutional Level. J Am Coll Radiol. 2017 Feb;14(2):256-261. PMID: 27815057.

Boos J, Fang J, Snell A, Hallett D, Siewert B, Eisenberg RL, Brook OR. Electronic Kiosks for Patient Satisfaction Survey in Radiology. AJR Am J Roentgenol. 2017 Mar;208(3):577-584. PMID: 28004975.

Bui AH, Roujol S, Foppa M, Kissinger KV, Goddu B, Hauser TH, Zimetbaum PJ, Ngo LH, **Manning WJ**, Nezafat R, Delling FN. Diffuse myocardial fibrosis in patients with mitral valve prolapse and ventricular arrhythmia. Heart. 2017 Feb;103(3):204-209. PMID: 27515954; PMCID: PMC5237392.

<u>Chang CD</u>, **Wu JS**. MR Imaging Findings in Heel Pain. Magn Reson Imaging Clin N Am. 2017 Feb;25(1):79-93. doi: 10.1016/j.mric.2016.08.011. Review. PubMed PMID: 27888853.

<u>Chen CK, Boos J</u>, **Sarwar A, O'Bryan-Alberts B**, **Ahmed M**, **Brook OR**. Observation time after outpatient non-arterial interventional procedures: standards, safety, and outcomes. Abdom Radiol (NY). 2017 Jan 17. doi: 10.1007/s00261-017-1046-2. PMID: 28097389.

Eisenberg RL, <u>Heidinger BH</u>. Low Yield of Chest Radiography in General Inpatients and Outpatients with "Positive PPD" Results in a Country with Low Prevalence of TB. Acad Radiol. 2017 Jan 30. pii: S1076-6332(17)30014-4. doi: 10.1016/j.acra.2016.12.012. PMID: 28153574.

Esparaz AM, **Ahmed M**. Resolution of Metallic Biliary Stent Allergic Reaction After Partial Stent Removal in a Patient with Nickel Sensitivity. Cardiovasc Intervent Radiol. 2017 Feb 7. doi: 10.1007/s00270-017-1596-2. PMID: 28175974.

Fang J, Zhang D, Wilcox C, <u>Heidinger B</u>, **Raptopoulos V**, **Brook A**, **Brook OR**. Metal implants on CT: comparison of iterative reconstruction algorithms for reduction of metal artifacts with single energy and spectral CT scanning in a phantom model. Abdom Radiol (NY). 2017 Jan 2. doi: 10.1007/s00261-016-1023-1. [Epub ahead of print] PMID: 28044188.

Gao Y, **Dialani V**, DeBenedectis C, Johnson N, Brachtel E, **Slanetz P**. Apocrine Metaplasia Found at MR Biopsy: Is There Something to be Learned? Breast J. 2017 Jan 12. doi: 10.1111/tbj.12755. PMID: 28079289.

Hall FM. Epinephrine-Enhanced Knee Arthrography Revisited. AJR Am J Roentgenol. 2017 Mar;208(3):W131. doi: 10.2214/AJR.16.17268. PMID: 28004968.

Heffernan EJ, Moran DE, Gerstenmaier JF, McCarthy CJ, Hegarty C, **McMahon CJ**. Accuracy of 64-section MDCT in the diagnosis of cruciate ligament tears. Clin Radiol. 2017 Feb 15. pii: S0009-9260(17)30034-X. doi: 10.1016/j.crad.2017.01.006. PMID: 28214478. **Hochman MG**. Preface. MR Imaging of the Foot and Ankle [Special Issue] Magn Reson Imaging Clin N Am. 2017 Feb;25(1):xvii-xviii. doi: 10.1016/j. mric.2016.09.004. PMID: 27888856. [Editorial]

Hsuan HF, Lin YC, Chiu CH, **Ni Mhuircheartaigh J**, Juan YH, Chan YS, **Wu JS**. Posterior cruciate ligament tears in Taiwan: an analysis of 140 surgically treated cases. Clin Imaging. 2016 Sep-Oct;40(5):856-60. PMID: 27179152.

Hughes AJ, DeBuitleir C, Soden P, O'Donnchadha B, Tansey A, Abdulkarim A, **McMahon C**, Hurson CJ. 3D Printing Aids Acetabular Reconstruction in Complex Revision Hip Arthroplasty. Adv Orthop. 2017;2017:8925050. doi: 10.1155/2017/8925050. PMID: 28168060; PMCID: PMC5259605.

Itri JN, Bakow E, Probyn L, Kadom N, Duong PT, Gettle LM, Mendiratta-Lala M, Scali EP, Winokur RS, Zygmont ME, **Kung JW**, Rosenkrantz AB. The Science of Quality Improvement. Acad Radiol. 2017 Mar;24(3):253-262. Review. PMID: 28193375.

Ivanovic AM, <u>Alessandrino F</u>, Maksimovic R, Micev M, Ostojic S, Gore RM, **Mortele KJ.** Pathologic Subtypes of Ampullary Adenocarcinoma: Value of Ampullary MDCT for Noninvasive Preoperative Differentiation. AJR Am J Roentgenol. 2017 Jan 17:W1-W8. doi: 10.2214/AJR.16.16723. PMID: 28095024.

Kilcoyne A, **Shenoy-Bhangle AS**, Roberts DJ, Sisodia RC, Gervais DA, Lee SI. MRI of Placenta Accreta, Placenta Increta, and Placenta Percreta: Pearls and Pitfalls. AJR Am J Roentgenol. 2017 Jan;208(1):214-221. PMID: 27762597.

Kressel HY. Editor's Recognition Awards. Radiology. 2017 Jan;282(1):1. PMID: 28005513.

Kressel HY. Radiology Editorial Board 2017. Radiology. 2017 Jan;282(1):1. PMID: 28005509.

Kressel HY. Setting Sail: 2017. Radiology. 2017 Jan;282(1):4-6. PMID: 28005504.

Kressel HY. Management Matters. Radiology. 2017 Feb;282(2):310. PMID: 28099110.

Kumar G, **Goldberg SN**, Wang Y, Velez E, Gourevitch S, Galun E, **Ahmed M**. Hepatic radiofrequency ablation: markedly reduced systemic effects by modulating periablational inflammation via cyclooxygenase-2 inhibition. Eur Radiol. 2017 Mar;27(3):1238-1247. PMID: 27287478.

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

MacMahon H, Naidich DP, Goo JM, Lee KS, Leung AN, Mayo JR, Mehta AC, Ohno Y, Powell CA, Prokop M, Rubin GD, Schaefer-Prokop CM, Travis WD, Van Schil PE, **Bankier AA**. Guidelines for Management of Incidental Pulmonary Nodules Detected on CT Images: From the Fleischner Society 2017. Radiology. 2017 Feb 23:161659. doi: 10.1148/radiol.2017161659. PMID: 28240562.

McGillen KL, <u>Boos J</u>, Nathavitharana R, **Brook A**, **Sun MR**, **Siewert B**, **Raptopoulos V**, **Kane R**, **Sheiman R**, **Brook OR**. Diagnostic yield and clinical impact of microbiologic diagnosis from CT-guided drainage in patients previously treated with empiric antibiotics. Abdom Radiol (NY). 2017 Jan;42(1):298-305. PMID: 27654990. Murphey MD, Roberts CC, Bencardino JT, Appel M, Arnold E, Chang EY, Dempsey ME, Fox MG, Fries IB, Greenspan BS, **Hochman MG**, Jacobson JA, Mintz DN, Newman JS, Rosenberg ZS, Rubin DA, Small KM, Weissman BN. ACR Appropriateness Criteria Osteonecrosis of the Hip. J Am Coll Radiol. 2016 Feb;13(2):147-55. PMID: 26846390.

Murphy IG, NiMhurchu E, Gibney RG, **McMahon CJ**. MRI-directed cognitive fusion-guided biopsy of the anterior prostate tumors. Diagn Interv Radiol. 2017 Jan 11. doi: 10.5152/dir.2016.15445. PMID: 28074780.

Nakamori S, Alakbarli J, Bellm S, Motiwala SR, Addae G, **Manning WJ**, Nezafat R. Native T(1) value in the remote myocardium is independently associated with left ventricular dysfunction in patients with prior myocardial infarction. J Magn Reson Imaging. 2017 Feb 2. doi: 10.1002/ jmri.25652. PMID: 28152237.

Ni Mhuircheartaigh JM, **Lee KS**, Curry MP, Pedrosa I, **Mortele KJ**. Early Peribiliary Hyperenhancement on MRI in Patients with Primary Sclerosing Cholangitis: Significance and Association with the Mayo Risk Score. Abdom Radiol (NY). 2017 Jan;42(1):152-158. PMID: 27472938.

<u>O'Brien JJ</u>, **Stormann J**, **Roche K**, **Cabral-Goncalves I**, **Monks A**, **Hallett D**, **Mortele KJ**. Optimizing MRI Logistics: Focused Process Improvements Can Increase Throughput in an Academic Radiology Department. AJR Am J Roentgenol. 2017 Feb;208(2):W38-W44. doi: 10.2214/AJR.16.16680. PMID: 27929667.

Occhipinti M, Heidinger BH, Pfannenberg C, Munden RF, **Eisenberg RL**, **Bankier AA**. Managing Incidental Lung Nodules in Patients With a History of Oncologic Disease: A Survey of Thoracic Radiologists. J Thorac Imaging. 2017 Mar;32(2):115-120. MID: 27643445.

Phillips J, <u>Miller MM</u>, Mehta TS, Fein-Zachary V, Nathanson A, Hori W, Monahan-Earley R, Slanetz PJ. Contrast-enhanced spectral mammography (CESM) versus MRI in the high-risk screening setting: patient preferences and attitudes. Clin Imaging. 2016 Dec 28;42:193-197. PMID: 28107737. [Not Found in PubMed until 2017]

Rubin GD, McNeil BJ, Palkó A, Thrall JH, Krestin GP, Muellner A, **Kressel HY**. External Factors That Influence the Practice of Radiology: Proceedings of the International Society for Strategic Studies in Radiology Meeting. Radiology. 2017 Feb 4:162187. doi: 10.1148/radiol.2017162187. PMID: 28157409.

Rutkove SB, Kapur K, Zaidman C, **Wu JS**, Pasternak A, Madabusi L, Yim S, Pacheck A, Szelag H, Harrington T, Darras BT. Electrical impedance myography for assessment of Duchenne muscular dystrophy. Ann Neurol. 2017 Jan 11. doi: 10.1002/ana.24874. PMID: 28076894.

Sarwar A, <u>Esparaz AM</u>, Tapper EB, **Brook OR**, Grunwald D, Malik R, **Ahmed M**. Comparison of Vascular Plugs and Pushable Coils for Variceal Embolization After TIPS. AJR Am J Roentgenol. 2017 Mar;208(3):650-655. PMID: 27959638.

Shahzeb Khan M, Fatima K, Bin Riaz I, Butler J, **Manning WJ**, Khosa F. The 20 most-cited articles in echocardiography literature. Eur Heart J. 2017 Jan 7;38(2):74-78. PMID: 28158413.

Tailor TD, Kicska GA, Jacobs JE, Pampaloni MH, **Litmanovich DE**, Reddy GP. Imaging of Heart Disease in Women. Radiology. 2017 Jan;282(1):34-53. PMID: 28005501.

Waltzman D, **Soman S**, Hantke NC, Fairchild JK, Kinoshita LM, Wintermark M, Ashford JW, Yesavage J, Williams L, Adamson MM, Furst AJ. Altered Microstructural Caudate Integrity in Posttraumatic Stress Disorder but Not Traumatic Brain Injury. PLoS One. 2017 Jan 23;12(1):e0170564. doi: 10.1371/journal.pone.0170564. PMID: 28114393.

Weissler-Snir A, Hindieh W, Gruner C, Fourey D, Appelbaum E, Rowin E, Care M, Lesser JR, Haas TS, Udelson JE, **Manning WJ**, Olivotto I, Tomberli B, Maron BJ, Maron MS, Crean AM, Rakowski H, Chan RH. Lack of Phenotypic Differences by Cardiovascular Magnetic Resonance Imaging in MYH7 (β -Myosin Heavy Chain)- Versus MYBPC3 (Myosin-Binding Protein C)-Related Hypertrophic Cardiomyopathy. Circ Cardiovasc Imaging. 2017 Feb;10(2). pii: e005311. doi: 10.1161/CIRCIMAGING.116.005311. PMID: 28193612.

Wu JS, McMahon CJ, Lozano-Calderon S, **Kung JW**. JOURNAL CLUB: Utility of Repeat Core Needle Biopsy of Musculoskeletal Lesions With Initially Nondiagnostic Findings. AJR Am J Roentgenol. 2017 Mar;208(3):609-616. PMID: 27959586.

Zaidman CM, **Wu JS**, Kapur K, Pasternak A, Madabusi L, Yim S, Pacheck A, Szelag H, Harrington T, Darras BT, Rutkove SB. Quantitative muscle ultrasound detects disease progression in Duchenne muscular dystrophy. Ann Neurol. 2017 Feb 27. doi: 10.1002/ana.24904. PMID: 28241384.

Zhao L, Dai W, **Soman S, Hackney DB**, Wong ET, Robson PM, **Alsop DC**. Using Anatomic Magnetic Resonance Image Information to Enhance Visualization and Interpretation of Functional Images: A Comparison of Methods Applied to Clinical Arterial Spin Labeling Images. IEEE Trans Med Imaging. 2017 Feb;36(2):487-496. PMID: 27723582.

Zygmont ME, Itri JN, Rosenkrantz AB, Duong PT, Mankowski Gettle L, Mendiratta-Lala M, Scali EP, Winokur RS, Probyn L, **Kung JW**, Bakow E, Kadom N. Radiology Research in Quality and Safety: Current Trends and Future Needs. Acad Radiol. 2017 Mar;24(3):263-272. Review. PMID: 28193376.

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Larson DB, **Kruskal JB**, Krecke KN, Donnelly LF. Key Concepts of Patient Safety in Radiology. **Radiographics. 2015 Oct;35(6):1677-93.** PMID: 26334571.

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