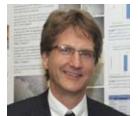
Radical Views... from the Department of Radiology





FROM THE CHIEF Jonathan B. Kruskal, MD PhD

Congratulations² Dave Alsop



≻

Distinguished Investigator of the Academy of Radiology Research in Washington, DC. This prestigious honor recognizes imaging researchers for their significant contributions to scientific progress and medical innovation. Dave is one of only 43 researchers so recognized nationwide.

Dr. Alsop was also named a Fellow of the ISMRM at the April 2013 meeting in Salt Lake City. David Alsop is an MRI physicist whose work has focused on

translating new techniques to clinical and clinical research applications. He is probably best known for his work on improving arterial spin labeling perfusion MRI and exploring its applications to the study of disease.

As usual, at this time of the year, we say good-bye to departing staff and trainees and welcome to our incoming. This issue of Radical Views is devoted to easing the transition with information and introductions. Keep it handy! – *Jonny*



Welcome new faculty Seema Prakash and Olga Brook:

Dr. Seema Prakash steps from BIDMC breast imaging fellow to BIDMC breast imaging faculty this month after successful completion of her fellowship training. Seema earned her MD from Dartmouth Medical School and BS (*magna cum laude*) in biochemistry and biology (with a minor in economics) from Brandeis University in Waltham. She went on to complete her residency training at Hartford Hospital in Connecticut where she served as Chief Resident in her final year before joining us for her breast imaging fellowship.



After four years of intensive fellowship training in Abdominal Imaging, Body MRI, Vascular and Interventional Radiology and Women's Imaging/Ultrasound, **Dr. Olga Brook** joins our interventional radiology faculty! Olga came to BIDMC following her internship in surgery, medicine and pediatrics and radiology residency training at Rambam Medical Center in Haifa, Israel where she, too served as Chief Resident (2006-2008). She earned her MD (*cum laude*) from Technion-Israel Institute of Technology, also in Haifa. This past year, she also served as

Chief Fellow and now, specializing in abdominal and pelvic imaging and interventions, Olga has focused on issues of quality assurance and safety and we look forward to further academic achievements.

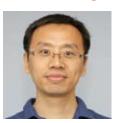
Welcome Deneen Smythwick, Administrative Assistant to Carl Nickerson and Liz Arsenault



Please welcome Deneen whose office is on the West Clinical Center, Rm. 327A. Having been born at Beth Israel Hospital, Deneen "returns" to us after more than 10 years working in Boston's private financial sector as a Senior Administrative

Assistant with a background in nursing as well as executive assistant training and serious computer savvy. As the only girl in a family with three brothers – and the mother of a 15-year-old son (and 6-year-old daughter) – Deneen is a Bruins, Red Sox and Celtics fan but she also loves cooking, reading and spending time with her kids. In the fall she will be tackling a program in Medical Information Managament at Bunker Hill Community College.

Welcome Yuanguo (Garry) Wang, PhD, Research Fellow



Garry joined Dr. Muneeb Ahmed's Minimally Invasive Tumor Therapy Lab in the Dana building in April of this year. Garry earned his PhD in Pharmaceutics and Molecular Cell Biology at KyungHee University/ National Cancer Center in South

Korea and also holds degrees in phytochemistry (MS) and pharmacy (BS) from universities in China. No doubt the tumor therapy lab will make good use of his skills in cellular and molecular biology and imaging and compound purification. When he has spare time, Garry enjoys running, music and cooking, especially Chinese food so we can look forward to his contributions at research potlucks. Garry can be reached at ywang16@bidmc.harvard.edu.



Beth Israel Deaconess Medical Center



A teaching hospital of Harvard Medical School

BIDMC Radiology Department Code of Conduct

Our department is committed to leadership in the delivery of patient care through technical and clinical expertise in medical imaging. To be the best at what we do, we must hold ourselves to the highest standards. We have set the following values and expectations for ourselves in order to create the best working environment. By sharing these common goals we can build successful teams and a strong community that values safety, openness and respect for personal privacy and confidentiality.

Embrace the following values

- Honesty
- Integrity
- Trust
- Empathy
- Tolerance
- Compassion
- Equity

Exhibit Professionalism

- Be on time and fully engaged for meetings or lectures
- Show respect to patients and staff alike
- Give all stakeholders a voice
- Foster teamwork and be a good teammate
- Demonstrate a positive attitude and clean neat presentation in both dress and speech
- Seek to build a safe and supportive environment for a strong sense of community

Take Personal Responsibility

- Make patient care your number one priority
- Maintain the pursuit of excellence through continuous education, training, and professional certification
- Take a proactive, not reactive, approach
- Take the initiative and lead by example
- Provide a safe environment for all employees, free from bullying or coercion

Be Accountable

All Radiology employees must be accountable for their actions and empowered to hold others to the same standards. Accountability is evidenced by:

- Taking ownership of your work
- Following through on commitments
- Complying with all applicable policies and guidelines
- · Making it safe and comfortable for employees to report problems or issues

DEPARTMENTAL UPDATES: PEER REVIEW: Acknowledging Your Great Pickups

As many of you have expressed, peer review by its very nature tends to focus more on error documentation than on your many great pickups and outcomes. Let's change this and try to provide positive feedback.

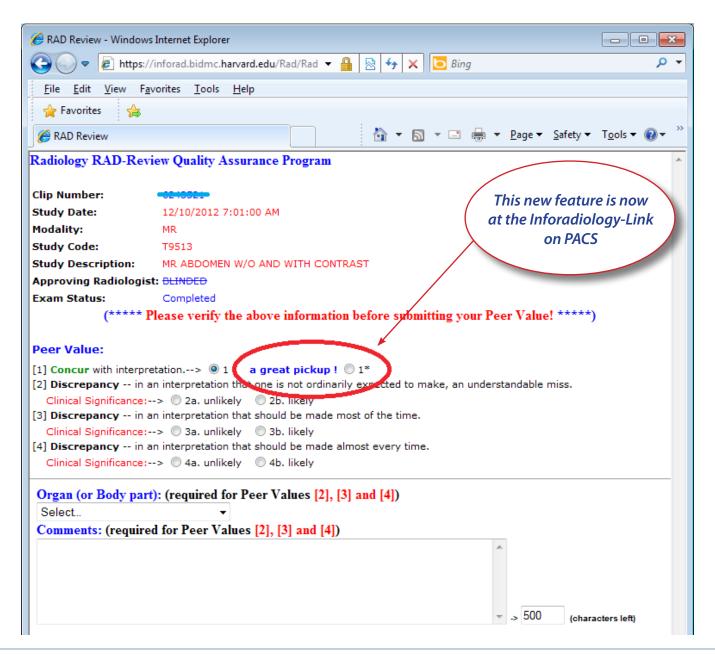
As you can see below, Dr. Bettina Siewert and I have introduced a **category 1*** into our RadReview system that is intended to document the spectrum of great pickups, good calls, good suggestions, great reports and good customer service, and anything that can be gleamed by reviewing images and the report of a case.

When reviewing a case, if you think the reader did something "above and beyond" that deserves acknowledgment, and you agree with the original read, please score this as a **1***. Of course if you think you've made another great call, and a colleague agrees, have them put the case into the system!



Thanks for participating in peer review.

- Jonny



Radiology Calendar JULY 2013

Mon	Tues	Wed	Thurs	Fri
1 8:00 - 9:00 Town Hall (Chiefs) Weekly Mon Section Meetings: 12:00-1:00 MRI (monthly) [Ansin 2] 3:00-4:00 ED section meeting (monthly) [ED annex, WCC]	2 8:00 - 9:00 Interesting Cases (Chiefs)	3 8:00 - 9:00 Intro to Mass Rad Society and ACR (Annie Leylek, Secretery MRS-RFS) 7:30 - 9:00 4th year exam strategy - All Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conf 12:00-1:00 CardioThoracic, Gl/GU Oncology 3:00-4:00 Mammo [TCC-484]	4 Independence Day Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK	5 7:30 - 9:00 Technology and Radiology (Berkowitz)
8 7:30 - 8:15 MRI of the GI Tract (Martin Smith) 8:15 - 9:00 MRI GI Tract - Cases (Martin Smith) 1:00-2:00 Body MRI meeting [Ansin 2]	9 7:30 - 8:15 Thyroid and Parathyroid Imaging (Colin Mcardle) 8:15 - 9:00 Small bowel follow-through: patterns (Girish Tyagi) 10:30-11:30 NMMI meeting [GZ-103]	10 7:30 - 8:15 How to do GI fluoroscopy (Andrew Bennett) 8:15 - 9:00 Upper GI cases (Andrew Bennett) 7:15 - 8:00 US meeting (WCC-304A Gallery)	11 7:30 - 8:15 Characterizing GI tract disease (Jonathan Kruskal) 8:15 - 9:00 GI tract cases (Jonathan Kruskal)	12
15 7:30 - 8:15 ICU I (Paul Spirn) 8:15 - 9:00 ICU II (Paul Spirn)	16 7:30 - 8:15 The Many Faces of Atelectasis (Dr. Abbott) 8:15 - 9:00 Case Conference - Chest (Dr. Abbott) 8:00-9:00 IR Meeting [West Recovery]	17 7:30 - 9:00 Physics (TBD)	18 7:30 - 9:00 Image guided biopsy or drainage (Ian Brennan) 2:00-3:00 West MedRads - Body Senior [TCC 484]	19
22 7:30 - 9:00 MSK (TBD)	23 7:30 - 9:00 MSK TBD) 10:30-11:30 NMMI meeting [GZ-103]	24 7:30 - 9:00 MSK (TBD)	25 7:30 - 9:00 MSK (TBD)	26
29 7:30 - 8:15 Imaging the Aorta I (Diana Litmanovich) 8:15 - 9:00 Imaging the Aorta II (Diana Litmanovich)	30 7:30 - 8:15 Teaching Cases (Janneth Romero) 8:15 - 9:00 Case Presentation (Ronald Eisenberg)	31 7:30 - 9:00 Physics (TBD)	*Consult the webpage for schedule: http://home.caregroup.or radiology/residency/sche displayMonthNew.asp	rg/departments/

Save the Date: Mentoring meetings August through December 2013

5-Aug	CV workshop: how to best show the work you have done, and ideas for how to expand your academic profile – Deborah Levine			
9-Sep	Endnote – Paul Bain from Countway library will update us on current functionality of endnote both as a stand-alone program and on the web – Paul Bain			
21-Oct	HMS Faculty Development/Diversity Initiatives and New Policies – a view from the Dean's office – Phillip Boiselle			
4-Nov	MBA for Radiologists, Part II – in one hour (!) Dr. Hochman will finish her summary of what we as Radiologists need to know about business. – Mary Hochman			
9-Dec	What the radiologist needs to know about malpractice, Part II – Ronald Eisenberg			

All meetings are scheduled for Shapiro 484

Fleischner Graduation 2013: What a night!



Graduating resident Mai-Lan Ho with Fleischner guest speaker Hugh Curtin, Chair of Radiology at Massachusetts Eye and Ear Infirmary.



The Fleischner graduation was once again held at the Harvard Club on Commonwealth Ave.



Abdominal fellow Giselle Revah and MSK staff Manjiri Didolkar. At this year's Fleischner, we also bid farewell to Manjiri who leaves BIDMC to enter private practice at *Advanced Radiology* in Baltimore and to marry "the most wonderful manin the world: Stevenson T. Odenwald". We wish her the best!



New radiology residency program coordinator **Scot Morrison**, and **Katie Armstrong**, manager of radiology medical education programs, enjoy their first Fleischner event.



Dr. Kruskal presents graduating residents **Mai-Lan Ho** and **Leo Tsai** with the Fleischner Young Investigator awards for outstanding research efforts.



Not shown: upcoming 2nd yr resident **Chip Watts** won the 2013 Resident Award for excellence in teaching medical students but was unable to attend as he was away on vacation! We'll get him next year!

Fleischner Graduation 2013: What a night for MSK!



MSK was voted Section of the Year in recognition of exemplary commitment to resdient education

proud parents - Kelechi was voted 2013 Fellow of the Year. Kelechi will be leaving BIDMC to pursue a prvate practice

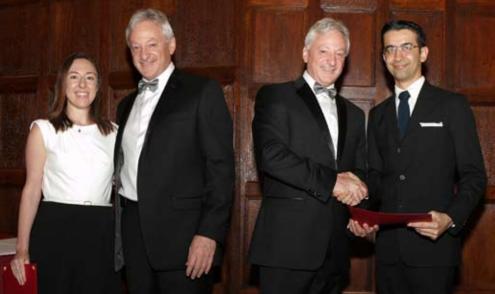
L to R: Dr. Kruskal bestows the 2013 awards for Excellence in Teaching Medical Students to MSK staff Jim Wu and cardiothoracic imaging staff Paul Spirn and Gillian Lieberman [not shown].



Fleischner Graduation 2013: Congratulations all!



Dr. Kruskal presents VIR Fellow Jennifer Ní Mhuircheartaigh with the RSNA Roentgen Award for outstanding research efforts. Jenni will be staying on as an MSK Fellow.



Dr. Kruskal presents upcoming 4th yr resident **Liz Asch** and graduating resident **Ammar Sarwar** with special awards in Qulaity Improvement for their outstanding achievements and contributions to quality initiatives. Ammar will be staying on as a VIR Fellow.



Chief Resident Samir Shah congratulates **Koneraad Mortele** on being awarded the Ferris Hall Faculty Award for Excellence in Teaching given by the residents.



Chief Resident Samir Shah presents **Priscilla Slanetz** with the Norman Joffe Award honoring the faculty member who best exemplifies the spirit and all around talent of the general radiologist.



Graduating resident (and upcoming 2013 Body MRI Fellow) **Leo Tsai** with his family. In addition to winning the Fleischner Young Investigator Award, Leo was recognized for his tenure as a 2012 Chief Resident and also presented with the Andrew Berezin Award for excellence in mentoring of fellow residents, and the 2013 Resident Award for excellence in teaching medical students.



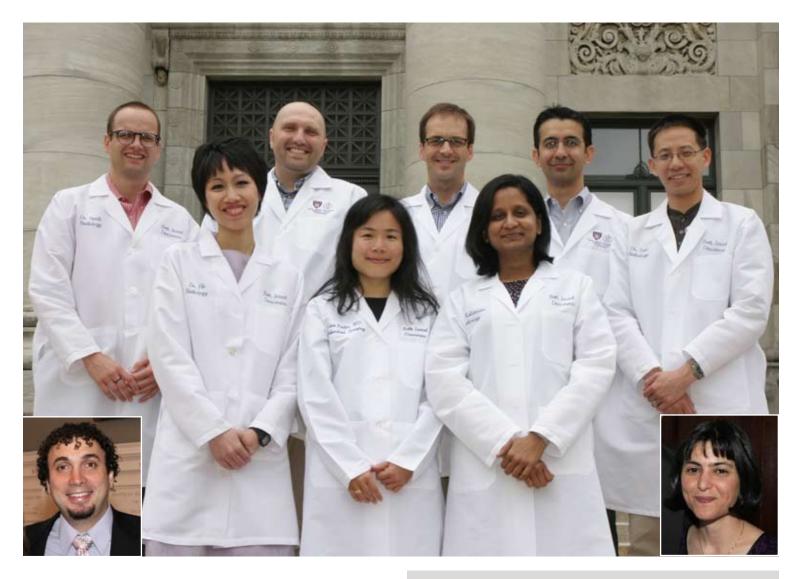
Residency Director Priscilla Slanetz presents graduating resident **Yiming Gao** the BIDMC Radiology Humanism Award for compassionate and respectful care of patients. Yiming will be leaving BIDMC to pursue a mammography fellowship at MGH.

These and many more lovely photographs are available for downloading at

S drive > Radiology > WorkGroup - Media Lab > Fleischner 2013

If you don't have access to the S drive, please email Michael Larson (mlarson1@bidmc. harvard.edu) and he will send you a zipped file of the photos via Secure File Transfer for downloading onto your computer.

Alumni News: New Postings for the Radiology Residents Class of 2013



2013 Graduating Residents (L to R):

- **Omar Zurkiya, MD PhD** Interventional Radiology Fellow, MGH [Left inset]
- Johannes Roedl, MD MSK Fellow, Thomas Jefferson University Hospital, Philadelphia
- Mai-Lan Ho, MD Neuroradiology Fellow, UCSF
- James E. Knutson, MD Interventional Radiology Fellow, MGH
- Yiming Gao, MD MM Mammography Fellow, MGH
- **Nicholas Telischak, MD MS** Interventional Neuroradiology Fellow, Stanford University
- Krithica Kaliannan, MD Body MRI Fellow, BIDMC
- Ammar Sarwar, MD Vascular & Interventional Fellow, BIDMC
- Leo Tsai, MD PhD MSc Body MRI Fellow, BIDMC
- **Behroze Vachha, MD PhD** Neuroradiology Fellow, MGH [Right inset]

Stay in touch: Join BIDMC Radiology Alumni Association Alumni will receive our monthly Radical Views via our web link below. You can also contact Radical Views Editor Donna Wolfe at 4-2515 or dwolfe@bidmc.harvard.edu with updates, especially after completion of your fellowships!



Alumni News: New Postings for the Radiology Fellows Class of 2013



Abdominal Imaging Fellows (L to R) with Fellowship Director Bettina Siewert (center): Joan Hu Burkhardt, MD - Private practice, Upstate Carolina Radiology, Greenville, South Carolina Genta Dani, MD - Staff radiologist, VA Medical Center, Charleston, SC Giselle Revah, MD FRCPC - Cardiothoracic Imaging Fellow, New York University Dell P. Dunn, MD - Staff radiologist, David Grant Medical Center, Travis Air Force Base, California Sumayya S. Jawadi, MD - TBA Sami Abedin, MD - Private practive, XRA Medical Imaging Centers, Cranston, Rhode Island

Body MRI Fellows with Fellowship Director Koenraad Mortele: Deirdre Moran, MD - Abdominal Imaging Fellow, BIDMC Mark T. Knox, MD - Breast Imaging Fellow, BIDMC [inset]





Alumni News: New Postings for the Radiology Fellows Class of 2013 (cont'd)



Breast Imaging Fellow (center): Seema Prakash, MD - Attending in Breast Imaging, BIDMC

Fellowship Directors Tejas Mehta *(left)* and Valerie Fein-Zachary *(right)* are doubly pleased to present Dr. Prakash with her graduation certifcate and to welcome her as a fellow staff member in breast imaging at BIDMC.



Cardiothoracic Imaging Fellows with Fellowship Director Diana Litmanovich (*L to R*): Som Mai Lê, MD - Staff radiologist, Montreal University Health Center, Quebec, Canada Maryam Shahrzad, MD (Research) - TBA Mario Silva, MD (Research) - Final year Radiology resident, University Hospital of Parma, Italy (Dec 2013). Alumni News: New Postings for the Radiology Fellows Class of 2013 (cont'd)



MSK Fellows with Fellowship Director Mary Hochman (*L to R*):

- Kelechi Princewill, MD Private practice, Quantum Imaging, Lewisberry, PA
- Michael T. Baldwin, MD Attending radiologist, Hartford Hospital/Connecticut Children's Medical Center





Minimally Invasive Tumor Therapy Research Fellow Marwan Moussa, MD - Radiology Residency, University of Arkansas for Medical Sciences, Little Rock, AR.

Neuroradiology Fellows with Fellowship Director Gul Moonis (L to R): Sachin K. Pandey, MD - Interventional Neuroradiology Fellow, BWH Martha Lopez, MD - Private practice, XRA Medical Imaging, Rhode Island Mary N. Tenenbaum, MD - Pediatric Neuroradiology Fellow, Children's Hospital, Boston Ernest Nanjung Yeh, MD PhD - Staff radiologist, South Shore Hospital, Weymouth, MA *Alumni News:* New Postings for the Radiology Fellows Class of 2013 (cont'd)



Vascular & Interventional Fellows and Fellowship Director, Barry Sacks (L to R): Harald Brodoefel, MD - Attending radiologist, University of Regensberg, Germany Jennifer Ní Mhuircheartaigh, MB BCh BAO, MRCSI, FFRRCSI - MSK Fellow, BIDMC Gabriela Spilberg, MD - PhD program in Brazil Jed Weinstock, MD - Staff radiologist, Bassett Healthcare, Cooperstown, NY



Women's Imaging Fellow and Fellowship Director Debbie Levine:

Olga R. Brook, MD - Attending Interventional Radiologist, BIDMC

RESIDENCY NEWS

Congratulations - After several months of intensive preparation, the 2013 graduating class all passed their radiology boards with flying colors! The Program Directors would like to personally thank all of the faculty who provided outstanding board review sessions in preparation for this momentous event. We all know look forward to the new certification process and hope that the faculty will embrace new approaches to teaching in preparation for the exam of the future.

Dr. Pritesh Mehta was nominated by his peers and inducted into the resident chapter of the BIDMC Gold Humanism Honor Society and Dr. George "Chip" Watts continues to represent BIDMC at the national level as one of the BIDMC resident leaders of the chapter.





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

 \triangleright **Graduating resident Ammar** Sarwar was elected Chair of the Massachusetts Medical Society **Resident and Fellow** Section and was also selected to be on the **Board of Directors** of the Physician Insurance Agency of Massachusetts. He was elected unopposed and he is the first chair in the society's 230 year history who is an international medical graduate.

The BIDMC Educational Task Force met on June 19th to begin reflecting on the methods of teaching residents and fellows and to make recommendations on how teaching must change to better meet the needs of current residents preparing for the new board structure. We all look forward to the Task Force suggestions and their implementation over the next few months.

Radiology Staff Posters

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

Log in to the portal:

https://portal.bidmc.org/

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

Log into Inforadiology, Click on **Staff Posters**

Managers: please contact Michael Larson mlarson1@bidmc.harvard.edu) to update rosters as needed

International Actional Statements

International Actional Actional Statements

International Actional Action

2013 Staff & Resident/Fellow posters will be available will be available in late July On the following pages are the initial versions of the 2013-2014 Staff and Residents/Fellows Posters.

Hard copies will be professionally printed once we have final versions.

Please contact Radical Views Editor Donna Wolfe (dwolfe@bidmc.harvard. edu, or call her at 4-1515) with any corrections or changes. Thank You! Executive Committee











Phillip M. Boiselle, MD

Cardiothoracic Imaging 33402

Valerie Fein-Zachary, MD

Breast Imaging 32841



Darren Brennan, MD, Community Radiology -Harrington, BID-Needha

Alice Fisher, MD -

Neuroradiology/Community Radiology - BID-Needham 91611



23

lan Brennan, MD, Vascular & Interventional 94347

Elisa N. Flower, MD

Emergency / Community Radiology - BID-Needham 39321

Jonathan B. Kruskal, MD, PhD Abdominal Imaging 91408

Koenraad Mortele, MD Dir., Clinical Magnetic Resonance Imaging 35930

Sejal Shah, MD

Emergency Radiology 94164

22055

Olga Brook, MD Vascular & Interventional 90861

Peter Gordon, MD Community Radiology 4-2506



Donna Hallett, BSc Director of Operations 31014

Clinical and Teaching Faculty -



ana M. Dialani, MD

Assoc. Dir., Breast MR

David B. Hackney, MD Chief, Neuroradiology

Robin Levenson, MD Interim Chief, Emergency Radiology 32858

Jordana Phillips, MD

Breast Imaging / Community Radiology

Priscilla Slanetz, MD, MPH Dir., Breast MRI Director, Residency Program 90767

Breast Imaging 32381

M. Julie Armada, MD Vascular & Interventional 35326

Breast Imaging/ Community Radiology BID-Needham 30552

Kevin J. Donohoe, MD NMMI 32407

Ferris M. Hall , MD Musculoskeletal/Breast Imaging 31614

Deborah Levine, MD Co-Dir., Ultrasound Dir., OB/GYN Ultrasound

Seema Prakash, MD

Marty P. Smith, MD Interim Chief, Harrington Abd Imaging/MRI Dir., Community MRI

Breast Imaging 92305

7-8901



Ronald L. Eisenberg, MD

Cardiothoracic Imaging/MSK Assoc. Dir., Residency Prog. 30801

Mary G. Hochman, MD, MBA Chief, Musculoskeletal Imaging

Gillian Lieberman, MD Dir., HMS Student Radiological Education 4-2597



Per Eld, MD Community Radiology -BID-Needham (781) 453-3053 Salomao Faintuch, MD Vascular & Interventional 38931

96

Robert A. Kane, MD Co-Dir., Ultrasound Dir., Abd Ultrasound

Diana Litmanovich, MD Cardiothoracic Imaging Dir., Cardiac Imaging 94016



Rafeeque A. Bhadelia, MD Clinical Director, Neuroradiology 31875

Jonathan Kleefield, MD Neuroradiology 4-2009

Colin McArdle, MD

Rafael Rojas, MD

Neuroradiology 34676

Ultrasound 31968



Gerald M. Kolodny, MD Chief, Nuclear Medicine & Molecular Imaging (NMMI) 31971 Herbert Y. Kressel, MD Magnetic Resonance Imaging 7-0299







Barry A. Sacks, MD Chief, Vascular & Interventional 91052 or 7-1285/4-2038



Shambhavi Venkataraman, MD Breast Imaging 94023

Jesse L. Wei, MD MRI/Abd Imaging Director, IT Radiology 39014



NMMI 31978



(1)

Felipe B. Collares, MD Vascular & Interventional 39676

ntional

Karen S. Lee, MD Emergency Radiology/MRI Dir., Rad Fellowship Prog. 91642



J. Anthony Parker, MD, PhD Sven Paulin, MD, PhD Professor Emeritus Cardiothoracic Imaging 7-5687







Jim S. Wu, MD Musculoskeletal Imaging 38932





Per Diem & Courtesy Staff





Paul W. Spirn, MD Cardiothoracic Imaging 33484



Laura Perry, MD Vascular & Interventional 32836



Research Faculty & Technical/Adjunct Staff-





Warren J. Manning, MD Cardiac MR 31144

Revised 7/18/2013



0

Matthew R. Palmer, PhD NMMI 38077





Deborah Burstein, PhD MR Research 7-3349





Chun-Shan Yam, PhD Dir., Dept'l Computing 38076



Thomas H. Hauser, MD Cardiac Nuclear Imaging 7-4363

Robert E. Lenkin Adjunct Faculty MR Research (7-0299 L. Gilden)















Weiying Dai, PhD MR Research 7-3266





Frank S. Levy, PhD Image utilization/ Health Care Policy (MIT) 617-253-2089

July 2013 Radical Views /14







Douglas Teich, MD Neuroradiology/ Community Radiology 94023





Residents (39)-

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1st Years (10)



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Quang Nguyen, MD

2nd Years (10)

Caitlin Connolly, MD

Matthew Miller, MD, PhD

3rd Years (10)

Michael Acord, MD

Sahil Mehta, MD

93724

93718

92289

92294

37532



Andrew (Drew) Colucci, MD 37528

37533

Hannah Perry, MD, MSc

Lauren Ferrara, MD

92290

(Diamanto)

92295

Amanda Rigas, MD

Edward Ahn, MD

93719

MD

93725



Jennifer (Jenny

Steinkeler, MD

David Khatami, MD, PhD

Neda Sedora-Roman, MD

Rashmi Javadevan, MD

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92291

92296





Komal Talati, MD

Jonathan Kim, MD

92292

Yuri Shif, MD

92297

37535

Jawad Hussain, MD, MSc

Ning Lu, MD 37531



Amanda Trotter, MD

Pritesh Mehta, MD

George Watts, MD

92298

92293

37536

Kristopher Daley, MD Abd 37537



Jibran Ahmad, MD

Neuro

37544

Michael Johnson, MD VIR 37551

Noam Millo, MD

Kamaldeep (Kamal)

Sahi, MD

Abd

Abd

37541

37540

Abd

37539



Krithica Kaliannan, MD Body MRI 90854

Deirdre Moran, MD

Abd

92307

Clinical Fellows (22) -

Omer Awan, MD

Patrick Duffy, MD

VIR

37549

WZK

37543



Iris Bonilla-Yoon, MD, PhD

Sreeniyas Garla, MD

Neuro

37545

Neuro

37546

lennifer Ní

MSK

94354



Pierluigi Ciet, MD

Cardiothoracic

Erica Gupta, MD

VIR

34692

37548

37538



Francesca Proulx, MD Mhuircheartaigh, MD 37552





Neuro

37547



Richard Sharpe, MD, MBA Breast Imaging 37542

> Clinical Fellows by section: Abd Imaging (6)- Daley, McGillen, Millo, Moran, Sahi, Tamjeedi Body MRI - Kaliannan, Tsai Breast Imaging - Knox, Sharpe MSK - Awan, Ní Mhuircheartaigh Neuroradiology (4) - Ahmad, Bonilla-Yoon, Garla, Sullivan Cardiothoracic Imaging - Ciet VIR (4) - Duffy, Gupta, Johnson, Sarwar Women's Imaging - Proulx





Bahar Tamjeedi, MD Leo Tsai, MD, PhD, MSc Body MRI 90858

Research Fellows (9)



Ali Farzan Jon, MD Cardiac CT 7-2535

Gopal Varma, PhD

Mario Silva, MD until Dec, 2013

Guarav Kumar, PhD Minimally Invasive Tumor Therapy Lab









Yu-Ching (Jason) Lin, MD MSK 7-1286

July 2013 Radical Views /15



93720

93727

Seth Berkowitz, MD

94339

Patrick Redmond, MD

Ann Levlek, MD

93722

Katherine Troy, MD 34767

Mark Masciocchi, MD

93723





Cardiac CT (8/1) (571) 305-0509



MRI 7-0281



Cardiothoracic Imaging



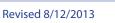




Pauline Bishop, MD

Maryam Shahrzad, MD Cardiothoracic Imaging









Monica Agarwal, MD

90900

Tamuna Chadashvili, MD, PhD 94340

94341

94337

Elizabeth Asch, MD

David Glazier, MD

Mark Ashkan, MD

94338

94343



Gunjan M. Senapati, MD* Samir H. Shah, MD* 94344

94342

(910) 728-0309

(857) 204-2573





WELCOME 2013-2014 RADIOLOGY FELLOWS:

With the new academic year kicking into full gear this week, we would like to introduce to you the incoming group of fellows across subspecialties. We are excited to welcome them into our department and know that they will be a wonderful group to work with over the next year.



Jibran Ahmad, MD - Neuro

Born in New Jersey, Jibran is a graduate of St. George's University School of Medicine in Grenada, West Indies, and he completed his residency at Saint Barnabas Medical Center in his home state.



Omer Awan, MD - MSK Omer graduated AOA from The George Washington University School of Medicine & Health Sciences and completed his residency at R. Adams Cowley Shock Trauma Center (University of Maryland medical system). This year, he will also be completing a minifellowship in Medical Informatics at BWH.



Iris Bonilla-Yoon, MD, PhD - Neuro Originally from Puerto Rico, Iris obtained a PhD from Yale University in Neuroscience prior to receiving her medical degree from Harvard Medical School. She is joining us after completing her diagnostic radiology residency at UCLA Medical Center.



Sreenivas Garla, MD - Neuro

Sreenivas received both his undergraduate and medical degrees from Boston University. He completed his residency at Albany Medical Center in New York before returning home to Boston for fellowship.

Erica Gupta, MD - VIR

Erica Gupta graduated from Emory University School of Medicine in Georgia and completed her residency at BIDMC in 2012. For the past year, she has served as an attending radiologist at BIDMC, primarily in abdominal imaging.

Michael Johnson, MD - VIR

Mike received both his undergraduate and medical degrees from the University of Connecticut and completed his radiology residency at Yale-New Haven Hospital. Prior to medical school, he worked as a research assistant in the Marine Biological Laboratory in Woods Hole.

Krithica Kaliannan, MD - Body MRI

Krithica is staying on at BIDMC for fellowship after completing residency training here in July. She received her medical degree from Tirunelveli Medical College in Tirunelveli, India and completed her radiology residency at Chennai Medical College, Chennai, India.

Mark Knox, MD - Breast Imaging

Mark is continuing at BIDMC after completing a fellowship in MRI in June. An honors graduate of the University of Dublin, Trinity College, he completed his residency at St. James's Hospital, Dublin.

Kathryn (Kate) McGillen, MD - Abd

Kathryn is a graduate of Jefferson Medical College in Philadelphia, PA and completed her residency at Brown University/Rhode Island Hospital. She also has an extensive background in research, having worked as a Research Specialist at the University of Pennsylvania for several years prior to medical school.



Pierluigi Ciet, MD - Cardiothoracic Pierluigi received his medical degree and residency training at the University of Padova in Italy. He most recently worked at Erasmus Medical Center/Sophia Children's Hospital in the Netherlands while working on his PhD in pediatric and adult thoracic imaging.



Kristopher Daley, MD - Abd A graduate of the University of Massachusetts Medical School, Kris completed his residency at Brown University/Rhode Island Hospital. In addition to his career in medicine, he also has a Masters degree in Physical Therapy from Quinnipiac University.



Patrick Duffy, MD - VIR Pat received his medical degree from The George Washington University School of Medicine and Health Sciences and completed his residency at Yale-New Haven Hospital, CT. He has also served eight years as a volunteer with Habitat for Humanity.







Noam Millo, MD - Abd

Originally from Canada, Noam graduated from the University of Manitoba Faculty of Medicine and completed his residency in radiology at the University of Alberta in Edmonton. He most recently worked as a staff radiologist at the Health Sciences Centre and Selkirk General Hospital in Winnipeg. Outside of medicine, he enjoys photography, as well as classical and electric guitar.



Deirdre Moran, MD - Abd Deirdre is continuing her training at BIDMC after completing a fellowship in MRI in June. After receiving her medical

degree from the University of Dublin, Trinity College in Ireland, she completed her internship at St. James' Hospital, and her residency at St. Vincent's University Hospital. She was also an all-star soccer player through her collegiate years.



Jennifer Ní Mhuircheartaigh, MD - MSK Jenny is continuing her training at BIDMC after completing fellowships in Abdominal Imaging, MRI and Vascular/Interventional Radiology. She received her medical degree from the National University of Ireland in Galway and completed residency at Galway University Hospital. Outside of medicine, she enjoys tennis, hiking and travel.



Francesca Proulx, MD - Women's Imaging Francesca received her medical degree and diagnostic radiology residency training from McGill University in Quebec, Canada. Her personal interests range from world health and travel to jogging and *haute couture*.



Kamaldeep (Kamal) Sahi, MD - Abd Kamal received his medical degree from the University of Calgary and completed his diagnostic radiology residency at the University of Alberta in Edmonton. Outside of medicine, he enjoys a variety of sports, including cricket, tennis, squash, basketball and soccer.



Ammar Sarwar, MD - VIR

Ammar is staying on at BIDMC for fellowship after completing residency training here in June. A graduate of King Edward Medical College in Lahore, Pakistan, he also went on to serve as a post-doctoral fellow in the Cardiac MR PET-CT Program at MGH. Outside of medicine, he enjoys tennis, soccer and chess.



Richard Sharpe, MD, MBA -Breast Imaging

Rich received his undergraduate, medical and business degrees from Georgetown University and he completed his residency at Jefferson University Hospital in Philadelphia. With his strong background in research and business, he has co-founded three start-up companies to date!



Ann Marie Sullivan, MD - Neuro

Anne Marie received her medical degree and radiology residency training at SUNY Upstate Medical University in Syracuse, NY and gained research experience prior to medical school in the Departments of Pathology and Cell & Developmental Biology at SUNY Upstate.

Bahar Tamjeedi, MD - Abd

Bahar received her undergraduate and medical degrees from McGill University in Quebec, Canada. She joins BIDMC after completing her diagnostic radiology residency at McGill as well. Outside of medicine, she is interested in oil painting, traveling, music and reading.

Leo Tsai, MD, PhD, MSc - Body MRI

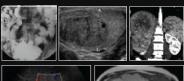
Leo is staying on at BIDMC for fellowship after completing residency training here in June. He is a graduate of the Harvard Medical School/Massachusetts Institute of Technology MD/PhD program and also earned his MSc in medical imaging from Cambridge University in Great Britain. Outside of medicine, he has an extensive background in music, studying violin performance at Juilliard and performing with various orchestra groups.

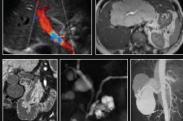


Abdominal & Pelvic Imaging CME: Boston Marriott Long Wharf June 17-19, 2013



Abdominal & Pelvic Imaging 2013





Monday - Wednesday June 17 - 19, 2013 Boston Marriott Long Wharf Boston, MA

Guest Faculty: Federle • Gore • Levine • Megibow

> Course Director Koenraad J Mortele MD

Earn Up To 22.75 AMA PRA Category 1 Credit(s)TM supported by Unrestricted Educational Grants from



Among the 126 attendees, 14 foreign countries were represented including 26 from Canada, 4 from Australia, 2 each from Belgium, Brazil, Chile and Singapore, and 1 each from Iceland, New Zealand, Pakistan, Saudi Arabia, Serbia, South Africa, The Netherlands, and United Kingdom. Also this year, attendees were invited to consider taking advantage of the Abdominal & Pelvic MR Imaging Preceptorship opportunity available at BIDMC. *[See the following page]*











Above: Lois Gilden ensures a seamless registration process and course flow over three days. R: Bettina Siewert offers her Case of the Day. Not shown: Maryellen Sun's Case of the Day.

... and at the end of day, the BIDMC and guest faculty enjoyed socializing at Legal Seafoods [1 of 2 tables, clockwise from left:] Debbie (Mrs. Marc Levine), Koenraad and Dejana Mortele, Mike Federle, Jesse Wei, Lois Gilden, Jim Gilden, Andrew Bennett, Alec Megibow, Richard Gore, and Marc Levine. Left: Encore lunch [clockwise from left:] Koenraad Mortele, Bob Kane, Richard Gore, Marc and Debbie Levine, Mike Federle, Jonny Kruskal and Dejana Mortele.







Beth Israel Deaconess Medical Center

Boston, MA PRECEPTORSHIP **Abdominal & Pelvic MR Imaging** 2013



Course Director Koenraad J Mortele MD

Earn Up To 41.25 AMA PRA Category 1 Credit(s)™

COURSE DESCRIPTION

The Division of Body MRI at BIDMC offers a Five-Day Abdominal and Pelvic MRI Preceptorship. This preceptorship is designed as a comprehensive review of MRI of the abdomen and pelvis. The combination of didactic lectures with case read-outs offers an opportunity for maximal interaction between registrants and faculty. Basic physics review as it relates to MRI, interesting cases discussion, and imaging protocol applications will be covered.

This program will expose the participant to daily read-out sessions and observation in the Shapiro MRI Reading Room. The participant will also attend daily MRI Rounds, as well as a weekly MRI Follow-up Meeting to discuss pathologically proven instructional cases. He/ she will also have access to the digitized Body MRI Library of audio visual lectures and will be allowed to attend a variety of interdisciplinary conferences, such as the Pancreaticobiliary Multidisciplinary Conference, Liver Tumor Conference, GU Conference, and GU & GI Oncology Conference.

The registrant will be supervised by faculty members who will also be responsible for teaching and providing guidance. The registrant will have only an observatory role on the body MRI service and no clinical work responsibility, or patient contact.

TARGET AUDIENCE

This course is designed primarily for the practicing community and academic radiologists, residents, and fellows with interest in abdominal and pelvic imaging who desire additional training in Body MRI. The goal of this preceptorship is for the participant to gain experience in understanding and developing MR sequences and their clinical application to diseases involving the abdomen and pelvis.

OBJECTIVES

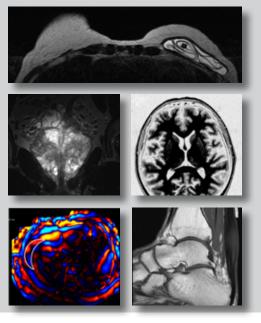
- At the conclusion of the Five-Day Abdominal & Pelvic MRI Preceptorship, the participant will be able to:
- Apply MR imaging to diseases involving the abdomen and pelvis.
- · Better recognize the key MR imaging features for accurate diagnosis of diseases involving the abdomen and pelvis.
- Better utilize MR imaging resources.

INQUIRIES

By phone, contact Lois Gilden at 617-667-0299, Monday-Friday, 10 AM to 5 PM (EST) or by email: lgilden@bidmc.harvard.edu.

To contact the HMS-CME Office, email: hms-cme@hms.harvard.edu, or call 617-384-8600.

BIDMC Radiology is proud to present **Best in Practice MRI Lecture Series 2013**



Fall Symposium

Saturday Sept 21st (9:00 am - 12:30 pm) Sherman Conference Room, BIDMC

Prostate MRI - Maryellen Sun, MD

Breast MRI: Technical Advancements & New BIRads - Priscilla J. Slanetz, MD MRA: Contrast & Non-Contrast Techniques - Jesse Wei, MD

These lecture are pending accreditation by the American Society of Radiologic Technologists (ASRT) Accreditation: 1 Category A Credit

Organizing Committee: Jeremy Stormann B.S. RT (R), (MR); Ines Cabral-Goncalves, RT (R), MR; David Alsop, PhD and Koenraad J. Mortele, MD

For more information, contact Lois Gilden Tel: 617-667-0299, Email: lgilden@bidmc.harvard.edu

GLOBAL OUTREACH: Shambhavi Venkataraman on Breast Cancer in India



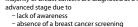
Breast Cancer in India: **Facts and Figures** 1.0 1

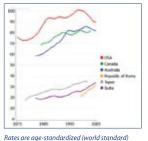
GLOBAL STATISTICS:

- Breast Cancer is the most frequent cancer among women with an estimated 1.38 million new ca cases diagnosed in 2008 (23% of all cancers), and ranks second overall (10.9% of all cancers)
- Nost common cancer both in developed and **developing regions** with ~ 690,000 new cases estimated in each region (population ratio 1:4).

BREAST CANCER IN INDIA:

- Most common cancer of urban Indian women
- Second most common in the rural women Majority of breast cancers are diagnosed at a relatively





rates (per 100,000)

Background:

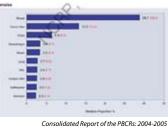
Breast Cancer Incidence & Mortality Worldwide

- 2008 Summary		
Estimated numbers (thousands)	Cases	Deaths
World	1383	458
More developed regions	692	189
Less developed regions	691	268
WHO Africa region (AFRO)	68	37
WHO Americas region (PAHO)	320	82
WHO East Mediterranean region	61	31
(EMRO)		
WHO Europe region (EURO)	449	139
WHO South-East Asia region (SEARO)	203	93
WHO Western Pacific region (WPRO)	279	73
IARC membership (21 countries)	729	210
United States of America	182	40
China	169	44
India	115	53
European Union (EU-27)	332	89

Courtesv Globocan 2008

BREAST CANCER IN INDIA

ading sites of cancer - Mumbai (2004-2005) Age adjusted incidence rates given in parentheses





References: Globocan IARC 2008 SGPGIMS Lucknow data India faces growing breast cancer epidemic, Priva Shetty The Lancet, Volume 379, Issue 9820, Pages 992 - 993, 17 March 2012

INCIDENCE IN INDIA IS INCREASING

115251 new cases diagnosed in 2008 53000 deaths from breast cancer in 2008

- Estimated it has risen 50% between 1965-1985.
- Increase in incidence of 0.5–2% per annum is across all regions of India and in all age groups but more so in the younger age groups (<45 years)
- Breast cancer has been reported to occur a decade earlier in Indian patients compared to their western counterparts.
- Majority in western countries are postmenopausal and in their 60's and 70's
- Premenopausal patients constitute about 50% of all patients in India (SGPGIMS Lucknow data) More than 80% of Indian patients are younger than 60 years of age

Average age of breast cancer patients in India is 50–53 years

A significant proportion are younger than 35 years of age between 11% (Tata Memorial Hospital (TMH) Mumbai) to 26% (SGPGIMS Lucknow).

India is facing a cancer epidemic

By 2020, 70% of the world's cancer cases will be in poor countries, with a fifth in India. 10 per 100 000 women got breast cancer in 1982 -2005, compared with 23 per 100 000 now By 2020, breast cancer is set to overtake cervical cancer as the most common type of cancer among all wo

in India.

Possible causes for increase in breast cancer: Economic development, rapid urbanization

- Western lifestyle change in diet, increase in alcohol intake, obesity Fewer children
 - Decrease in breast feeding

For further information, contact:

Shambhavi Venkataraman, MD svenkata@bidmc.harvard.edu Staff Radiologist - Breast Imaging Beth Israel Deaconess Medical Cente Instructor in Radiology, Harvard Medical School Boston, Massachusetts, USA

CHALLENGES FACED IN INDIA

- No national or regional breast cancer screening program exists in India. Mammography is not advocated for mass screening, and it is generally felt that it may not be costeffective in India
- Breast cancer awareness programs are more concentrated in the cities and not the remote and rural parts of the country.
- Majority of breast cancer patients in India are still treated at locally advanced and metastatic stages - Lack of an organized breast cancer screening program
 - Paucity of diagnostic aids
- General indifference towards the health of females Women often do not present for medical care early
- enough perhaps due to illiteracy, lack of awareness, and financial constraints. In the West where women seek early medical attention,
- more than 80% of breast cancers are treated at Stage-1(50%) or stage-2 (30%) and the cure rates are 70% to 80%.
- In India more than 70% of the Breast cancers are far advanced (stage-3 and 4) by the time women seel medical attention and the cure rates are leass than 30-40%
- Patients do not complete treatment - 20-30% lost to follow-up
 - Financial constraints False sense of assurance if there is initail response
 - Lack of faith in treatment if there is no early response
- Single largest impact will be in creating awareness & educating women about self breast examination - Awareness should also be directed at men as they
- are key in providing access for women to health care 'Health for All' and the National Rural Health Mission emphasis is put on breast awareness and breast self

examination as a first step towards creating the ground work for a nationwide breast cancer screening program.

OBJECTIVE OF SCREENING PROGRAM

- Identify cancer at an earlier stage- when it is curable
- Educate
- Create awareness
- · Teach breast examination
- Provide early access to treatmentbiopsy, pathology, surgery

On Sunday, June 16 at the historic Park Theatre in Cranston, Rhode Island, the first annual fund raiser for Sankara Cancer Foundation was held. Well-attended by local supporters, it included stellar performances by New England artists, a cultural show, and lectures and posters on cancer and prevention by Dr. Pankaj Bhargava (oncologist from Dana Farber), Dr. Nicole Johnson and Dr. Rajan Dewar (pathologists from BIDMC) and BIDMC breast imager Dr. Sham Venkataraman. The following is Dr. Venkataraman's summary of the event:

The funds generated from this event and donations to SCF will be spent on SCF cancer initiatives such as the first one at

2012 to serve the needs of the poor patients with cancer in India. Hindu Mission Hospitals (HMH), the main recipient of the efforts in Trichy, South India have been informally involved in these efforts since 2011. The specific focus of the foundation and the hospital has been to set up preventative measures and programs for women's cancers - cervical and breast cancer and this work has been progressing with grants and professional support from various organizations in the US and India – including the Association of Indian Pathologists of North America (AIPNA) and the Indian Institute of Technology, Madras.

Sankara Cancer Foundation, Inc. (http://www.sankaracancer.

org/) is a New England based organization established in





HMH Trichy. In the past years, HMH had set up various free screening programs, health camps (Thuraiyur, Manapparai, Palayamkottai, etc.). While cancer spares no one (rich/poor, urban/rural) it is the poor and those in non-metropolitan and villages that suffer the most due to lack of resources. These are the targeted populations and the main focus of HMH. Currently, there is a focus on improving the laboratory infrastructure for cervical cancer screening, e.g., Dr. Dewar and Dr. Johnson will be travelling to Trichy this summer to train, educate and set up operations with the local staff.

In the next few weeks I will be leading meetings with the staff at the facility in India and with technology vendors to set up a breast cancer screening program. The screening camps for cervical cancer last year were a success and moving forward, we plan to hold camps for breast and cervical cancer screening on a regular basis.

As you can see from the poster, the death rate from breast cancer in India is alarming. 50% of all breast cancers result in death. There are 150,000 deaths every year from breast and cervical cancer, combined. Most of these are in the rural population, among poor women who are uninformed and have no money for advanced medical care. Added to this, there is an increase in the number of triple negative cancers in younger women. About 15-25% of breast cancers are in women less than 40 years of age. India does have state-ofthe-art imaging facilities and current chemo and hormonal therapy, but only in major cities and not easily accessible to the general population.

The plan for the Sankara Cancer Foundation is to set up screening purely for women. From my experience over the last year, mammogram is NOT the way to screen. Mammogram is expensive, needs special training for technologists and doctors and requires regular QA/QC, all of which are not feasible in the proposed set up. Furthermore, DCIS (ductal carcinoma in situ) and atypia are not treated, so there is no point in finding microcalcifications. The aim is to find small invasive cancers. Most "lumps" get excised surgically if the FNA(fine needle aspiration) is positive. Core biopsies are not routinely done.

The proposed camp will conduct (and teach) breast exam and perform focused ultrasound. I plan to go either in August 2013 or Feb 2014 to train the staff to do US and FNA.

Please contact me if you would like to get involved. Any constructive input will be greatly appreciated.

- Sham

Community Outreach: Radiology at the 2013 Employee Health Fair



Community site Manager Jane Corey, interventionalist Felipe Collares and staff promote Community Radiology offerings at the Employee Health Fair in the Shapiro Lobby May 22.



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!

MRI



Kelli Roche MRI has done a wonderful helping, organizing and tracking all the "MRI Best in Practice conferences" and MRI tip of the month that is posted monthly as a teaching tool for all the technologists. She's been proactive in making sure all our protocol binders are constantly updated with the latest protocol information.







A patient arrived late for his wrist arthrogram MRI. [Above L to R:] **Jeremy Stormann**, **Jeff Fuller**, and **Bill Dunay** were instrumental in getting the patient rescheduled for the same day. Jeff escorted the patient downstairs after the exam. As Boston Cab was taking an unusually long time, Bill relieved Jeff and Leon Carrington, the patient ambassador, helped to flag a cab and paid \$10 out of his pocket for the cab to take the patient.



Jeremy Stormann has done a wonderful job planning, organizing, and tracking all the "MRI Best in Practice conferences" and MRI tip of the month that is posted monthly on the Rad News as a teaching tool for all the technologist.

Image Archive



Tom Konieczka participated in the Customer Service Training and did an outstanding job with the role play. He stumped the "angry" actor who couldn't get their images because the burner was down. He calmed him down and offered to get the images on the other campus and have them brought to his appt. -- the actor said "how do I know that will happen?" He said "I will personally bring them up!" During the discussion after the actor said "would you really do that? and he said "in that situation, yes I would". I would like to thank Tom for his portrayal of excellent customer service skills.

Quality Improvement



Misti Mullins, **RN** continually exhibits a commitment to patient safety; championing initiatives to improve documentation and initiating root case analysis of complications. She was instrumental during the recent TJC visit, taking the lead to facilitate a comprehensive and successful survey.

News Flash: As Radical Views will be on hiatus in August, we wanted to make sure you had a chance to bid farewell to Misti who has accepted a position in clinical informatics at Boston Children's Hospital as of Monday, July 15.

"While I am looking forward to this new opportunity, I will miss working with all of you here. It has been a great honor to be part of the Radiology and BIDMC family. I have enjoyed working with so many incredibly compassionate, dedicated and skilled individuals. Thank you for your support, education and guidance." - Misti



Mickesson Comer HMFP contracts with McKesson for Revenue Cycle Management services including diagnosis coding, claims scrubbing, allowables monitoring, accounts receivable and insurance denial management, compliance and reporting. We offer this column by Kathleen West, McKesson's Senior Director of Account Management for Radiology, as an opportunity to keep you informed. During this time of revenue and utilization reductions, compliance scrutiny and increased payer denials, our partnership with McKesson has been vital to our ability to maintain our financial stability. Feel free to contact Kathy.west@mckesson.com should you have any specific questions or concerns related to the Revenue Cycle Management process.

Kathleen West

MCKESSON

In honor of the new academic year, Mckesson offers the following quidelines for all of you who are new to Radiology:

Empowering Healthcare

It is essential for correct and compliant coding as well as to maximize reimbursement to have complete documentation of what was done for all exams and procedures. The following is based on ACR, AMA and CMS recommendations.

The radiology report should contain:

- Clinical history (from requisition & if applicable from patient)
- Title of exam
- Technique (contrast use, position, number/type of views, etc)
- Radiologist's findings
- Radiologist diagnostic impression

Exams that are separately billed should be reported under separate headings (for example, MRI & MRA or CT and CTA Head). This helps support the separate nature of the services when payors attempt to bundle them.

"Protocol" language is not an acceptable technique to support coding

- "Trauma Torso"
- "Stroke Protocol"
- "PE Protocol"

Incomplete or Invalid Clinical History will delay coding and possibly cause loss of revenue. Common issues requiring send backs for additional information include:

- No Reason for Exam listed
- Symptoms do not relate to procedure performed
- When claim is denied based on Medical Necessity, these are returned requesting any additional related signs/symptoms
- · Clarification of Abbreviations that may have more than one description (UC, HIA)
- "Trauma" or "MVA" or "Fall" are events
- Family history is non payable for MR & CT absent symptoms of illness
- OB Ultrasounds: Indications must be stated as complicating pregnancy in order to be payable

The following are recommendations by modality and study for complete and accurate documentation:

CT is coded based on body area, whether contrast is used and if reconstruction is done.

All CT reports should have a technique section that documents how the exam was performed including initial planes (axial, coronal, etc.). The technique should also document type, amount and method of contrast administration (intravenous, intraarticular, intrathecal) and the episode of injection (Was contrast given before any imaging was done or were some unenhanced images taken prior to contrast?).

CT Angiography: it is especially important to document 3D image post processing in the technique (MIPP, volume rendering, surface shading, etc.) to be clear that a true CTA was done. Some hospitals and/or practices have been confusing certain PE protocols, which could be a CT Chest with Contrast, as CTA. The AMA has clarified the definition of "image post-processing" in regards to CTA as 3D, not 2D. For example, document the injection of contrast, the imaging and include a simple statement such as "3D angiographic image postprocessing" was performed.

If multiple body areas are done, each body area should have a separate findings paragraph and/or impression.

MRI and MRA reports also require a technique documenting how/when contrast was administered and separate findings and/or impressions for different body areas. If both MRI and MRA studies are done on the same body area, they should also have separate findings.

PET/CT – Please indicate that CT was done for "attenuation correction and localization" to avoid confusion on whether it is a diagnostic CT or not. If a separate diagnostic CT is done, this should appear on a separate report.

Medicare has restrictive coverage policies. Be sure to give a good clinical history "story" so that it is clear whether the exam is for diagnosis, staging, restaging, monitoring. This will determine appropriate modifier for use on Medicare billing.

Ultrasound is usually described by the title of exam identifying which body area is being scanned and whether or not this is a complete or limited study. Each type of study should have its own heading and impression.

According to the AMA in CPT 2005, "All diagnostic ultrasound examinations require permanently recorded images with measurements, when such measurements are clinically indicated." Also, " use of ultrasound, without thorough evaluation of organ(s) or anatomic region, image documentation and final written report is not separately reportable."

Each body area, which has descriptors for "complete" and "limited" studies, includes a list of elements which describe a "complete" exam. If less than the required elements are reported, then only the "limited" code may be assigned. The report should contain a description of these elements or the reason an element could not be visualized. (Gallbladder is surgically absent, organ is obscured by overlying bowel gas, etc.).



Abdomen Complete includes: Liver, gallbladder, common bile duct, pancreas, spleen, kidneys, and the upper abdominal aorta and IVC.

Retroperitoneal Complete includes: Kidneys, abdominal aorta, common iliac artery origins, and IVC.

Alternatively, if clinical history suggests urinary tract pathology, complete includes: Kidneys and Urinary Bladder.

Non-OB Female Pelvis Complete includes: Uterus (description and measurements), adnexal structures, measurement of the endometrium, measurement of the bladder (when applicable).

Male Pelvis Complete includes: Evaluation and measurement (when applicable) of the urinary bladder, evaluation of the prostate and seminal vesicles to the extent that they are visualized.

For Female Pelvic Ultrasound, whether or not the patient is pregnant, a technique or title line describing how the scan was performed is critical. Coders must know whether the exam was performed transabdominally, transvaginally or both ways to assign the proper code(s). If both methods are done, each should have separate finding paragraphs in order to determine if all elements of a complete exam are remarked on.

In addition, on OB exams, at some point in the report the approximate gestational age needs to be identified. Also, when appropriate, identify limited or follow-up OB exams, all of which have different codes.

OB exam Complete, the maternal adnexa must be remarked upon. If unable to visualize adnexa, a statement to this effect must be made in the report. ("adnexa not visualized due to gestational age")Other elements of Complete OB include: determination of number of fetuses and amniotic/chorionic sacs, measurements appropriate for age, survey of intracranial/spinal/ abdominal anatomy, 4 chambered heart, umbilical cord insertion site, placenta location and amniotic fluid assessment.

Doppler evaluation of vascular structures is separately reportable using the 93875-93990 codes as long as it is not just color flow used only for anatomic identification. It must be Color Doppler and Spectral analysis to qualify as the separate service. Please clarify in reports when doing a true evaluation as a separate title and finding. (Testicular US w/Doppler Evaluation of Scrotal Contents as an example)

Mammography reports should not only identify type of views, but also whether screening, diagnostic, digital or CAD techniques used. Also, if a patient is having additional views on the same day as her screening exam because of abnormal finding, a discussion of the need for the additional films should be documented and both exams should have their own finding/impression.

Nuclear Medicine reports should contain a technique paragraph or line that identifies the dose and type of isotope and the method of administration. Any other pharmacologics, like Lasix, Adenosine, Captopril, CCK should also be documented. Coding can also be effected by these various nuclear medicine techniques which all should be mentioned in the report as part of the title and/or technique:

Uptake (Thyroid) Whole Body, Multiple Areas or Limited Flow Function SPECT Wall Motion Ejection Fraction Blood Pool

Plain Films are usually coded by type and/or number of views. There are various levels of codes for most extremity, spine and skull studies so the type or number of views should be included in the exam title and/or the first line of the body of report. On bilateral extremity studies, please indicate the number of views for each side.

UGI and BE should include a technique or discussion of whether or not a KUB is performed and which type (Barium or Air or Both) of contrast is used.

On IVP, method of contrast administration is important in choosing the correct code. (IV injection vs. bolus) Also identify when tomography is done.

Interventional and Special Procedures need to include documentation of both the surgical procedures as well as the radiological supervision and interpretation and/or guidance.

Type of guidance must be described in the technique portion of each procedural report. A common mistake is mammographic vs. ultrasound guidance for breast needle localization. Also, fluoroscopic guidance is sometimes left off various procedures such as lumbar punctures and central line procedures.

Ultrasound for vascular access code 76937 has very strict documentation criteria as noted in the CPT descriptor. Must document selected vessel patency, real-time needle entry and permanent recording and reporting. If a permanent image of the US cannot be made, then this code may not be reported.

All other ultrasound guidance procedures also require permanently recorded images of the site to be localized, as well as a documented description of the localization process, either separately or within the report of the procedure for which the guidance is utilized per CPT manual.

Moderate Sedation

Three elements must be documented to allow coding of moderate sedation when this service is not bundled into the surgical code.

- Radiologist supervised (a description in the report that sedation was provided is adequate)
- · Patient was monitored
- Intra-service time (starts when sedation agents are administered and ends when radiologist leaves the patient)

Again, the technique description in each dictated report is the most important part when assigning the proper CPT procedure code to allow for accurate reimbursement.

PUBLICATION CALL OUT: The following article co-authored by Rafael Rojas and David Alsop has been cited in both the New York Times and the Los Angeles Times! [see wblinks, below]

Effects of dietary glycemic index on brain regions related to reward and craving in men

Belinda S Lennerz, David C Alsop, Laura M Holsen, Emily Stern, Rafael Rojas, Cara B Ebbeling, Jill M Goldstein, David S Ludwig

ABSTRACT

Background: Qualitative aspects of diet influence eating behavior, but the physiologic mechanisms for these calorieindependent effects remain speculative.

Objective: We examined effects of the glycemic index (GI) on brain activity in the late postprandial period after a typical intermeal interval.

Design: With the use of a randomized, blinded, crossover design, 12 overweight or obese men aged 18-35 y consumed highand low-GI meals controlled for calories, macronutrients, and palatability on 2 occasions. The primary outcome was cerebral blood flow as a measure of resting brain activity, which was assessed by using arterial spin-labeling functional magnetic resonance imaging 4 h after test meals. We hypothesized that brain activity would be greater after the high-GI meal in prespecified regions involved in eating behavior, reward, and craving.

Results: Incremental venous plasma glucose (2-h area under the curve) was 2.4-fold greater after the high- than the low-GI meal (P = 0.0001). Plasma glucose was lower (mean 6 SE: 4.7 6 0.14 compared with 5.3 6 0.16 mmol/L; P = 0.005) and reported hunger was greater (P = 0.04) 4 h after the high- than the low-GI meal, respectively. At this time, the high-GI meal elicited greater brain activity centered in the right nucleus accumbens (a prespecified area; P = 0.0006 with adjustment for multiple comparisons) that spread to other areas of the right striatum and to the olfactory area.

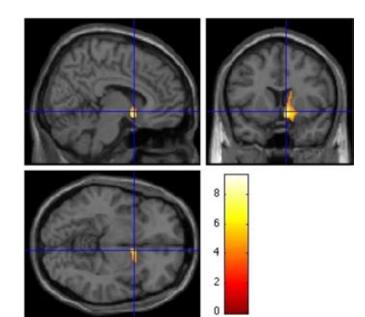


FIGURE 3. Regions with significantly different cerebral blood flow 4 h after test meals (P # 0.002). The color scale represents the value of the t statistic for the comparison between meals (n = 11) by using general linear model analyses as described in Subjects and Methods. For all areas depicted, the blood flow was greater after the high- than after the low-GI meal. GI, glycemic index.

Conclusions: Compared with an isocaloric low-GI meal, a high-GI meal decreased plasma glucose, increased hunger, and selectively stimulated brain regions associated with reward and craving in the late postprandial period, which is a time with special significance to eating behavior at the next meal. This trial was registered at clinicaltrials.gov as NCT01064778.



http://well.blogs.nytimes. com/2013/06/27/howcarbs-can-trigger-foodcravings/?_r=0

http://www.latimes.com/ news/science/sciencenow/ la-sci-high-carbohydratehunger-20130627,0,1772900. story

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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 in the new year, thus their paper publication will appear in 2013.

Akçakaya M, Basha TA, Chan RH, **Manning WJ**, Nezafat R. Accelerated isotropic sub-millimeter whole-heart coronary MRI: Compressed sensing versus parallel imaging. Magn Reson Med. 2013 Feb 25. doi: 10.1002/mrm.24683.

Alemozaffar M, Chang SL, Kacker R, **Sun M**, Dewolf WC, Wagner AA. Comparing costs of robotic, laparoscopic, and open partial nephrectomy. J Endourol. 2013 May;27(5):560-5. doi: 10.1089/end.2012.0462. PMID: 23130756.

Anis M, **Mortele K**. Role of secretin-enhanced magnetic resonance cholangiopancreatography in the evaluation of patients following pancreatojejunostomy. J Clin Imaging Sci. 2013 Feb 28;3:7. doi: 10.4103/2156-7514.107909. PMC3625885.

Appelbaum L, Solbiati L, **Sosna J**, Nissenbaum Y, Greenbaum N, **Goldberg SN**. Evaluation of an electromagnetic image-fusion navigation system for biopsy of small lesions: assessment of accuracy in an in vivo swine model. Acad Radiol. 2013 Feb;20(2):209-17. doi: 10.1016/j. acra.2012.09.020. PMID: 23395242.

<u>Asch E, Shah S</u>, Kang T, **Levine D**. Use of pelvic computed tomography and sonography in women of reproductive age in the emergency department. J Ultrasound Med. 2013 Jul;32(7):1181-7. doi: 10.7863/ ultra.32.7.1181. PMID: 23804340.

Ashitate Y, Lee BT, Laurence RG, Lunsford E, Hutteman M, Oketokoun R, Choi HS, **Frangioni JV**. Intraoperative Prediction of Postoperative Flap Outcome Using the Near-Infrared Fluorophore Methylene Blue. Ann Plast Surg. 2013 Mar;70(3):360-365. PMC3371147.

Ashitate Y, Lee BT, Ngo LH, Laurence RG, Hutteman M, Oketokoun R, Lunsford E, Soo Choi H, **Frangioni JV**. Quantitative assessment of nipple perfusion with near-infrared fluorescence imaging. Ann Plast Surg. 2013 Feb;70(2):149-53. doi: 10.1097/SAP.0b013e31822f9af7. PMC3224668.

Assenza GE, Graham DA, Landzberg MJ, Valente AM, Singh MN, Bashir A, Fernandes S, **Mortele KJ**, Ukomadu C, Volpe M, Wu F. MELD-XI score and cardiac mortality or transplantation in patients after Fontan surgery. Heart. 2013 Apr;99(7):491-6. doi: 10.1136/heartjnl-2012-303347. PMID: 23406689.

Baez JC, Lee EY, Restrepo R, **Eisenberg RL**. Chest wall lesions in children. AJR Am J Roentgenol. 2013 May;200(5):W402-19. doi: 10.2214/AJR.12.8883. PMID: 23617508.

Bittman ME, Lee EY, Restrepo R, **Eisenberg RL**. Focal adrenal lesions in pediatric patients. AJR Am J Roentgenol. 2013 Jun;200(6):W542-56. doi: 10.2214/AJR.12.8677. PubMed PMID: 23701083.

Boiselle PM. A new year brings a new beginning and new voices. J Thorac Imaging. 2013 Jan;28(1):1. doi: 10.1097/RTI.0b013e318277ce9b.

Boiselle PM. Fostering a spirit of life-long learning. J Thorac Imaging. 2013 Mar;28(2):67. doi: 10.1097/RTI.0b013e318282d04c. PMID: 23422780.

Boiselle PM. Computed tomography screening for lung cancer. JAMA. 2013 Mar 20;309(11):1163-70. doi: 10.1001/jama.2012.216988. Review. PMID: 23512063.

Boiselle PM, Biederer J, Gefter WB, Lee EY. Expert Opinion: Why is MRI Still an Under-utilized Modality for Evaluating Thoracic Disorders? J Thorac Imaging. 2013 May;28(3):137. doi: 10.1097/RTI.0b013e31828cafe7. PMID: 23545946.

Boiselle PM, Bogaert J, **Manning WJ**, Ruzsics B. Expert Opinion: Should Stress Myocardial Perfusion MRI be Routinely Added to Delayed Enhancement Cardiac MRI Studies? J Thorac Imaging. 2013 Mar;28(2):68. doi: 10.1097/RTI.0b013e3182843aef.

Boiselle PM, Erasmus JJ, Kauczor HU, Li K, Patz E. Expert opinion: the future role of cardiothoracic radiologists in molecular imaging. J Thorac Imaging. 2013 Jan;28(1):2. doi: 10.1097/RTI.0b013e31827b0fa7.

Boiselle PM, Hoffmann U, Schoepf UJ, White CS. Expert Opinion : Is 24/7 Coverage Necessary for Implementing Coronary CT Angiography in the Emergency Room Setting? J Thorac Imaging. 2013 May 27. PMID: 23719543.

Boiselle PM, Lynm C, Livingston EH. JAMA patient page. Lung cancer screening. JAMA. 2013 May 8;309(18):1948. doi: 10.1001/jama.2013.4324. PMID: 23652527.

Boiselle PM, Reddy GP. Reviewer awards and acknowledgments editors' recognition awards for distinction in reviewing in 2012. J Thorac Imaging. 2013 Jan;28(1):3. doi: 10.1097/RTI.0b013e31827851f4.

Bommart S, Kovacsik HV, Pujol JL, Macmahon H, **Bankier AA**, Naidich DP. Management of part-solid nodules. Radiology. 2013 Jul;268(1):306-7. doi:10.1148/radiol.13130293. PMID: 23793596.

<u>Brodoefel H</u>, Ramachandran R, Pantol G, Bergethon P, Qiu WQ, Scott T, Rojas R, Horger M, Rosenberg I, **Bhadelia RA**. Association between linear measurements of corpus callosum and gait in the elderly. Eur Radiol. 2013 Mar 20. PMID: 23512195.

Brook OR, Faintuch S, Brook A, Goldberg SN, Rofsky NM, Lenkinski RE. Embolization therapy for benign prostatic hyperplasia: Influence of embolization particle size on gland perfusion. J Magn Reson Imaging. 2012 Dec 12. doi: 10.1002/jmri.23981.

<u>Brook OR</u>, Gourtsoyianni S, **Brook A**, **Siewert B**, Kent T, **Raptopoulos V**. Split-Bolus Spectral Multidetector CT of the Pancreas: Assessment of Radiation Dose and Tumor Conspicuity. Radiology. 2013 May 14. PMID: 23674791.

<u>Brook OR</u>, **Raptopoulos V.** Response. Radiology. 2013 Feb; 266(2): 687-8. [Comment on Spectral CT with metal artifacts reduction software for improvement of tumor visibility in the vicinity of gold fiducial markers. Radiology 2012. Metal artifact reduction software must be used with caution. Radiology 2013] PMID: 23479787.

Brown K, Gutierrez AJ, Mohammed TL, Kirsch J, Chung JH, Dyer DS, Ginsburg ME, Heitkamp DE, Kanne JP, Kazerooni EA, Ketai LH, **Parker** JA, Ravenel JG, Saleh AG, Shah RD, Steiner RM, Suh RD; Expert Panel on Thoracic Imaging. ACR Appropriateness Criteria® Pulmonary Hypertension. J Thorac Imaging. 2013 Jul;28(4):W57-W60. PMID: 23748650. Cerci R, Vavere AL, Miller JM, Yoneyama K, Rochitte CE, Dewey M, Niinuma H, **Clouse ME**, Laham R, Bush DE, Shapiro EP, Lardo AC, Cox C, Brinker J, Lima JA, Arbab-Zadeh A. Patterns of coronary arterial lesion calcification by a novel, cross-sectional CT angiographic assessment. Int J Cardiovasc Imaging. 2013 May 24. PMID: 23702949.

Chan RH, **Manning WJ**. Stress CMR - It's Time to Trust the Magnetic Crystal Ball. J Am Coll Cardiol. 2013 May 29. doi:pii: S0735-1097(13)02080-9. 10.1016/j.jacc.2013.04.065. PMID: 23727210.

Chen FY, Yang CP, Chen PY, Naraghi AM, Gupta S, Jacks LM, Essue J, Marks P, White LM, **Levine D**, Halpern EF, **Kressel HY**. Comment on the correct use of predictive values for evaluating diagnostic tests. Radiology. 2013 Jan;266(1):364-5. doi: 10.1148/radiol.12121346. PMID: 23264531.

Choi HS, Gibbs SL, Lee JH, Kim SH, Ashitate Y, Liu F, Hyun H, Park G, Xie Y, Bae S, Henary M, **Frangioni JV**. Targeted zwitterionic near-infrared fluorophores for improved optical imaging. Nat Biotechnol. 2013 Jan 6. doi: 10.1038/nbt.2468. PMID: 23292608.

Dai W, Shankaranarayanan A, **Alsop DC**. Volumetric measurement of perfusion and arterial transit delay using hadamard encoded continuous arterial spin labeling. Magn Reson Med. 2013 Apr;69(4):1014-22. doi: 10.1002/mrm.24335. PMC3427721.

de Souza DA, Parente DB, Eiras de Araújo AL, **Mortelé KJ.** Modern Imaging Evaluation of the Liver: Emerging MR Imaging Techniques and Indications. Magn Reson Imaging Clin N Am. 2013 May;21(2):337-63. doi: 10.1016/j.mric.2013.01.001. PMID: 23642557.

Dewhurst C, Beddy P, **Pedrosa I**. MRI evaluation of acute appendicitis in pregnancy. J Magn Reson Imaging. 2013 Mar;37(3):566-75. doi: 10.1002/jmri.23765. PMID: 23423797.

Dewhurst CE, **Mortele KJ**. Magnetic resonance imaging of rectal cancer. Radiol Clin North Am. 2013 Jan;51(1):121-31. doi: 10.1016/j. rcl.2012.09.012.

Drew DA, **Bhadelia R**, Tighiouart H, Novak V, Scott TM, Lou KV, Shaffi K, Weiner DE, Sarnak MJ. Anatomic brain disease in hemodialysis patients: a cross-sectional study. Am J Kidney Dis. 2013 Feb;61(2):271-8. doi: 10.1053/j.ajkd.2012.08.035. PMCID: PMC3546146.

Duncan JR, Larson DB, **Kruskal JB**. Standardization of quality initiative reporting. Radiographics. 2013 Mar;33(2):373-4. doi: 10.1148/rg.332125034. PMID: 23479702.

Eisenberg RL. Ways to Improve Radiologists' Adherence to Fleischner Society Guidelines for Management of Pulmonary Nodules. J Am Coll Radiol. 2013 Mar 28. doi:pii: S1546-1440(12)00608-4. 10.1016/j. jacr.2012.10.001. PMID: 23542022.

Eisenberg RL, Cunningham M, Kung JW, Slanetz PJ. Misrepresentation of publications by radiology residency applicants: is it really a problem? J Am Coll Radiol. 2013 Mar;10(3):195-7. doi: 10.1016/j.jacr.2012.12.013. PMID: 23571059.

Eisenberg RL. Re: "recent measures to improve radiology reporting: perspectives from primary care physicians". J Am Coll Radiol. 2013 Jun;10(6):479. doi: 10.1016/j.jacr.2013.04.004. PMID: 23735277.

Faroja M, **Ahmed M**, Appelbaum L, Ben-David E, <u>Moussa M</u>, **Sosna J**, Nissenbaum I, **Goldberg SN**. Irreversible electroporation ablation: is all the damage nonthermal? Radiology. 2013 Feb;266(2):462-70. doi: 10.1148/radiol.12120609.

Ferris HA, <u>Williams G</u>, **Parker JA**, Garber JR. Therapeutic Implications of Diffuse Hepatic Uptake Following I-131 Therapy for Differentiated Thyroid Cancer. Endocr Pract. 2013 Mar 25:1-16. PMID: 23529347.

Gadaleta CD, Solbiati L, Mattioli V, Rubini G, Fazio V, Goffredo V, Vinciarelli G, Gadaleta-Caldarola G, Canniello E, Armenise F, D'Aluisio L, Gaudiano A, Ranieri G, **Goldberg SN**. Unresectable lung malignancy: combination therapy with segmental pulmonary arterial chemoembolization with drug-eluting microspheres and radiofrequency ablation in 17 patients. Radiology. 2013 May;267(2):627-37. doi: 10.1148/radiol.12120198. PMID: 23249572.

<u>Gao Y</u>, Seidman MA, **Bankier AA**. Case 196. Radiology. 2013 Apr;267(1):305-7. doi: 10.1148/radiol.13121257. PMID: 23525717.

Gao Y, **Slanetz PJ**, **Eisenberg RL**. Echogenic Breast Masses at US: To Biopsy or Not to Biopsy? Radiographics. 2013 Mar;33(2):419-34. doi: 10.1148/rg.332125048. PMID: 23479705.

<u>Ghosh E</u>, **Levine D**. Recommendations for Adnexal Cysts: Have the Society of Radiologists in Ultrasound Consensus Conference Guidelines Affected Utilization of Ultrasound? Ultrasound Q. 2013 Mar;29(1):21-4. doi: 10.1097/RUQ.0b013e31827c6ab1.

Gilmore DM, Khullar OV, Gioux S, Stockdale A, **Frangioni JV**, Colson YL, Russell SE. Effective Low-dose Escalation of Indocyanine Green for Nearinfrared Fluorescent Sentinel Lymph Node Mapping in Melanoma. Ann Surg Oncol. 2013 Feb 26. PMID: 23440551.

Gilmore DM, Khullar OV, Jaklitsch MT, Chirieac LR, **Frangioni JV**, Colson YL. Identification of metastatic nodal disease in a phase 1 dose-escalation trial of intraoperative sentinel lymph node mapping in non-small cell lung cancer using near-infrared imaging. J Thorac Cardiovasc Surg. 2013 Jun 18. doi:pii: S0022-5223(13)00455-8. 10.1016/j.jtcvs.2013.04.010. PMID: 23790404.

Ginat DT, Freitag SK, Kieff D, Grove A, Fay A, Cunnane M, **Moonis G**. Radiographic Patterns of Orbital Involvement in IgG4-Related Disease. Ophthal Plast Reconstr Surg. 2013 May 2. PMID: 23645355.

Ginat DT, Singh AD, **Moonis G**. Reply. Retina. 2013 May;33(5):1090. doi:10.1097/IAE.0b013e318281b992. PMID: 23549093.

Gokhale S, Lahoti S, **Rojas R**, Caplan LR. Tissue Plasminogen Activator and Calcific Emboli. JAMA Neurol. 2013 Mar 4:1-2. doi: 10.1001/jamaneurol.2013.616. PMID: 23460090.

Goldberg SN. Science to practice: can we expand focal interventional oncologic ablation treatments into an effective systemic therapy? Radiology. 2013 May;267(2):321-3. doi: 10.1148/radiol.13130140. PMID: 23610091.

Hall FM. Treatment of unresectable pancreatic cancer. AJR Am J Roentgenol. 2013 Feb;200(2):467. doi: 10.2214/AJR.12.9353.

Hall FM. Lobular neoplasia: what does it mean and how should it be treated? AJR Am J Roentgenol. 2013 May;200(5):W538. doi: 10.2214/ AJR.12.10123. PMID: 23617527.

Hall FM, Hooley RJ, Greenberg K, Stackhouse RM, Geisel J, Butler R, Philpotts LE, Lee CI, Bassett LW, Lehman CD. Breast density legislation. Radiology. 2013 Mar;266(3):997-8. doi: 10.1148/radiol.12121953.

Hall FM, Hylton N. MR Imaging for the Prediction of Breast Cancer Response to Neoadjuvant Chemotherapy. Radiology. 2013 Jan;266(1):367. doi: 10.1148/radiol.12121371.

Handley R, Zelaya FO, Reinders AA, Marques TR, Mehta MA, O'Gorman R, **Alsop DC**, Taylor H, Johnston A, Williams S, McGuire P, Pariante CM, Kapur S, Dazzan P. Acute effects of single-dose aripiprazole and haloperidol on resting cerebral blood flow (rCBF) in the human brain. Hum Brain Mapp. 2013 Feb;34(2):272-82. doi: 10.1002/hbm.21436. PMID: 22451196.

Havla L, Basha T, Rayatzadeh H, Shaw JL, **Manning WJ**, Reeder SB, Kozerke S, Nezafat R. Improved fat water separation with water selective inversion pulse for inversion recovery imaging in cardiac MRI. J Magn Reson Imaging. 2012 Aug 23. doi: 10.1002/jmri.23779. PMID: 22927327

<u>Hindman N</u>, Ngo L, Genega EM, Melamed J, **Wei J**, Braza JM, Rofsky NM, Pedrosa I. Angiomyolipoma with Minimal Fat: Can It Be Differentiated from Clear Cell Renal Cell Carcinoma by Using Standard MR Techniqeus? Radiology. 2012 Sep 25.

<u>Ho ML</u>, **Moonis G**, **Eisenberg RL**. Lesions of the corpus callosum. AJR Am J Roentgenol. 2013 Jan;200(1):W1-W16. doi: 10.2214/AJR.11.8080.

Hryhorczuk A, Lee EY, **Eisenberg RL**. Bowel obstructions in older children. AJR Am J Roentgenol. 2013 Jul;201(1):W1-8. doi: 10.2214/AJR.12.8528. PMID: 23789680.

Huda W, Brady SL, Kaufman RA, **Bankier AA**, **Kressel HY**, McCollough CH. CT Dose Metrics. Radiology. 2013 Jun;267(3):964-7. doi: 10.1148/ radiol.13122469. PMID: 23704294.

International Society for Strategic Studies in Radiology (IS3R). A statement about authorship from individual members of the International Society for Strategic Studies in Radiology (IS3R). Eur Radiol. 2013 Jan;23(1):1-2. doi: 10.1007/s00330-012-2713-x. PMID: 23184074. [**Kressel HY**, collaborator]

Jamar F, Buscombe J, Chiti A, Christian PE, Delbeke D, **Donohoe KJ**, Israel O, Martin-Comin J, Signore A. EANM/SNMMI Guideline for 18F-FDG Use in Inflammation and Infection. J Nucl Med. 2013 Apr;54(4):647-58. doi: 10.2967/jnumed.112.112524. PMID: 23359660.

Javery O, Shyn P, **Mortele K**. FDG PET or PET/CT in patients with pancreatic cancer: when does it add to diagnostic CT or MRI? Clin Imaging. 2013 Mar;37(2):295-301. doi: 10.1016/j.clinimag.2012.07.005. PMID: 23465982.

Johnson KA, Minoshima S, Bohnen NI, **Donohoe KJ**, Foster NL, Herscovitch P, Karlawish JH, Rowe CC, Carrillo MC, Hartley DM, Hedrick S, Pappas V, Thies WH. Appropriate use criteria for amyloid PET: A report of the Amyloid Imaging Task Force, the Society of Nuclear Medicine and Molecular Imaging, and the Alzheimer's Association. Alzheimers Dement. 2013 Jan;9(1):e-1-16. PMID: 23360977

Johnson KA, Minoshima S, Bohnen NI, **Donohoe KJ**, Foster NL, Herscovitch P, Karlawish JH, Rowe CC, Carrillo MC, Hartley DM, Hedrick S, Pappas V, Thies WH. Appropriate use criteria for amyloid PET: A report of the Amyloid Imaging Task Force, the Society of Nuclear Medicine and Molecular Imaging, and the Alzheimer's Association. J Nucl Med. 2013 Mar;54(3):476-90. doi: 10.2967/jnumed.113.120618. Review. PMID: 23359661.

Johnson KA, Minoshima S, Bohnen NI, **Donohoe KJ**, Foster NL, Herscovitch P, Karlawish JH, Rowe CC, Hedrick S, Pappas V, Carrillo MC, Hartley DM. Update on Appropriate Use Criteria for Amyloid PET Imaging: Dementia Experts, Mild Cognitive Impairment, and Education. J Nucl Med. 2013 Jun 10. PMID: 23753186.

Kadiyala V, Lee LS, Banks PA, Suleiman S, Paulo JA, Wang W, Rosenblum J, Sainani NI, **Mortele K**, Conwell DL. Cigarette smoking impairs pancreatic duct cell bicarbonate secretion. JOP. 2013 Jan 10;14(1):31-8. doi: 10.6092/1590-8577/1195. PMID: 23306332.

Kanne JP, Jensen LE, Mohammed TL, Kirsch J, Amorosa JK, Brown K, Chung JH, Dyer DS, Ginsburg ME, Heitkamp DE, Kazerooni EA, Ketai LH, **Parker JA**, Ravenel JG, Saleh AG, Shah RD; Expert Panel on Thoracic Imaging. ACR appropriateness Criteria® radiographically detected solitary pulmonary nodule. J Thorac Imaging. 2013 Jan;28(1):W1-3. doi: 10.1097/RTI.0b013e31827657c8. PMID: 23197285. Kapoor K, Repas K, Singh VK, Conwell DL, **Mortele KJ**, Wu BU, Banks PA. Does the duration of abdominal pain prior to admission influence the severity of acute pancreatitis? JOP. 2013 Mar 10;14(2):171-5. doi: 10.6092/1590-8577/1283. PMID: 23474564.

Ketwaroo G, Brown A, Young B, Kheraj R, Sawhney M, **Mortele KJ**, Najarian R, Tewani S, Dasilva D, Freedman S, Sheth S. Defining the Accuracy of Secretin Pancreatic Function Testing in Patients With Suspected Early Chronic Pancreatitis. Am J Gastroenterol. 2013 May 28. doi: 10.1038/ajg.2013.148. PMID: 23711627.

<u>Khosa F, Khan AN</u>, Nasir K, Bedayat A, Malik Z, Jon AF, Cheema AR, **Clouse ME**, Welty FK. Comparison of coronary plaque subtypes in male and female patients using 320-row MDCTA. Atherosclerosis. 2013 Feb;226(2):428-32. doi: 10.1016/j.atherosclerosis.2012.11.033. PMID: 23287639.

Kressel HY. Herding bees: restricting overuse of abbreviations in biomedical literature. Radiology. 2013 Feb;266(2):372-3. PMID: 23479780.

Kung JW, <u>Melenevsky Y</u>, Hochman MG, Didolkar MM, Yablon CM, Eisenberg RL, Wu JS. On-call musculoskeletal radiographs: discrepancy rates between radiology residents and musculoskeletal radiologists. AJR Am J Roentgenol. 2013 Apr;200(4):856-9. PMID: 23521460.

Kwak Y, Nam S, Akçakaya M, Basha TA, Goddu B, **Manning WJ**, Tarokh V, Nezafat R. Accelerated aortic flow assessment with compressed sensing with and without use of the sparsity of the complex difference image. Magn Reson Med. 2012 Oct 12. doi: 10.1002/mrm.24514. PMID: 23065722.

Lalani T, <u>Couto CA</u>, **Rosen MP**, Baker ME, Blake MA, Cash BD, Fidler JL, Greene FL, Hindman NM, Katz DS, Kaur H, Miller FH, Qayyum A, Small WC, Sudakoff GS, Yaghmai V, Yarmish GM, Yee J. ACR Appropriateness Criteria Jaundice. J Am Coll Radiol. 2013 Apr 27. doi:pii: S1546-1440(13)00120-8. 10.1016/j.jacr.2013.02.020. PMID: 23632132.

Lee EY, Jenkins KJ, Muneeb M, Marshall AC, Tracy DA, Zurakowski D, **Boiselle PM**. Proximal pulmonary vein stenosis detection in pediatric patients: value of multiplanar and 3-D VR imaging evaluation. Pediatr Radiol. 2013 Mar 10. PMID: 23475282.

Lee EY, Zucker EJ, Restrepo R, Daltro P, **Boiselle PM**. Advanced large airway CT imaging in children: evolution from axial to 4-D assessment. Pediatr Radiol. 2013 Mar;43(3):285-97. doi: 10.1007/s00247-012-2470-7.

Lee JH, Park S, Hyun H, Bordo MW, Oketokoun R, Nasr KA, **Frangioni JV**, Choi HS. High-Throughput Screening of Small Molecule Ligands Targeted to Live Bacteria Surface. Anal Chem. 2013 Mar 18. PMID: 23461528.

Lennerz BS, **Alsop DC**, Holsen LM, Stern E, **Rojas R**, Ebbeling CB, Goldstein JM, Ludwig DS. Effects of dietary glycemic index on brain regions related to reward and craving in men. Am J Clin Nutr. 2013 Jun 26. PMID: 23803881.

Levine D, Bankier AA, Kressel HY. Spin in radiology research: let the data speak for themselves. Radiology. 2013 May;267(2):324-5. doi: 10.1148/radiol.13130108. PMID: 23610092.

Li X, **Sarkar SN**, Purdy DE, Spence JS, Haley RW, Briggs RW. Anteroposterior perfusion heterogeneity in human hippocampus measured by arterial spin labeling MRI. NMR Biomed. 2013 Feb 19. doi: 10.1002/nbm.2898. [Epub ahead of print] PubMed PMID: 23420779.

Li Y, Estroff JA, Khwaja O, **Mehta TS**, Robson CD, Poussaint TY, Feldman HA, Ware, J, **Levine D**. Callosal dysgenesis in fetuses with ventriculomegaly: levels of agreement between imaging modalities and postnatal outcome. Ultrasound Obstet Gynecol, in press. Ultrasound Obstet Gynecol. 2012 Jan 20. doi: 10.1002/uog.11098. PMID: 22262510 Maron BJ, Rowin EJ, Casey SA, Haas TS, Chan RH, Udelson JE, Garberich RF, Lesser JR, Appelbaum E, **Manning WJ**, Maron MS. Risk Stratification and Outcome of Patients with Hypertrophic Cardiomyopathy over 60 Years of Age. Circulation. 2013 Feb 5;127(5):585-93. doi: 10.1161/ CIRCULATIONAHA.112.136085.

Moghari MH, Roujol S, Chan RH, Hong SN, Bello N, Henningsson M, Ngo LH, Goddu B, Goepfert L, Kissinger KV, **Manning WJ**, Nezafat R. Freebreathing 3D cardiac MRI using iterative image-based respiratory motion correction. Magn Reson Med. 2012 Nov 6. doi: 10.1002/mrm.24538. [Epub ahead of print] PMCID: PMC3604140.

Molinari F, Tack DM, **Boiselle P**, Ngo L, Mueller-Mang C, **Litmanovich D**, **Bankier AA**. Radiation dose management in thoracic CT: an international survey. Diagn Interv Radiol. 2013 May-Jun;19(3):201-7. doi: 10.4261/1305-3825.DIR.6381-12.1. PMID: 23271505.

Mortelé KJ. Cystic pancreatic neoplasms: imaging features and management strategy. Semin Roentgenol. 2013 Jul;48(3):253-63. doi: 10.1053/j.ro.2013.03.006. PMID: 23796376.

<u>Moussa M</u>, **Goldberg SN**, Tasawwar B, Sawant RR, Levchenko T, Kumar G, Torchilin VP, **Ahmed M**. Adjuvant Liposomal Doxorubicin Markedly Affects Radiofrequency Ablation-induced Effects on Periablational Microvasculature. J Vasc Interv Radiol. 2013 Jul;24(7):1021-33. doi: 10.1016/j.jvir.2013.03.006. PMID: 23664809.

Naidich DP, **Bankier AA**, Macmahon H, Schaefer-Prokop CM, Pistolesi M, Goo JM, Macchiarini P, Crapo JD, Herold CJ, Austin JH, Travis WD. Recommendations for the Management of Subsolid Pulmonary Nodules Detected at CT: A Statement from the Fleischner Society. Radiology. 2013 Jan;266(1):304-317.

Nam S, Akçakaya M, Basha T, Stehning C, **Manning WJ**, Tarokh V, Nezafat R. Compressed sensing reconstruction for whole-heart imaging with 3D radial trajectories: a graphics processing unit implementation. Magn Reson Med. 2013 Jan;69(1):91-102. doi: 10.1002/mrm.24234. PMC3371294.

<u>Nemec SF</u>, **Bankier AA**, **Eisenberg RL**. Pulmonary hyperlucency in adults. AJR Am J Roentgenol. 2013 Feb;200(2):W101-15. doi: 10.2214/ AJR.12.8917. PMID: 23345374.

<u>Nemec SF</u>, **Bankier AA**, **Eisenberg RL**. Upper lobe-predominant diseases of the lung. AJR Am J Roentgenol. 2013 Mar;200(3):W222-37.

<u>Nemec SF</u>, **Bankier AA**, **Eisenberg RL**. Lower lobe-predominant diseases of the lung. AJR Am J Roentgenol. 2013 Apr;200(4):712-28. doi: 10.2214/AJR.12.9253. PMID: 23521438.

Nguyen JT, Ashitate Y, Venugopal V, Neacsu F, Kettenring F, **Frangioni JV**, Gioux S, Lee BT. Near-infrared imaging of face transplants: are both pedicles necessary? J Surg Res. 2013 May 10. doi:pii: S0022-4804(13)00414-9. 10.1016/j.jss.2013.04.039. PMID: 23706565.

<u>Ní Mhuircheartaigh JM</u>, **Sun MR**, Callery MP, **Siewert B**, Vollmer CM, **Kane RA**. Pancreatic Surgery: A Multidisciplinary Assessment of the Value of Intraoperative US. Radiology. 2013 Mar;266(3):945-55. doi: 10.1148/ radiol.12120201.

O'Gorman RL, Poil SS, Brandeis D, Klaver P, Bollmann S, Ghisleni C, Lüchinger R, Martin E, Shankaranarayanan A, **Alsop DC**, Michels L. Coupling Between Resting Cerebral Perfusion and EEG. Brain Topogr. 2012 Nov 18. PMID: 23160910.

Olivotto I, Maron BJ, Tomberli B, Appelbaum E, Salton C, Haas TS, Michael Gibson C, Nistri S, Servettini E, Chan RH, Udelson JE, Lesser JR, Cecchi F, **Manning WJ**, Maron MS. Obesity and its Association to Phenotype and Clinical Course in Hypertrophic Cardiomyopathy. J Am Coll Cardiol. 2013 Apr 30. doi:pii: S0735-1097(13)01731-2. 10.1016/j.jacc.2013.03.062. PMID: 23643593.

Peters DC, Shaw JL, Knowles BR, Moghari MH, **Manning WJ.** Respiratory bellows-gated late gadolinium enhancement of the left atrium. J Magn Reson Imaging. 2012 Nov 29. doi: 10.1002/jmri.23954. PMID: 23197465.

Quesnel AM, **Moonis G**, Appel J, O'Malley JT, McKenna MJ, Curtin HD, Merchant SN. Correlation of computed tomography with histopathology in otosclerosis. Otol Neurotol. 2013 Jan;34(1):22-8. doi: 10.1097/ MAO.0b013e318277a1f7. PMC3523308.

Rangwala NA, **Hackney DB**, **Dai W**, **Alsop DC**. Diffusion restriction in the human spinal cord characterized in vivo with high b-value STEAM diffusion imaging. Neuroimage. 2013 Jun 5. doi:pii: S1053-8119(13)00632-0. 10.1016/j.neuroimage.2013.05.122. PMID: 23747289.

Rayatzadeh H, Patel SJ, **Hauser TH**, Ngo LL, Shaw JL, Tan A, Buxton AE, Zimetbaum P, Josephson ME, Appelbaum E, **Manning WJ**, Nezafat R. Volumetric Left Ventricular Ejection Fraction is Superior to 2-Dimensional Echocardiography for Risk Stratification of Patients for Primary Prevention Implantable Cardioverter-Defibrillator Implantation. Am J Cardiol. 2013 Apr 15;111(8):1175-9. doi: 10.1016/j.amjcard.2012.12.051. PMC3619203.

Rayatzadeh H, Tan A, Chan RH, Patel SJ, **Hauser TH**, Ngo L, Shaw JL, Hong SN, Zimetbaum P, Buxton AE, Josephson ME, **Manning WJ**, Nezafat R. Scar heterogeneity on cardiovascular magnetic resonance as a predictor of appropriate implantable cardioverter defibrillator therapy. J Cardiovasc Magn Reson. 2013 Apr 10;15(1):31. PMID: 23574733.

<u>Ridge CA</u>, **Litmanovich D**, Molinari F, **Bankier AA**, **Eisenberg RL**. Radiographic evaluation of central venous catheter position: anatomic correlation using gated coronary computed tomographic angiography. J Thorac Imaging. 2013 Mar;28(2):129-33. doi: 10.1097/ RTI.0b013e31825d2db9.

Rosenkrantz AB, <u>Sekhar A</u>, Genega EM, Melamed J, Babb JS, Patel AD, Lo A, Najarian RM, **Ahmed M**, Pedrosa I. Prognostic implications of the magnetic resonance imaging appearance in papillary renal cell carcinoma. Eur Radiol. 2013 Feb;23(2):579-87.

Sacks BA, <u>Brook OR</u>, **Brennan IM**. Adrenal venous sampling: promises and pitfalls. Curr Opin Endocrinol Diabetes Obes. 2013 Jun;20(3):180-5. doi: 10.1097/MED.0b013e32835f26c9. PMID: 23571509.

Sarwar A, Ding A, **Slanetz PJ**. Getting involved in organized medicine-a remedy for the current health care crisis? Acad Radiol. 2013 Apr;20(4):519-20. doi:10.1016/j.acra.2012.10.001. PMID: 23498996.

<u>Sarwar A</u>, **Eisenberg RL**, **Boiselle PM**, **Siewert B**, **Kruskal JB**. Improving resident education in quality improvement: role for a resident quality improvement director. Acad Radiol. 2013 Apr;20(4):500-5. doi: 10.1016/j. acra.2012.10.011. PMID: 23498993.

Schaafsma BE, Verbeek FP, van der Vorst JR, Hutteman M, Kuppen PJ, **Frangioni JV**, van de Velde CJ, Vahrmeijer AL. Ex vivo sentinel node mapping in colon cancer combining blue dye staining and fluorescence imaging. J Surg Res. 2013 Jan 25.

Siewert B, <u>Brook OR</u>, Mullins MM, Eisenberg RL, Kruskal JB. Practice policy and quality initiatives: strategies for optimizing staff safety in a radiology department. Radiographics. 2013 Jan;33(1):245-61. doi: 10.1148/rg.331125174. PMID: 23322840.

Slanetz PJ, **Kung J**, **Eisenberg RL**. Teaching radiology in the millennial era. Acad Radiol. 2013 Mar;20(3):387-9. doi: 10.1016/j.acra.2012.09.022. PMID: 23452486.

Sullivan EV, Müller-Oehring E, Pitel AL, Chanraud S, Shankaranarayanan A, **Alsop DC**, Rohlfing T, Pfefferbaum A. A Selective Insular Perfusion Deficit Contributes to Compromised Salience Network Connectivity in Recovering Alcoholic Men. Biol Psychiatry. 2013 Apr 12. doi:pii: S0006-3223(13)00223-0. 10.1016/j.biopsych.2013.02.026. PMID: 23587427.

Tsao CW, Frost LE, Fanning K, **Manning WJ**, **Hauser TH**. Radiation Dose in Close Proximity to Patients after Myocardial Perfusion Imaging: Potential Implications for Hospital Personnel and to the Public. J Am Coll Cardiol. 2013 May 8. doi:pii: S0735-1097(13)01794-4. 10.1016/j.jacc.2013.04.032. PMID: 23665101.

Tung P, Hong SN, Chan RH, Peters DC, **Hauser TH**, **Manning WJ**, Josephson ME. Aortic injury is common following pulmonary vein isolation. Heart Rhythm. 2013 May;10(5):653-8. doi: 10.1016/j.hrthm.2013.01.012. PMID: 23318348.

van der Vorst JR, Schaafsma BE, Hutteman M, Verbeek FP, Liefers GJ, Hartgrink HH, Smit VT, Löwik CW, van de Velde CJ, **Frangioni JV**, Vahrmeijer AL. Near-infrared fluorescence-guided resection of colorectal liver metastases. Cancer. 2013 Jun 21. doi: 10.1002/cncr.28203.PMID: 23794086.

van der Vorst JR, Schaafsma BE, Verbeek FP, Keereweer S, Jansen JC, van der Velden LA, Langeveld AP, Hutteman M, Löwik CW, van de Velde CJ, **Frangioni JV**, Vahrmeijer AL. Near-infrared fluorescence sentinel lymph node mapping of the oral cavity in head and neck cancer patients. Oral Oncol. 2013 Jan;49(1):15-9. doi: 10.1016/j.oraloncology.2012.07.017. PMCID: PMC3608510.

van der Vorst JR, Schaafsma BE, Verbeek FP, Swijnenburg RJ, Tummers Q, Hutteman M, Hamming JF, Kievit J, **Frangioni JV**, van de Velde CJ, Vahrmeijer AL. Intraoperative Near-Infrared Fluorescence Imaging of Parathyroid Adenomas using Low-Dose Methylene Blue. Head Neck. 2013 May 29. doi: 10.1002/hed.23384. PMID: 23720199.

Verbeek FP, van der Vorst JR, Schaafsma BE, Swijnenburg RJ, Gaarenstroom KN, Elzevier HW, van de Velde CJ, **Frangioni JV**, Vahrmeijer AL. Intraoperative Near-Infrared Fluorescence-Guided Identification of the Ureters using Low-Dose Methylene Blue: A First-in-Human Experience. J Urol. 2013 Mar 1. doi:pii: S0022-5347(13)03463-0. 10.1016/j. juro.2013.02.3187. PMID: 23466242.

Wang X, Zhang L, O'Neill A, Bahamon B, **Alsop DC**, Mier JW, **Goldberg SN**, Signoretti S, Atkins MB, Wood CG, Bhatt RS. Cox-2 inhibition enhances the activity of sunitinib in human renal cell carcinoma xenografts. Br J Cancer. 2013 Feb 5;108(2):319-26. doi: 10.1038/bjc.2012.591. PMID:23322198

Wang Y, Ma Y, Zhu B, <u>Brook OR</u>, **Raptopoulos V**. Metal artifact reduction software must be used with caution. Radiology. 2013 Feb;266(2):687. doi: 10.1148/radiol.12121476. PMID: 23362100.

Watadani T, Sakai F, Johkoh T, Noma S, Akira M, Fujimoto K, **Bankier AA**, Lee KS, Müller NL, Song JW, Park JS, Lynch DA, Hansell DM, Remy-Jardin M, Franquet T, Sugiyama Y. Interobserver Variability in the CT Assessment of Honeycombing in the Lungs. Radiology. 2013 Mar;266(3):936-44. doi: 10.1148/radiol.12112516. PMID: 23220902.

Watanabe M, Saito N, Nadgir RN, Liao JH, **Flower EN**, Steinberg MH, Sakai O. Craniofacial bone infarcts in sickle cell disease: clinical and radiological manifestations. J Comput Assist Tomogr. 2013 Jan;37(1):91-7. doi: 10.1097/RCT.0b013e3182752967. PMID: 23321839.

Weingärtner S, Akçakaya M, Basha T, Kissinger KV, Goddu B, Berg S, **Manning WJ**, Nezafat R. Combined saturation/inversion recovery sequences for improved evaluation of scar and diffuse fibrosis in patients with arrhythmia or heart rate variability. Magn Reson Med. 2013 May 6. doi: 10.1002/mrm.24761. PMID: 23650078.

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Yablon CM, Wu JS, Newman LR, Downie BK, Hochman MG, Eisenberg RL. A needs assessment of musculoskeletal fellowship training: a survey of practicing musculoskeletal radiologists. AJR Am J Roentgenol. 2013 Apr;200(4):732-40. doi: 10.2214/AJR.12.9105. PMID: 23521440.

Zhu H, **Bhadelia RA**, Liu Z, Vu L, Li H, Scott T, Bergathon P, Mwamburi M, Rosenzweig JL, Rosenberg I, Qiu WQ. The Association Between Small Vessel Infarcts and the Activities of Amyloid-β Peptide Degrading Proteases in Apolipoprotein E4 AlleleCarriers. Angiology. 2012 Oct 23.

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Ellis RJ, Norton AC, Overy K, Winner E, **Alsop DC**, Schlaug G. Differentiating maturational and training influences on fMRI activation during music processing. **Neuroimage. 2012 Apr 15;60(3):1902-12.**

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