Radical Views... from the Department of Radiology



FROM THE CHIEF Jonathan B. Kruskal, MD PhD

- Welcome Peter Gordon, MD FACR, our new Vice Chair of Radiology for Community Network Services. Dr. Gordon will be on site here on Tuesdays. His office location is 308A for now, but then will move down the hall to 308F, to share with Dr. Sacks. Trish Gardner is his assistant and can be reached at 4-2506. Peter brings his extensive community imaging and network development experience to our group, where his role will be to further develop, grow and maintain all of our community practices. He will oversee the clinical operations, performance and enhancement of all sites, and we very much look forward to having him join our leadership team. Please stop in on Tuesday to welcome him!
- New HMFP Benefits Advisory Committee Member: Valerie Fein-Zachary, Breast Imager and Co-Director of the Breast Imaging Fellowship Program will be the new radiology representative on the HMFP Benefits Advisory committee, replacing Phil Boiselle, in view of his appointment as Associate Dean for Academic and Clinical Affairs at HMS.

Herbert Gramm Lecture at NERRS:



On Friday, Sept. 14, 2012, Francis J. Scholz of Tufts University presented the *Herbert F Gramm Lecture*, "How to examine for dysphagia" at the New England Roentgen Ray Society meeting held at the Harvard Conference Center in Boston. This lecture was named for Dr. Herbert Gramm, Associate Radiologist and Vice Chair and Director of Radiology Education at the New England Deaconess Hospital (1975-1993). Currently, Dr. Gramm serves as a trustee of our Radiology Alumni Association.

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TOBER 20

Beth Israel Deaconess Medical Center

Photo by NERRS Secretary Edward Y. Lee, MD, MPH

> Jonathan Kruskal, MD PhD and now FFRCSI (Hon) - Our own Chief was in Dublin this past weekend to attend a ceremony



conferring upon him the title of *Honorary Fellow of the Faculty of the Royal College of Surgeons in Ireland* for BIDMC Radiology's championing of 32 Irish Fellows!



BIDMC Irish alumni: Fellows, Mary Keogan ('99-'02), Dave Brophy ('96-'97), Annemarie O'Connell ('06-08), Ann McNamara ('00-'02) and Michelle McNicholas ('98-'00) were also present to offer their congratulations!

Radiology Calendar October 2012

Mon	Tues	Wed	Thurs	Fri
1 Weekly Mon Section Meetings: 1:0-2:00 MRI [Ansin 2] 3:00-4:00 ED section meeting (monthly) [ED annex, WCC] call Trish Gardner 4-2506 7:30 - 9:00 Cardiac (TBA)	2 7:30 - 9:00 Cardiac Imaging & Cases (Litmanovich)	3 Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conf 12:00-1:00 CardioThoracic, GI/GU Oncology 3:00-4:00 Mammo [TCC-484] 7:30 - 9:00 Cardiac (Hauser)	4 Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK 7:30 - 8:15 Chronic venous insufficiency (Collares) 12:00-1:00 Q/A Abdominal Conf Kalinnan 1:30-2:00 East MedRads - Nukes Senior [TCC 484]	5 12:00-1:00 Grand Rounds: Advances in Translational Molecular Imaging - Moritz Kircher [Sherman Auditorium]
8 Columbus Day	9 7:30 - 9:00 Screening Mammo & Cases(Slanetz) 10:30-11:30 Nuc Med meeting [GZ-103]	10 7:30 - 9:00 Dx Mammo - Masses & Calcifications (Fein-Zachary) 7:15 - 8:00 US meeting (WCC-304A Gallery)	11 7:30 - 9:00 Breast Rad-Path Correlations (Mehta) 1:30-2:00 East MedRads - Nukes Senior (TCC 484) 2:00-3:00 West MedRads - Body Senior [TCC 484]	12 8:00 - 9:00 Sven Paulin Lecture - Andrew Arai [Sherman Auditorium]
15 7:30 - 8:15 Small Airways Disease (Bankier) 12:00 - 1:00 Mentoring Meeting: Writing the discussion portion in a research manuscript (Bankier) [TCC 484] 5:00-6:00 Best in Practice: MR guided Breast Biopsies (Dialani) [TCC-10]	16 8:00-9:00 IR Meeting [West Recovery Rm]	17 7:30 - 8:15 GI Bleeding (Collares) 8:15 - 9:00 TIPS/portal interventions (Collares)	18 7:30 - 8:15 Degenerative Spine (Kleefield) 8:15 - 9:00 Spine cases (Lopez) 1:30-2:00 East MedRads - Nukes Senior [TCC 484]	19 12:00 - 1:00 No Grand Rounds: NERRS
22 7:30 - 9:00 Body	23 7:30 - 9:00 Body 10:30-11:30 Nuc Med meeting [GZ-103]	24 7:30 - 9:00 Body	25 7:30 - 9:00 Body 1:30-2:00 East MedRads - Nukes Senior (TCC 484) 2:00-3:00 West MedRads - Body Senior [TCC 484]	26 12:00 - 1:00 Grand Rounds: Follow-Up of Incidental Findings on CT - Bettina Siewert
29 7:30 - 8:15 COPD (Bankier) 8:15-9:00 Cases (Bankier)	30 7:30 - 9:00 Professionalism (Program Directors)	31 7:30 - 8:15 Aortic interventionas (Sacks) 8:15-9:00 Renal angiography (Sacks)	SAVETH Upcoming mentoring Mo	EDATE monthly meetings- ndays 11/5 & 12/3

Upcoming Monday Mentoring Meetings: [12-1 pm, TCC 484, unless otherwise noted]

- Oct 15 Lecture #3 in our series on writing a research manuscript. Dr. Alex Bankier will be presenting his views on pithy writing of the discussion of a research manuscript.
- Nov 5 iPad and how to integrate its use in Radiology practice and teaching. Dr. Seth Berkowitz will be giving us helpful insights on use of tablets in Radiology.
- Dec 3 HMS promotions and your CV. This meeting is for a group discussion of formatting your CV and how to augment your CV to best show your academic achievements and hopefully position you for promotion. *Dr. Debbie Levine*

*Consult the webpage for the most up to date schedule: http://home.caregroup. org/departments/ radiology/residency/ scheduling/conferences/ displayMonthNew.asp

DEPARTMENTAL Grand Rounds



Friday, October 5, 2012 12 noon - 1:00 PM • Sherman Auditorium

Advances in Translational Molecular Imaging

Moritz F. Kircher, MD PhD - Attending/Laboratory Head, Memorial Sloan-Kettering Cancer Center, New York, NY and Assistant Professor of Radiology at Weill Cornell Medical College, Cornell University.

We are pleased to welcome back former resident Moritz Kircher! Dr. Kircher earned his MD and PhD at Charité – Universitätsmedizin Berlin, Humboldt-University, Berlin, Germany and served as a research fellow at MGH's Center for Molecular Imaging Research under Dr. Ralph Weissleder between 2001-2004. He then

completed clinical internship training in surgery at Fairview Hospital in Cleveland, OH before coming to Beth Israel Deaconess Medical Center as a radiology resident in 2005. Upon graduation in 2009, he went on to complete a dual fellowship in body MRI and molecular imaging research at Stanford University. Currently, he serves as an Assistant Attending Radiologist at the Memorial Hospital for Cancer and Allied Diseases and a Lab Head at the Memorial Hospital Research Laboratories at the Memorial Sloan-Kettering Cancer Center. His research relates to the development of novel molecular imaging approaches for noninvasive detection and intraoperative visualization of cancer at its earliest stage, particularly the development of Surface Enhanced Resonant Raman Scattering (SERRS) nanoparticle approaches that allow ultra-high sensitivity imaging of cancer in intraoperative and endoscopic applications.



Friday October 12, 2012 8:00 - 9:00 AM • Sherman Auditorium

6th Annual Sven Paulin Lecture: A Transition from Occulostenotic Reflex to Significant Stenosis: Clinical Trial Data and Imaging Implications

Andrew E. Arai, MD FAHA - Chief, Cardiovascular and Pulmonary Branch, National Heart, Lung and Blood Institute, National Institutes of Health, Bethesda, MD 20892-1061

The 6th Sven Paulin lecture, which is a collaboration of the Department of Radiology and the Division of Cardiovascular Medicine, will be presented by Dr. Andrew Arai. Dr. Arai joined the National Heart, Lung, and Blood Institute (NHLBI) in 1993. He is Chief of the Cardiovascular and Pulmonary Branch in the Institute's Division of Intramural Research. Dr. Arai is also the President of the Society of Cardiovascular Magnetic Resonance, the leading international professional organization focused on this new diagnostic technique.Dr. Arai's research focuses on coronary artery disease, heart attack, and other diseases that affect the heart or blood vessels. His expertise is in the use of magnetic resonance imaging (MRI) to evaluate patients.

Dr. Arai focuses his research on understanding and intervening in this process of myocardial infarction and ischemia. His laboratory currently encompasses six major areas of clinical activity and translational research: 1) assessment of the area at risk from myocardial infarction, and myocardial salvage, 2) quantification of myocardial perfusion by magnetic resonance imaging (MRI), 3) technical development of diagnostic cardiovascular MRI, 4) anatomical and physiological evaluation of coronary artery disease by cardiovascular computed tomography (CT), 5) support for the NHLBI Advanced Cardiovascular Imaging Fellowship, and 6) clinical and research support for cardiovascular MRI and cardiovascular CT at the NIH Clinical Center in Bethesda, MD and at the Johns Hopkins Suburban Hospital in Bethesda, MD.

Dr. Arai received his MD from the University of Illinois College of Medicine, Chicago in 1986. He received his BA from Cornell University in Ithaca, NY in 1982. He completed a residency in Internal Medicine and a Cardiology fellowship at the Oregon Health Sciences University in 1989 and 1993 respectfully. In 2001, he received a Presidential Early Career Award for Scientists and Engineers. He has authored or coauthored over 130 papers or book chapters. He is a member of the American Society of Clinical Investigation. He is a fellow in the American Heart Association. He has been President of the Cardiac MRI Study Group for the International Society of Magnetic Resonance in Medicine. As a member of the American Heart Association Council on Clinical Cardiology, Committee on Cardiac Imaging, he has helped develop various scientific advisory papers on cardiac imaging. He has also served as an expert advisor to the US Food and Drug Administration. He directs a fellowship program training cardiologists and radiologists how to use cardiac MRI and cardiac CT to diagnose.

DEPARTMENTAL MOVES



OFFICE CHANGES - In an effort to better organize faculty and staff by their respective sections and modalities, the following changes in office locations were initiated in mid-September:

Breast Imaging – Linda Lintz x 7-3102 Linda Lintz - from 443A to Shapiro 483 workstation (opposite 483E) Priscilla Slanetz – from Shapiro 443A-1 to Shapiro 483D Amee Patel – now Shapiro 471 Peter Gross – from Shapiro 425A to Shapiro 483B QA Mammo room - now Shapiro 483E

Cardiothoracic – Meredith Cunningham x 7-3116 Diana Litmanovich – from Sherman 368 to **Sherman 317**

Emergency/Community – Trish Gardner x 4-2506 Darren Brennan – now W/CC 385 Peter Gordon – W/CC 308A (temporary); then W/CC 308F (with Barry Sacks) Sejal Shah – from W/CC 376 to W/CC 1 ED Annex

Interventional – Maxima Baudissin x 4-2523 Ian Brennan – now W/CC 376

MSK – Clotell Forde x 7-1283 Clotell Forde – from Shapiro 483A to Shapiro 483 workstation (opposite 483C) Manjiri Didolkar – from Sherman 368 to Shapiro 426 Justin Kung – from Sherman 358 to Shapiro 483A Jim Wu – from Sherman 358 to Ansin 228

Neuro – Barbara Lawrence x 4-2009 Alice Fisher – **CC-B 90A** (with Doug Teich) Jonathan Kleefield – from Shapiro 426A to current **West/CC 3** office/reading area

Ultrasound

Colin McCardle x 7-5699 – from Sherman 354 to Sherman 368

Residency/Fellowship Programs – x 7-3532, -3102 Richard Jennette and Laura Major – from Sherman 347 to **Shapiro 483F**

RESIDENCY NEWS

BIDMC was recently selected as one of ten resident chapters of the Gold Humanism Society. Under the direction of Dr. Amy Ship and an Advisory Board (TBD), BIDMC will be leading the way in promoting caring and compassionate care. Each chapter also has a resident liaison who will become the resident leader. I would like to announce that 1st yr resident **George (Chip) Watts**



Priscilla J. Slanetz, MD, MPH Dir., Radiology Residency Program & Dir., Breast MRI



was recently selected

to represent BIDMC in this capacity. This is a tremendous honor for Chip as well as our Department. Chip is excited about this opportunity as he was a member of the Gold Humanism Society as a medical student and looks forward to helping shape the resident chapter at BIDMC. Chip will be attending the

Chip Watts

Gold Humanism Society meeting in Chicago this October where he will learn more about his role and the goals of these new resident chapters.

RSNA BREAKING NEWS



Congratulations Dr. Olga brook - RSNA just announced today, Oct. 1, that current Women's Imaging Fellow Olga Brook has been chosen by the RSNA Scientific Program Committee to receive the RSNA Trainee Research Prize for her research project "Structured vs Non-structured Reporting for Pancreatic CTA".

Introducing ...



MRI Case of the Month Oct 2012

MRI is starting a new educational tool for technologists called "MR Case of the Month".

Background: Monthly case presentations highlighting an exam that has been done particularly well and/or illustrates a teaching point. Exams can be chosen for a variety of reasons. It could be an excellent exam where the imaging was done really well, it could be a new type of exam not previously performed, the technologist altered the exam in some way to improve the imaging quality, or maybe the patient was difficult and the technologist pulled out all the stops to get the exam done. These cases have great learning potential for all technologists. This first case is presented by Clinical MRI Chief Koenraad Mortele.

- Jeremy Stormann B.S., RT(R) (CT) (MR) MRI Clinical Instructor

Clinical History:

31-year-old woman with chronic right lower quadrant pain and increased pelvic pressure. Patient is getting evaluated for possible hernia or obstructed defecation.

Technique:

Immediately prior to the MR defecography exam, the patient receives a fleet enema in the Department. The patient is given 32 oz. of water 30 minutes before any imaging. Thereafter, the patient is placed supine on the MR table, lying on a plastic container; 240 cc of ultrasound gel is administered intra-rectally. No IV contrast is used. Sagittal MR images, using breath-hold sequences (SSFSE and FIESTA) are obtained of the pelvis during 4 phases: rest, squeezing (contraction of pelvic floor), straining, and defecation. Sequences with a very high temporal resolution are used so the dynamic process of pelvic floor movement and defecation can be evaluated. The overall exam time is approximately 30 minutes.





Rest

Squeezing



Straining

Defecation

Discussion:

This case presents the first MR defecography exam performed at BIDMC. Since then, several additional cases have been performed, detecting significant abnormalities in patients with longstanding non-specific symptoms.

REST:

On the image obtained during rest, there is a normal position of the bladder, uterus, and cervix, and anorectal junction in relationship to the pubococcygeal line. The anorectal junction projects 1 cm below the pubococcygeal line. The base of the bladder projects 2 cm above the pubococcygeal line.

SQUEEZING:

During squeezing, there is a normal elevation of the pelvic floor and narrowing of the anorectal angle. The anorectal junction now projects 7 mm above the pubococcygeal line, and the bladder base projects 2.6 cm above pubococcygeal line.

STRAINING:

During straining, there is a slight abnormal descent of the rectum below the pubococcygeal line indicating posterior compartment pelvic floor prolapse. The anorectal junction projects 3.5 cm below the pubococcygeal line. During straining, the bladder base minimally projects below the pubococcygeal line with the maximum descent of 8 mm below the line.

DEFECATION:

During defecation, there is a marked abnormal descent of all three compartments below the pubococcygeal line compatible with complete pelvic floor prolapse. The bladder base projects 3.1 cm below the pubococcygeal line compatible with a cystocele. The cervix projects at the level of the pubococcygeal line indicating a mild abnormal descent of the middle compartment. Finally, the anorectal junction projects 7.8 cm below the pubococcygeal line indicating severe abnormal rectal descent. Also identified is a mild anterior rectocele extending approximately 2.5 cm beyond the expected normal contour of the rectal wall.

Note that the signal on this image is markedly less than on the images obtained in rest, squeezing, and straining. This is a technical artefact that has been corrected since and related to lack of the recovery of the SSFSE sequence because of the high temporal resolution.

Teaching Points:

- MR defecography provides an accurate and comprehensive evaluation of the defecation process.
- The technique demands incorporation of the "defecation phase" as up to 30% of abnormalities are missed on exams performed without.
- The exam is fast, easy to perform, and using the correct tools allows for a "clean" approach to investigating the defecation process.
- MR defecography is superior than fluoroscopic evaluation of the defecation process since it detects more subtle findings in the anorectum and, more importantly, depicts associated abnormalities in the bladder and cervix/vagina.
- Optimizing the "recovery" phase of temporal SSFSE imaging is crucial to maintain enough signal on the images.

References:

- 1. Flusberg M, Sahni VA, Erturk SM, Mortele KJ. Dynamic MR defecography: assessment of the usefulness of the defecation phase. AJR Am J Roentgenol. 2011;196(4):W394-9.
- 2. Mortele KJ, Fairhurst J. Dynamic MR defecography of the posterior compartment: Indications, techniques and MRI features.Eur J Radiol. 2007 Mar;61(3):462-72.





"MR Guided Breast Biopsies"

Vandana Dialani, MD Instructor in Radiology Associate Director, Breast MRI BIDMC

Monday, October 15, 2012 5:00 pm - 6:00 pm Rabkin Board Rm, Shapiro 10

Local Organizing Committee: Jeremy Stormann B.S. RT (R), (MR); Steve Flaherty, MBA, RT (R), (MR); Ines Cabral-Goncalves, RT (R), MR; David Alsop, PhD and Koenraad J. Mortele, MD Event Coordinator: Lois Gilden, Tel: 7-0299 / Igilden@bidmc.harvard.edu



That's all it takes for a Screening Mamnogram



rd! October is Monocology National Breast Cancer Awareness Month

Flexible scheduling & multiple sites so Employees can choose time & location: Early Morning • Lunchtime • End of Day



Beth Israel Deaconess Medical Center

1101 Beacon St Suite 3W, Brookline	617-731-5250
Chestnut Hill - 25 Boylston St., Chestnut Hill	617-754-0313
Lexington - 482 Bedford St., Lexington	781-528-2560
Chelsea - 1000 Broadway Ave., Chelsea	617-975-6020
Needham - 148 Chestnut St., Needham	781-453-3044
Shapiro Clinical Center - (East campus)	617-754-9500

Caring for our own in the community

Please spread the word to friends and family that they can go to any of our sites & the interpretations will be provided by the same BIDMC breast imaging radiologists.

We have availability for early morning, lunch time, early evening and Saturday mornings. Note: free parking is available at Lexington, Chelsea, Needham, and Chestnut Hill

– Site Managers Olga Augustus -Shapiro Jane Corey -1101 & Chestnut Hill Judy Farina -Chelsea & Lexington Bill Hallett -Needham





Exciting news! This month we will be kicking off a **Radiology Patient Satisfaction Survey** to all of our outpatients in the Radiology Department. The survey is less than 10 questions and should only take a few minutes to complete. The goal of the survey is to learn more about our patients' experiences. In

addition to learning what we do really well, we also want to hear about what didn't go well so that we can make improvements. The key to our success is you! The surveys will be available to patients in a variety

of ways: 1) On our new touch screen kiosks soon to be located on TCC4, WCC3, GZ3 and West MRI Suite. 2) Access through smart phones and home computers - posters located in various waiting rooms will provide a URL address and QR Code for the survey; 3) Postcards for patients to take with them providing information on how to access the survey for patients whose appointments are not located near a kiosk. It's ideal if patients take the survey before they leave the department. Once they leave, the chance that they will fill out the survey drops dramatically! *How can you help?* When talking to the patients, encourage them to use the kiosk and take the survey on their way out. Tell them how important their feedback is to Radiology and how committed we are to improving the patient experience. **If they don't tell us, we'll never know!**

Why is this important? We want our patients to tell their friends and family that BIDMC is a great place to get care.

- Aideen Snell, MSW Service Excellence Program Manager **KUDOS** - Each month, we share the postive feedback we recieve about staff members and ask you to join us in congratulating them but this month, we are especially proud to acknowledge an unprecedented constellation of staff for providing outstanding care amd service!

Diagnostic Radiology



Sandro Vicente not only helped nursing staff put a lifting pad under a patient and transfer them to the stretcher but upon the return trip he had it all set up for me when I went into the room It made the start of a busy shift much easier. He was

also very knowledgeable with the lift equipment and showed me some tips for removing it faster

John Schembri, Robert Croce, Michelle (Marquis) Short, Abrahim Abrahim and Michael Hogan all joined the effort in addressing an overbooked OR schedule and keeping the workflow moving - requiring good communication between OR and Radiology



Lekisha Hamilton, Robert Chotalal, Jennifer DiStefano, and Fred Jumba handled an overbooked Ortho day with double patients booked for Drs. Duggal and Glazier.





David Delpeche continues to provide high energy with a smile on the night shift. He notices scheduling concerns and brings them to my attention. He often volunteers for coverage - even short notice. I was trying to get in

touch with another TA and David knew that the TA didn't have phone access so he offered to drive by his home to drop off the message.



Joe Messina and Vicki Pappas handled a complicated PACS downtime, which also resulted in DR equipment problems.

They ensured all images were corrected and send to PACS.



I had an issue with that I just couldn't figure out. I contacted the weekend diagnostic supervisor, **Alicia Zaske** and I really appreciate her professionalism and can-do attitude. She figured out the problem very quickly and was

happy to help. This made it so that doctors looking at OMR and Careweb could see the patient's reports. Having people like Alicia around makes BIDMC a better place. She is doing a great job and is greatly appreciated.

MRI



Jason Mangosing was spotted bringing a patient via wheelchair to Shapiro. It was a hot day and the patient did not ambulate well. Jason went above and beyond to help the patient get to his next appointment, providing the type

of personal attention that sets a great example for others and shows patients that we are committed to being the best.



Over the past year, **Robert Beeman** has been a great asset to the department by helping out with many of the magnet QA processes, from logging results to organizing data, to monitoring service call completion and

scanner problems. He has repeatedly asked for new projects and volunteered to help with existing ones. His enthusiasm, commitment and motivation are an example to all.

СТ



Maryellen O'Rourke has done a tremendous job in the 3D advanced imaging lab this summer. The imaging lab is a very busy environment with STAT code strokes coming in at any time and special requests from

Radiologists. Maryellen manages this workflow well and triages priority with professionalism and a positive attitude.

I'd like to present a recognition award to **Luis Lopes**, **Carlos Silva** and **Rich Munro**, for their positive attitudes they have in the working environment. Luis is always smiling and finding ways to lighten the mood which really has a wonderful impact on the day. Carlos looks to find collective ways to bring the techs KUDOS - Please join us in congratulating the following staff for outstanding patient care and service



together and recently he organized purchasing polo shirts with BIDMC logos on them. Rich is a silent joker, using the apple world of electronics to create fun things that make everyone laugh. Thank you Luis, Carlos and Rich for your contributions to our great team in CT.

Nuclear Medicine and Molecular Imaging (NMMI)



Jeff English and Aaron Thurston have initiated a project to identify patients who have had specialized PET images on previous

studies so that those same views will be repeated on future studies. They are working with the programmer to set up a database of patients who have had specialized images. When these patients are scheduled for their next exam, an alert will be created to let the techs know that this scan needs special attention.

Nursing



Mary Ryan and Michelle Baar-Daley performed outstanding LEAN work, redesigning Nursing supply carts and the main

distribution supply closet. Standardization of work areas (procedure rooms and recovery) resulted in easy identification of product location and expirations.



Dorothy Amrose for providing compassionate patient focused care. Dotty has received several patient letters noting her "outstanding care", "beyond the call", with genuine concern for patient comfort and a willingness

to put forth extra effort to ensure good outcomes on every level.



Jon Underhill is an invaluable asset to the IR flow and co-ordination of services. Time and time again I hear compliments both verbal and written from patients who are reassured and supported after their interactions

with him. The physicians view him as "the face" of the section, assuring quality, safe patient care, going above and beyond to facilitate a positive patient experience.

Image Archives



Because of **Phil Purvis'** assistance with the Radiology Information Technology Security initiatives, we were able to respond to numerous inquiries in a timely manner related to a potential data breach with one of our

Radiology PACS workstations. Phil was consistently responsive to the questions posed both by our own Office of Business Compliance and to the Center for Medicare and Medicaid Services (CMS), when they conducted their own detailed investigation into the potential breach. That the case is now closed with the agencies involved, and we were found to now be in full compliance with our mitigation efforts, is in large part due to Phil's efforts.

SUPPORT SERVICES



Mary Finley is always willing to go the extra step to help patients and staff. Being one of the first person patients see upon arrival, Mary tries very hard to make that first interaction a positive one. Whether the patient

is being seen in Radiology, or just lost...and looking for PAT, Mary takes time to assure that patients are taken care of. She seeks out resources in her never ending file numbers and names to help staff and patients if she doesn't have that knowledge in her head. Mary is constantly proactive when handling patient/customer issues, therefore I would like to recommend her for this spot bonus.



Scott Gillespie has over the last several months at various times acted in a lead capacity during the absence of the Supervisor and Lead Coordinator. During these occurrences, Scott has stepped

up to the plate and ensured the largest and most

challenging reception site in Radiology operates efficiently. Scott along with the help of teammates stepped up and met the challenges they faced created by personnel on summer vacation. He kept his Supervisor abreast of any issues going on, and reached out for answers of complex questions/issues from his teammates. This allowed Shapiro to operate in a seamless manner to our patients. Therefore I would like to recommend Scott for the spot bonus.



The Call Center located offsite in new location, comes with a number of new challenges and during the past couple of months **Deolinda DiPina** have proven herself to be a leader. Deolinda is a very

effective supervisor who communicates constantly with the staff either in a coaching manner or just to find out how they are doing. This approach has been instrumental in the staff performing as a cohesive group. In addition Deolinda has been very collaborative with the internal and external departments.

EVS

Michael McHugh can always be counted on for a smile and a pleasant comment. He is very conscientious and consistent in his work, and is willing to go out of his way to help.

Angela Oliveria is a very hard worker. She is very thorough and willing to help out even when not asked. She is always pleasant and warm both to patients and staff.

Radiology Administration



Andrea Baxter is always willing to go the extra step to assist a patient or an employee whether she can solve the issue or facilitate it. She is compassionate and friendly and her deep commitment to the patients and

department shows in her everyday work.



Michael Larson is always willing to assist in a minute's notice whether it's fixing a computer, taking pictures at an event or building staffing posters. He supports every request with a talented creative eye and a pleasant demeanor.



Donna Wolfe has been tremendously helpful in supporting technologist recognition events. She also works tirelessly on the department newsletter which is read and enjoyed by all.

Where in the world is ...



Palm Beach Radiology Professionals, P.A. is pleased to welcome our Director of Breast Imaging, Dr. Elaine Iuanow



Elaine Iuanow, M.D.

• Diplomate, American Board of Radiology

Dr. Iuanow completed her undergraduate degree in Biology and Neurosciences at Cornell University and medical degree at Tuft's University School

of Medicine in Boston, MA. She then went

on to complete her Diagnostic Radiology Residency at Tuft's -New England Medical Center Hospital and her Breast Imaging fellowship at Faulkner-Sagoff Breast Center in Boston, MA. She has practiced as a breast imager within the Harvard Medical System for 10 years and was the Breast Imaging Residency Coordinator at Beth Israel Deaconess Medical Center. Dr. Iuanow joined Palm Beach Radiology Professionals and the Medical Staff of JFK Medical Center in August 2012 and is also a member of the Medical Staff at Northwest Medical Center. Her interests include female and male breast imaging, personalized multidisciplinary breast care, advocacy, serving as an Ambassador for the American Cancer Society, and healthcare policy.

Please visit our website at www.PBRP.com or call (561) 548-3727 for more information on Dr. Iuanow's research, publications and community involvement or to learn more about any of our professional services.

DEPARTMENTAL NEWS, AWARDS & HONORS:



New in Diagnostic Radiology

We are replacing our old portable x-ray units with new units that are designed differently (much easier and less bulky) and allows images to be transferred wirelessly to PACS. Our four new **Carestream Revolution DR portables** should be available this month after

set-up, testing and network set up. Three Revolutions will be at the West and one at the East. So in the end we will have all DR units at both campuses (with the exception of the NICU).

Our old portables were named for the 7 dwarfs. Since the new DR are the "REVOLUTION," we considered naming the units after figures from the American Revolution and offered the following quiz to get us all in the mood. Try your luck:

Match the person with the quote:

Thomas Jefferson
George Washington
Nathan Hale
Paul Revere
Beatles

- 1. "The DR portables are coming....the portables are coming....the portables are coming...."
- 2. "I know not what course others may take, but as for me, give me Liberty from CR or give me death!"
- 3. "One DR if by land and two if by sea."
- 4. "I only regret I have but one DR to give to my country."
- 5. "I cannot tell a lie, father, you know I cannot tell a lie! I do love DR portables."
- 6. "The happiness of society is the end of CR portables."
- 7. "...I have felt a sincere passion for liberty and DR."
- 8. "Wine and DR is constant proof that God loves us and loves to see us happy."
- 9. "I like the dreams of the future DR better than the history of the CR past."
- 10. "There, I guess King George and Dr. X will be able to read that without his spectacles!"
- 11. "DR loves you yeah, yeah, yeah."

Answers: 1- Revere, 2 – Henry, 3- Revere, 4- Hale, 5- Washington, 6- Adams, 7 – Allen, 8 – Franklin, 9- Jefferson, 10 – Hancock 11- (goes without saying!)

- Betsy Grady R.T. (R) (CV) ARRT General Diagnostic Manager

P.S. In the end, we decided to name the DR units after superheroes! Look for Batman, Wonder Woman, and Superman on the West Campus and Atomic Bettty on the East!

(Note that Atomic Betty was voted in because "In each episode, a crisis occurs somewhere in the galaxy [**hospital**], usually while Betty enjoys some activity with her friends. Invariably, her bracelet [**pager**] begins beeping, and she runs off alone to save the galaxy [hospital]. Accompanied by her crew, Betty manages to defeat the villains before returning home".)



"You say you want a DR **Revolution**"



Publication Call Out: A recent Editorial on reporting dose in CT studies by Drs. Alexander Bankier and Herbert Kressel in the October issue of Radiology made the headline in Aunt Minnie.



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Radiology: Time to mothball 'low-dose' terminology September 26, 2012 -- The terms "low dose" and "standard dose" are meaningless, so if the paper you're submitting to Radiology includes them, expect to get it back, say the editors of the specialty's flagship journal. PISCUSS

Radiology: Time to mothball 'low-dose' terminology By Eric Barnes, AuntMinnie.com staff writer

September 26, 2012 -- The terms "low dose" and "standard dose" are meaningless, so if the paper you're submitting to Radiology includes them, expect to get it back, say the editors of the specialty's flagship journal.

Authors should instead express dose levels in CT dose index volume (CTDIvol), dose-length product (DLP), effective diameter, and size-specific dose estimates (SSDE) -- avoiding effective dose as well, save for the broadest dose comparisons, according to Radiology editors Drs. Alexander Bankier and Herbert Kressel.

Why use these measures instead of nebulous terms such as low dose or effective dose expressed as mSv? Because together these alternatives paint the dose picture in the context of the patient being scanned, wrote Bankier and Kressel, who also hold positions at Boston's Beth Israel Deaconess Medical Center.

CTDIvol and DLP provide information about scanner radiation output, while effective diameter offers information about the dimensions of the study participants, and SSDE provides an approximation of the dose absorbed by the individual patient, they explained. Terms such as low dose and standard dose are limited by several factors, including changing dose standards over time, geographic differences in patient care, and even differences as to what constitutes low-dose scanning between patients.

"We believe that the only remedy to these concerns is the general avoidance of the term low dose and its replacement by terminology that will allow precise and reproducible comparisons of dose between and within studies," Bankier and Kressel wrote (Radiology, October 2012, Vol. 265:1, pp. 4-8).

Low dose today is standard dose tomorrow

In the days before automatic exposure control (AEC), when the term low dose was introduced into the literature, dose calculation was a relatively straightforward process performed with single tube current settings, often 120 kV. This made dose index levels relatively easy to calculate and compare among different CT scanner models, protocols, and patients.

However, when AEC arrived on the scene, patient factors such as body habitus, circumference, and position in the CT gantry began to affect dose index values used in scans, and its use now creates problems, they explained.

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In addition, the definition of low dose changes over time with the evolution of technology and practice. The efforts of radiologists, medical physicists, and manufacturers to reduce radiation dose have led to new clinical standards and practices, the development of new CT scanners, and the introduction of AEC, noise reduction algorithms, and new image reconstruction techniques. As a result, protocols that were considered low dose a decade ago are now widely accepted as clinical standards.

Take the National Lung Screening Trial (NLST) as an example. "The technical protocol of the NLST was designed in 1998, and for that time it was a real low-dose protocol ... but according to current standards it's certainly no longer a low-dose protocol, though it's still called low dose," Bankier said in an interview with AuntMinnie.com.

"So the term ages very quickly," he said, "and hopefully what we consider to be low dose today will be standard dose a few years from now, and then something else will be low dose because our efforts to develop technology such that dose to patients could be lowered is an ongoing process."

An effective dose of 1.5 mSv for CT lung cancer screening was considered low in 1998 when NLST was designed, but images are routinely acquired now at 1 mSv or less using AEC. So terms such as low dose, ultralow dose, and so on, are confusing both to patients and clinicians, he said.

The term low dose also means different things in different geographic locations -- that is, different geographic regions have different awareness and dose issues, and patient sizes also vary substantially in different regions.

"Dose measurements refer to a standard patient who has a fixed weight and a fixed height," Bankier said. "But as we know, a standard patient -- or median patient, if you want -- can look very different in the U.S., Europe, or Asia, so a standard patient could look very different depending on the country of origin."

Recognizing these differences, the World Health Organization avoids the use of fixed thresholds in favor of ranges of body mass index to define categories such as normal, overweight, or underweight, and it continuously adapts these ranges with respect to geography, the editors noted.

Finally, different regions have different histories and experience with regard to low-dose imaging, Bankier said. "For example, in Europe, we were a little ahead of the rest of the world, so regulations there are more stringent than in the rest of the world," he said. When a manuscript is reviewed with one European and one U.S. reviewer, "they understand very different things when we say low dose."

Patient context needed

For Bankier and Kressel, the solution to these concerns is to avoid the term low dose except for the most general descriptions, and replace it in every paper with terminology that enables precise and reproducible comparisons between studies with an understanding of patient parameters.

The use of effective dose, expressed in mSv, is one way to express dose, but it has several limitations owing to phantom limitations. And it represents a calculation of the relative radiosensitivity of an organ that is based not on the individual patient but on a standard patient size. The vagaries and oversimplifications inherent in this measure mean that effective dose shouldn't be used to assess risk.

"We collaborated with a number of very knowledgeable radiation physicists, and there is a broad consensus among them that effective dose should not be used," Bankier said. "It's a good method to compare general radiation between radiation technologies, but it's not a good metric to quantify patientrelated radiation."

Overlapping terminology

Bankier and Kressel recommend that authors report all four dose parameters: CTDIvol, DLP, effective patient diameter, and SSDE. CTDIvol and DLP provide information about the radiation output of the scanner, effective diameter provides information about the size and dimensions of the study cohort, and SSDE provides an approximation of the dose absorbed by the individual patient for a given scan.

How did they reach this conclusion? "First, CTDIvol is the most commonly known parameter that quantifies the radiation output of a standard model, and this parameter is included in most of the dose reports that are generated by CT units," Bankier said.

The second parameter, DLP, gives additional information about the scan length (DLP = scan length x CTDIvol), he said. The effective diameter works only for the torso, but it quantifies patient size. Finally, SSDE is the new kid on the block, but "using the effective diameter and the CTDIvol allows [it] to approximate the individual patient risk."

More people are familiar with CTDIvol and DLP right now, while fewer understand SSDE, so the idea was to find a stepwise, overlapping approach that allows for physicians' continued improvement in dose understanding and, over time, increasingly accurate reporting for authors, he said. "We don't think that starting January 1, 2013, every author will report those as we propose," Bankier said. "It is just something that arises from our very individual experience as journal editors. But we think this is an iterative process, and every iterative process is easier to start when you go from known to unknown," and eventually become comfortable with the use of new metrics.

The proposal even applies to most retrospective studies, Bankier said. As long as the CT images are available, effective diameter can be calculated from the largest transverse and sagittal diameter of the patient. The square root of the product of those two measurements gives the effective diameter. Then, from the effective diameter and the CTDIvol of the scan, published tables (Task Group 204, American Association of Physicists in Medicine, 2011) can be used to determine SSDE, Bankier said.

The proposal isn't a rule or official recommendation; it simply represents the experience of journal editors looking for ways to provide accurate, comparable, and reproducible dose reporting methods for studies, Bankier said. And while the editors' aims are limited to clarifying reports in the radiology literature, the benefits don't stop there.

"Ultimately, I believe it does affect patient care," he said. "If you look at the speed at which dose reduction technology is implemented into new scanners, if you look at the fast pace at which these noise reduction algorithms are implemented into new scanner generations -- all based on scientific evidence -- I think this is a good example of how quickly and how directly patient care is affected by the reliability and scientific precision" of meaningful and universally understood terminology.

Owing to the importance of the issue, study drafts that arrive using imprecise terms for radiation dose won't be accepted for publication in Radiology. "We'll probably very kindly ask them to describe dose according to our recommendations -- just for our applicants," he said.



(L to R): Statistician Elkan Halpern, assistant to the editor Pamela Lepkowski, deputy editor Alexander Bankier and editor Herbert Kressel at the Radiology editorial office in Boston.

Publication Call Out:

SPECIAL COMMUNICATIONS

Congratulations to the 2012 Editorial Fellows¹

William T. Thorwarth, Jr, MD—RSNA Board Liaison for Publications and Communications



Birgit Ertl-Wagner, MD

The Radiological Society of North America (RSNA) is pleased to announce that Birgit Ertl-Wagner, MD, has been awarded the 2012 RSNA William R. Eyler Editorial Fellowship, and Mai-Lan Ho, MD, the 2012 RSNA Editorial Fellowship for Trainees.

Both fellows will work closely with *Radio-Graphics* Editor Jeffrey S. Klein, MD, in Burlington, Vt, and *Radiology* Editor Herbert Y. Kressel, MD, in Boston, Mass. Professor Ertl-Wagner will join the editors for 1 month, and Dr Ho will join them for 1 week. The fellows will also visit the RSNA Publications and Public Information departments at RSNA Headquarters in Oak Brook, Ill. During the final week of her fellowship, Professor Ertl-Wagner will work with the RSNA edi-



Mai-Lan Ho, MD

torial team at the 2012 RSNA Scientific Assembly and Annual Meeting in Chicago, Ill.

RSNA William R. Eyler Editorial Fellowship: Birgit Ertl-Wagner, MD

Birgit Ertl-Wagner, MD, is a professor of radiology and section chief for magnetic resonance (MR) imaging at the University of Munich, Germany. Professor Ertl-Wagner, whose work focuses on neuroradiology and head and neck radiology, has published more than 60 original articles, including 28 as first or senior author. She has written 21 review articles and book chapters and is the main author of five textbooks. She serves as

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

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Did you know that PubMed can automatically convert publication citations into the format we use?

For each citation you have checked, instead of retyping,

1) click on "Display Settings" to view a drop down menu and click on 2) Summary (text) and then 3) click on "Apply". PubMed will display all the citations you asked for in the format we use here at HMS.

Copy and paste into MS Word using the **Paste Special** function in the Edit drop down menu in Word and click on "Unformatted Text". When you press "OK", the citations will paste into Word with the correct line spacing and in your default font (Times or Times New Roman)!



Tips for Saving Images from PACS

Thanks to B. James Hamilton, RIS Apps Specialist (7-9555)

Open study within PACS Click the Exam Functions drop down menu Choose Send Click Export Images tab Change Method to Email Choose format: jpg and tiff are recommended Enter a title under Image Prefix (e.g., the clip #) Click email icon Enter email destination Click send

Note that while patient information is removed from images received via e-mail, resolution is also decreased.