

Radical Views...

from the Department of Radiology









October Special Issue 2015 Jonathan B. Kruskal, Justin Kung, Co-editors

This year's annual RadioGraphics monograph is co-edited by our Radiology Chairman **Jonathan B. Kruskal** and Residency Program Associate Chairman **Justin Kung**. Comprised of more than 20 chapters, this monograph covers the entire gamut of noninterpretive skills and we are proud of the BIDMC Radiology faculty who have contributed (please see below).

Also, in honor of their efforts, the co-editors were invited to create the cover. This word art cover reflects the authors' vision of the innumerable concepts, initiatives, criteria, and management issues required to address and maintain a high-quality radiology practice in today's consumer-driven climate. Presented in varying shades of gray, we created a collage of terms as the background for our explication of quality, safety, and noninterpretive skills.

Conducting a Successful Practice Quality Improvement Project for ABR Certification. Cindy S Lee, Vibhor Wadhwa, Jonathan B Kruskal, David B Larson.

Practice quality improvement (PQI) is a required component of the American Board of Radiology (ABR) Maintenance of Certification (MOC) cycle, with the goal to "improve the quality of health care through diplomate-initiated learning and quality improvement." The essential requirements of PQI projects include relevance to one's practice, achievability in one's clinical setting, results suited for repeat measurements during an ABR MOC cycle, and reasonable expectation to result in quality improvement (QI). PQI projects can be performed by a group or an individual or as part of a participating institution. Given the interdisciplinary nature of radiology, teamwork is critical to ensure patient safety and the success of PQI projects.... (Available Ahead of Print)

Root Cause Analysis: Learning from Adverse Safety Events.

Olga R Brook, Jonathan B Kruskal, Ronald L Eisenberg, David B Larson.

Key Concepts of Patient Safety in Radiology.

David B Larson, Jonathan B Kruskal, Karl N Krecke, Lane F Donnelly.

Harm from medical error is a difficult challenge in health care, including radiology. Modern approaches to patient safety have shifted from a focus on individual performance and reaction to errors to development of robust systems and processes that create safety in organizations. Organizations that operate safely in high-risk environments have been termed high-reliability organizations. Such organizations tend to see themselves as being constantly bombarded by errors. Thus, the goal is not to eliminate human error but to develop strategies to prevent, identify, and mitigate errors and their effects before they result in harm.... (Available Ahead of Print)

Improving Safety Through Human Factors Engineering.

Bettina Siewert, Mary G Hochman.

A Practical Guide to MRI Safety.

Leo L Tsai, Aaron K Grant, Koenraad J Mortele, Justin W Kung, Martin P Smith.

Radiologic Professionalism in Modern Healthcare

Anastasia L Hryhorczuk, Kate Hanneman, Ronald L Eisenberg, Elaine C Meyer, Stephen D Brown.

Alexander A. Bankier:

RSNA Honored Educator Awardee 2013 2014 2015



Cardiothoracic Division Chief **Alexander A. Bankier, MD, PhD** has once again earned an RSNA Honored Educator Award which recognizes an individual's dedication to furthering the profession of radiology by delivering high-quality educational content for the RSNA.

Established in 2011, this award honors RSNA members who have produced an array of RSNA educational resources in the past calendar year. Based on the number of qualifying activities in a given calendar year, eligible RSNA members are presented with the Honored Educator award in recognition of their contributions. RSNA members qualify by:

- Serving as faculty at RSNA's educational meetings
- Authoring an education exhibit, Quality Storyboard and/or Cases of the Day for the RSNA Annual Meeting
- Authoring educational articles in RSNA premier journals, Radiology and RadioGraphics
- Authoring online education modules and/or creating CME questions for online education
- Donating a refresher course and writing CME questions for online learning
- · Authoring an online professionalism vignette

The RSNA Honored Educator Award serves as a benchmark of academic productivity in support of a meaningful and successful radiology career. Congratulations to Alex for achieving this three years in a row!

Radiology Calendar OCTOBER 2015

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, GI/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	Friday Grand Rounds: 12 noon Sherman Auditorium, East Campus (unless stated otherwise)		
			7:30 - 9:00 Pulmonary Fibrosis (Alexander Bankier) 3:00-4:00 West MedRads - West Body Senior	2 7:30 - 8:15		
7:30 - 8:15 Venous Access (Seth Berkowitz) 8:15-9:00 Vascular Syndromes & Venous Interventions (Ammar Sarwar)	7:30 - 8:15 GI Bleeding (Felipe Collares) 8:15 - 9:00 TIPS & Portal Interventions (Felipe Collares)	7 7:30 - 9:00 Neuro (TBD)	8 7:30 - 8:15 Interventional Oncology: RFA (Muneeb Ahmed) 8:15 - 9:00 Interventional Oncology: Transarterial Treatment (Muneeb Ahmed)	9 7:30 - 8:15 Disruptive Physician (Program Directors) [Professionalism Session - Read JACR article before session]		
12 Columbus Day	7:30 - 8:15 Liver Ultrasound & Doppler (Robert Kane) 8:15-9:00 Hepatobiliary Cases (Robert Kane) 10:30-11:30 NMMI meeting [GZ-103] 12:00 - 1:00 ACR Certifying Exam debrief - Fellows	7:30 - 8:15 Imaging the Ovaries (Deborah Levine) 8:15-9:00 Diffusion MRI (Martin Smith) 7:15-8:00 US meeting [WCC-304A]	3:00-4:00 West MedRads - West Body Senior	7:30-8:15 Power Point (Ronald Eisenberg) [Education Session] 12:00 - 1:00 Chief Rounds - AmmarSarwar [TRO, CAV, ESP, WEI]]		
19 7:30 - 9:00 Career Week - The Job Hunt (Current Fellows)	7:30 - 9:00 Career Week - Transitioning to being an Attending (TBD) 8:00-9:00 IR Meeting [West Recovery] 10:30-11:30 NMMI meeting [GZ-103]	21 7:30 - 9:00 Career Week - Words of Wisdom from Chairs (TBD)	22 7:30 - 9:00 Physics (TBD)	23		
26 7:30 - 9:00 Cardiac Week (TBD)	27 7:30 - 9:00 Cardiac Week (TBD) 10:30-11:30 NMMI meeting [GZ-103]	28 7:30 - 9:00 Cardiac Week (TBD)	7:30 - 9:00 Cardiac Week (TBD) 3:00-4:00 West MedRads - West Body Senior	30 12:00 - 1:00 Sven Paulin Lecture: Non-Coronary Cardiac CT: Indications and Findings (Charles S. White)		

WELCOME NEW INTERVENTIONAL FACULTY: JEFFREY WEINSTEIN, MD



Please welcome Jeffrey L. Weinstein, MD as a staff radiologist in Vascular & Interventional Radiology. Jeff comes to BIDMC from the Einstein Medical Center in Philadelphia, a teaching hospital of the Sidney Kimmel Medical College (formerly, Thomas Jefferson Medical College) where he served as an interventional staff member and Interventional Radiology Resident Rotation Coordinator. He earned a BS in Behavioral Science at Lafayette College in Easton, PA and his MD from Jefferson Medical College. Completing his radiology residency training at Einstein Medical Center, followed by a fellowship in Vascular & Interventional Training at Northwestern Memorial Hospital in Chicago, he returned to his alma mater as a staff radiologist and took on several academic education roles. He looks forward to using his educational and web-based teaching experience to help adapt our efforts to the new training paradigm

in Interventional Radiology which involves the development of an integrated diagnostic radiology/interventional radiology residency. Outside of work, he has many interests though not enough time to pursue them. He enjoys tennis, jogging and reading, learning about new technology and also collecting watches and clocks (both new and vintage but doesn't want us to think he's eccentric). Contact: jlweinst@bidmc.harvard.edu

OCTOBER GRAND ROUNDS: Charles S. White, MD presents the 9th Annual Sven Paulin Lecture



Charles S. White, MD

Friday, October 30th, 2015 12 noon - 1:00 PM • Sherman Auditorium

Non-Coronary Cardiac CT: Indications and Findings Charles S. White, MD - Vice-Chairman of Clinical Affairs, Department of Diagnostic Radiology and Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD; Professor of Radiology and Professor of Pulmonology and Critical Care Medicine, University of Maryland School of Medicine.

Dr. White received his undergraduate training in anatomy and biochemistry at Cornell University and his MD at SUNY Buffalo School of Medicine. He

completed residency training in both internal medicine and diagnostic radiology with a 4th year subspecialty in thoracic radiology at Columbia-Presbyterian Medical Center in New York, NY and began his academic career at the University of Maryland Medical School as an Assistant professor in 1991. Dr. White rose to professor of Radiology and Nuclear Medicine in 2001 and professor of Pulmonary and Critical Care in 2004 and currently serves as Director of Thoracic Radiology at the University of Maryland Medical Center and Vice Chairman of Clinical Affairs at the University of Maryland Medical School. Focusing on cardiothoracic imaging, he developed cardiac CT and MRI programs and CT-guided bronchoscopy. In 2006, he joined Alexander Bankier as an elected member of the Fleischner Society



"I met Dr. Paulin about 20 years ago at the NASCI meeting. It was not a lengthy encounter, but I remember him as well-spoken, with the manners and bearing of a European statesman. Very dignified and also very nice. It is hard to think of anyone quite like him today."

- Charles S. White, MD

and currently serves as Chairman of the Cardiac Certifying Committee of the American Board of Radiology and Treasurer of the North American Society for Cardiac Imaging (NASCI). Additionally, he is a former president of both the Society of Thoracic Radiology (STR) and the Maryland Radiological Society. Dr. White has coauthored more than 150 peer-reviewed publications, including:

- Ropp A, Lin CT, White CS. Coronary computed tomography angiography for the assessment of acute chest pain in the emergency department: evidence, guidelines, and tips for implementation. J Thorac Imaging. 2015 May;30(3):169-75. PMID: 25730553.
- Li C, Lin CT, Kligerman SJ, Hong SN, **White CS**. Enhancement Characteristics of the Computed Tomography Pulmonary Angiography Test Bolus Curve and Its Use in Predicting Right Ventricular Dysfunction and Mortality in Patients With Acute Pulmonary Embolism. J Thorac Imaging. 2015 Jul;30(4):274-81. PMID: 25635705.
- Terpenning S, **White CS**. Imaging pitfalls, normal anatomy, and anatomical variants that can simulate disease on cardiac imaging as demonstrated on multidetector computed tomography. Acta Radiol Short Rep. 2015 Jan 9;4(1):2047981614562443. PMID: 25610617; PMCID: PMC4299369.
- Kligerman S, Lahiji K, Weihe E, Lin CT, Terpenning S, Jeudy J, Frazier A, Pugatch R, Galvin JR, Mittal D, Kothari K, **White CS**. Detection of pulmonary embolism on computed tomography: improvement using a model-based iterative reconstruction algorithm compared with filtered back projection and iterative reconstruction algorithms. J Thorac Imaging. 2015 Jan;30(1):60-8. PMID: 25423129.
- Yoo SM, Lee HY, **White CS**. Screening coronary CT angiography: possibilities and pitfalls. Int J Cardiovasc Imaging. 2014 Dec;30(8):1599-601. PMID: 25026911.
- Kim HR, Yoo SM, Rho JY, Lee HY, **White CS**. MDCT evaluation of atherosclerotic coronary artery disease: what should radiologists know? Int J Cardiovasc Imaging. 2014 Jun;30 Suppl 1:1-11. Review. PMID: 24687407.
- Woodard PK, White RD, Abbara S, Araoz PA, Cury RC, Dorbala S, Earls JP, Hoffmann U, Hsu JY, Jacobs JE, Javidan-Nejad C, Krishnamurthy R, Mammen L, Martin ET, Ryan T, Shah AB, Steiner RM, Vogel-Claussen J, **White CS**. ACR Appropriateness Criteria chronic chest pain-low to intermediate probability of coronary artery disease. J Am Coll Radiol. 2013 May;10(5):329-34. PMID: 23542027.

Given his credentials, we are honored to have Dr. White present the 9th Annual Sven Paulin lecture, but we are also extremely pleased to welcome him as he has also met Dr. Sven Paulin!

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:
http://radnet.bidmc.harvard.edu/education/newsletters.asp



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

COMMUNITY RADIOLOGY NEWS: 1101 Beacon St Renovations Before and After





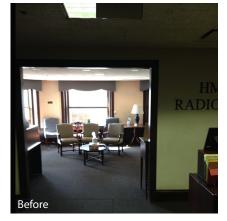




The HMFP Radiology practice site at 1101 Beacon St. underwent extensive renovations. The project consisted of three phases starting early February and concluding mid August (20+ weeks with staff and patients occupying the space concurrently). Some of the highlights more notable during this time included doubling a radiographic room to accommodate an ultrasound bed and unit; the temporary building of a reading room sharing the space with reception and waiting; and operating with one mammography room throughout the entire

process. The patients needed to be directed from setting foot into the practice until their exam was completed – there were temporary barriers in place, sealed areas of the suite, limited restroom availability and each week brought a new traffic pattern. The 1101 and mobile ultrasound team took ownership of whatever needed to be done and performed above the anticipated level of support – I am blessed to have such a great group! Please share in our excitement and appreciate the before and after photos below.

Our patient surveys once reflected comments such as "this space is old and tired, I am depressed sitting in your funeral parlor!" to daily comments now expressing how wonderful the space feels and how they are happy for us.











See page 5 for the 1101 Beacon St. Open House

COMMUNITY RADIOLOGY NEWS (cont'd) OPEN HOUSE at 1101 Beacon St.

The project also afforded the opportunity to install 3D mammography and a new radiographic room.

Our sincere thanks to the Business Committee, HMFP, Dr. Kruskal, Dr. Gordon, Annamarie Monks and Carl Nickerson for accepting the proposal and moving this project forward.

- Jane Corey, Mgr, HMFP Radiology





On Monday, Sept. 21st we officially unveiled our renovated facility:











- A) Suzie Konopka, Jane Corey, Marian Howes, Vicki Albano, Caroline Comparone, Andrea Garvin.
- B) Jennifer Matthews (Project Manager), Annamarie Monks, Jonathan Kruskal, Tejas Mehta, Peter Gordon, Jane Corey, Samara Tilken (Architect).
- C) Marian Howes, Andrea Garvin, Valerie Fein-Zachary, Vicki Albano.
- D) Tejas Mehta, Kathleen West (McKesson), Tara Juxba (McKesson), Jane Corey, Melissa Davis (McKesson).

COMMUNITY RADIOLOGY NEWS: ACER Goes to Buenos Aires

This past September, the Alliance of Clinician-Educators in Radiology (ACER) leadership brought their expertise to South America as part of a pre-Congress to the 61st Congreso Argentino de Radiologia. The one-day educational program provided a forum whereby educators from Argentina came together to share experiences and learn new approaches to more effectively educate the next generation of radiologists. Led by Drs. **Eric Stern** from University of Washington, Mark Mullins from Emory University, and Priscilla Slanetz from Harvard Medical School, the one-day program consisted of multiple sessions focused on defining a clinician educator, designing optimal learning spaces, creating and maintaining a teaching portfolio, improving the effectiveness of PowerPoint presentations combined with an interactive small group activity to improve attendee's own presentations, flipping the classroom accompanied by a unique interactive session using video and case scenarios focused on digital professionalism, and maximizing educational scholarship. Attended by nearly 50 radiology educators, the program was an overwhelming success. Earlier this summer, Drs. Stern, Mullins, Aine Kelly from University of Michigan, and Mahesh Thapa from University of Washington held a similar program in Cancun, Mexico that was also received positively. Consistent with its mission, the ACER leadership will continue to share its passion for education with others and is sure to continue to reach out globally to countries that are likely to benefit from this interactive exchange of ideas.



About ACER

ACER works to advance the interests and efforts of the clinician-educator in this large and growing segment of academic radiology faculty.

2015-16 Officers:

President: Mark E. Mullins, MD, PhD President-elect: Aine M. Kelly, MD, MS Secretary: Priscilla J. Slanetz, MD, MPH Treasurer: Paul P. Cronin, MBBCh



Left: Dr. Slanetz talks to Argentinian educators about how to create a teaching philosophy, an essential component of an educator's teaching portfolio.

Below: Drs. Mullins, Alfredo Buzzi (President, Society of Argentinian Radiologists), and Drs. Slanetz and Stern at the Congress.



Dr. Slanetz presenting a talk on minimizing risk and maximizing cancer detection on mammography to attendees of the 61st Argentine Congress of Radiology (CAR 2015).





Attendees of the Congress concentrate on a presentation by Dr. Slanetz on breast MR logistics and pitfalls in interpretation.

HOSPITAL NEWS: IRB Changes

The Committee on Clinical Investigation/Internal Review Board is instituting several new changes that are important to be aware of as well as the dates that they take effect. Although you probably received the email on September 3rd, there are 2 key points I wanted to call your attention to:

- As of September 14th, part Q (Conflict of Interest forms) will no longer be required for BIDMC employees/ staff. You will be sent a message if needed when you are being added to an IRB to complete an electronic conflict of interest form. Failure to respond to the electronic conflict of interest request will delay the processing of your study. Please contact IRB coordinators Tara Bun (West) or Meredith Cunningham (East) for further information.
- New forms will be available September 14th and old versions will not be accepted on or after October 1st. Please download forms each time you do a new IRB at https://portal.bidmc.org/Home/Research/Human%20Subjects/CCI/CCIIRBFrms.aspx.
 Part A (Research Application) now includes questions that were on Part N (Discarded Specimens) and Part O (Medical Records). If you have been working on submitting a new IRB/continuing review, it will need to be redone using the new versions after September 30th.

Thanks,

Ron Eisenberg, MD, JD

Scientific Review Officer and Director, Educational Research Committee, Dept. of Radiology

Sent: Thursday, September 03, 2015 12:47 PM

To: Clinical Research Community

From: Jesse Ripton, Director of CCI-IRB Operations

Re: Electronic Conflict of Interest Reporting for Protocol Submissions

The Committee on Clinical Investigation (CCI) is pleased to announce that beginning on September 14, 2015, all BIDMC employees and staff will utilize the electronic Conflict of Interest reporting system to make conflict of interest disclosures associated with protocol submissions. This change will use the information BIDMC individuals have already entered in their disclosure portfolio and eliminate the administrative burden associated with the paper-based disclosures made on the Part Q (co-investigators and research staff members). The process will be similar to that used for grants, clinical trial agreements, and annual disclosures by the leadership, management and medical staff. Non-BIDMC employees and staff will continue to use the Part Q to make paper-based disclosures.

The electronic Conflict of Interest Reporting system will be triggered by the submission of an initial application, an amendment to add new research staff, and a progress report for continuing review.

- Following submission of an initial protocol application, the Principal Investigator and all BIDMC investigators/research staff members named in the protocol will receive an email containing a link to an on-line protocol specific disclosure questionnaire. The email will ask the investigator to complete the questionnaire and to update or create their disclosure portfolio within the electronic Conflict of Interest reporting system. Once the questionnaire is electronically signed it will be routed to the Office of Compliance and Business Conduct (OCBC) for review. Part Qs will be required only for non-BIDMC research staff members.
- Following submission of an amendment to add a research staff, the BIDMC research staff member who is being added will receive an email containing a link to an on-line protocol specific disclosure questionnaire. The email will ask the research staff member to complete the questionnaire and to update or create their disclosure portfolio within the electronic Conflict of Interest Reporting System. Once the questionnaire is electronically signed it will be routed to OCBC for review. Part Qs will be required only for the addition of non-BIDMC research staff members.
- Following submission of a continuing review progress report, the Principal Investigator
 and all BIDMC investigators/research staff members named in the protocol will receive
 an email containing a link to an on-line protocol specific disclosure questionnaire. The
 email will ask the investigator to complete the questionnaire and to update or create
 their disclosure portfolio within the electronic Conflict of Interest Reporting System.
 Once the questionnaire is electronically signed it will be routed to OCBC for review.
 NOTE: The CCI does not require Part Qs at the time of continuing review for non-BIDMC
 research staff members listed on the protocol.

The CCI will be unable to fully review and approve a new protocol, amendment or continuing review submission until the Principal Investigator and all BIDMC research staff members have completed the electronic disclosure reporting. The electronic Conflict of Interest system will remind investigators that they have to complete the protocol specific disclosure questionnaire every 72 hours. Any Part Qs received on or after September 14, 2015 will be disregarded and the investigator will receive the email containing a link to an on-line protocol specific disclosure questionnaire.

In addition to changes in the conflict of interest disclosure process, the CCI has also significantly revised forms, created a new IRB form to facilitate a simple and streamlined amendment process for addition/removal of research staff members to the protocol, and eliminated the requirement to lists co-investigators on the consent form. All revised forms will be available via the portal on September 14, 2015. Investigators will be required to use the revised and new forms for any submission made on or after October 1, 2015.

The following changes have been made to CCI forms and submission process:

- The Part A has been significantly revised. Questions from the Part 0 Medical Record form and the Part N Discarded Specimen form have been added to the Part A to streamline submission of research limited to review of medical records and/or discarded specimens.
- A new form, Research Staffing, has been created which is designed to capture in one form all research staff members listed on the protocol. This form will be required for all initial submissions, any amendment to add/remove research staff and continuing review submissions.
- The Amendment Form and the amendment submission requirements have been revised to
 create a simple process for adding/removing research staff. At the time of an amendment
 limited to the addition/removal of research staff members, the Principal Investigator will
 only need to complete the Amendment Form, the Research Staffing Form, and, if the staffing
 change affects the list of authorized prescribers, an updated Part E form. The CCI will no longer
 require that any additional forms be updated to reflect the staff changing.
- The Executive Committee of the CCI has removed the requirement to list all co-investigators on the consent form. The Research Staffing Form will capture the co-investigators who are able to consent and this form along with the consent form will be available to all BIDMC employees and staff on CT Pro. This change in CCI policy is implemented to address the administrative burden of constantly updating the consent form at the time of a research staff change and to alleviate the confusion and potential for protocol deviations caused by frequently changing consent forms Consent forms for existing protocol will be revised to remove co-investigators at either the next amendment to add/remove staff or the continuing review submission.

Additional information and detailed instructions on the revised and new forms will be provided on the IRB Portal September 14, 2015.

Please contact the CCI Office at 617-667-0476 with any questions.

AIDEEN SNELL ON THE PATIENT EXPERIENCE



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

Radiology Action Planning Committee's Patient Engagement
OCTOBER TIP OF THE MONTH:

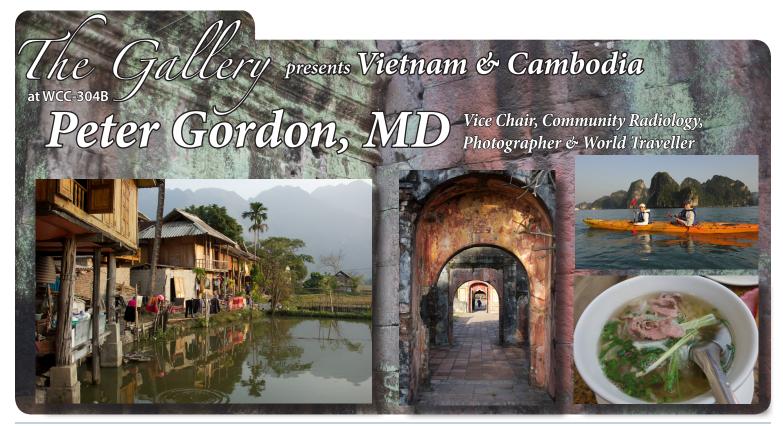
Patients' perceptions of how well we work together has a large impact on how well they feel cared for and increases their confidence in our care.

Are you a team player?



At various times of the day Radiology can be a very busy department. Research shows that how well a patient perceives their care coordination and how well each discipline works together gives them a sense of confidence. This means from Radiologist, Technologist, Nurses, Reception, Transporters, Image Archive, Scheduling—every step of the way from when they enter the department until they leave, how well do we communicate and put the patient first. This can also mean how well we work with other departments. In order for us to work well as a team we need to communicate effectively and always maintain respect for each other and our roles. Be sure to thank your peers when you see them being a TEAM PLAYER!

Speaking of teamwork, on Sept. 30, 2015, many of our Radiology leaders participated in a Multigenerational Workforce Seminar by **Cally Ritter, LICSW** from All One Heath to learn more about our diversified workforce and how our varied life experiences influence work styles, attitudes towards authority, communication style and motivations. Whether you are a: **Traditionalist:** Born before 1945 (69 or older), **Baby Boomer:** Born 1946 – 1964 (50 to 68), **Generation X:** Born 1965 - 1980 (34 to 49) or **Generation Y (Millennials):** Born 1981 – 1999 (15 to 34), all of these generations bring strength and experience to the table. Each generation also places their priorities on different values that we could learn from each other. Over the years the world has changed at an amazing pace and so has the workplace with technology advancements and the expectations of our patients. To work together as a team, we need to have all these generational attributes represented, understand what motivates each of us and communicate when we don't understand. Get to know your team and see how it improves your daily work flow. We all want to work in a conflict free environment and opening the lines of communication could create a more satisfying work environment.



PREVENTABLE HARM AT BIDMC - FY15

QUALITY UPDATE: BIDMC EXPANDS ITS VIEW OF PATIENT HARM



Suzanne Swedeen, RN MSN CNIV Quality Improvement Specialist

Webster's dictionary defines harm as: physical or mental damage or injury; something that causes someone or something to be hurt or broken. Over the past year, BIDMC has expanded the consideration of Harm to include harm to respect and dignity. Below Dr. Pat Folcarelli, Senior Director for Patient Safety at the Silverman Institute explains more...

Consider these examples:

- A patient dies from a progressive brain disease and the family requests an autopsy
 to see if there is anything they should know for their future health. Two months
 after the burial, they inquire about the autopsy results, only to learn that the autopsy was never done.
- A patient being taken to surgery is asked to remove his wedding ring, a family heirloom that belonged to his deceased father. A member of the healthcare team takes the ring, promising to "lock it up." After surgery, the ring cannot be found.
- An elderly woman who suffers from chronic dementia falls from bed in the early evening, but the first notification to her family is at 2 am by a doctor calling to get consent to take her to surgery. She has already undergone physical exams and x-rays to evaluate her for a fracture—but a call to the family to let them know about the fall did not happen prior to this point.

These cases are examples of what we now believe to be preventable harm to the respect and dignity of patients and their families. Building on the experience of detecting, analyzing, categorizing and improving physical harm, we are using the same rigorous approach toward understanding the patient experience through the reports of harm to respect and dignity.

In 2014, a steering group that included representatives from healthcare quality, patient safety, risk management, performance assessment and regulatory compliance, ethics, social work, palliative care, communications, interpreter services, community relations, patient relations, hospital governance and our Patient Family Advisory Council began meeting to develop our approach.

We defined Dignity as the intrinsic, unconditional value of all human beings that makes them worthy of respect.
Respect was defined as the sum of the actions we take to protect, preserve and enhance the dignity of our patients.

We have configured the BIDMC Patient Safety Reporting System so that our staff and physicians can report Respect and Dignity Cases. Patient Representatives are also flagging complaints reported by patients and families as Respect and Dignity cases when the nature of the issue meets the defined criteria.

DIGNITY & RESPECT RELATED	AIM	FY15 Target	CHANGE	Q1 15	Q2 15	Q3 15	Q4 15
Disrespectful Communication (Severe)		0					
Language Related [Total Reviewed: 1]	•	0		0	0	1	
Etiquette/ Rudeness [Total Reviewed: 25]	•	0		0	3	5	
Failure to be Patient-Centered	▼	0		5	8		
Insensitivity [Total Reviewed: 4]	•	0				0	
Uncoordinated Care [Total Reviewed: 23]	•	0				3	
Prejudice or Discrimination that Affects Care [Total Rwd: 0]	•	0		0	1	0	
Minimization of Patient Concerns (incl. Pain Management) [Total Reviewed: 8]	•	0		2	3	1	
Failure to Conduct or Incorporate Advance Care Planning [Total Reviewed: 1]	•	0		0	0	0	
Adverse Event Related [Total Reviewed: 1]	•	0		1	0	1	
Failure to Maintain an Environment that Preserves Dignity (Severe)							
Privacy Violation – Auditory/Information [Total Reviewed: 11]	•	0		1	2	3	
Privacy Violation – Physical [Total Reviewed: 4]	▼	0		0	1	1	
Visitor Mismanagement [Total Reviewed: 0]	•	0		0	0	0	
Prolonged unclean conditions – Environment [Total Reviewed: 3]	•	0		1	0	0	
Prolonged unclean conditions – Personal [Total Reviewed: 0]	•	0		0	1	0	
Failure to Provide Appropriate Care after Death (Severe)							
Body Mismanagement [Total Reviewed: 3]	▼	0		1	1	2	
Bereavement Related [Total Reviewed: 1]	▼	0		0	0	0	
Failure to Care for Personal Possessions (Severe) [Total: 16]	▼	0		2	2	0	
Other Disrespect Causing Harm to Dignity (Severe)		0		0	0	0	
TOTAL	▼	0		10	22	17	
TOTAL R&D Events Reviewed				68	86	101	
Percent Severe				15%	26%	17%	

Each week a team that includes Patient Relations, Patient Safety Coordinators and other HCQ team members gather to review and categorize the cases. Cases that are assessed as preventable and severe are reviewed and counted for the BIDMC Preventable Harm Dashboard. Examples of these cases, once analyzed for root causes, are presented at the QI Directors meeting and the Patient Care Assessment Committee Meeting. Corrective actions are developed for these cases.

We have completed 9 months of review. Several themes are emerging as opportunities for improvement, and there are work groups that are beginning to develop improvement plans in response. One example is how we communicate with families after the death of a loved one. We have realized a need to standardize an approach to better support the family members and loved ones in the aftermath of an inhospital death.

We are still in the early phases of this work, and we are refining our approach toward categorization and severity assessment.

We encourage any staff member or physician to utilize the patient safety reporting system if they observe episodes of disrespectful treatment of patients or families. For additional information, please reach out to Pat

Folcarelli RN, PhD, Sr. Director, Patient Safety at 617-632-8174 or pfolcare@bidmc.harvard.edu

Next Steps

1. Tell us about severe disrespect or harm to dignity

From the portal... Report an incident



2. The QI Directors, PCAC, and Chiefs will review dignity/respect cases using existing fair and just QI processes for physical harm

KIP Coach TIPS

SUZANNE SWEDEEN DONS HER OTHER HAT AS KIP COACH IN RADIOLOGY:



#secure Email at BIDMC

If you are sending an email with Protected Health Information,
Personal Information or sensitive financial/business or research information outside of the BIDMC network,
put "#secure" at the beginning of the subject line of your message.

This causes the message to be encrypted ("scrambled" to make it unusable to "cyber thieves" or other unauthorized persons). A link to a secure site called ProofPoint is included in the message. The person who receives the message needs to go to this site to read the message. No special software is required, but the recipient needs to set up an account with a password the first time.

Keep in Mind

If you forget or do not use "#secure" and you inadvertently send private or sensitive information through the internet from a BIDMC email address, Proofpoint will automatically encrypt the message. The recipient will follow the same Proofpoint process to retrieve the message.



If you send information from one BIDMC email address to another, it stays within our own secure systems so the information is automatically protected.

BIDMC has secure business-to-business connections (transport layer security or TLS connections) with institutions or companies with whom we regularly exchange email that contains protected, personal or business information. This

includes Atrius, CareMark, Joslin Diabetes Center, BID-Milton and many of our affiliates, selected billing companies and other entities. If you are exchanging email with individuals at institutions on the list, you don't have to take any extra steps because the information is secured by using the TLS connection. Find the list on both the KIP and IS Support Service intranets on the BIDMC Portal.

BIDMC's PatientSite website for patients continues to be the best secure choice for clinicians communicating by email with patients. Visit patientsite.org for more information.

Learn More



- · Information Security and Privacy (KIP) intranet
- IS Support Services intranet



While it is hard to believe that RSNA 2015 is already upon us, did you know that the services of a full-time Medical Editor are available to Radiology Faculty, Staff and Trainees? Donna Wolfe, MFA assists in editing, writing, proofreading and creation/preparation/assembly/submission of your scientific presentations - text, slides, posters, e-posters. Donna also creates the annual Program of BIDMC contributions at RSNA so please send her your acceptance e-mails to be included in the program guide.

Please allow ample time for poster production, particularly for RSNA

RSNA Nov. 29 - Dec. 4, 2015

Chicago, IL

STR Mar. 13-16, 2016

Scottsdale, AZ

ARRS Apr. 17-22, 2016

Los Angeles, CA

ASNR May 21-26, 2016

Washington, DC

ISMRM May 7-13, 2016

Singapore

SNMMI June 11-15, 2016

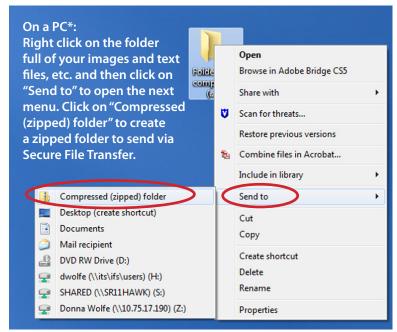
San Diego, CA

RSNA Nov. 27-Dec. 2, 2016

Chicago, IL

Speaking of posters...

Did you know that the best way to send multiple images and text files for any presentation is through our Secure File Transfer system? Place all your images and text files in one folder and compress (also known as "zip") it so that it can be sent via email. Log onto the BIDMC portal or the specific Secure File Transfer URL (see below in red) to upload the compressed folder. Using a zipped folder will ensure that your recipient will have all the files in one download!

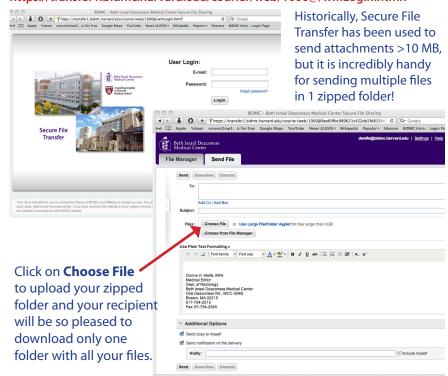


*On a Mac, right click on the folder and click on **Compress "Folder name"** to create a zipped folder.



BIDMC Secure File Transfer:

https://transfer1.bidmc.harvard.edu/courier/web/1000@/wmLogin.html?



KUDOS – Each month, we share the positive feedback we receive about staff members and ask you to join us in congratulating them; as always, we are especially proud to acknowledge an unprecedented constellation of staff for providing outstanding care and service!

Support Services -



Kamissa Rene has brought energy, passion and a customer centered approach to the daily workflow. She has been working diligently to improve our service delivery to customers Her focus and collaborative effort has been

instrumental in the continued reduction of the number of cases done without Prior Authorization attached to the patients visit.



Chriselle Calixto - Congratulations to Chriselle your work at the front desk and at the different Radiology reception sites achieved the highest quality of work of the past several months. We all have noticed the enthusiasm and extra hours

you put in the past several months. Thank you for your significant contribution to our division's success.



Adriano Carvalho - Based on this recent feedback from a patient I would like to recognize Adriano. "I wanted to send you a note to let you know what a great employee Adriano Carvalho is! Unfortunately, as you know, we had a lot

of experience with the healthcare system lately and I want to tell you that he was kind, considerate, and thorough. He was a breath of fresh air! You should be very proud of him"



Sheldene Hope-Spencer has been a model team player in the scheduling office, she has gone above and beyond to meet the needs of our customers. She recently transitioned to the core biopsy scheduling team and has demonstrated

a collaborative spirit which has enhanced morale and efficiency on the team and with the referring offices.

Breast Imaging



Paulette Bell - Special thanks for your participation during the recent "spot "mock Joint Commission visit and excellent work in being able to clearly articulate the procedure process.



Marissa Bradley - Partnering with the attending to brain storm and troubleshoot the logistics of performing a biopsy using previously untried technology. During the procedure you seamlessly and calmly provided excellent customer care and

sound technical knowledge to ensure that this procedure had a successful outcome for the patient experience and ensuring satisfactory sampling for tissue diagnosis, and shared the experience with your peers debriefing them on the events.



Elena Morozov - Special thanks for your continued commitment to our patients. During a recent event you just did the "right thing" going the extra distance to ensure satisfactory closure of the communication loop for a patient after an inconsistency

in the result notification was discovered. Using multiple resources, coordination of attending with the patient and continued "check in" with the involved parties all these actions were integral to the successful outcome. The patient was beyond grateful for your empathy and consideration of her heightened anxiety and noted that you even reached out to her at the end of the process to make sure that she had no outstanding questions. Job well done.



Elena Shimonov and Karen Dowie (not shown) - were referred to in a "Thank You" note received from a grateful patient who states that as part of the Breast imaging team involved in her recent same day diagnostic work-up visit were great and

attentive to her needs during the imaging and its hand offs. She attributes this speedy delivery of care to her being able to move into a favorable care plan option and a highly successful outcome.

MORE KUDOS -

MRI -



william Dunay - was recently recognized by staff for his efforts in going above and beyond to improve performance. He stayed late to train and recertify the night staff with POC. "Bill was thorough, thoughtful and supportive. I feel I've learned more from this session than in previous years".



Robert Beeman - was recognized for his continued effort, enthusiasm and dedication. "Robert is constantly asking to be involved in more projects within the department, staying involved and engaged in any staff improvement efforts".



Sue Nagle - was identified by staff and students for always having a positive attidute, caring, patience during training and being a great team member.

The following staff were recognized through the Customer Kiosk Survey or letters for an excellent patient expireince. They were recognized by patients the most for FY15:



Mike Plum - "Mike was very caring, professional and knowledgeable."



Ben Jenkins - "Ben was terrific! He was very helpful, kind and made me feel very comfortable during my MRI."



Kaitlyn MacVarish - "Kaitlyn made me feel comfortable. She was very professional and courteous, she made a stressfull procedure feel less stressful. I will tell all my friends how well I was treated."



Kristina Pelkola - "This was an excellent experience. I have been a patient here for over 50 yrs and have never been treated by such friendly and proficient staff. Kristina was great!"



Lisa Thornhill - "Lisa was great! she was very professional, she had a caring attitude and provided an exceptional patient experience."



Kirsten Gonsalves - "Kirsten was excellent-a perfect blend of professionalism and kindness. She kept me comfortable and checked in with me regularly."



Katrina Marshall - "Katrina has a caring attitude. She was professional, and put my needs first during a recent MR exam. An exceptional patient experience."

Updated Radiology Staff, Trainee & Technologist Posters

are available on InfoRadiology in pdf format for viewing, downloading, and printing.

New this year are **Administrative** and **Informatics** posters, with **Support Staff** coming soon!

Log in to the portal:

https://portal.bidmc.org/

Click on InfoRadiology → Staff Posters



Please contact Donna Wolfe or Michael Larson if you would like to update your or any other information on these posters

Updated Policy Notifications



Donna Hallett, BSc Director of Operations

As we announced in July, 2014 the following departmental policies, procedures, guidelines and directives (PPGD) have been added, edited or reviewed with no change. To ensure that you are up to date on the newest, most current information, please click on the link below to view the specific PPGD:



https://apps.bidmc.org/cms/dispManuals.asp

New / Updated Policies

MRI Device and Object Screening

- New policy as recommended by ACR

RAD-85 Personnel Response during and after a controlled or uncontrolled MRI magnet quench

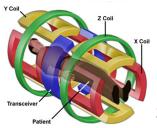
- Made changes in the policy statement to reflect cryogen leak and quench
- Updated information for emergency situations in MR as recommended by ACR
- Combined magnet quench and cryogen leakage policy versus having two separate policies

RAD-58 Use of IV contrast for CT and MR imaging

 Policy Statement reworded to add information on a physician response to any adverse event post contrast administration as recommended by ACR

RAD-97 Job Shadow Observations in the Radiology Setting

- provide guidelines for Job Shadow observations in the Radiology department.
 - 1) An individual may be allowed in the Radiology areas for the purposes of job shadowing for technical clinical observation.
 - 2) The Job Shadow individual will not be allowed to observe without approval of a Radiology Manager, or Clinical Instructor.
 - 3) A Job Shadow individual can never participate in direct patient care.



Residents & Fellows

MRI Physics Course

Patient 2015-2016 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 formation 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 August 5th.

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.

Contact Aaron Grant, PhD: 7-3265

Remaining TOPICS

October 7: Accelerated imaging. Parallel

imaging and compressed sensing.

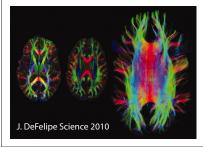
October 14: Diffusion-weighted imaging and DTI

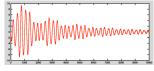
in neuro applications.

October 21: Arterial spin labeling in the brain

and body.

November 4: Artifacts and troubleshooting.





2015 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 2014 and paper publication in 2015; and 2) doi addresses are only included until citations are updated with hard copy page citations.

<u>Acord M</u>, Shaikh R. Predictors of diagnostic success in image-guided pediatric soft-tissue biopsies. Pediatr Radiol. 2015 May 10. PMID: 25958250.

Agarwal MD, **Levenson RB**, **Siewert B**, Camacho MA, **Raptopoulos V**. Limited added utility of performing follow-up contrast-enhanced CT in patients undergoing initial non-enhanced CT for evaluation of flank pain in the emergency department. Emerg Radiol. 2015 Apr;22(2):109-15. Epub 2014 Aug 1. PMID: 25082439.

Ahmed M, <u>Kumar G</u>, Navarro G, Wang Y, Gourevitch S, Moussa MH, Rozenblum N, Levchenko T, Galun E, Torchilin VP, **Goldberg SN**. Systemic siRNA Nanoparticle-Based Drugs Combined with Radiofrequency Ablation for Cancer Therapy. PLoS One. 2015 Jul 8;10(7):e0128910. doi: 10.1371/journal.pone.0128910. eCollection 2015. PMID: 26154425; PMCID: PMC4495977.

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. 2015 Sep 29:150080. PMID: 26418615.

Alkalay RN, **Burstein D**, Westin CF, Meier D, **Hackney DB**. MR diffusion is sensitive to mechanical loading in human intervertebral disks ex vivo. J Magn Reson Imaging. 2015 Mar;41(3):654-64. Epub 2014 Jun 3. PMID: 24889510.

Alkalay RN, von Stechow D, **Hackney DB**. Augmentation of failed human vertebrae with critical un-contained lytic defect restores their structural competence under functional loading: An experimental study. Clin Biomech (Bristol, Avon). 2015 Mar 28. pii: S0268-0033(15)00100-X. doi: 10.1016/j.clinbiomech.2015.03.024. PMID: 25912639.

Alessandrino F, Ivanovic AM, Yee EU, Radulovic D, Souza D, **Mortele KJ**. MDCT and MRI of the ampulla of Vater (part I): technique optimization, normal anatomy, and epithelial neoplasms. Abdom Imaging. 2015 Aug 26. PMID: 26306515.

Alessandrino F, Souza D, Ivanovic AM, Radulovic D, Yee EU, **Mortele KJ**. MDCT and MRI of the ampulla of Vater (part II): non-epithelial neoplasms, benign ampullary disorders, and pitfalls. Abdom Imaging. 2015 Aug 26. PMID: 26306516.

Alessandrino F, Millo N, Yee EU, **Mortelé KJ**. The "peripheral washout sign" in focal hepatic lesions: not always an MRI sign of malignancy. Clin Imaging. 2015 Sep-Oct;39(5):923-7. PMID: 25951769.

American College of Radiology (ACR); Society for Pediatric Radiology (SPR); Society of Radiologists in Ultrasound (SRU); American Institute of Ultrasound in Medicine (AIUM). AIUM practice guideline for the performance of an ultrasound examination of solid-organ transplants. J Ultrasound Med. 2014 Jul;33(7):1309-20. PMID: 24958421. [Sun MR, Collaborator]

Arnason JE, Luptakova K, Rosenblatt J, Tzachanis D, Avigan D, Zwicker JI, Levine J, Kim M, **Parker JA**, Grant B, Joyce RM. Yttrium-90 ibritumomab tiuxetan followed by rituximab maintenance as treatment for patients with diffuse large B-cell lymphoma are not candidates for autologous stem cell transplant. Acta Haematol. 2015;133(4):347-53. PMID: 25677780.

Avadhani R, Fowler K, Barbato C, Thomas S, Wong W, Paul C, Aksakal M, **Hauser TH**, Weinger K, Goldfine AB. Glycemia and cognitive function in metabolic syndrome and coronary heart disease. Am J Med. 2015 Jan;128(1):46-55. Epub 2014 Sep 16. PMID: 25220612; PMCID: PMC4306431.

Bae GH, Nambudiri VE, Bach DQ, Danziger J, Faulkner-Jones B, **McMahon C**, Huang SJ. Rapidly Progressive Nonuremic Calciphylaxis in Setting of Warfarin. Am J Med. 2015 Jul 8. pii: S0002-9343(15)00569-0. doi: 10.1016/j.amjmed.2015.05.049. PMID: 26164564.

Barr RG, Ferraioli G, Palmeri ML, Goodman ZD, Garcia-Tsao G, Rubin J, Garra B, Myers RP, Wilson SR, Rubens D, **Levine D**. Elastography Assessment of Liver Fibrosis: Society of Radiologists in Ultrasound Consensus Conference Statement. Radiology. 2015 Sep;276(3):845-61. PMID: 26079489.

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**, Holbrook S, Graham MM, Testanera G, Hoekstra OS, Zijlstra J, Visser E, Hoekstra CJ, Pruim J, Willemsen A, Arends B, Kotzerke J, Bockisch A, Beyer T, Chiti A, Krause BJ. FDG PET/CT: EANM procedure guidelines for tumour imaging: version 2.0. Eur J Nucl Med Mol Imaging. 2015 Feb;42(2):328-54. Epub 2014 Dec 2. PMID: 25452219; PMCID: PMC4315529.

Boiselle PM. Celebrating 30 years of the journal of thoracic imaging. J Thorac Imaging. 2015 Jan;30(1):1. doi: 10.1097/RTI.000000000000129. PMID: 25525776.

Boiselle PM, Bardo DM, Rubin GD, Tack D. Expert Opinion: Is there Still a Role for Filtered-back Projection Reconstruction in Cardiothoracic CT? J Thorac Imaging. 2015 Jul;30(4):219. doi:10.1097/RTI.000000000000163. PMID: 26057436.

Boiselle PM, Choe YH, Leipsic J, Pugliese F, Schoepf UJ, Vliegenthart R. Expert Opinion: How and When to Perform CT Myocardial Perfusion Imaging. J Thorac Imaging. 2015 May;30(3):167-8. PMID: 25844977.

Boiselle PM, Ravenel JG, White CS. Current practices for lung cancer screening-reply. JAMA Intern Med. 2015 Feb 1;175(2):317-8. doi: 10.1001/jamainternmed.2014.6988. PMID: 25642679.

Boiselle PM, Reddy GP. Reviewer awards and acknowledgements editors' recognition awards for distinction in reviewing in 2014. J Thorac Imaging. 2015 Jan;30(1):14. PMID: 25525779.

Brook OR, Beddy P, Pahade J, Couto C, Brennan I, Patel P, **Brook A**, Pedrosa I. Delayed Growth in Incidental Pancreatic Cysts: Are the Current American College of Radiology Recommendations for Follow-up Appropriate? Radiology. 2015 Sep 4:140972. PMID: 26348231.

Brook OR, Brook A, Vollmer CM, Kent TS, Sanchez N, Pedrosa I. Structured reporting of multiphasic CT for pancreatic cancer: potential effect on staging and surgical planning. Radiology. 2015 Feb;274(2):464-72. Epub 2014 Oct 3. PMID: 25286323.

Brook OR, Romero J, Brook A, Kruskal JB, Yam CS, Levine D. The complementary nature of peer review and quality assurance data collection. Radiology. 2015 Jan;274(1):221-9. Epub 2014 Sep 1. PMID: 25188432.

Brook OR, Thornton E, Mendiratta-Lala M, Mahadevan A, **Raptopoulos V**, **Brook A**, Najarian R, **Sheiman R**, **Siewert B**. CT Imaging Findings after Stereotactic Radiotherapy for Liver Tumors. Gastroenterol Res Pract. 2015;2015:126245. doi: 10.1155/2015/126245. PMID: 26221135; PMCID: PMC4499630.

Butros SR, McCarthy CJ, Karaosmanoğlu AD, **Shenoy-Bhangle AS**, Arellano RS. Feasibility and effectiveness of image-guided percutaneous biopsy of the urinary bladder. Abdom Imaging. 2015 Aug;40(6):1838-42. PMID: 25875861.

Cavallari M, Hshieh TT, Guttmann CR, Ngo LH, Meier DS, Schmitt EM, Marcantonio ER, Jones RN, Kosar CM, Fong TG, Press D, Inouye SK, **Alsop DC**; SAGES Study Group. Brain atrophy and white-matter hyperintensities are not significantly associated with incidence and severity of postoperative delirium in older persons without dementia. Neurobiol Aging. 2015 Jun;36(6):2122-9. PMID: 25824618; PMCID: PMC4433616.

Chadashvili T, Ghosh E, Fein-Zachary V, Mehta TS, Venkataraman S, Dialani V, Slanetz PJ. Nonmass enhancement on breast MRI: review of patterns with radiologic-pathologic correlation and discussion of management. AJR Am J Roentgenol. 2015 Jan;204(1):219-27. Review. PMID: 25539260.

Chan RH, Maron BJ, Olivotto I, Assenza GE, Haas TS, Lesser JR, Gruner C, Crean AM, Rakowski H, Rowin E, Udelson J, Lombardi M, Tomberli B, Spirito P, Formisano F, Marra MP, Biagini E, Autore C, **Manning WJ**, Appelbaum E, Roberts WC, Basso C, Maron MS. Significance of Late Gadolinium Enhancement at Right Ventricular Attachment to Ventricular Septum in Patients With Hypertrophic Cardiomyopathy. Am J Cardiol. 2015 Aug 1;116(3):436-41. PMID: 26026863.

Chan RH, Shaw JL, **Hauser TH**, Markson LJ, **Manning WJ.** Guideline Adherence for Echocardiographic Follow-Up in Outpatients with at Least Moderate Valvular Disease. J Am Soc Echocardiogr. 2015 Apr 3. pii: S0894-7317(15)00143-1. doi: 10.1016/j.echo.2015.03.001. PMID: 25843026.

<u>Ciet P</u>, **Litmanovich DE**. MR safety issues particular to women. Magn Reson Imaging Clin N Am. 2015 Feb;23(1):59-67. Review. PMID: 25476674.

Clavelle K, King D, Bazzi AR, **Fein-Zachary V**, Potter J. Breast Cancer Risk in Sexual Minority Women during Routine Screening at an Urban LGBT Health Center. Womens Health Issues. 2015 Jun 6. pii: S1049-3867(15)00039-0. doi: 10.1016/j.whi.2015.03.014. PMID: 26060123.

Cypess AM, Weiner LS, Roberts-Toler C, Franquet E*, Kessler SH, Kahn PA, English J, Chatman K, Trauger SA, Doria A, **Kolodny GM**. Activation of Human Brown Adipose Tissue by a β 3-Adrenergic Receptor Agonist. Cell Metab. 2015 Jan 6;21(1):33-8. PMID: 25565203; PMCID: PMC4298351. *Note name correction

Danziger J, <u>Thummalakunta L</u>, Nelson R, **Faintuch S**. The risk of acute kidney injury with transjugular intrahepatic portosystemic shunts. J Nephrol. 2015 Mar 10. PMID: 25753449.

Dialani V, <u>Chadashvili T</u>, **Slanetz PJ**. Role of Imaging in Neoadjuvant Therapy for Breast Cancer. Ann Surg Oncol. 2015 May;22(5):1416-24. PMID: 25727555.

Dodd GD 3rd, Allen B Jr, Birzniek D, Boland GW, Brink JA, Dreyer KJ, Khandheria P, **Kruskal JB**, Ricci P, Seibert JA, Zane R. Reengineering the radiology enterprise: a summary of the 2014 intersociety committee summer conference. J Am Coll Radiol. 2015 Mar;12(3):228-34. PMID: 25743920.

Donovan LM, Kress WL, Strnad LC, **Sarwar A**, Patwardhan V, Piatkowski G, Tapper EB, Afdhal NH. Low likelihood of intracranial hemorrhage in patients with cirrhosis and altered mental status. Clin Gastroenterol Hepatol. 2015 Jan;13(1):165-9. Epub 2014 Jun 4. PMID: 24907500.

DuBrock HM, **Bankier AA**, <u>Silva M</u>, **Litmanovich DE**, Curry MP, Washko GR. Pulmonary Vessel Cross-sectional Area before and after Liver Transplantation: Quantification with Computed Tomography. Acad Radiol. 2015 Jun;22(6):752-9. PMID: 25770631.

<u>Dunn DP</u>, Kelsey NR, **Lee KS**, **Smith MP**, **Mortele KJ**. Non-oncologic applications of diffusion-weighted imaging (DWI) in the genitourinary system. Abdom Imaging. 2015 Aug;40(6):1645-54. PMID: 26109511.

<u>Dunn DP</u>, **Lee KS**, **Smith MP**, **Mortele KJ**. Nononcologic applications of diffusion-weighted imaging in the gastrointestinal system. AJR Am J Roentgenol. 2015 Apr;204(4):758-67. Review. PMID: 25794064.

Dunnick NR, **Kressel HY**. Manuscript reviewers: a note of thanks. Radiology. 2015 Apr;275(1):310. PMID: 25799342.

Foppa M, Rao SN, **Manning WJ**. Doppler echocardiography in the evaluation of a heart murmur. JAMA. 2015 Mar 10;313(10):1050-1. PMID: 25756442.

Freer PE, **Slanetz PJ**, Haas JS, Tung NM, Hughes KS, Armstrong K, Semine AA, Troyan SL, Birdwell RL. Breast cancer screening in the era of density notification legislation: summary of 2014 Massachusetts experience and suggestion of an evidence-based management algorithm by multidisciplinary expert panel. Breast Cancer Res Treat. 2015 Sep;153(2):455-64. PMID: 26290416.

Gareen IF, **Siewert B**, Vanness DJ, Herman B, Johnson CD, Gatsonis C. Patient willingness for repeat screening and preference for CT colonography and optical colonoscopy in ACRIN 6664: the National CT Colonography trial. Patient Prefer Adherence. 2015 Jul 23;9:1043-1051. eCollection 2015. PMID: 26229451.

George RT, Mehra VC, Chen MY, Kitagawa K, Arbab-Zadeh A, Miller JM, Matheson MB, Vavere AL, Kofoed KF, Rochitte CE, Dewey M, Yaw TS, Niinuma H, Brenner W, Cox C, **Clouse ME**, Lima JA, Di Carli M. Myocardial CT Perfusion Imaging and SPECT for the Diagnosis of Coronary Artery Disease: A Head-to-Head Comparison from the CORE320 Multicenter Diagnostic Performance Study. Radiology. 2015 Feb;274(2):626. PMID: 25625749.

Gillams A, **Goldberg N**, **Ahmed M**, Bale R, Breen D, Callstrom M, Chen MH, Choi BI, de Baere T, Dupuy D, Gangi A, Gervais D, Helmberger T, Jung EM, Lee F, Lencioni R, Liang P, Livraghi T, Lu D, Meloni F, Pereira P, Piscaglia F, Rhim H, Salem R, Sofocleous C, Solomon SB, Soulen M, Tanaka M, Vogl T, Wood B, Solbiati L. Thermal ablation of colorectal liver metastases: a position paper by an international panel of ablation experts, the interventional oncology sans frontières meeting 2013. Eur Radiol. 2015 May 22. PMID: 25994193.

Grunwald D, Tapper EB, Jiang ZG, **Ahmed M**, Malik R. A Standardized Assessment of Functional Disability Predicts 1-year Mortality in Patients Undergoing Transjugular Intrahepatic Portosystemic Shunt (TIPS) for Refractory Ascites. J Clin Gastroenterol. 2015 May 6. PMID: 25984975.

Guermazi A, **Kressel HY.** Getting published in Radiology: A Deputy Editor's perspective. Jpn J Radiol. 2015 Aug 5. PMID: 26242773.

<u>Ha D</u>, **Dialani V**, **Mehta TS**, Keefe W, Iuanow E, **Slanetz PJ**. Mucocele-like lesions in the breast diagnosed with percutaneous biopsy: is surgical excision necessary? AJR Am J Roentgenol. 2015 Jan;204(1):204-10. PMID: 25539258.

Hall FM. Upper extremity trauma radiographs. AJR Am J Roentgenol. 2015 Mar;204(3):W374. PMID: 25714326.

Hall FM. IT Challenges for the Aging Radiologist: Practice Corner. Radiographics. 2015 Mar-Apr;35(2):650-1. PMID: 25763745.

Hall FM. Guidelines for Management of Thyroid Nodules. J Am Coll Radiol. 2015 Jul;12(7):655-6. PMID: 26143563.

Hauser TH, Essebag V, Baldessin F, McClennen S, Yeon SB, **Manning WJ**, Josephson ME. Prognostic value of pulmonary vein size in prediction of atrial fibrillation recurrence after pulmonary vein isolation: a cardiovascular magnetic resonance study. J Cardiovasc Magn Reson. 2015 Jun 18;17:49. PMID: 26082185.

<u>Heidinger BH</u>, <u>Occhipinti M</u>, **Eisenberg RL**, **Bankier AA**. Imaging of Large Airways Disorders. AJR Am J Roentgenol. 2015 Jul;205(1):41-56. Review. PMID: 26102379.

<u>Ho ML</u>, Juliano A, **Eisenberg RL**, **Moonis G**. Anatomy and pathology of the facial nerve. AJR Am J Roentgenol. 2015 Jun;204(6):W612-9. PMID: 26001250.

Humphrey PE, <u>Alessandrino F</u>, Bellizzi AM, **Mortele KJ**. Non-hyperfunctioning pancreatic endocrine tumors: multimodality imaging features with histopathological correlation. Abdom Imaging. 2015 Oct;40(7):2398-410. PMID: 25989932.

Isaac L, Main KL, **Soman S**, Gotlib IH, Furst AJ, Kinoshita LM, Fairchild JK, Yesavage JA, Ashford JW, Bayley PJ, Adamson MM. The impact of depression on Veterans with PTSD and traumatic brain injury: A diffusion tensor imaging study. Biol Psychol. 2015 Jan 3;105C:20-28. PMID: 25559772.

Jefferson AL, Beiser AS, Himali JJ, Seshadri S, O'Donnell CJ, **Manning WJ**, Wolf PA, Au R, Benjamin EJ. Low cardiac index is associated with incident dementia and Alzheimer disease: the framingham heart study. Circulation. 2015 Apr 14;131(15):1333-9. PMID: 25700178; PMCID: PMC4398627.

Jerome SD, Farrell MB, Godiwala T, Heller GV, Bezold LI, Choi JY, Cockroft KM, Gornik HL, Katanick SL, **Manning WJ**. Facility perception of nuclear cardiology accreditation: Results of an Intersocietal Accreditation Commission (IAC) survey. J Nucl Cardiol. 2015 Jun;22(3):496-503. Epub 2014 Oct 29. PMID: 25352528.

<u>Johnson M</u>, Kent MS, Khwaja K, **Faintuch S**. Hepatic Capsular Avulsion After Video-Assisted Thoracic Biopsy of the Lung. Ann Thorac Surg. 2015 Mar;99(3):1069-71. PMID: 25742834.

Kelly AM, **Slanetz PJ**. Radiology Education: Creating Tomorrow's Radiologists with Yesterday's Budgets! Acad Radiol. 2015 Aug 24. pii: S1076-6332(15)00326-8. doi: 10.1016/j.acra.2015.08.001. PMID: 26314497.

Kelly AM, **Slanetz PJ**. Radiology Education: Creating Tomorrow's Radiologists with Yesterday's Budgets! Acad Radiol. 2015 Oct;22(10):1211-3. PMID: 26314497.

Kisilevzky N, **Faintuch S**. Is prostatic artery embolization similar to uterine artery embolization? Cardiovasc Intervent Radiol. 2015 Feb;38(1):247-50. Epub 2014 Mar 20. PMID: 24647656.

Kressel HY. New for 2015. Radiology. 2015 Jan;274(1):7-8. PMID: 25531471.

Kressel HY. Radiology editorial board 2015. Radiology. 2015 Jan;274(1):9. PMID: 25531472.

Kressel HY. Editor's Recognition Awards. Radiology. 2015 Jan;274(1):10-1. PMID: 25531473.

Kressel HY, **Levine D**. Introducing the "golden oldies" of radiology. Radiology. 2015 Jan;274(1):4-6. PMID: 25531470.

Kruskal J, Eisenberg R. Focused Professional Performance Evaluation of a Radiologist-A Centers for Medicare and Medicaid Services and Joint Commission Requirement. Curr Probl Diagn Radiol. 2015 Aug 14. pii: S0363-0188(15)00132-2. doi: 10.1067/j.cpradiol.2015.08.006. PMID: 26365574.

Kruskal JB, Sarwar A. An introduction to basic quality metrics for practicing radiologists. J Am Coll Radiol. 2015 Apr;12(4):330-2. PMID: 25745829.

Kung JW, **Slanetz PJ**, Huang GC, **Eisenberg RL**. Reflective Practice: Assessing Its Effectiveness to Teach Professionalism in a Radiology Residency. Acad Radiol. 2015 Oct;22(10):1280-6. PMID: 25863796.

Lake-Bakaar G, **Ahmed M**, Evenson A, Bonder A, **Faintuch S**, Sundaram V. Hagen-Poiseuille's law: The link between cirrhosis, liver stiffness, portal hypertension and hepatic decompensation. World J Hepatol. 2015 Jan 27;7(1):28-32. Review. PMID: 25624993, PMCID: PMC4295190.

Larson DB, **Kruskal JB**, Krecke KN, Donnelly LF. Key Concepts of Patient Safety in Radiology. Radiographics. 2015 Sep 4:140277. [Epub ahead of print] PMID: 26334571.

Lavelle LP, McEvoy SH, Ni Mhurchu E, Gibney RG, **McMahon CJ**, Heffernan EJ, Malone DE. Cystic Fibrosis below the Diaphragm: Abdominal Findings in Adult Patients. Radiographics. 2015 Apr 24:140110. PMID: 25910185.

Lee CS, Murphy DJ, **McMahon C**, Nolan B, Cullen G, Mulcahy H, Sheahan K, Barnes E, Fennelly D, Ryan EJ, Doherty GA. Visceral Adiposity is a Risk Factor for Poor Prognosis in Colorectal Cancer Patients Receiving Adjuvant Chemotherapy. J Gastrointest Cancer. 2015 Apr 2. PMID: 25832480.

Lee CS, Wadhwa V, **Kruskal JB**, Larson DB. Conducting a Successful Practice Quality Improvement Project for American Board of Radiology Certification. Radiographics. 2015 Sep 4:150024. [Epub ahead of print] PMID: 26334572.

Levine D, Kressel HY. Radiology's Legacy: Rummaging through the Attic. Radiology. 2015 Jan;274(1):20-8. PMID: 25531477.

Levine YC, Matos J, Rosenberg MA, **Manning WJ**, Josephson ME, Buxton AE. Left Ventricular Sphericity Independently Predicts Appropriate ICD Therapy. Heart Rhythm. 2015 Sep 23. pii: S1547-5271(15)01192-3. doi: 10.1016/j.hrthm.2015.09.022. PMID: 26409099.

<u>Leylek AM</u>, **Kane RA**. Juvenile granulosa cell tumor of the testis. Ultrasound Q. 2014 Sep;30(3):219-20. PMID: 25148497.

<u>Lin YC</u>, **Mhuircheartaigh JN***, Lamb J, **Kung JW**, Yablon CM, **Wu JS**. Imaging of adult flatfoot: correlation of radiographic measurements with MRI. AJR Am J Roentgenol. 2015 Feb;204(2):354-9. PMID: 25615758. [*Ní Mhuircheartaigh JN]

Lynch DA, Austin JH, Hogg JC, Grenier PA, Kauczor HU, **Bankier AA**, Barr RG, Colby TV, Galvin JR, Gevenois PA, Coxson HO, Hoffman EA, Newell JD Jr, Pistolesi M, Silverman EK, Crapo JD. CT-Definable Subtypes of Chronic Obstructive Pulmonary Disease: A Statement of the Fleischner Society. Radiology. 2015 Oct;277(1):192-205. PMID: 25961632.

Magalhães TA, Kishi S, George RT, Arbab-Zadeh A, Vavere AL, Cox C, Matheson MB, Miller JM, Brinker J, Di Carli M, Rybicki FJ, Rochitte CE, **Clouse ME**, Lima JA. Combined coronary angiography and myocardial perfusion by computed tomography in the identification of flow-limiting stenosis - The CORE320 study: An integrated analysis of CT coronary angiography and myocardial perfusion. J Cardiovasc Comput Tomogr. 2015 Sep-Oct;9(5):438-45. PMID: 25977111.

Mainiero MB, Lourenco AP, Barke LD, Argus AD, Bailey L, Carkaci S, D'Orsi C, Green ED, Holley SO, Jokich PM, Lee SJ, Mahoney MC, Moy L, **Slanetz PJ**, Trikha S, Yepes MM, Newell MS. ACR Appropriateness Criteria Evaluation of the Symptomatic Male Breast. J Am Coll Radiol. 2015 Jul;12(7):678-82. PMID: 26001306.

Manning WJ, Farrell MB, Bezold LI, Choi JY, Cockroft KM, Gornik HL, Jerome SD, Katanick SL, Heller GV. How Do Noninvasive Imaging Facilities Perceive the Accreditation Process? Results of an Intersocietal Accreditation Commission Survey. Clin Cardiol. 2015 Jul;38(7):401-6. PMID: 26072711.

Margolis NE, Mackey RA, **Sarwar A**, Fintelmann FJ. 15 Practical Ways to Add Value in Daily Practice: An Imaging 3.0 Primer for Trainees. J Am Coll Radiol. 2015 Jun;12(6):638-40. PMID: 26047405.

Mauri G, Cova L, De Beni S, Ierace T, Tondolo T, Cerri A, **Goldberg SN**, Solbiati L. Real-Time US-CT/MRI Image Fusion for Guidance of Thermal Ablation of Liver Tumors Undetectable with US: Results in 295 Cases. Cardiovasc Intervent Radiol. 2015 Feb;38(1):143-51. Epub 2014 May 8. PMID: 24806953.

McEvoy SH, Lavelle LP, Purcell YM, Quinlan DM, Skehan SJ, Collins CD, **McMahon CJ.** Should abdominal sequences be included in prostate cancer MR staging studies? Eur J Radiol. 2015 Jun;84(6):1019-22. PMID: 25795196.

Nazarian A, Entezari V, Villa-Camacho JC, Zurakowski D, Katz JN, **Hochman M**, Baldini EH, Vartanians V, Rosen MP, Gebhardt MC, Terek RM, Damron TA, Yaszemski MJ, Snyder BD. Does CT-based Rigidity Analysis Influence Clinical Decision-making in Simulations of Metastatic Bone Disease? Clin Orthop Relat Res. 2015 May 29. PMID: 26022114.

Nemec SF, Molinari F, Dufresne V, Gosset N, Silva M, **Bankier AA**. Comparison of four software packages for CT lung volumetry in healthy individuals. Eur Radiol. 2015 Jun;25(6):1588-97. PMID: 25576226.

Occhipinti M, Heidinger BH, Franquet E, **Eisenberg RL**, **Bankier AA**. Imaging the posterior mediastinum: a multimodality approach. Diagn Interv Radiol. 2015 Jul-Aug;21(4):293-306. PMID: 25993732; PMCID: PMC4498424.

Ong EM, Ghazi LJ, Schwartz DA, **Mortelé KJ**. Guidelines for imaging of Crohn's perianal fistulizing disease. Inflamm Bowel Dis. 2015 Apr;21(4):731-6. PMID: 25751067.

Parker JA. ABNM International In-Training Examination Program. J Nucl Med. 2015 Feb;56(2):10N. PMID: 25645220.

Rastegar N, Matteoni-Athayde LG, Eng J, Takahashi N, Tamm EP, **Mortele KJ**, Syngal S, Margolis D, Lennon AM, Wolfgang CL, Fishman EK, Hruban RH, Goggins M, Canto MI, Kamel IR. Incremental value of secretin-enhanced magnetic resonance cholangiopancreatography in detecting ductal communication in a population with high prevalence of small pancreatic cysts. Eur J Radiol. 2015 Apr;84(4):575-80. PMID: 25619503.

Redmond CE, Nason GJ, Kelly ME, **McMahon C**, Cantwell CP, Quinlan DM. Transrectal Ultrasound Guided Biopsy of the Prostate: Is the Information Accessible, Usable, Reliable and Readable? Curr Urol. 2015 May;8(1):32-7. PMID: 26195961.

Ridge CA, **Litmanovich DE**. Acute aortic syndromes: current status. J Thorac Imaging. 2015 May;30(3):193-201. PMID: 25851925.

Roujol S, Basha TA, Weingärtner S, Akçakaya M, Berg S, **Manning WJ**, Nezafat R. Impact of motion correction on reproducibility and spatial variability of quantitative myocardial T2 mapping. J Cardiovasc Magn Reson. 2015 Jun 12;17:46. PMID: 26067275; PMCID: PMC4465156.

Roujol S, Foppa M, Weingärtner S, **Manning WJ**, Nezafat R. Adaptive registration of varying contrast-weighted images for improved tissue characterization (ARCTIC): Application to T1 mapping. Magn Reson Med. 2015 Apr;73(4):1469-82. Epub 2014 May 5. PMID: 24798588; PMCID: PMC4221574.

Rozenblum N, Zeira E, Bulvik B, Gourevitch S, Yotvat H, Galun E, **Goldberg SN**. Radiofrequency Ablation: Inflammatory Changes in the Periablative Zone Can Induce Global Organ Effects, including Liver Regeneration. Radiology. 2015 Aug;276(2):416-25. PMID: 25822472.

Rozenblum N, Zeira E, Scaiewicz V, Bulvik B, Gourevitch S, Yotvat H, Galun E, **Goldberg SN**. Oncogenesis: An "Off-Target" Effect of Radiofrequency Ablation. Radiology. 2015 Aug;276(2):426-32. PMID: 26203709.

Rybicki FJ, Mather RT, Kumamaru KK, Brinker J, Chen MY, Cox C, Matheson MB, Dewey M, DiCarli MF, Miller JM, Geleijns J, George RT, Paul N, Texter J, Vavere A, Yaw TS, Lima JA, **Clouse ME**. Comprehensive assessment of radiation dose estimates for the CORE320 study. AJR Am J Roentgenol. 2015 Jan;204(1):W27-36. PMID: 25539270.

Sarwar A, Ahn E, **Brennan I**, **Brook OR**, **Faintuch S**, Malik R, Khwaja K, **Ahmed M**. Utility of liver biopsy in predicting clinical outcomes after percutaneous angioplasty for hepatic venous obstruction in liver transplant patients. World J Hepatol. 2015 Jul 18;7(14):1884-93. PMID: 26207170. PMCID: PMC4506946

Sarwar A, Boland G, **Monks A**, **Kruskal JB**. Metrics for Radiologists in the Era of Value-based Health Care Delivery. Radiographics. 2015 May-Jun;35(3):866-76. PMID: 25839737.

Schwartz DA, Ghazi LJ, Regueiro M, Fichera A, Zoccali M, Ong EM, **Mortelé KJ**. Guidelines for the multidisciplinary management of Crohn's perianal fistulas: summary statement. Inflamm Bowel Dis. 2015 Apr;21(4):723-30. PMID: 25751066.

<u>Senapati GM</u>, **Sheiman RG**, Almashat S, Goldsmith JD. Pleomorphic Liposarcoma of the Inferior Vena Cava: AIRP Best Cases in Radiologic-Pathologic Correlation. Radiographics. 2015 Jan-Feb;35(1):269-74. PMID: 25590403.

Sharma RK, Arbab-Zadeh A, Kishi S, Chen MY, Magalhães TA, George RT, Dewey M, Rybicki FJ, Kofoed KF, de Roos A, Tan SY, Matheson M, Vavere A, Cox C, **Clouse ME**, Miller JM, Brinker JA, Arai AE, Di Carli MF, Rochitte CE, Lima JA. Incremental diagnostic accuracy of computed tomography myocardial perfusion imaging over coronary angiography stratified by pre-test probability of coronary artery disease and severity of coronary artery calcification: The CORE320 study. Int J Cardiol. 2015 May 19;201:570-577. PMID: 26334382.

<u>Sharpe RE Jr</u>, **Mehta TS**, **Eisenberg RL**, **Kruskal JB**. Strategic planning and radiology practice management in the new health care environment. adiographics. 2015 Jan-Feb;35(1):239-53. PMID: 25590401.

Shenoy-Bhangle AS, Nimkin K, Aranson T, Gee MS. Value of diffusion-weighted imaging when added to magnetic resonance enterographic evaluation of Crohn disease in children. Pediatr Radiol. 2015 Aug 4. PMID: 26238966.

Shklyar I, Geisbush TR, Mijialovic AS, Pasternak A, Darras BT, **Wu JS**, Rutkove SB, Zaidman CM. Quantitative muscle ultrasound in Duchenne muscular dystrophy: A comparison of techniques. Muscle Nerve. 2015 Feb;51(2):207-13. doi: 10.1002/mus.24296. Epub 2014 Dec 23. PMID: 24862337; PMCID: PMC4241391.

<u>Silva M</u>, **Bankier AA**, Centra F, Colombi D, Ampollini L, Carbognani P, Sverzellati N. Longitudinal evolution of incidentally detected solitary pure ground-glass nodules on CT: relation to clinical metrics. Diagn Interv Radiol. 2015 Sep-Oct;21(5):385-90. PMID: 26140697; PMCID: PMC4557321.

Slanetz PJ, Freer PE, Birdwell RL. Breast-density legislation--practical considerations. N Engl J Med. 2015 Feb 12;372(7):593-5. PMID: 25671249.