# Radical Views... from the Department of Radiology

FROM THE CHIEF Jonathan B. Kruskal, MD PhD

### Welcome to the new academic year

This last month has been full of exciting and wonderful news. First of all, I am pleased to announce that **Peter H. Gordon, MD, FACR** will be our new Vice Chair of Radiology for Community Network Services, taking over MaxRosen's portfolio. Peter is currently Chairman of the Departments of Diagnostic Imaging at Good Samaritan Medical Center in Brockton and St. Anne's Hospital in Fall River. A graduate of Amherst College, Peter received his medical degree from Tufts University, completed internship training at George Washington University and his radiology residency at Massachusetts General Hospital before completing a

Volume 5, Number 1

Peter H. Gordon, MD Vice Chair, Community Network Services Oct. 1, 2012

fellowship in DiagnosticUltrasound and CT at Brigham and Women's Hospital. Peter has a long history of service to the radiology community at both the local and national level, including serving as president of the medical staff at Good Samaritan Medical Center and president of the Massachusetts Radiological Society. Peter will bring his extensive community imaging and network development experience to our group, where his role will be to further develop, grow and maintain all of our community practices. He will oversee and be responsible for the clinical operations, performance and enhancement of all sites, and we very much look forward to having him join our leadership team. Peter will be joining us October 1st.

Also please welcome three new staff members, **Ian Brennan** in vascular and interventional radiology, and **Jordana Phillips** and **Amee Patel** in breast imaging following completion of their fellowship training at BIDMC. (Amee will be coming on board in August.) Ian completed his VIR fellowship in 2011 and an additional abdominal imaging fellowship in 2012.





Beth Israel Deaconess Medical Center



lan Brennan

Jordana Phillips

## Congratulations Professor Alexander Bankier, MD PhD



Alex Bankier (left) presenting Stefan Nemec, cardiothoracic imaging research fellow, his graduation certificate at this year's Fleischner ceremony.

It has been a stellar year for promotions in our department. I am thrilled to announce that **Alex Bankier**, our Chief of Cardiothoracic Imaging, has been appointed Professor of Radiology at Harvard Medical School. Alex is an internationally recognized expert in thoracic imaging and also serves as a Deputy Editor of Radiology. Alex hales from Vienna, Austria, and received his medical training from the University of Vienna and his PhD from the University of Brussels. Originally, Alex spent two years at BIDMC as a reserach fellow in MRI under Robert Edeleman (1999-2001) and then returned to us as a thoracic imaging faculty member in 2007. Since then, Alex's research has focused in part on translating pulmonary imaging technologies into the functional evaluation of airways disease, specifically the use of CT for quantifying the extent of emphysema. Another broad area of interest has been in imaging following lung transplantation and Alex has served as coordinator of the international lung transplant research group documenting the spectrum of expected and unanticipated findings following grafting. Most recently, Alex was honored to present the Felix Fleischner

Lecture considered by many to be the most prestigious scientific and educational lecture worldwide in the field of thoracic imaging. An avid and respected mentor (Mentor of the year Award 2004), teacher (Teacher of the year Award 2005), author (over 180 scientific manuscripts, reviews, editorials, books, chapters and case reports), clinician and researcher, Alex exemplifies a *quadruple threat* in academic medicine. Of note, Alex now brings the total to five full Professors involved in cardiac and/or thoracic imaging in our department (in addition to Phil Boiselle, Sven Paulin, Mel Clouse and Ron Eisenberg). I am so pleased that Alex has received this most deserved and timely appointment. Please join me in congratulating Alex.

# Radiology Calendar July 2012\*

Mon	Tues	Wed	Thurs	Fri
<b>2</b> 3:00-4:00 ED section meeting (monthly) [ED annex, WCC] call Trish Gardner 4-2506 7:30-8:15 HRCT Patterns (Dr. Boiselle)	<b>3</b> 1:00 MRI Section Meeting Shapiro 484 7:30 - 9:00 Breakfast w/new residents	4 Weekly Wed Section Meetings: 11:00-12:00 MSK clinical conference 12:00-1:00 Thoracic Imaging, Gl/GU Oncology 3:00-4:00 Mammo [TCC-484] 7:30 - 9:00 GI & GU	<b>5</b> Weekly Thurs Section Meetings: 12:00 - 1:30 Abd [WCC-354] 12:00-1:00 MSK 7:30-8:15 Chest Imaging (Dr. Romero) 8:15-9:00 Patterns (Dr. Eisenberg)	6 No Grand Rounds for July
9 7:30 - 8:15 Intro - iPad security (Residents)	10 7:30 - 9:00 Intro (Residents) 10:30-11:30 Nuc Med meeting [GZ-103]	<b>11</b> 7:30 - 9:00 Intro - Neuro CT (Residents) 7:15 - 8:00 US meeting (WCC-304A Gallery)	<b>12</b> 7:30 - 9:00 Intro (Residents) 1:30-2:00 East Med-Rads conference - Senior Nukes Resident (TCC 484)	13
<b>16</b> 7:30-8:15 TBA (Dr. Brennan)	<b>17</b> 7:30 - 9:00 Intro (Dr. Kruskal) 8:00-9:00 IR Meeting [West Recovery Rm]	<b>18</b> 7:30 - 9:00 Focal liver lesions - multimodality imaging (Dr. Mortele)	<b>19</b> 7:30 - 9:00 Liver ultrasound and cases (Dr. Kane) 1:30 - 2:00 East Med-Rads conference - Senior Nukes Resident (TCC 484)	20
<b>23</b> 5:00-6:00 Best in Practice: MR Angiography of the Cerebral Aneurysm (Dr. Rafeeque Bhadelia) Shapiro 10 - Rabkin Board Rm	<b>24</b> 10:30-11:30 Nuc Med meeting (GZ-103)	25 7:30 - 8:15 Cross-sectional interventions (Dr. Brennan) 8:15-9:00 Case conference (Dr. Brennan)	26 7:30-8:15 Cranial anatomy (Dr. Rojas) 8:15-9:00 Neck anatomy (Dr. Moonis)	27
<b>30</b> 7:30 - 8:15 EU trauma (Dr. Hochman) 8:15-9:00 Cases (Dr. Hochman)	<b>31</b> 7:30-8:15 Emergent intervention (Dr. Wu) 8:15-9:00 Cases (Dr. Wu)		MG	

We are pleased to announce that Marcel Clemente, MD, our first physician to enter our International Observership Program, has started this week in the Radiology Department. Dr. Clemente is a radiologist from Santos, Brazil. He will be observing for his first three months in Body MR and will be spending a great deal of his observership in the Shapiro 4 Reading Room. Please stop by and welcome Dr. Clemente as he observes and studies clinical methodology in our Section.



\*Consult the webpage for the most up to date schedule:

http://home.caregroup.org/departments/radiology/residency/scheduling/conferences/displayMonthNew.asp

#### **DEPARTMENTAL NEWS, AWARDS & HONORS:**

### Welcome Sophie Rose Bernstein!

We are thrilled to announce a new addition to the BIDMC radiology family. **Sophie Rose Bernstein** arrived fashionably late on Monday 5/28/2012, at 11:44 AM, weighing in at a mere 10 lbs and measuring 20.5 inches.

Mom, Dad, and Sophie are doing well.

- Robin Levenson Interim Chief, Emergency Radiology

# 20.5 inches. whie are doing

## > Farewell Rola Shaheen, Breast Imager and Chief of Radiology at Harrington Memorial Hospital

We are pleased to announce that Dr. Shaheen has accepted a post with the government of Abu Dhabi to lead the breast imaging planning program at SEHA (Abu Dhabi Health Services). She will be based at Al Mafraq hospital, one of the major SEHA hospitals in Abu Dhabi, as the Deputy Chair of Radiology and Chief of Women's Imaging. While she is aware of how challenging and demanding such a position can be, Dr. Shaheen is very excited about her new role.

Dr. Shaheen first came to BIDMC as a Women's Imaging Fellow in 2007 and then in 2008 she accepted the position of Chief of Mammography at Harington Memorial Hospital, one

of our community radiology sites where she rose to Chief of Radiology in 2009. In January 2011, Dr. Rola Shaheen was appointed the Susan G. Komen regional director for the Middle East where she worked to expand the Komen foundation's various education, advocacy and awareness initiatives in the region to better reach underserved women. It has been a very active five years for Dr. Shaheen and we know that her global health work will continue through her projects with Komen, WHO and the Harvard Global Equity Initiative (HGEI) which offers opportunities for medical students, residents and fellows to do clinical and research electives in Abu Dhabi and to participate in some NGO initiatives in the Middle East that will benefit mainly underserved areas. Dr. Shaheen welcomes any inquiries and can be reached via e-mail available from Breast Imaging administrator Linda Lintz at 7-3102.

#### The Body MR Section celebrated the

graduation of fellows Catherine Dewhurst and Jennifer Ní Mhuircheartaigh on Wednesday, June 27th, at the Ristorante Fiore with a rooftop dinner. Dr. Mortele presented them with electronic picture frames that will be loaded with photos from everyone at the party to help them remember their time in Boston.







### Farewell Max Rosen

On Friday June 22, we bid farewell to **Max Rosen**, Executive Vice Chair of Radiology and Director of Community Network Services, who will be taking up the reins as the new Chairman of Radiology at UMASS Medical School in Worcester. After more than 2 decades of incredible service at BIDMC, it was hard to know what we could give him – besides a Harvard Chair – until we decided to pool our "knowledge" into what became "A Chairman's Survival Kit".





(Above) Director of Operations Donna Hallett and BIDMC Vice President Laurie Pascal register their support and best wishes to Max as Dr. Kruskal presents him with his personalized Chairman's Survival Kit. Pages of this advicefilled tome were on display in the Kirstein Living Room and Dr. Rosen asked to take all eight feet of them to his new office in Worcester! (See the sample page below). And finally, we stood as a large group of friends and admirers seeing Dr. Max Rosen off to new adventures.





### DEPARTMENTAL NEWS, AWARDS & HONORS: Outstanding Residency Leadership and Resident awards 2012

- Congratulations Dr. Jim Wu, a recipient of the 2011-2012 Harvard Medical School Young Mentor Award sponsored by the Office for Diversity Inclusion & Community Partnership. Dr. Wu was nominated by fellow musculoskeletal radiologist and Associate Residency Program Director Justin Kung, who also presented the award to him in a ceremony at the Tosteson Medical Education Center at HMS on Tuesday, June 5.
- Congratulations Dr. Priscilla Slanetz on her election to Fellowship in the Society of Breast Imaging "on the basis of outstanding contributions and service to breast imaging". She will be formally presented as a new fellow at the next SBI Fellows meeting held during RSNA in Chicago, this November 2012. This is incredibly well-deserved as Dr. Slanetz serves as our Director of Breast MRI and Director of Breast Imaging Research & Education as well as Director of our Radiology Residency Program.



- Speaking of RSNA, congratulations 4th year resident Mai-Lan Ho on being awarded the 2012 RSNA Trainee Editorial Fellowship. This is a great honor and opportunity to learn first hand about academic publishing as the grant allows her to visit the Radiology offices in Boston, the RadioGraphics offices in Burlington, VT and the RSNA Publications Department at Society headquarters in Oak Brook, IL.
- Two of our residents were honored this year at the Celebration of Education Awards Ceremony at BIDMC on June 4, 2012: Leo Tsai and Sachin Pandey for outstanding resident teaching (Principle clinical Experience). Leo is now entering his 4th year of residency and is also a Chief Residents and Sachin completed his residency this year but stays on as a Neuroradiology fellow.
- Double header for now 4th year resident Ammar Sarwar. Last month, Dr. Sarwar won a Morrison Award for his talk on "A Novel Tool to Improve Detection of Fractures on Radiography: The Digital Anatomic Avatar" and then, barely a week later, he won a clinical research award as lead author for a poster version of his talk at Resident Research Day 2012 held as part of Medical Education Week at BIDMC. Ammar and his fellow authors, Jim Wu, Justin Kung, Karen Lee, Manjiri Didolkar, Leo Tsai, Jean-Marc Gauget, Larry Nathanson, Johannes Roedl, and Max Rosen, propose that in addition to written radiology orders, that ordering physicians mark on a digital avatar – for this poster, a foot – that would allow ordering physicians to indicate the location that needs imaging. This poster showed how a physician could mark a sub-region of the foot or even a specific toe along with orders.



A novel tool to improve detection of fractures on radiography: the digital anatomic avatar



- Radiology was also very well represented by posters from residents Elizabeth Asch and Mai-Lan Ho and vascular & interventional fellow (now Women's Imaging fellow) Olga Brook, who also participated in the Resident and Fellow Poster Competition:
- Form Follows Function: Anatomic and Functional Localization of the Central Sulcus Mai-Lan Ho
- Use of CT and US for acute pelvic pain in women of reproductive age
- in the emergency department Elizabeth Asch

Superselective vs. lobar transarterial chemoembolization – incidence and clinical significance of non-targeted embolization. - Olga Brook

(Thanks also to Olga Brook for the photos!):

#### MORRISON RESEARCH DAY, May 29, 2012

**Congratulations**: Resident **Ammar Sarwar**, Abd Imaging Fellow **Bala Rangaswamy** and Research Fellow **Marwan Moussa!** The 17th annual Morrison Research Day featured 13 talks 9 posters over which the judges, Dave Alsop, Alex Bankier, Aaron Grant and Debbie Levine, had to give some serious thought to choosing a winner among so many great presentations. Then our guest lecturer Richard Ehman (right) drew a multidisciplinary crowd who came to hear him talk about MR Elastography, a state-of-the-art technique.





Above (I to r): Vice Chair of Research David Alsop presents Morrison Research Day Awards to Ammar Sarwar for "A novel tool to improve detection of fractures on radiography: the digital anatomic avatar"; VIR fellow Bala Rangaswamy for his talk on "evaluating the role of CT intensity distribution data as a marker of response to Tyrosine Kinase inhibitor (TKI) therapy in patients with metastatic renal cell carcinoma (metRCC)."; and tumor research fellow, Marwan Moussa, for his talk on Combination RF Ablation with Nanotechnology: Effect of Nanoparticle Size on Drug Delivery in the Periablational Zone".





There was lots of arm waving this year as authors got the opportunity to present their work to their colleagues, mentors, and friends. (Posters presented at Morrison will also be available for viewing in the corridor outside the 3rd floor Clouse conference room on the West Campus.) FLEISCHNER GRADUATION The Harvard Club, Boston Thursday, June 14TH, 2012

> Congratulations graduating residents (L to R): Iva Petkovska, Erica Gupta, Jennifer Son, Jean-Marc Gauguet, Adam Jeffers, Sachin Pandey, Ernie Yeh, and David Li





It was a particularly special night for Chief Resident Sachin Pandey who became the first recipient of the Humanism Award presented here by Priscilla Slanetz; Sachin also won the resident award for excellence in teaching medical students and he and fellow resident Ernie Yeh won Andrew Berezin Awards for mentoring fellow residents!

Current Chief Residents, James Knutson and Leo Tsai presented 1)the Section of the Year Award to **MRI** represented this evening by Jesse Wei, Karen Lee, Koenraad Mortele and Marty Smith.

2) Our Chief Residents went on to present **Tony Parker** with the Ferris Hall Teacher of the Year Award and 3) the Fellow of the Year Award to Women's Imaging Fellow, **Carolynn DeBenedectis** and 4) Norman Joffe Awards to **Andrew Bennett** and **Manjiri Didolkar**.

(Bottom right) Dr. Kruskal presented **Paul Spirn** with the faculty award for excellence in teaching medical students.













(L to R) Dr. Kruskal presents the Triple Threat Award (for excellence in clinical, research and educational achievement) to **Diana Litmanovich**; RSNA Roentgen Research Award to **Mai-Lan Ho**; and Risa & Felix Fleischner Young Investigator Awards to Body MR Fellow **Cathy Dewhurst** and Neuroradiology Fellow **Harald Brodoefel**.



(L to R) Ferris Hall in apparent thrall with this year's Fleischner Lecturer **Dr. James Thrall**. We were honored that Dr. Thrall not only joined us at the graduation but he also participated in the end of year resident video directed by Ammar Sarwar. And Sven Paulin, framed by Jonathan and Sharon Kleefield, perfectly signals the success of the event. Below: Departing Vice Chair of Community Network Services Max Rosen is given a standing ovation as Dr. Kruskal presnts him with a going away present of a Harvard Chair.





Please note that there are many more wonderful Fleischner graduation photos available for viewing and/or downloading on the S drive: S:\Radiology\WorkGroup - Media Lab\Fleischner 2012 If you can't access the folder, please call IS at 4-8080 and have them add your name to "Radiology" (ITS\Radiology)

At this year's Fleischner graduation event, it was quite remarkable to see what a family we have become and how it's never too early to introduce the next generation of potential physicians to each other.









# *Alumni News:* New Postings for the Class of 2012

# **RESIDENTS**

Jean-Marc Gauguet, MD PhD - Fellow in Pediatric Radiology, Children's Hospital, Boston

# Erica A. Gupta, MD - TBA

- Adam Bredahl Jeffers, MD Fellow in Vascular & Interventional Radiology, Johns Hopkins
- **David Li, MD PhD** Fellow in Vascular & Interventional Radiology, Cornell University
- Sachin K. Pandey, MD Fellow in Neuroradiology, BIDMC
- Iva Petkovska, MD Fellow in MRI, Stanford University

Jennifer K. Son, MD - Fellow in Pediatric Radiology, Children's Hospital, Boston Ernest Nanjung Yeh, MD PhD - Fellow in Neuroradiology, BIDMC

### **FELLOWS**

Ian M. Brennan MD (Abd) - Attending in Interventional Radiology, BIDMC

Harald Brodoefel, MD (Neuro) - Fellow in Vascular & Interventional Radiology, BIDMC

Olga Rachel Brook, MD (VIR) - Fellow in Women's Imaging, BIDMC

Please note that information is not available at this time for all graduates. Contact Radical Views Editor Donna Wolfe at 4-2515 or dwolfe@bidmc.harvard.edu if you have updates. Thank you!

Reema Chaudhary, MD (Neuro) - Returned to India Carolynn M. DeBenedectis, MD (Women's Imaging) - Attending Breast Imaging, UMASS Memorial Medical Center, Worcester Catherine Dewhurst, MB BCH BAO, BMedSc, FFRRCSI (Body MR) - Returned to Ireland Liran Domachevsky, MD, PhD, MSc (Abd) - Brigham & Women's Hospital, Boston Valerie Drnovsek, MD PhD (VIR) - Chief, Interventional Radiology, Blanchard Valley Hospital System, Findlay, OH Lisa Marie Fortin, MD (Abd) - Private Practice, Northern Imaging Associates, Petoskey, MI Elize Gershater, MDCM, MPH, CCFP, FRCPC, DABR (MSK) - Returned to Toronto, Canada Gaurav Jindal, MD (Neuro) - Radiologist, North Shore Medical Center, Salem, MA Atif Niaz Khan, MBBS (Cardiovascular CT Research) - Residency in Pediatrics and Internal Medicine, Wisconsin Naveen M. Kulkarni, MD (Cardiothoracic) - Fellow in Thoracic Imaging, MGH Jennifer Ní Mhuircheartaigh, MB BCh BAO, MRCSI, FFRRCSI (Body MR) - Fellow in Vascular & Interventional Radiology, BIDMC Gustavo Pantol, MD (Neuro) - Staff, Radiology Associates of South Florida, Miami, FL Amee Patel, MD (Women's Imaging) - Attending in Breast Imaging, BIDMC (8/1) Jay Prakash Patel, MD (MSK) - Breast Imaging Fellow, Henry Ford Hospital, Detroit, MI (Beginning Jan 2013) Jordana Phillips, MD (Breast Imaging) - Attending in Breast Imaging, BIDMC Balasubramanya Rangaswamy, MBBS, MD (Abd) - Radiology Attending, University of Pittsburgh, Passavant Hospital (9/2012) Laxmi N. Abishek Thummalakunta, MD MPH (VIR) - TBA

Ann Michelle Brown, MB BCh BAO, MRCPI, MMedSci, FFR RCSI (Abd) - Attending Radiologist, Sligo General Hospital, Ireland





# 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

At BIDMC Radiology, we expect all staff (Medical Center and HMFP) to exhibit the highest levels of professional demeanor and personal responsibility

# 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

# Residents (39) —

### 1st Years (10)



Matthew Miller, MD

97789

92294

93718



Lauren Ferrara, MD 97790



(Diamanto) Amanda Rigas, Neda Sedora-Roman,

92295

MD





Michael Acord, MD Edward Ahn, MD 93719



Sahil Mehta, MD

3rd Years (9)

Monica Agarwal, MD

Tamuna Chadashvili,

4th Years (10)

Yiming Gao, MD

Ammar Sarwar, MD

\*Chief Residents

Jan 2012-Dec 2012

90851

90857

MD, PhD

94340

90900

93724

Javier Perez-Rodriguez, MD Tonguc Pinar, MD 93725 93726

Rashmi Jayadevan, MD

93720



Ann Leylek, MD

93722

Jonathan Kim, MD

Yuri Shif, MD

92297

97797

Pritesh Mehta, MD

George Watts, MD

Mark Masciocchi, MD

Katherine Troy, MD

93723

92298

97793

34767



Pauline Bishop, MD 94342



Elizabeth Asch, MD

94337

94341

Mai-Lan Ho, MD

Nicholas Telischak, MD

90853

94492

94343

94344

94339



Johannes Roedl, MD 90856



Behroze Vachha, MD, PhD Omar Zurkiya, MD, PhD 90860

# Clinical Fellows (21) -



Abd 92299





Michael Baldwin, MD



Olga Brook, MD Women's Imaging 90861 **Chief Fellow** 



Joan Burkhardt, MD Abd 92302

Body MR

Jennifer Ní

VIR

94354

Abd

92304

Neuro 34699

Ernest Yeh, MD. PhD

Mhuircheartaigh, MD

, 92306



Genta Dani, MD

Dell Dunn, MD Abd

92301

VIR

93728

Sumayya Jawadi, MD Abd 92303

Mark Knox, MD





Body MR

, 92307

(Thi) Som Mai Lê, MD Cardiothoracic 92312

Neuro 92311

Sachin Pandey, MD Neuro 34696

Seema Prakash, MD Breast Imaging 92305

Kelechi Princewill, MD MSK 92309



Giselle Revah, MD Gabriela Spilberg, MD VIR <u>(8/1)</u>





Mary Tenenbaum, MD Neuro 92310

Jed Weinstock, MD



#### Clinical Fellows by section:

Abd Imaging - Sami Abedin, Joan Burkhardt, Genta Dani, Dell Dunn, Sumayya Jawadi, Giselle Revah (Bala Rangaswamy until 9/13/12) Body MR - Mark Knox, Deirdre Moran

Breast Imaging - Seema Prakash

MSK (Musculoskeletal Imaging) - Michael Baldwin, Kelechi Princewill Neuroradiology - Martha Lopez, Sachin Pandey, Mary Tenenbaum, Ernest Yeh

- Cardiothoracic Imaging Som Mai Li VIR (Vascular & Interventional) - Harald Broedefel, Jennier Ní Mhuircheartaigh, Gabriela Spilberg, Jed Weinstock
- Women's Imaging Olga Brook

# **Research Fellows**



Weiying Dai, PhD MRI 7-3266





Guarav Kumar, PhD Minimally Invasive Tumor Therapy Lab (857)204-2573





Stefan Nemec, MD Cardiothoracic Imaging

Novena Rangwala, PhD MRI

MRI 7-0281







Marwan Moussa, MD

Minimally Invasive

Tumor Therapy Lab

(617) 319-6927







7-2535







James Knutson, MD\*

90855

90859

Seth Berkowitz, MD

Krithica Kaliannan, MD

Leo Tsai, MD, PhD, MSc\*

90854

90858

Mark Ashkan, MD

94338









# Radiology Faculty 2012-2013

Beth Israel Deaconess Medical Center



Executive Committee



es Chair



# Clinical and Teaching Faculty



rg. MD

Per Eld, MD

Community Ra BD-Needham (781) 453-305

Alexan Chief, Ca

der A.8

Faintuch, ME

Gerald Chief, J 33971

J.An PhD



adiology -8ID-1

Kung, MD

Sven Paulin, MO, PhD Cardiothoracic Imaging 7-5687

Community Radio Assoc. Dit., Reside

Elisa N. F Emergenc Radiology 39321

Dir, Rad

Nagamani Peri, MB Neurosadiology 91234

er, MD

boa



, MD

Laura Perry, MD

Vascular & 1 32836

MD.

ish, MD

Peter D. Gross, MD





M. Hall, MD imaging 31614



Colin Ultrasc 31968



ins, MD aging/GI Rad







h Y.R.



Amee Patel, MD BreastImaging 93739

Magneti Imaging 7-0299















Venkat Breast I



Research Faculty & Technical Staff

Jim S. Wu, MD Munculoskeletal 38932 **Callmaging** 









Abd Imaging/MRI Dit., Community M

Neurota Radiology 94023

Paul W. S

Dir., Cor 32653



Dit, Ca

Arra Sures Chief, Inter





vid C. Al Dir., Research Dir., MR Research 7-0275

Matthew R. Palmer, PhD Nuclear Medicine



Sul MR 7-2757

Cardiov 4-2529



Jacob Sosna, MD Adjunct Faculty Abd Imaging Research (4-2519 A. Baxterj)



Deborah Burstein, PhD MR Research 7-3349

Welying Dai, PhD MR Research 7-3266

John V. Fra Molecular I 7-0692 dioni, MD, PhD



Chun-Shan Yam, PhD Dit., Dept1 Computing 38076



Aaron K. Gr MR Research 7-3265



Robert L. G ME Research 7-0278

Thomas H Candiac Nu 7-4363

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

July 2012 Radical Views /14

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Pei-Jan Paul Lin, PhD Medical Imaging Physics 32214



#### **DEPARTMENTAL NEWS, AWARDS & HONORS:**

 $\succ$ Interventional Radiology christens it's new interventional suite! Thursday, June 14th was a very busy day for the department. In addition to the annual Fleischner Graduation Ceremony and dinner, the department held an 8:00 a.m. ribboncutting ceremony and breakfast on the 3rd floor West Campus Clinical Center to formally open the new interventional suite which replaces a system that had been in place since 1995. This suite is a state-of-the-art flat panel digital system for all advanced IR procedures and was designed with input from technologists, nurses and physicians utilizing many of the process improvement concepts initiated in IR. Over the past few years, the IR section has reestablished its strong presence on both campuses of the medical center and this suite will support the growing volume of inpatient and outpatient IR cases. For many of us, it was also a chance to meet our new BIDMC President Dr. Kevin Tabb.



BIDMC President Kevin Tabb (with scissors) cuts the ribbon on the new suite, witnessed by (L to R) Jonny Kruskal, Joseph Breen (Skanska), Barry Sacks, Manuel Sotelo, Marge Guthrie.



State-of-the-art Interventional Radiology suite on the 3rd floor of the West Campus Clinical Center



Due to scheduling issues, Radiology Business Director Allen Reedy was not able to be here for the formal opening of the IR suite but thanks to incredible ingenuity by IR/ INR Manager Marge Guthrie, Allen was able to be here in absentia, seen here represented by a life-sized cardboard cutout! Allen served as Project sponsor who helped coordinate the BIDMC Radiology team for this project so there was no question that he had to be there!

The BIDMC team: Kevin Tabb, Laurie Pascal, Allen Reedy, and Jonny Kruskal







... and what would a celebratory breakfast be without cake! Margie Guthrie and Jonny Kruskal have their priorities.

Above left: Jonny Kruskal shows Dr. Tabb around the IR suites. Above right: Design and renovation team (I to R): Joseph Breen (Skanska), Adam Maxcy (Skanska), Rebecca Jablonski, Martin Batt (isgenuity)



Dr. Tabb greets IR techs (I to R) Diana Daley, Kim Downes and Kali Wilson

*Alumni News:* Sven Paulin & Igor Laufer Days at Rambam Medical Center, Haifa, Israel



BIDMC Alumni reunion in Israel: Drs. Jonny Kruskal and Ron Eisenberg were in Israel early in June and were happy to reunite with BIDMC alumni (L to R) **Jacob Sosna**, former abdominal imaging fellow, now Chief of Radiology, Hadassah Medical Center, Jerusalem and newly appointed head of the Israeli Radiology Association; **Liat Appelbaum**, former abdominal imaging fellow, now staff at the Pulmonary Institute of Hadassah Medical Center, Jerusalem; and **S. Nahum Goldberg**, former Director, Minimally Invasive Tumor Therapy Lab and staff radiologist, now head of Interventional Oncology and Head of the Applied Radiology Lab at Hadassah Medical Center, Jerusalem. All were gathered on the occasion of the Beth Israel Deaconess Sven Paulin-Moris Simon Lecture at Rambam Medical Center, Technion University, Haifa which this year, also honored the life and times of Igor Laufer (1944-2010) who was also a BIDMC alumnus (BIH Radiology resident under

Dr. Eisenberg - *Early History of Radiology* and *Pattern Approach to Musculoskeletal Radiology* Dr. Kruskal - *Pitfalls of Liver Imaging* and *Pitfalls of Gallbladder and Bile Duct Imaging* 

Sven Paulin 1970-1973). Both Drs. Kruskal and Eisenberg presented two talks each at this event:

Dr. Kruskal also gave two talks, *Practical Peer Review to Achieve Performance Improvement* and *Optimizing Liver Doppler Examination* at the Israeli Radiology Association Conference in Tel Aviv on June 5.

Jacob Sosna "on the waterfront" demonstrates how one can still get work done amidst such a beautiful lansdscape. (Thanks to Ron Eisenberg for sharing the photos)





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

# **M C KESSON**

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

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:

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- 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?).

McKesson Corner 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 post-processing" 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.

### Symposia

# Establishing a Computed Tomography Screening Clinic

Max P. Rosen, MD, MPH,\* Jane Corey,† and Bettina Siewert, MD\*

Abstract: Since the publication of the National Lung Screening Trial results, there has been increasing interest among radiologists to establish computed tomography (CT) screening centers. During the past 10 years, we have operated a CT screening center in suburban Boston, MA. The purpose of this paper is to describe our process for performing self-referred CT lung screening exams, including our organizational structure, marketing, patient selection process, and standardized workflow. Direct communication between the patient and radiologist, both before and after the CT scan, in our opinion, is critical to a successful screening program. In many ways, CT screening offers radiologists a wonderful opportunity to interact directly with patients. Showing abnormal lung findings to patients on their CT scans may help create a unique "teachable" moment for current smokers and may help motivate patients to quit smoking.

Key Words: computed tomography (CT), screening, lung cancer, health policy and practice, economics

(J Thorac Imaging 2012;27:220-223)

#### BACKGROUND

Initial data from the ELCAP<sup>1</sup> study served to spark interest in the widespread use of screening computed tomography (CT) to detect lung cancer at an early, and hopefully treatable, stage. At the same time, CT scanner technology was rapidly evolving. New methods such as CT colonography and coronary CT angiography were being developed and implemented in both academic and community practices. Concurrent with these developments, medicine was undergoing a transformation from a primarily "doctor driven" system to a more "consumer driven" system. These changes were manifested by the expansion of direct-to-consumer marketing of medical services such as Lasik eye surgery, cosmetic surgery, and prescription medications.

These clinical advances, combined with technological developments in CT in the context of societal change, produced the "perfect storm" to create interest among radiologists in performing CT screening<sup>2</sup> and the foundation for the development of CT screening centers. Although it is likely that many academic and community-based programs have offered de-facto CT screening for many years under the guise of "soft" indications for ordering a CT scan, for example, "rule-out pneumonia" or "cough," the birth of widespread direct-to-patient-marketed CT screening began approximately in the year 2000. Screening services such as "full-body scan," coronary artery calcium scoring, coro-

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nary CT angiography, and CT colonography were marketed directly to patients through radio, print, TV, and direct mail. Several national "screening" chains soon appeared, including CT Screening International and Ameriscan.<sup>3</sup> The majority of these screening centers appeared in high socioeconomic areas.<sup>4</sup>

A debate soon appeared in the medical literature<sup>5</sup> arguing the ethical problems caused by marketing medical tests directly to patients before having the test's efficacy proven by randomized clinical trials. Now that a randomized control trial has shown that CT screening reduces lung cancer mortality, screening on a broader scale is anticipated in the near future. This creates a potential challenge, however, as relatively few radiology practices or departments have experience with lung cancer screening outside of research trials. Thus, the goal of this article is to share the authors' 10-year experience at "BeWell" (a free-standing screening center operated by an academic radiology practice) with an emphasis upon reviewing the considerations of establishing and running a lung cancer screening center.

#### **ORGANIZATIONAL STRUCTURE**

Since May 2001, the academic Radiology Department of Beth Israel Deaconess Medical Center in Boston, MA, has owned and operated a CT screening service, BeWell Body scan LLC (http://www.bewellbodyscan.com), in Chestnut Hill, MA. "BeWell" is unique in that, as far as we know, it is the only free-standing CT screening center wholly owned by an academic radiology department. BeWell is located in a suburban shopping mall and is attached to an outpatient radiology office (also owned by a division of our physician practice), which also performs "traditional" physicianordered x-ray, ultrasound, and bone densitometry.

Over the past 10 years, the radiologist has played an active role in all aspects of the patient encounter. Our goal was to provide as comprehensive a service as possible, have each patient seen by a radiologist before and after the CT scan, have the radiologist review the CT images directly with the patient, and have the patient leave with a final written report and as few "loose ends" as possible. In addition, as patients can be "self-referred" without an order from another physician, we have stressed upon the importance that the screening CT is one piece of information that should be used in the context of each patient's medical care, that the CT scan is not a substitute for routine medical care, and that we encourage, but do not require, patients to share the information with their primary care physician (PCP). Although not currently a part of the BeWell program, some centers include evaluation by a pulmonologist and/or tobacco cessation expert as part of the CT screening process.

#### MARKETING

During the initial stages of BeWell we marketed our services in print (newspaper and magazine), through direct mail, and through radio. We also ran information booths at

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From the \*Beth Israel Deaconess Medical Center, Harvard Medical School, Boston; and †BeWell Body Scan, Chestnut Hill, MA. The authors declare no conflicts of interest.

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### **Publication Call Out:** Ron Eisenberg in Hungary!

The following is the original and the translation of an article written by Dr. Harkanyi Zoltan, Dr. Eisenberg's major Radiology host while he was in Budapest

## KÖNYVEKRŐL

# Minden könyvnek megvan a sorsa...



#### A könyv eredeti és magyar nyelvű kiadása The original Hungarian edition of the book

edikált magyar nyelvű radiológiai könyvet kaptam postán egy ismerős amerikai kollégától Bostonból. Címe "Röntgenfelvételi technikai zsebkönyv", a Medicina Kiadó gondozásában jelent meg 1998-ban. A könyv szerzői C. A. Dennis, C. May és Ronald A. Eisenberg. A könyv sokaknak nagy segítséget nyújtott a röntgenvizsgálatok végzéséhez, a beállítások megtanulásához. A kötet magyar változatát Baranyai Tibor és munkatársai készítették el az angol monográfia alapján, a magyar változatot Fornet Béla ellenőrizte.





Zina Schiff, hegedűművész és Ronald Eisenberg, radiológusprofesszor Visegrádon

A könyv harmadik szerzőjével, Ron Eisenberg professzorral tavaly Pesten találkoztam párnapos itt tartózkodása alatt. Egy emlékezetes, jó hangulatú továbbképző előadást tartott a Semmelweis Egyetem Kardiológiai Központhoz tartozó, Határőr úti intézetében, Hüttl Kálmán professzor meghívására. Akkori utazásának célja az volt, hogy "lelkileg" segítse felesége, a neves hegedűművész Zina Schiff lemezfelvételét a Magyar Rádióban. A fénykép visegrádi kirándulásunkon készült.

Ron Eisenberg azon radiológusok közé tartozik, akik döntően a hagyományos röntgenológiával foglalkoztak egész életükben; ezt ismeri a legjobban, és még ma is ezt a területet oktatja a szakorvosjelölteknek a Harvard Egyetemen. Húsz radiológiai témájú könyvnek a szerzője. Az orvosi diploma mellett megszerezte a jogi képzettséget is, orvosi jogi kérdésekben is gyakran publikál.

E rövid írás csupán egy kis adalék a sokak által hazánkban is kedvelt röntgenológiai könyvvel kapcsolatban.

Violinist Zina Schiff and Professor Ronald **Eisenberg** in Visegrad

Eisenberg professzor előadása a Cardiovascularis Központban

Dr. Harkányi Zoltán Professor Eisenberg lectures at the Cardiovascular Institute 99

Translation: All books have their destiny ...

MAGYAR RADIOLÓGIA 2012;86(1):99.

I recently received in the mail an autographed radiology book translated into Hungarian from an American colleague living in Boston. Appearing in a 1998 edition, this book has helped many people learn radiology in a variety of settings.

I met the third author, Professor Ron Eisenberg, several times last year during his stay in Budapest. He presented a memorable, good-humored lecture at the Semmelweis University Cardiology Unit, at the invitation of its professor and director, Dr. Huttl Kalman. He was in Budapest with his wife, the renowned violinist, Zina Schiff, who recorded a CD at the Hungarian Radio. They are pictured together (upper right) in a photograph from Visegrad.

The photo (lower left) is of Ron Eisenberg with radiologists who are primarily dealing with conventional radiological images. He is a specialist in this area and teaches residents at Harvard University. He is the author of many books in radiology and also obtained a law degree and has published on medical-legal issues.

**2012 BIDMC Radiology Publications** [New Citations in Blue\*]. We do a monthly PubMed search for new BIDMC publications and may miss those in which your affiliation is not noted. If we miss your paper, please send the reference to dwolfe@bidmc.harvard.edu.

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

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The editor apologizes for any confusion!