Radical Views... from the Department of Radiology

May 2010

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Mon	Tues	Wed	Thurs	Fri
3 7:30-9:00 Board Review (Kruskal) 3:00-4:00 ED section meeting (monthly) [ED annex, WCC] call Sheila Blalock 4-2506	4 7:30-8:15 (Reddy) 8:15-9:00 (Reddy) 1:00-2:00 MRI meeting (Weekly) [TCC-484]	5 7:30-8:15 Chest Cases (O'Donnell) 8:15-9:00 Chest Cases (TBA) Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 Thoracic Imaging, GI Oncology/GU Oncology 3:00-4:00 Mammo [TCC-484]	6 7:30 - 8:15 Boards Cases (Wu) 8:15-9:15 Boards Cases (Suzanne Long, Fellow) Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK	7 7:30 - 8:00 Bone Marrow Imaging of the Extremities (Kung, MSK Fellow) 8:00-9:00 Grand Rounds: MR Imaging of the Elbow in Baseball Pitchers (Hugue Ouellette, MGH) 12:00-1:00 Resident Case Conference (Teich)
10 7:30-9:00 IR Board Review (Ahmed) 8:15-9:00 Board Review (TBA)	11 7:30 - 8:15 US Board Review (Levine) 8:15-9:00 Board Review (TBA) 7:00 - 8:00 US meeting (WCC-304A Gallery) 10:30-11:30 Nuc Med meeting (GZ-103)	12 7:30 - 8:15 US Board Review (Mehta) 8:15-9:00 Nuc Med Cases (Hill)	13 7:30 - 8:15 Board Cases (Livingston- Neuro Fellow) 8:15 - 9:00 Board Cases (Hackney)	14 7:30 - 9:00 Chief Rounds 12:00-1:00 Resident Case Conference (Peri)
17 7:30-8:15 IR Board Review (Tyagi)	18 7:30 - 9:00 Breast Cases (Velez) 8:15-9:00 (Reddy) 8:00 - 9:00 IR meeting [West Recovery Rm]	19 7:30 - 8:15 Chest Cases (TBA) 8:15 - 9:00 Chest Cases (TBA)	20 7:30 - 8:15 Boards Cases (McMahon) 8:15-9:00 Boards Cases (Hochman)	21 7:30-8:00 Cardiac CT - A Practical Approach (0'Donnell, Thoracic Fellow) 8:00-9:00 Grand Rounds: Envisioned Information - Use and Misuse of Graphics in Medical Publications (Bankier) 12:00 - 1:00 Resident Case Conference (Bhadelia)
24 7:30 - 9:00 Board Review (Sun)	25 7:30 - 9:00 Breast Cases (Slanetz) 10:30-11:30 Nuc Med meeting (GZ-103) EVENT: 12 Noon Mentoring Program: Using Endnote [Kirstein Living Rm]	26 7:30 - 8:15 US Board Review (Levine) 8:15 - 9:00 Nuc Med Cases (Hill)	27 7:30 - 8:15 Neuro Conference (Appel) 8:15 - 9:00 Neuro Conference (Peri)	28 8:00-9:00 Grand Rounds: The Importance of Imaging in an Era of Personalized Medicine (R. Lenkinski) 12:00 - 1:00 Resident Case Conference (Hackney)
31 Memorial Day			changed to Wednesday, May 26, Shapiro Museum of Fine Arts, Boton, MA • Thurs	

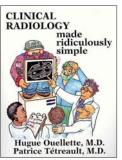
May GRAND ROUNDS: Visiting Professor

Hugue Ouellette, MD - MR Imaging of the Elbow in Baseball Pitchers

Friday, May 7 • 8:00 - 9:00 am, Sherman Auditorium

Following the 7:30-8:00 am Bread & Butter lecture, "Bone Marrow Imaging of the Extremities" presented by MSK Fellow, Dr. Justin Kung, **Dr. Hugue Ouellette** will present a timely lecture on **"MR Imaging of the Elbow in Baseball Pitchers"** at Grand Rounds on Friday, May 7th. Dr. Ouellette is Associate Director of the Diagnostic Radiology Residency Program, Director of the Musculoskeletal Radiology Residency Course and the Director of Education for Musculoskeletal Radiology at Massachusetts General Hospital. Dr. Ouellette graduated Magna cum laude in Anatomical Sciences from McGill University, Canada and earned his medical degree from the University of Ottowa. Our Grand Rounds speaker is clearly a man who is committed to

going to the source: He also has certificates in Tropical Medicine from the Universidad de Costa Rica, Spanish Language from the Universidad de Malaga, Spain, and German Language from Ruprecht-Karls-Universitat, Heidelberg, Germany. Dedicated to his specialty, he is the co-founder of the Lodwick Award, an international award and lecture designed to identify and teach new trends in musculoskeletal disease research. Dr. Ouellette has published not only on his on his specific grand rounds topic but also on other sport related imaging such as Imaging of the Throwing Athlete, Spectrum of shoulder injuries in the baseball pitcher, and rotator cuff cysts and tears. Most notably, he is the author of Clinical Radiology Made Ridiculously Simple, the bestselling radiology textbook according to Amazon.com. (He is also coauthor of Clinical Anatomy Made Ridiculously Simple and Orthopedics Made Ridiculously Simple.)



DEPARTMENTAL NEWS, AWARDS & HONORS

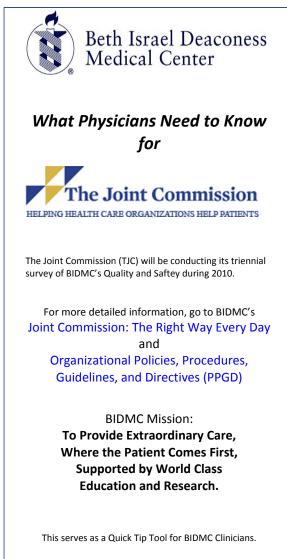


FROM THE CHIEF Jonathan B. Kruskal, MD, PhD

What Physicians Need to Know for JCAHO

In preparation for the coming JCAHO survey of Quality and Safety at BIDMC, Kathleen Murray of the Silverman Insititute, has put together a compact doublesided tip/reminder sheet that will fit nicely in your pocket and act as a guide for clinicians on the hot topics and surveyor "favorites". This and other reference sheets are available on line at http://home.caregroup.org/templatesnew/links/cat_out.asp?pageid=8754. I encourage staff members to download this booklet.

Jo Beth Israel Deaconess Medical Center	oint Commission - The Right Way Every Day				
Home Patient Care Environment of Care Emergency Management Organization Everyday Readiness Reference Materials					
Reference Materials					
The 2010 CMS-Joint Commission CrossWalk of Conditions and Standards					
Quick Tips					
The Right Way Every Day: Life Safety Edition					
The Right Way Every Day: Leadership Edition					
The Right Way Every Day: Patient Rights Edition					
The Right Way Every Day: Provision of Care Edition					
The Right Way Every Day: Medication Management Edition					
The Right Way Every Day: Emergency Managment Edition					
The Right Way Every Day: Infection Prevention					
Inpatient Question of The Day					
Inpatient Question of The Day Answer Key					
New Standards into Effect July 1, 2009					
CMS: Conditions of Participation Manual 2009					
What Physicians Need to Know for TJC - Trifold Brochure					



Prepared by Performance Assessment and Regulatory Compliance/Health Care Quality 4/2010

Congratulations Corrie Yablon

Please join Dr. Kruskal and me in congratulating Corrie Yablon on her appointment as Director of Musculoskeletal Ultrasound. Corrie has been working vigorously to develop a cutting-edge dedicated diagnostic and therapeutic musculoskeletal ultrasound service, with considerable success. As you probably know, she recently hosted an extremely well-received Radiology Grand Rounds session on musculoskeletal ultrasound, given by Dr. Lev Nazarian. Over the past year, Corrie has done a terrific job, taking the lead in developing our department's ability to provide superior clinical service in this area. As Director of Musculoskeletal Ultrasound, she will be working to develop and grow this exciting new opportunity for our department.

- Mary Hochman, Chief, Musculoskeletal Imaging

Congratulations to Priscilla Slanetz

Dr. Slanetz (and BU Colleague Johanne Dillon) received the AUR 2010 Whitley award in March, 2010 for their educational curriculum on evidence-based imaging (medical student radiology clerkship at BUSM). The Joseph E. and Nancy O. Whitley Award is a national annual award given by the Association of University Radiologists for the best medical eduation manuscript submitted to Academic Radiology. The project assessed the impact of teaching evidence-based imaging using the ACR Appropriateness Criteria to teach cost-effective utilization of technology. At BIDMC, Dr. Slanetz has modified the curriculum and teaches evidence-based imaging to the medical students in Dr. Lieberman's clerkship using some of the materials she created at Boston University.

Additionally, Dr. Slanetz has been inducted as a member of the HMS Academy of Medical Educators. Her appointment runs from January 2010 through December 2012.

Where in the world is Erica Gupta?

In case anyone was wondering, 2nd yr resident Erica is participating in the Introduction to Academic Radiology Program sponsored by RSNA/AUR/ARRS at this year's ARRS annual meeting in San Diego May 2-7. Erica was chosen to spend a week with other top residents to learn the importance of research in diagnostic radiology.

Medical Student Yi Li wins AIUM in San Diego, March 2010

Yi Li, HMS medical student working with Dr. Debbie Levine this year won the trainee research award at AIUM for her presentation: Ultrasound and MRI in fetuses with ventriculomegaly: Can cortical development be used to predict postnatal outcome?

DEPARTMENTAL NEWS, AWARDS & HONORS

Dr. Gillian Lieberman makes good use of new technology



I am delighted to share a new radiology learning tool with you:

1. "Lieberman's iRadiology" iPhone Application: At present, The Classics Collection is available. This valuable learning tool may be downloaded free of charge on your iPhone via the App Store.

2. It is also available via iTunes by clicking on the link below:

http://itunes.apple.com/us/app/iradiology/id346440355?mt=8 <http://itunes.apple.com/us/app/iradiology/id346440355?mt=8>

3. It is still available on the web at http://eradiology.bidmc.harvard.edu/> in the Classics Collection

The iRadiology Classics App allows for quick review of classic radiology cases on the fly, during rounds, at no cost, with no internet connection.

FEATURES:

Over 500 unique cases

- Browse unlabeled and labeled images by organ system and pathology
- Find relevant cases by keyword search
- Test your knowledge by finding the abnormality on unlabeled images
- Toggle image labels on and off
- Each case has a detailed description and discussion of the findings
- Images can be zoomed, panned, and rotated with standard iPhone gestures
- No mobile phone reception or wi-fi internet connection required
- Free!

We are currently working on further iApps so as to offer the "Primary Care Radiology Series" and "Interactive Tutorial Series" in the near future.

Hope you find these useful, - Gillian

Congratulations to our graduating Diagnostic Radiology interns!

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iPhone Screenshots

Morrison Submissions

Research at BIDMC Radiology is thriving! We have received a record 26 talks and 15 posters to consider. Thank you to all who submitted abstracts. Dr. Lenkinski and his committee will be sending out accaptance letters next week.

Under the direction of our Clinical Instructor, Ana Cordero, students spend 24 months as interns in diagnostic radiology at BIDMC. This year, a record 10 students completed their clinical training at BIDMC and will graduate with certificates or degrees from their respective Radiology Technologist programs at Bunker Hill Community College, Regis College and Massachusetts College of Pharmacy. We wish them well!



Graduating Diagnostic Radiology Technologists:

Back Row: Margaret Mullane, Katelyn Kazlauskas, Richard Bogosian, Katrina Marshall, Caryn Ayers-Jackson, Donna Bernat, Clinical Instructor: Ana Cordero.

Front Row: Marbela Perez, Maureen Carroll, Ashley Maeo, Katie Siegel.

Monthly Section Updates: Breast Imaging, Max Rosen, MD, MPH Interim Chief; David Magaram, MD, Clinical Director



Max Rosen



David Magaram



Julie Armada



Douglas Bober



Vandana Dialani



Valerie Fein-



Peter Gross





Kenny Lai







Shambhavi Venkataraman



Teias Mehta

Rola Shaheen



The past year has been one of evolution for the breast imaging section, with many changes driven both by internal growth and response to external factors.

We now perform breast imaging at 8 sites: BIDMC, Lexington, Chelsea, 1101 Beacon, 25 Boylston Street, BID-Needham, Harrington Memorial Hospital and Harrington Hospital's Webster, MA campus. Average weekly volume is approximately 685 screening mammograms, 325 diagnostic mammograms, and 245 breast ultrasounds. Breast MRI volume has increased to 15 per week.

This January, we welcome **Dr. David Magaram** as the new clinical director of breast imaging. Dr. Magaram went to medical school and did his Radiology residency at U.C.S.F. David has been involved in developing and managing community breast imaging programs for over 30 years, having organized and directed mobile mammography screening program serving 17 community health centers in Los Angeles, served as the director of a comprehensive breast care clinics in State College, PA, Seattle, Washington, and most recently in Bellevue, Washington. In his new role at BIDMC, David will help run the clinical operations of the breast imaging section both at BIDMC, as well as at our community sites.

In order to help facilitate better coordinate of our community sites, **Ms. Olga Augustus** recently transitioned from her position as BIDMC modality manager for breast imaging to a newly created position as the manager of our community breast imaging division. In her new role, Olga will work with each of the site managers (Nancy Whitman at 1101 Beacon, Marian Howes at 25 Boylston, Judy Farina at Lexington and Chelsea, and Don Holmes at BIDN) to help standardize and coordinate our breast imaging practices across all of our community sites.

Although we will all miss Olga at BIDMC, we are fortunate to have just hired **Ms. Leanne Linscott** to join the management team for Breast Imaging. Leanne comes to us from Bar Harbor, Maine where she was the director of Medical Imaging at MDI hospital. Leanne is a registered Radiographer, Nuclear Medicine Technologist and Mammographer.

This past year we also welcomed **Dr. Doug Bober** as a member of our community breast imaging group. Doug did his undergraduate work at MIT, and competed his medical school training at Dartmouth and George Washington University. After completing his Radiology residency and fellowship training at SUNY Upstate Medical Center, Doug has been in private practice in Connecticut for the past 25 years. Doug will be working primarily at Hubbard and Harrington Hospitals 3 days per week, but has graciously offered to help us at BIDMC and the other offices within route 128 when needed.

In late May / early June, our community practice in Central Massachusetts will welcome a third breast imaging site when the new Charlton, MA outpatient imaging center opens.

This July we will have two more transitions in the breast imaging section. We will unfortunately say "goodbye" to Dr. Shayna Roberts who has helped us greatly by staying on for an extra year following her fellowship. Shayna will be joining her husband who is completing his post-graduate training. In July, we will also "re-welcome" Dr. Kenny Lai back to BIDMC. As many of you know, Kenny finished his residency with us last year, and after 12 months near the old Charles Street jail, will be returning "home" to join the breast imaging section.



The major "external" factors shaping the future of the breast imaging section is the departure of Dr. Susan Troyan as the director of the BIDMC's breast care center. I have been actively involved on the search committee charged with finding Dr. Troyan's replacement, and am confident that BIDMC will soon find a superb replacement for Dr. Troyan. While Dr. Troyan's departure has left several gaps in the breast care center, it has also served as an opportunity to re-look at many of our processes and seek out opportunities for improvement. Donna, David, myself, Dr. Valerie Staradub, and the administrators of the breast center have started a monthly operations improvement meeting to seek ways to provide improved and more coordinated care between Radiology and Breast Surgery.

During the past year both David and I completed LEAN training. After working with the other Radiologists in the section, we have identified 5 targets which we will work to achieve in the next 12-24 months.

These targets are:

- Maximize Radiologist's productivity
- Improve Quality / Eliminate Harm
- Provide "just-in-time" service
- Improve patient experience
- Achieve financial sustainability

Some of the first initiatives will be re-configuring the Radiologist's daily work schedule for diagnostic mammography at BIDMC, re-writing patient letters, and conducting an audit of both short and long term space and equipment needs in Shapiro.

Beyond the confines of Longwood and Brookline Avenues, **Dr. Rola Shaheen** has been active in developing innovative outreach programs to increase awareness of breast cancer and the benefits of screening and early detection among Palestinian women. She was awarded two grants for these efforts and she has edited / authored two publications:

Breast cancer awareness booklet for Palestinian Women, a joint effort with United States Middle East Partnership <u>www.</u> bcpartnership.org

Breast Cancer Screening Kit - (Editors: Slanetz P, Raza S. and Rosen M) An educational booklet for women and health care providers in Gaza. The booklet is distributed in Gaza through partnership with CARE International in Gaza

Grants:

\$3,500 US from the Canadian Association for Medical Relief for Educational/research project of breast cancer awareness in Gaza. Co-investigators: Max Rosen, Priscilla Slanetz and Sughra Raza.

\$4,500 US \$ from CARE international WBG to print booklet of "Breast cancer screening kit" in Gaza.

On the academic front the section the section has celebrated several publications and academic accomplishments:

Awards:

Dr. Priscilla Slanetz:

- AUR Whitley Award for manuscript on teaching evidencebased imaging using the ACR Appropriateness Criteria in the radiology core clerkship.
- Appointed to the HMS Academy and the BIDMC Academy of Medical Educators.

3 Certificate of Merit awards - RSNA 2009 posters, Chicago, IL

Shaheen Rola, Chorlton M, Behrerman R, Armada Julie, Mehta Tejas, Slanetz Priscilla.

Artifacts on Digital Mammography: Optimizing Image Quality.

<u>Shayna Roberts-Klein</u>, **Priscilla Slanetz**, **Elaine Iuanow**. Minimizing Risk: A Pictorial Review Identifying Pitfalls in Breast Imaging Interpretation.

<u>Neely Hines</u>, **Priscilla Slanetz**, **Shambhavi Venkataraman**. Multimodality Review of Breast Augmentation.

Invited Presentations:

Dr. Rola Shahen: *Barriers to mammography for Gaza women*. Presented at Breast Cancer in Developing Countries: meeting the unforeseen challenge to women, health and equity, Harvard University, Nov 2nd 2009.

Dr. Valerie Fein-Zachary:

- "Breast MRI 1.5 & 3 T" NERR Breast Conference, 3/6/10.
- "The Tipping Point in LGBT Healthcare: When Social Justice and Social Policy Meet the Scientific Method" Brandeis University, The Heller School for Social Policy and Management 3/2/10.
- "Doctors are Activists: the LGBTQ Political Update." 1st Annual LGBTQ Medical Student Symposium. 5/8/10.

Posters:

Valerie Fein-Zachary, **Priscialla Slanetz**, **Ferris Hall**. Missed Breast Cancers - Learning from the Mistakes of Others. RSNA 2009, Chicago, IL

Rola Shaheen, <u>Faisal Khosa</u>, L. Stoddart, **Max Rosen**, **Priscilla Slanetz**. Multimodality Breast Imaging Evaluation of Architectural Distortion with Emphasis on Utilization of Breast MRI and Pathological Correlation. 5th International congress on breast MRI, Jena Germany. [Abstract published in European Radiology September 2009]

Rola Shaheen, **Priscilla Slanetz**, Sughra Raza, D. Muradali D, **Max Rosen**. Barriers and opportunities for early detection of breast cancer in Gaza. Global Summit on Breast Health, Chicago, IL June 2010.



BREAST IMAGING PUBLICATIONS 2009-2010

<u>Teaching Evidence-Based Imaging in the Radiology</u> <u>Clerkship Using the ACR Appropriateness Criteria.</u> Dillon JE, **Slanetz PJ**. Acad Radiol. 2010 Apr 21.

Cystic masses of the breast. <u>Hines N</u>, **Slanetz PJ**, Eisenberg RL. AJR Am J Roentgenol. 2010 Feb;194(2):W122-33. Review.

Breast density, hormones, and screening mammography: should women be less concerned? Sayegh RA, **Slanetz PJ**. Menopause. 2009 Nov-Dec;16(6):1085-6.

An increase in medical student knowledge of radiation oncology: a pre-post examination analysis of the oncology education initiative. Hirsch AE, Mulleady Bishop P, Dad L, Singh D, **Slanetz PJ**. Int J Radiat Oncol Biol Phys. 2009 Mar 15;73(4):1003-8; quiz 1008.e1-1008.e2.

Sonographic features of gynecomastia. Dialani V, Baum J, Mehta TS. J Ultrasound Med. 2010 Apr;29(4):539-47.

More mammography muddle: emotions, politics, science, costs, and polarization. Berlin L, **Hall FM**. Radiology. 2010 May;255(2):311-6.

Mammographic screening: a well-recognized medical advance. **Hall FM**. Radiology. 2010 Apr;255(1):307.

Identification, biopsy, and treatment of poorly understood premalignant, in situ, and indolent lowgrade cancers: are we becoming victims of our own success? Hall FM. Radiology. 2010 Mar;254(3):655-9. Review.

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

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

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

Combined screening with ultrasound and mammography vs mammography alone in women at elevated risk of breast cancer. Berg WA, Blume JD, Cormack JB, Mendelson EB, Lehrer D, Böhm-Vélez M, Pisano ED, Jong RA, Evans WP, Morton MJ, Mahoney MC, Larsen LH, Barr RG, Farria DM, Marques HS, Boparai K; ACRIN 6666 Investigators. (**Fein-Zachary VJ, collaborator**) JAMA. 2008 May 14;299(18):2151-63. **2010 Publications from our Faculty Members** [New citations in Blue]. We do a monthly PubMed search for new BIDMC publications and may miss those in which your affiliation is not noted. If we miss your paper, please send the reference to dwolfe@bidmc.harvard.edu to be included in next month's issue. Please note that publications with Epub dates in Dec 2009 are retained here as the paper publication date will indeed be in 2010.

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Alsop DC, **Dai W**, Grossman M, Detre JA. Arterial Spin Labeling Blood Flow MRI: Its Role in the Early Characterization of Alzheimer's Disease. J Alzheimers Dis. 2010 Apr 22. [Epub ahead of print]

Appelbaum L, **Sosna J**, Pearson R, Perez S, Nissenbaum Y, <u>Mertyna</u> <u>P</u>, Libson E, **Goldberg SN**. Algorithm optimization for multitined radiofrequency ablation: comparative study in ex vivo and in vivo bovine liver. Radiology. 2010 Feb;254(2):430-40.

Bankier AA, Estenne M, Kienzl D, Müller-Mang C, Muylem AV, Gevenois PA. Gravitational Gradients in Expiratory Computed Tomography Examinations of Patients With Small Airways Disease: Effect of Body Position on Extent of Air Trapping. J Thorac Imaging. 2010 Apr 14. [Epub ahead of print]

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Berlin L, **Hall FM**. More mammography muddle: emotions, politics, science, costs, and polarization. Radiology. 2010 May;255(2):311-6.

Boiselle PM. Celebrating 25 years of the journal of thoracic imaging. J Thorac Imaging. 2010 Feb;25(1):1.

Boiselle PM, Aberle DR, **Bankier AA**, de Roos A, Gefter WB, Goodman L, Grenier P, Hansell DM, Herold CJ, Im JG, Johkoh T, Kauczor HU, Kazerooni E, Kono M, Levin DC, MacMahon H, McLoud TC, Miller SW, Müller NL, Naidich DP, Prince MR, Rémy-Jardin MR, Schoepf UJ, Stillman AE, Webb WR, White CS. 25-on-25: twenty-five perspectives on twenty-five years of cardiopulmonary imaging. J Thorac Imaging. 2010 Feb;25(1):3-7.

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Chow BA, Hamilton J, **Alsop D**, Cattet MR, Stenhouse G, Vijayan MM. Grizzly bear corticosteroid binding globulin: cloning and serum protein expression. Gen Comp Endocrinol. 2010 Mar 25. [Epub ahead of print] PubMed PMID: 20347821.

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Dewey M, Vavere AL, Arbab-Zadeh A, Miller JM, Sara L, Cox C, Gottlieb I, Yoshioka K, Paul N, Hoe J, de Roos A, Lardo AC, Lima JA, **Clouse ME**. Patient characteristics as predictors of image quality and diagnostic accuracy of MDCT compared with conventional coronary angiography for detecting coronary artery stenoses: CORE-64 Multicenter International Trial. AJR Am J Roentgenol. 2010 Jan;194(1):93-102.

Dillon JE, **Slanetz PJ**. Teaching Evidence-Based Imaging in the Radiology Clerkship Using the ACR Appropriateness Criteria. Acad Radiol. 2010 Apr 21. [Epub ahead of print]

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Dixon WT, Hancu I, Ratnakar SJ, Sherry AD, **Lenkinski RE**, **Alsop DC** A Multislice Gradient Echo Pulse Sequence for CEST Imaging. Magnetic Resonance in Medicine, 63 (1): 253-256 JAN 2010.

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Hall FM. E-mail alert for important imaging findings. Radiology. 2010 Feb;254(2):635; author reply 635-6.

Hall FM. Identification, biopsy, and treatment of poorly understood premalignant, in situ, and indolent low-grade cancers: are we becoming victims of our own success? Radiology. 2010 Mar;254(3):655-9.

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