Sunday, December 01, 2013
10:45-12:15 PM  •  SSA11  •  Room: S403A  •  ISP: Informatics (Education and Research)
02:00-03:30 PM  •  RC102  •  Room: E350  •  What's New from the Radiology Residency Review Committee: Milestones, New for 2013
02:00-03:30 PM  •  RC116  •  Room: S102D  •  RSNA Educational Programs Around the World: An International Forum (Sponsored by the RSNA Committee on Interna...
02:00-03:30 PM  •  RC123  •  Room: N229  •  Minicourse: Current Topics in Medical Physics-Clinically Focused Physics Education: Principles to Practice

Monday, December 02, 2013
08:30-10:00 AM  •  RC202  •  Room: S502AB  •  Teaching Leadership Strategies to Residents for Future Health Care Challenges
08:30-10:00 AM  •  RC230  •  Room: S102D  •  Technologies for Creating Educational Content and Teaching Files
10:30-12:00 PM  •  ICIW21  •  Room: S401AB  •  Creating, Storing, and Sharing Teaching Files Using RSNA's MIRC®: A Hands On Course
10:30-12:00 PM  •  SSC08  •  Room: S102D  •  ISP: Health Service, Policy and Research (Radiology Education)
01:30-04:30 PM  •  SPRP21  •  Room: E271A  •  Program to Enhance Relational and Communication Skills for Radiologists (PERCS:Radiology)
04:30-06:00 PM  •  SPSI23  •  Room: N229  •  Special Interest Session: Planning for the Future Radiology Workforce: Too Many or Too Few?

Tuesday, December 03, 2013
08:30-10:00 AM  •  RC302  •  Room: S403B  •  Strategies for ABR Core Exam and ACGME Resident Performance Evaluations
02:30-04:00 PM  •  ICIW33  •  Room: S401AB  •  Creating, Storing, and Sharing Teaching Files Using RSNA's MIRC®: A Hands On Course
04:30-06:00 PM  •  RC402  •  Room: E353A  •  Resident Interviewing: Skills that Work!
04:30-06:00 PM  •  RC424  •  Room: E352  •  Publishing in Radiology: What You Always Wanted to Know and Never Asked

Wednesday, December 04, 2013
08:30-10:00 AM  •  RC502  •  Room: S404AB  •  How To Evaluate Resident Milestones Effectively and Efficiently: Practical Ideas Will Help Program Directors a...
10:30-12:00 PM  •  ICIW41  •  Room: S401AB  •  Creating Radiology eBooks for the iPad: A Hands-on Introduction to iBooks Author
01:30-03:30 PM  •  MSRP41  •  Room: E451B  •  RSNA Resident and Fellow Symposium 2013: Career 101: Planning for Success After Residency (An Interactive Ses...
PURPOSE/AIM
1) Review the diagnosis of a specific condition by using either a single-modality or multi-modality approach. 2) Identify state-of-the-art imaging and methods of treatment for various pathologic conditions. 3) Assess new research on applications of various imaging and therapeutic modalities.

Cardiac Case of the Day

**LL-EDE3002**
**Moderator**
Matthew D Cham, MD
Gregory Kicska, MD, PhD *
Dorith Shaham, MD
Yelena Bekker-Milovanov, MD

PURPOSE/AIM
1) Review the diagnosis of a specific condition by using either a single-modality or multi-modality approach. 2) Identify state-of-the-art imaging and methods of treatment for various pathologic conditions. 3) Assess new research on applications of various imaging and therapeutic modalities.

Chest Case of the Day

**LL-EDE3003**
**Moderator**
Eric T Goodman, MD
Andrew C Yen, MD
Sharon S Brouha, MD, MPH
Masoud Shiehmorteza, MD
Michael E Hahn, MD, PhD
David S Heister, MD
Quinn C Meisinger, MD
Gregory A Shaw, MD

PURPOSE/AIM
1) To analyze interesting chest cases. 2) To understand appropriate differential diagnosis. 3) To understand the clinical significance of the diagnosis presented.
PURPOSE/AIM
1) To analyze interesting chest cases. 2) To understand appropriate differential diagnosis. 3) To understand the clinical significance of the diagnosis presented.

Emergency Radiology Case of the Day

LL-EDE3004
Moderator
Guillermo P Sangster, MD
Maureen G Heldmann, MD
Alberto A Simoncini, MD
Carlos H Previgliano, MD
Justin W Skweres, MD
Kevin C Cormier, MD

PURPOSE/AIM
1) Participants will test their diagnostic skills on the imaging findings of challenging cases in Emergency Radiology. 2) Key radiologic signs will be shown and discussed to generate a list of differential diagnoses.

Gastrointestinal Case of the Day

LL-EDE3005
Moderator
Kevin J Chang, MD
Nicholas C Monu, MD
Anna Ellermeier, MD
Elizabeth H Dibble, MD
Joseph L Farnam, MD
Robert C Ward, MD

PURPOSE/AIM
1) Each GI case of the day will be taken from disorders of the luminal GI tract as well as the liver, spleen, pancreas, and biliary system. The findings may be uncommon manifestations of common diseases or common manifestations of uncommon diseases.

Genitourinary Case of the Day

LL-EDE3006
Moderator
Frederico F Souza, MD
Shannon A Milbourne, MD
Patrick J Robbins, MD
Katherine L Ragland, MD
Keith P Russell, MD
Timothy J Ragland, MD
John T McCarty, DO
Jason H Williams, MD
Tracy C Marchant, DO
Cody Branch, BS
Andrew D Smith, MD, PhD *

Genitourinary Case of the Day
**Genitourinary Case of the Day**

**LL-EDE3006**
Moderator
Frederico F Souza, MD
Shannon A Milbourne, MD
Patrick J Robbins, MD
Katherine L Ragland, MD
Keith P Russell, MD
Timothy J Ragland, MD
John T McCarty, DO
Jason H Williams, MD
Tracy C Marchant, DO
Cody Branch, BS
Andrew D Smith, MD, PhD

**Interventional Radiology Case of the Day**

**LL-EDE3007**
Moderator
Paula Novelli, MD

**PURPOSE/AIM**
For a set of challenging cases, the viewer is asked to: 1) Identify and analyze normal and abnormal findings on multi-modeling interventional radiology studies. 2) Develop a DDX based on imaging findings and clinical information. 3) Discuss important aspects of image-guided treatment.
For a set of challenging cases, the viewer is asked to: 1) Identify and analyze normal and abnormal findings on multi-modeling interventional radiology studies. 2) Develop a DDX based on imaging findings and clinical information. 3) Discuss important aspects of image-guided treatment.

<table>
<thead>
<tr>
<th>Musculoskeletal Case of the Day</th>
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<tbody>
<tr>
<td><strong>LL-EDE3008</strong></td>
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<td><strong>Moderator</strong></td>
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<tr>
<td>Jonelle M Petscavage-Thomas, MD, MPH *</td>
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<td>Stephanie A Bernard, MD</td>
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<td>Eric A Walker, MD *</td>
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<td>Pamela L Brian, MD</td>
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<tr>
<td><strong>PURPOSE/AIM</strong></td>
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<tr>
<td>Participants will test their diagnostic skills and become familiar with the imaging findings of a variety of challenging and interesting musculoskeletal cases.</td>
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<tr>
<th>Neuroradiology Case of the Day</th>
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<tr>
<td><strong>LL-EDE3009</strong></td>
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<td><strong>Moderator</strong></td>
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<tr>
<td>Yoshimi Anzai, MD</td>
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<td>Jayson L Benjert, DO</td>
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<td>James R Fink, MD *</td>
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<td>Gisele E Ishak, MD</td>
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<tr>
<td>Mahmud Mossa-Basha, MD</td>
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<tr>
<td>Judith Luckman, MD</td>
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<td><strong>PURPOSE/AIM</strong></td>
</tr>
<tr>
<td>1) To identify, characterize and analyze abnormal findings on multimodality neuroimaging. 2) To develop concise differential diagnosis based on available clinical information and imaging findings.</td>
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<th>Nuclear Medicine Case of the Day</th>
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<td><strong>LL-EDE3010</strong></td>
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<td><strong>Moderator</strong></td>
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<td>Murray D Becker, MD, PhD</td>
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<td>Puneet Belani, MD</td>
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<td>Richard K. J. Brown, MD *</td>
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<td>Daniel J Wale, DO</td>
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<td>Anjani P Naidu, MD</td>
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<td>Pranay C Uppuluri, MD</td>
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<td>Jeffrey S Kempf, MD</td>
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<td><strong>PURPOSE/AIM</strong></td>
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<tr>
<td>1) To recognize perfusion patterns on renal scintigraphy that indicate acute renovascular abnormalities. 2) To understand the incidence and etiologies of acute renal thrombosis in a newborn.</td>
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PURPOSE/AIM
1) To recognize perfusion patterns on renal scintigraphy that indicate acute renovascular abnormalities. 2) To understand the incidence and etiologies of acute renal thrombosis in a newborn.

Nuclear Medicine Case of the Day

LL-EDE3010
Moderator
Murray D Becker, MD, PhD
Puneet Belani, MD
Richard K. J. Brown, MD *
Daniel J Wale, DO
Anjani P Naidu, MD
Pranay C Uppuluri, MD
Jeffrey S Kempf, MD

PURPOSE/AIM
1) To recognize perfusion patterns on renal scintigraphy that indicate acute renovascular abnormalities. 2) To understand the incidence and etiologies of acute renal thrombosis in a newborn.

Obstetrical Imaging Case of the Day

LL-EDE3011
Moderator
Genevieve L Bennett, MD

PURPOSE/AIM
1) The five submitted Obstetrical Imaging cases will offer challenging ultrasound and MR images to practice visual interpretation skills, promote medical knowledge review, and enhance ability to summarize important findings to achieve a diagnosis.
Genevieve L Bennett, MD

PURPOSE/AIM
1) The five submitted Obstetrical Imaging cases will offer challenging ultrasound and MR images to practice visual interpretation skills, promote medical knowledge review, and enhance ability to summarize important findings to achieve a diagnosis.

Obstetrical Imaging Case of the Day

LL-EDE3011
Moderator
Genevieve L Bennett, MD

PURPOSE/AIM
1) The five submitted Obstetrical Imaging cases will offer challenging ultrasound and MR images to practice visual interpretation skills, promote medical knowledge review, and enhance ability to summarize important findings to achieve a diagnosis.

Pediatric Case of the Day

LL-EDE3012
Moderator
Lynn A Fordham, MD
W. Dean Bidgood, MD, MS
Tae Il Han
Cassandra M Sams, MD

PURPOSE/AIM
1) Challenge yourself with unknown pediatric cases. 2) Review test cases and similar cases. 3) Increase depth of knowledge in Pediatric imaging.

Physics Case of the Day

LL-EDE3013
Moderator
Charles E Willis, PhD
Physics Case of the Day

LL-EDE3013
Moderator
Charles E Willis, PhD
William D Erwin, PhD
William R Geiser, MS
Ryan F Fisher, PhD
Robert L Dixon, PhD *
Dustin K Ragan, PhD

Physics Case of the Day

LL-EDE3013
Moderator
Charles E Willis, PhD
William D Erwin, PhD
William R Geiser, MS
Ryan F Fisher, PhD
Robert L Dixon, PhD *
Dustin K Ragan, PhD

Physics Case of the Day

LL-EDE3013
Moderator
Charles E Willis, PhD
William D Erwin, PhD
William R Geiser, MS
Ryan F Fisher, PhD
Robert L Dixon, PhD *
Dustin K Ragan, PhD

Physics Case of the Day

LL-EDE3013
Moderator
Charles E Willis, PhD
William D Erwin, PhD
William R Geiser, MS
Ryan F Fisher, PhD
Robert L Dixon, PhD *
Dustin K Ragan, PhD

Ultrasound Case of the Day

LL-EDE3014
Moderator
Jeanne M Horowitz, MD
Lori A Goodhartz, MD
Maneesh Gupta, MD, BEng
Ravi Guttikonda
Joseph A Meranda, MD
Nicholas Morley, MD
Meghan F Single, MD

PURPOSE/AIM
1) Recognize the diagnosis and differentiate specific conditions using Ultrasound. 2) Learn characteristic imaging findings for the diagnosis. 3) Learn about clinical implications and treatment of the diagnosis.
PURPOSE/AIM
1) Recognize the diagnosis and differentiate specific conditions using Ultrasound.
2) Learn characteristic imaging findings for the diagnosis.
3) Learn about clinical implications and treatment of the diagnosis.

Ultrasound Case of the Day

LL-EDE3014
Moderator
Jeanne M Horowitz, MD
Lori A Goodhartz, MD
Maneesh Gupta, MD, BEng
Ravi Guttikonda
Joseph A Meranda, MD
Nicholas Morley, MD
Meghan F Single, MD

PURPOSE/AIM
1) Recognize the diagnosis and differentiate specific conditions using Ultrasound.
2) Learn characteristic imaging findings for the diagnosis.
3) Learn about clinical implications and treatment of the diagnosis.

Molecular Imaging Case of the Day

LL-EDE3015
Umar Mahmood, MD, PhD
David A Mankoff, MD, PhD
Hannah M Linden, MD
David M Schuster, MD
Katja Pinker-Domenig, MD
Edwin L Palmer, MD
Mukesh G Harisinghani, MD
Pedram Heidari, MD

PURPOSE/AIM
1) Participants will gain a better understanding, through example cases, of cutting edge clinical applications of molecular imaging using novel techniques.

ISP: Informatics (Education and Research)

Sunday, 10:45 AM - 12:15 PM • S403A

SSA11 • AMA PRA Category 1 Credit™:1.5 • ARRT Category A+ Credit:1.5
Moderator
Gary H Danton, MD, PhD
Moderator
Ayis T Pyrros, MD *

SSA11-01 • Informatics Keynote Speaker: Informatics and Education
CONCLUSION
Software which de-identifies and indexes clinical data for a queryable research database was created. Users have the ability to save radiology reports and request de-identified medical images via the system's web interface. Additionally, the opt-out paradigm provided a substantial number of consented patients and maximized the amount of data available to researchers. Autonomous operation of our dedicated research system resulted in minimal PACS performance degradation.

Background
A system to mine, organize, anonymize, and request de-identified images from a radiological database was required to fulfill the needs of biomedical researchers. The system must function autonomously from a clinical PACS to minimize its impact on performance during clinical use. Independent operation allows keyword queries of anonymized radiology reports through a web interface; this interface also functions as a database creation and de-identified image request system. A custom database interface was designed to fill this need.

Evaluation
The software includes (1) Perl and VB apps to extract data from a clinical PACS and anonymize PHI in accordance with IRB and HIPAA standards; (2) an indexing search engine that allows keyword queries via a web browser; (3) PHP-based exporting of queried radiology reports with an option to request associated de-identified images through the Human Imaging Research Office at our institution. An opt-out IRB paradigm was created: outpatients in radiology reception areas are presented with an opt-out form to establish consent for use of clinical images and associated data for research.

Discussion
The opt-out paradigm began in October 2008; to date 128,000 patients are enrolled and de-identified image data is available for query via our database interface. 1,324 patients have declined the study resulting in a 1% withdrawal rate. Previous paradigms resulted in an enrollment of less than 3,000 patients over a 5 year period. Over 1.2 million radiology reports encompassing over a decade of data were anonymized and indexed from our PACS and are available for use in medical research.

PURPOSE
To introduce and evaluate the workflow, standard and database established at the Alliance Imaging Corelab for cancer imaging quality control in multi-institutional clinical trials

METHOD AND MATERIALS
The imaging Corelab (ICL) established an overall clinical trial implementation pipeline from trial initiative to trial closure. Along the roadmap, workflows of data quality control were defined with more than 15 individual sub-components integrated (site credentialing, virtual site visit, automatic quality check, real-time image remote review and so on). Quality control standard in 15 items under 4-level categories (timing, imaging, data and patient) was established with SOP driven. (Semi-)automatic softwares were developed enabling mega-data processing and database management in 10 important steps and audit process.

RESULTS
A total of 2992 patients with 8246 studies (PET/CT, CT, MR, NM) from 27 clinical cancer trials over 300 participating sites within USA were included in this assessment. The established thin-client real-time image review approach enables off-site reviewers performing remote image review with no data transfer required; a success rate of better than 91% in adaptive trials has been achieved in evaluating over 1500 real-time central reviews of which 75% enabled independent remote review. Quality control is critical component of cancer imaging clinical trials to assure appropriate executions and the success of clinical trial. The study proposed and evaluated our established workflow, standard and database of quality control in 10-yr multi-institutional clinical trials implementations experiences at the imaging corelab with efforts in helping people better understand the components, challenges and strategies of doing quality control for clinical trials.

CLINICAL RELEVANCE/APPLICATION
Conducting multi-institutional clinical trials requires a set of standards and workflows in quality control defined for professional trial implementations making sure trials to be valid and successful.

CONCLUSION
The developed searching engine was integrated a clinical RIS-integrated PACS, and operated for two years in a hospital. The evaluation results showed that searching engine can be used for the purposes of decision support, research, and education were quite different.

CLINICAL RELEVANCE/APPLICATION
SSA1-05 • Development of a Dedicated Workstation to Facilitate Rapid Performance of Observer Studies in Low-dose CT

David R Holmes PhD (Presenter); Rickey Carter PhD; Kurt E Augustine MS; Yu Liu MD; Maria Shiung; Lifeng Yu PhD; Phillip Edwards; Cynthia H McCollough PhD *; Joel G Fletcher MD *

PURPOSE
While numerous CT noise reduction methods have been developed, it is difficult to directly measure the clinical impact of each approach. We have developed an open source computer workstation to efficiently conduct observer studies of low dose CT protocols to determine the superiority or non-inferiority of new reconstruction methods.

METHOD AND MATERIALS
The workstation allows a user to conduct lesion detection and characterization, and image quality assessment in a time-efficient manner. The user is required to identify the location and size of all lesions in a dataset by delineating the long axis of the lesion. Both manual and automated software tools have been developed to match corresponding lesions between an observer and routine dose FBP reference standard. The automatic matching algorithm computes correspondence by determining if the reference ROI overlaps with an observer ROI. Matching rules are employed to insure lesions are appropriately characterized (e.g., benign/malignant) if they are detected. The algorithm reports true positives (TP), false positives (FP), and false negatives (FN) to a back-end database for export and JAFROC analysis.

RESULTS
The automated matching algorithm was validated using ten radiologist observers reviewing 10 datasets. The study PI created the reference standard based on correlative imaging, follow-up and pathology reports. Observer required an average of 5.6 minutes (range 0.5 - 25.4) min to review each case. The PI completed semi-automated visual matching of observer and reference marks and diagnoses. The observers delineated a combined 644 lesions (including TP, FP, and FN) across all 10 observers. Automated matching required < 1 second and correctly matched 94.7% of the lesions (compared to the manual matching). Incorrect responses by the algorithm included 11 overmatched (e.g. multiple overlapping ROIs) detections and 23 mis-matches between reference and observer ROIs.

CONCLUSION
A system for interactively evaluating CT denoising methods must minimize radiologist effort, accurately match reference detections and classifications with observer markings using automated and manual visual tools, and create a streamlined workflow and statistical analysis.

CLINICAL RELEVANCE/APPLICATION
Dedicated workstations for observer performance in low dose CT minimize radiologist effort with streamlined workflow and provide automated and visual tools for reference standard matching.

SSA1-06 • Compression of Radiology Reports Using a Semi-static Dictionary and Directed Pseudoforest

Naveen Garg MD (Presenter) *; Peter Kamel; Sarfaraz Sadruddin MD; Jorge Herskovic MD, PhD; David J Vining MD *; Kevin W McEnery MD *

PURPOSE
A radiologist will generally dictate a normal chest the same way every day, and usually describe the same pathology in a consistent style. Speech recognition systems rely on these recurring patterns of reporting style to develop statistical language models for improving. Because of this, we hypothesized that radiology reports would be highly compressible using static dictionaries. The more commonly used compression algorithms such as gzip obtain approximately 4x compression, but lose random access of the compressed data. In this work, we report on the compression ratios achieved on a large corpus of radiology reports using static dictionaries. We also present a novel method of compressing the static dictionary itself using a directed pseudoforest.

METHOD AND MATERIALS
We constructed dictionaries from a variable number of radiology reports. Dictionaries were constructed using a variation of a generalized suffix tree pruned by a threshold frequency of the suffixes. The dictionary was then itself compressed using a directed pseudoforest, taking advantage of the shared structure between phrases in the dictionary. Source documents were then compressed using the integer indices into the dictionary, coded with a prefix-free entropy code. The algorithm was coded in c++11 with no platform specific dependencies.

RESULTS
Compression ratios improved with increasing number of reports. A million reports compressed to 18.7% of original size including the compressed reports, and dictionary. These randomly accessible compressed reports were further compressible by gzip, bringing compressed size to 13.7 %. Pruning the dictionary of less frequently used n-grams substantially decreased the size of the dictionary with only a minor increase in the size of the compressed reports. On a million reports, limiting the dictionary to n-grams that occur at least 30 times in the corpus results in overall better compression than allowing n-grams that occur 10 or more times.

CONCLUSION
Static dictionaries with directed pseudoforests can compress radiology reports with a very high efficiency while retaining random access capability.

CLINICAL RELEVANCE/APPLICATION
Better compression of radiology reports and other medical records can be used to enable data mining applications to retain more data in memory allowing faster analytics.

SSA1-07 • Detailed Comparison of Average Journal Impact Factors of Oral and Poster Abstracts Presented at Scientific Session That Achieved Publication at 2009 Radiological Society of North America Scientific Assembly and Annual Meeting

Hiroyuki Takaoka MD, PhD (Presenter); Nobusada Funabashi MD, PhD; Naoko Mizuno; Koya Ozawa MD; Yoshio Kobayashi

PURPOSE
To determine the average journal impact factors of oral and poster abstracts presented at the scientific sessions of the 2009 Radiological Society of North America (RSNA) 95th scientific assembly and annual meeting that achieved publication for each category using Pubmed.

METHOD AND MATERIALS
From the 2009 RSNA meeting program (total of 1509 oral abstracts, and 684 poster abstracts), authors names and abstract titles were entered into PubMed. Publication consistent with abstract content was confirmed by PubMed in March 2013.

RESULTS
Percentages of all oral and poster abstracts in the scientific sessions achieving publication were 18.4 and 11.4% and that of oral abstracts was significantly higher than that of poster abstracts. The percentage of oral abstracts achieving publication was significantly higher than the poster abstracts in Breast (26.3 vs 10.0%, P < 0.05), Nucleic Acids and Gene (20.6 vs 3.2%, P < 0.05), Musculoskeletal (29.0 vs 14.0%, P < 0.05), and Radiation Oncology categories (12.7 vs 0.1%, P < 0.05). Even though impact factors were significantly higher for the oral abstracts that achieved publication (3.3 ± 1.8) than for the poster abstracts that achieved publication (2.6 ± 1.3) in all categories (P < 0.04), but there were no significant differences in average Impact factors achieving publication between oral and poster abstracts in each category.
CONCLUSION
Although the percentages of oral abstracts to achieve publication were significantly higher than poster abstracts in all, Breast, Nuclear Medicine, Musculoskeletal, and Radiation Oncology categories, both oral and poster abstracts at the 2009 RSNA 95th scientific assembly and annual meeting were similar in achieving publication in terms of average journal impact factor in each category.

CLINICAL RELEVANCE/APPLICATION
Both oral and poster abstracts presented at the scientific sessions of the 2009 RSNA annual meeting were similar in achieving publication in terms of average journal impact factor in each category.

SSA11-08 • Developing a Computer Game for Problem Based-learning (PBL) of Radiology for Undergraduate Medical Education (MEDGAME)

Salvador Pedraza, MD, PhD (Presenter)*; Joan C. Vilanova, MD, PhD; Elda Balliu, MD; Carles Munoz; Enric Marti; Jordi Arnal; Pere Nolla; Joan Domenech; Albert Ramon; Luis Branda

CONCLUSION
In response to the need to improve the learning of radiology in medical schools using PBL, we have created MEDGAME. We discuss the task to build a computer educational game and thorough radiological aspects involved.

Background
Problem-based learning (PBL) is a recognized and implemented educational strategy in the learning of radiology. In this project we developed and validated a learning tool radiological computer game (MEDGAME) of image interpretation in order to improve the effectiveness of PBL applied to radiology and its associated disciplines.

Evaluation
The study population was composed of 150 second-year medical students at the Medical School of the University of Girona during the 2012-2013 academic year. MEDGAME has been developed under Mac Platform with the Unity3D Engine which allows deployment for Mac and Windows standalone application. 3D Studio MAX program was used to the create 3D characters and environments models. Images of five scenarios of typical radiology departments were obtained: a reporting room, a plain-film X-ray room, a sonography room, a computed tomography room, and a magnetic resonance imaging room. It was decided to include only three roles: a) The player requests a radiological examination and then must answer the questions asked by the senior radiologist; b) senior radiologist, who asks the player; c) patient, whose avatar is different in each challenge. Summarizing picture is shown in Figure 1. On the other hand, four challenges have been developed into the game: Cervical trauma, appendicitis, pulmonary embolism, and acute stroke. Each challenge contains several questions about the patient's radiological diagnoses.

Discussion
This project will make it possible to examine the degree of relevance of a specific computer game dedicated to PBL radiology education. Each student trained with MEDGAME is completing a written surview about the knowledge and skills acquired in the Educational program. Currently, we are analyzing the preliminary results for demonstrating whether this new tool is improving students' motivation and their learning of radiology.

SSA11-09 • A Diagnostic Problem? Think www.diagnologic.com!

Raphael E Khayat, MD (Presenter)

PURPOSE
Diagnostics.com is a free innovating medical database allowing an unique computer assisted diagnosis in radiology. The website has several goals:
- To provide a quick and reliable computer assisted diagnosis in radiology using more than 500 gamuts.
- To educate radiologists by showing more than 150 000 images, Diagnologic.com publishes cases of radiology everyday on fabecook with the account Diagnologic Radiology

METHOD AND MATERIALS
After 4 years of collaboration between radiologists, and experts in database, a Diagnostic Decision Support System has been developed. The website has more than
- 100 000 images,
- 2500 diagnostics,
- 200 anatomical locations,
- 500 gamuts

RESULTS
Three search modes are available:
- A search mode by gamuts, which allows the user to make a diagnosis in just a few clicks, through the use of more than 500 gamuts.
- A search mode by anatomy, which lists all diagnoses present in database according to a simple but comprehensive anatomic classification
- A keyword search, which works like a conventional search engine, for which the user enters the name of diagnosis, allowing access to many images of the same diagnosis Diagnologic is present on social networks, and presents the 'case of the day' commented by radiologists worldwilde.

CONCLUSION
www.diagnologic.com is a simple, rapid, and complete website, to solve diagnoses problems, even the most complex one

CLINICAL RELEVANCE/APPLICATION
Diagnologic.com is a free radiologic website to help and educate radiologists.
RSNA Educational Programs Around the World: An International Forum (Sponsored by the RSNA Committee on International Radiology Education)

Sunday, 02:00 PM - 03:30 PM • S102D

RC116 • AMA PRA Category 1 Credit ™:1.5
Coordinator
Teresita L Angtuaco, MD
Melissa L Rosado De Christenson, MD *
Marco A Alvarez, MD
Laura W Bancroft, MD
Omolola M Atalabi, MBBS
Norran H Said, MD,FRCR
Chamaree Chuapetcharasopon, MD
Savvas Andronikou , MBBS

LEARNING OBJECTIVES
1) To familiarize the learner with the existing RSNA educational programs in other countries. 2) To discuss the past activities of RSNA in other countries in improving knowledge of radiology and application of latest technical radiology innovations. 3) To receive feedback from representatives of four selected countries (Nigeria, South Africa, Egypt and Thailand) on the impact of the RSNA educational programs both on a personal and national level.

ABSTRACT
This refresher course presents a summary of the existing RSNA educational programs around the world: International Visiting Professor (IVP) program, Derek Harwood Nash (DHN) fellowship, Introduction to Research for International Young Academics (IRIYA) and Educational Material and Journal awards (EMJA) program. These programs address radiology education in many levels: junior radiologist (IRIYA) the more senior radiologist (DHN), the institution (EMJA) and the national radiology organizations (IVP). RSNA committee members familiar with the programs will discuss the history and unique features of each that make them ideal for international outreach initiatives. Four international representatives from Nigeria, South Africa, Egypt and Thailand will provide feedback on how the various programs have impacted radiology education and practice in their country as a whole and the personal careers of those who participated in the DHN or IRIYA programs. A panel discussion will then be conducted at the end of the session to explore other educational opportunities and future directions that will maximize the resources provided by the RSNA.

Minicourse: Current Topics in Medical Physics-Clinically Focused Physics Education: Principles to Practice

Sunday, 02:00 PM - 03:30 PM • N229

RC123 • AMA PRA Category 1 Credit ™:1.5 • ARRT Category A+ Credit:1.5
Moderator
Perry Sprawls , PhD *

LEARNING OBJECTIVES
URL’s
http://www.sprawls.org/clinphys

RC123A • Clinically Focused Physics Education: Principles to Practice-Part A
Perry Sprawls PhD (Presenter) *

LEARNING OBJECTIVES
1) Describe the general characteristics of mental knowledge structures of physics and technology that are required for effective clinical applications. 2) Describe conditions and activities that contribute to the formation of effective knowledge structures. 3) Identify the different levels of learning that can occur and relate them to specific actions that can be performed and potential outcomes. 4) Analyze learning activities for effectiveness and efficiency in producing desired outcomes with available human effort and resources. 5) Identify the opportunities to use digital technology to enhance human performance for both learners and learning facilitators. 6) Identify resources that can be used to optimize the effective-efficiency relationship of learning activities. 7) Provide effective learning activities.

RC123B • Clinically Focused Physics Education: Principles to Practice-Part B
Debra L Monticciolo MD (Presenter)

LEARNING OBJECTIVES
1) To review the need for updated physics education in the clinical setting. 2) To review the use of computer-based learning in the clinical setting for physics education of radiology residents.

ABSTRACT
Teaching Leadership Strategies to Residents for Future Health Care Challenges

Monday, 08:30 AM - 10:00 AM • S502AB

RC202 • AMA PRA Category 1 Credit ™:1.5
Vijay M Rao , MD
Richard E Sharp , MD, MBA
Carol M Rumack , MD

LEARNING OBJECTIVES
1) Describe specific ways that residents can participate in important radiology leadership and advocacy opportunities in order to enhance the future of radiology. 2) Appreciate the potential power of leveraging technology to provide leadership and further the specialty of radiology. 3) Understand relevant leadership skills that radiology residents must learn in order to address emerging challenges in the current and future practice of radiology. 4) Develop an appreciation for the role of organized radiology as a means to shape the future of our specialty. 5) Articulate the challenges facing radiology as a specialty in the era of new healthcare delivery models and healthcare reform.

ABSTRACT
Leadership skills will be essential to the successful careers of all radiology residents and fellows. Ten key points aimed at improving your success in academic medicine will help you in planning your career and gaining effective mentoring as you start your career.
LEARNING OBJECTIVES

RC230A • Podcasting and Screencasting for Teaching

Mahesh M Thapa MD (Presenter)

LEARNING OBJECTIVES
1) Identify the utility of podcasts and screencasts. 2) List major software packages available for creating podcasts and screencasts. 3) Understand the steps required to create a podcast or screencast.

RC230B • e-Publishing in Radiology

Michael L Richardson MD (Presenter)

LEARNING OBJECTIVES
1) Know the pros and cons of publishing electronic books. 2) Know the two main formats for publishing electronic books. 3) Be aware of several strategies for converting one’s book to electronic form. 4) Know the pros and cons of several software packages used for electronic book conversion.

RC230C • Incorporating the iPad in Resident Education: Using Mobile Technology to Improve the Way We Teach

Harpit S Bedi MD (Presenter)

LEARNING OBJECTIVES
1) Identify techniques to incorporate mobile technology into your teaching program. 2) Appraise your current teaching practices in light of the new pedagogical approaches introduced in the lecture.

Creating, Storing, and Sharing Teaching Files Using RSNA’s MIRC®: A Hands On Course

Monday, 10:30 AM - 12:00 PM • S401AB

Krishna Juluru, MD
Frederick E Weiss, MD
Tessa S Cook, MD, PhD

LEARNING OBJECTIVES
1) Learn how easy it is to install the new and improved RSNA teaching file software with the one-click installer. 2) Learn how to create, organize, and share teaching files, create conference documents and save interesting cases for yourself, your group or your department.

ISP: Health Service, Policy and Research (Radiology Education)

Monday, 10:30 AM - 12:00 PM • S102D
Arguing Your Way to an Education: An Effective Method of Teaching Residents Health Economics

Stephen J Hunt (Presenter) ; Saurabh Jha MD

PURPOSE
The study compares a new method of teaching residents health policy and economics, using faculty-moderated point-counterpoint resident debates, with traditional didactic lectures.

METHOD AND MATERIALS
A new method of resident-driven conference comprising an Oxford-style debate moderated by faculty was employed for the curriculum in economics and health policy. The debate involves a motion that highlights a basic principle of economics with one resident arguing for the motion and the other against, with questions thrown to the wider audience. The residents then vote for or against the motion. In concluding, the moderator summarizes the key issues of economics and policy and the points of tension. The study compares the resident ratings of the debates to traditional lectures in the economics and policy curriculum. Residents assign a score for all lectures on a point scale ranging from (1) to (5) with a score of 5 expressing maximum effectiveness and a score of 1 the least.

RESULTS
In 2012, 285 lectures received mean rating of 4.49 +/- 0.02. Each lecture was, on average, rated by 16 residents. Amongst the nine subspecialties, there was essentially a bimodal distribution with the highest garnering mean ratings of 4.64 +/- 0.06 and the lowest a mean of 4.26 +/- 0.12. The mean score of the didactic economics and health policy lectures in 2011 was 4.0 +/- 0.38, placing it below the lowest of the subspecialty. In 2012 there were ten lectures in the economics and health policy curriculum, with six delivered in the traditional didactic format, and four utilizing debates. The didactic lectures in 2012 received a mean rating of 3.94 +/- 0.12 (N=90). The moderated debates demonstrated a 20% higher mean rating, with an average of 4.71 +/- 0.07 (N=60), scoring higher on average than any of the nine clinical subspecialties. There was statistical significance in the difference in ratings between the new format and both the concurrent 2012 didactic lectures and historic 2011 lectures.

CONCLUSION
The moderated point-counterpoint debate is an effective adjunct to didactic lectures in teaching radiology residents issues in health economics and health policy. We make a case for this model to be adopted by other residency programs.

CLINICAL RELEVANCE/APPLICATION
Increased education of non-radiology residents by Radiology faculties on radiation safety may lead to more informed ordering of imaging tests and commitment to use of radio-protective equipment.

SSC08-01 • Health Service, Policy and Research Keynote Speaker: Radiology Education
Paul P Cronin MD,MS (Presenter)

SSC08-02 • Radiation Safety Knowledge and Perception among Residents: A Potential Improvement Opportunity for Graduate Medical Education in the United States
Gelareh Sadigh MD (Presenter) ; Michael T Kassin MD ; Ramsha Khan ; Kimberly E Applegate MD, MS

PURPOSE
To investigate residents' knowledge and perception of ionizing radiation adverse effects, frequency of their education on radiation safety and their use of radio-protective equipment.

METHOD AND MATERIALS
Residents from 15 residency programs at Emory University received an invitation email to complete Resident Radiation Safety Survey through SurveyMonkey in September 2012. The associations between residents' knowledge and use of radio-protective equipment with residents' specialty and year of training were investigated.

RESULTS
173/532 residents responded to the survey (response rate of 32%). 39% reported radiation safety is discussed in their residency curriculum at least every six months. This rate was significantly higher among Radiology residents (84%) vs. 20% in Medicine, 19% in Surgery and 30% in OB/GYN; P

CONCLUSION
A large proportion of residents are unaware of the adverse effects of ionizing radiation, especially during pregnancy and childhood.

CLINICAL RELEVANCE/APPLICATION
A large proportion of residents are unaware of the adverse effects of ionizing radiation, especially during pregnancy and childhood.

SSC08-04 • Emergency Department Musculoskeletal Study Interpretation: Can Performance on a Musculoskeletal Curriculum Predict Error Frequency When on Call?
Kevin B Hoover MD, PhD (Presenter) *

PURPOSE
Errors in initial radiologic interpretation can significantly affect patient management in the emergency department (ED). This retrospective study investigated test results and work parameters that could be helpful in predicting resident errors.

METHOD AND MATERIALS
A curriculum for residents during their first and second musculoskeletal radiology (MSK) rotations was begun in July 2010. During both rotations, textbook reading, chapter specific slide presentations and chapter specific quizzes were assigned. The quiz results for each resident were placed into quartiles, based on the results so far obtained. The number of studies interpreted by a resident on service was calculated in 21 residents. Out of these variables, the only result to correlate with the minor and significant discrepancies was the quartile score on the curriculum. The quartiles for the first and second rotation curriculum together were negatively correlated with minor discrepancies.
 Residents rotating through MSK have an assigned curriculum that guides them through the basics of orthopedic radiology including MRI.

**METHOD AND MATERIALS**

A systematic search in bibliographic databases was performed using a sensitive search strategy with key words (from January 1 2000 to May 20 2011) without any language and/or methodological limitation. Medical education research was defined as any research study pertaining to the medical students, residents, fellows, faculty members, curriculum development, or program evaluation. Information regarding type of study, outcomes, and sample size (if applicable) were extracted using a checklist designed according to the coding sheet of Best Evidence in Medical Education (BEME) Collaboration. All citations stored and managed by EndNote X3. Descriptive data were produced by SPSS ver. 17 and also were qualitatively synthesized and reported.

**RESULTS**

The search strategy yielded 691 citations that 394 citations published after 2000 were reviewed. By title and abstract reviewing by two independent reviewers, 183 citations were excluded. Full-text articles for 211 citations were reviewed. Out of 161 studies in the field of breast cancer medical education, only 19 articles had radiologists as their subjects and were included in the review. The majority of the included studies (17 out of 19 studies), aimed to assess the capability of residents and radiologists in reading mammograms. Sample size of studies ranged from 3 to 364 with the median of 207 subjects. Only one study had an interventional design and most of studies (16 out of 19 studies) assessed knowledge or skill of the participants. None of the studies considered a clinical outcome as an outcome of the medical education research.

**CONCLUSION**

Despite the paramount importance of radiology in screening, diagnosis and follow up of breast cancer, and different existing modalities and technologies, educational effort and evidence in the field of breast cancer seems lacking and is limited to interpreting mammography. Larger studies and experiments using controlled designs, and clinically relevant outcomes are needed.

**CLINICAL RELEVANCE/APPLICATION**

Radiologists should actively participate in improving medical education research activities in the filed of breast cancer to play an active role in the future of diagnosis and management of this disease.
CLINICAL RELEVANCE/APPLICATION
The high prevalence of flawed CME questions in three major radiology journals puts learners at risk of failing for reasons unrelated to their knowledge of the topic.

SSC08-08 • Potential Impact the American Board of Radiology’s New Core Examination Will Have on Resident Training: Resident and Faculty Perspectives

Brian J Clark MD (Presenter) ; Hima Prabhakar MD

PURPOSE
Assess radiology resident and faculty perspectives on the potential impact the ABR’s new core exam will have on resident training. Factors assessed include resident call schedule, protected time, fourth year focused training, and entering fellowship.

METHOD AND MATERIALS
A 5-point Likert scale survey was given to radiology residents and faculty at an academically-affiliated hospital radiology residency program. Question responses were: 5=strongly agree, 4=agree, 3=undecided, 2=disagree, and 1=strongly disagree. Faculty and resident responses were compared using the students’ t-test and summary statistics were generated.

RESULTS
Most surveyed were undecided or disagreed if the new exam format would better prepare residents for practice (89%, rating =4) and all thought it would shift to the third year (100%, rating =4). Most surveyed agreed third year residents should have protected study time (94%, rating =4) and 69% thought 6 to 8 weeks or more was adequate. All surveyed agreed that residents should be relieved from call duties before the core exam (100%, rating =4) and 50% thought 6 to 8 weeks appropriate. 63% surveyed disagreed with the APDR’s recommendation of no time off from clinical duties before the core exam (rating =4). Residents agreed they were likely to pursue research during fourth year subspecialty training (mean=4, p=0.01) and faculty were undecided if this would occur. Most surveyed thought that residents would continue to pursue fellowship training (93%, rating =4). Residents disagreed (mean=2.1, p=0.04) that the new exam format would affect fellowship choice while faculty were undecided.

CONCLUSION
Residents and faculty have similar views regarding the new board exam and were uncertain if it would better prepare residents. Board frenzy will likely shift to third year and most think 8 weeks of protected study time appropriate with fourth year residents taking more call to fill the gap. Residents are likely to pursue research during the fourth year and to continue to enter fellowships.

CLINICAL RELEVANCE/APPLICATION
With the ABR’s new core examination, board frenzy will probably shift to third year and residency programs should address rotation scheduling and consider time off call duties prior to the exam.

SSC08-09 • Quality Improvement of Radiological Image Interpretation Skills Assessment through Digital MPR Images in Medical Education

Cecile Ravesloot MD ; Anouk Van Der Gijp MD, PhD (Presenter) ; Marieke Van Der Schaaf ; Olle Ten Cate ; Jan P Van Schaik MD, PhD ; Christian Mol MSc ; Corinne Tipker ; Mario Maas MD, PhD ; Koen L Vincken PhD

PURPOSE
Current radiology practice has become increasingly based on the digital interpretation of volumetric multi-planar-reconstruction images (MPR-images). Nevertheless, assessment of radiological image interpretation skills in medical education and postgraduate radiology training is still mainly based on two-dimensional (2D) images (only one or two slices of a stack are presented). Consequently, the assessment lacks authenticity, which negatively impacts its quality. We hypothesized that using MPR images increases the assessment quality as reflected in its validity (the test assesses what it is intended to measure) and reliability (the accuracy of the test results, its reproducibility and little measurement error). Our aim was to evaluate differences in validity and reliability of assessment with 2D image questions versus MPR image questions.

METHOD AND MATERIALS
In 2012, 246 medical students, trained with MPR images, took a digital radiology test. There were two versions (A and B), both containing twenty 2D and twenty MPR image questions, concerning anatomy on CT-scans. Participants filled out a questionnaire to judge the authenticity of the assessment as an indication of validity. They also gave their opinion on the difficulty of 2D and MPR image questions. Mean scores and reliabilities (estimated with Cronbach’s alpha) of the 2D and MPR image subtests were compared.

RESULTS
Cronbach’s alphas on 2D image questions were .49 (A), and .65 (B), and alphas of MPR image questions were .65 (A), and .71 (B). Scores on MPR image questions (M 15.6, SD 2.6; M 14.9, SD 2.9) were lower than scores on 2D image questions (M 15.8, SD 2.2; M 16.8, SD 2.4). This difference between 2D and MPR scores was significant for version B. Assessment based on MPR images was considered more authentic (t (56) = -7.1, p < .001), and less difficult (t (58) = -4.2, p < .001) by the participants.

CONCLUSION
According to the participants, assessment with MPR images increases authenticity, which can contribute to validity. MPR image questions showed higher reliability than 2D image questions. Scores on MPR image questions in one version were significantly lower, but considered less difficult by participants.

CLINICAL RELEVANCE/APPLICATION
Valid and reliable assessments of image interpretation skills of radiology trainees, adds to patient safety. MPR image assessment seems to contribute to its validity and to its reliability.

Program to Enhance Relational and Communication Skills for Radiologists (PERCS:Radiology)

Monday, 01:30 PM - 04:30 PM • E271A

SPRP21 • AMA PRA Category 1 Credit ™:3 • ARRT Category A+ Credit:3.5

Stephen D Brown, MD
Elaine C Meyer, PhD, RN
Michael J Callahan, MD

LEARNING OBJECTIVES
1) To improve radiology trainees’ preparedness to communicate with patients about a new, unexpected or difficult diagnosis. 2) To enhance radiology trainees’ success in discussing radiation safety with patients.

ABSTRACT
Expectations are rapidly evolving for how radiologists communicate with patients. Radiologists today face heightened responsibilities to discuss diagnostic information and to optimize communication about radiation exposure. These communication challenges require radiologists to convey cognitively complex information under emotionally charged conditions. Few educational opportunities exist to help radiologists acquire the skills necessary to approach these conversations effectively, PERCS-Radiology seeks to fill this gap and to enhance radiology trainees’ confidence and skills when communicating with patients about these difficult topics. This 3 hour workshop will combine didactic and educational media presentations with realistic improvised enactments between workshop participants and professional actors.
Enactment participants will receive feedback from other course participants, faculty, and actors. Faculty facilitators include experts in healthcare communication pedagogy. The learning model emphasizes group collaboration among professionals from varying levels of experience, integration of perspectives from patient and family representatives, and a safe environment that respects multiple viewpoints. Radiology trainees are the core learning group.

**Special Interest Session: Planning for the Future Radiology Workforce: Too Many or Too Few?**

**Monday, 04:30 PM - 06:00 PM • N228**

**LEARNING OBJECTIVES**
1) Identify the current workforce distribution of radiologists in the US. 2) Examine the many variables that may influence future workforce planning for radiology. 3) Appraise the complexity of the effects of health care reform on radiology.

**ABSTRACT**
This workshop will provide attendees with a better understanding of the NIH grant review process from the perspective of those who have served on review committees in order to better prepare them for submitting and resubmitting proposals and to encourage them to serve as reviewers. If you think like a reviewer, you can be a better grant writer! Although there is a significant amount of information available on how to write NIH grants and how the review process works, many investigators (new and experienced) often have questions that are best answered directly in person by those who have first-hand experience.

**SPSI23A • Introduction and Overview of Issues**
Carolyn C Meltzer MD (Presenter) *

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**SPSI23B • ACR 2013 Workforce Survey**
Edward I Bluth MD (Presenter)

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**ABSTRACT**
The results of the ACR 2013 Workforce Survey will be presented and discussed.

**URL**

**SPSI23C • Our Changing Health Care World: Factors Influencing the Need vs Surplus of Radiologists**
Cheri L Canon MD (Presenter) *

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**SPSI23D • Is Radiology Still an Attractive Field: A Program Director's Perspective**
Mark E Mullins MD, PhD (Presenter)

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**SPSI23E • Going Forward: Is There a Formula for Success**
Jocelyn D Chertoff MD (Presenter)

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**SPSI23F • Panel Discussion/Q and A**
Carolyn C Meltzer MD (Presenter) *; Edward I Bluth MD (Presenter); Cheri L Canon MD (Presenter) *; Mark E Mullins MD, PhD (Presenter); Jocelyn D Chertoff MD (Presenter); Shawn D Teague MD (Presenter) *

**LEARNING OBJECTIVES**
View learning objectives under main course title.

**Strategies for ABR Core Exam and ACGME Resident Performance Evaluations**

**Tuesday, 08:30 AM - 10:00 AM • S403B**

**LEARNING OBJECTIVES**
1) Describe core exam preparation resources and better understand which resources are more effective. 2) Delineate alternative ways to prepare for the core exam during the first three years of residency. 3) Discuss successful strategies for the core exam physics preparation including the timing of the various components of the physics curriculum.

**ABSTRACT**
For several years now, program directors and residents have been planning the transition to the new curriculum and thinking about the new ABR core exam. This transition is now complete. The first core exam was administered in early October 2013 and the next exam is scheduled for June 2014. With so many resources available, trainees may feel overwhelmed by options on how to prepare for this exam.
Resident Interviewing: Skills that Work!

Tuesday, 04:30 PM - 06:00 PM • E353A

LEARNING OBJECTIVES
1) Describe basic interview skills appropriate to various levels. 2) Conduct an effective interview. 3) Avoid interview don'ts.

ABSTRACT
Interviewing is a critical part of the hiring process, often the decisive factor in hiring decisions. Additionally, virtually every radiologist will be required to be an interviewer or interviewee during his or her career. Despite the importance placed on interviews, candidates and interviewers rarely undergo training to either 1) present themselves in the most favorable light, or 2) optimize the interview to quickly and accurately assess a candidate's qualifications and personality fit for a particular job. Through didactic teaching and a series of vignettes, this course will review basic interview and interviewing skills for residents, fellows, and staff radiologists as well as for leadership positions at the department level and above (section chiefs, vice chairs, chairs, chief of staff, deans).

RC402C • Beyond the Differential Diagnosis: How Will Developing Professionalism Skills Prepare You For Practice and Patient Safety?

Lori A Deitze MD (Presenter)

LEARNING OBJECTIVES
1) Describe ways to promote the development of professionalism skills during residency training. 2) Discuss the potential impact of unprofessional behavior on patient safety and the medical practice environment. 3) Describe the desirable professional attributes outlined in the Physician's Charter that can strengthen your application for a radiology position and enhance your performance as a radiologist.

ABSTRACT
The traditional radiology residency curriculum consisted primarily of the acquisition of medical knowledge, the recognition of radiological findings, and the development of an appropriate differential diagnosis. While these skills are important to becoming a competent radiologist, they are not enough. This session will examine the humanistic qualities and professional skills that distinguish a truly great (and desirable) colleague/physician from the others. The negative impact of unprofessional behavior on patient safety will also be reviewed.
Interviewing is a critical part of the hiring process, often the decisive factor in hiring decisions. Additionally, virtually every radiologist will be required to be an interviewer or interviewee during his or her career. Despite the importance placed on interviews, candidates and interviewers rarely undergo training to either 1) present themselves in the most favorable light, or 2) optimize the interview to quickly and accurately assess a candidate’s qualifications and personality fit for a particular job. Through didactic teaching and a series of vignettes, this course will review basic interview and interviewing skills for residents, fellows, and staff radiologists as well as for leadership positions at the department level and above (section chiefs, vice chairs, chairs, chief of staff, deans), review during his or her career. Despite the importance placed on interviews, candidates and interviewers rarely undergo training to either 1) present themselves in the most favorable light, or 2) optimize the interview to quickly and accurately assess a candidate’s qualifications and personality fit for a particular job. Through didactic teaching and a series of vignettes, this course will review basic interview and interviewing skills for residents, fellows, and staff radiologists as well as for leadership positions at the department level and above (section chiefs, vice chairs, chairs, chief of staff, deans).

URL's
http://med.uc.edu/radiology/facstaff/colliji4/index.html

Creating Radiology eBooks for the iPad: A Hands-on Introduction to iBooks Author

Wednesday, 10:30 AM - 12:00 PM • S401AB

LEARNING OBJECTIVES
1) Become familiar with Apple's free ebook authoring tool, iBooks Author. 2) Create a sample radiology ebook during the course. 3) Learn how to freely share your ebook with others.
Apple, enables the creation of ebooks with a near-limitless number of high-resolution images, movies, and other interactive elements. Unfortunately, most radiologists lack the expertise to leverage the advantages of this application. This hands-on workshop will cover the basics of iBooks Author. During the course, attendees will create their own interactive radiology ebook and learn how to freely share it with anyone who has an iPad. iBooks Author is only available for Mac OS and bringing your own Mac is required for the hands-on portion of the course. Attendees are encouraged to download iBooks Author prior to attending; the link is provided below. Attendees are also encouraged to come with an idea for their own iBook, ideally with a text file and folder of images they would like to turn into an ebook during the course. Sample text and images will be provided for those who do not bring their own material.

URL's

RSNA Resident and Fellow Symposium 2013: Career 101: Planning for Success After Residency (An Interactive Session)
Wednesday, 01:30 PM - 03:30 PM • E451B
How To Evaluate Resident Milestones Effectively and Efficiently: Practical Ideas Will Help Program Directors and Residents To Know What Is Expected

Thursday, 08:30 AM - 10:00 AM • S404AB

RC602 • AMA PRA Category 1 Credit ™:1.5
Andelisa H Palacios, MD
Mary H Scanlon, MD, FACP
Todd S Miller, MD

LEARNING OBJECTIVES
1) Become familiar with each main milestone category. 2) Learn the constituent parts of each main milestone category and how they are structured into graduated sections organized by level of training. 3) Learn methods of gathering data for each milestone category, section, and level within each using the resources provided by the milestone committee. 4) Learn how to apply proven assessment strategies via review of lessons learned during successful and unsuccessful implementations undertaken by the milestone committee members.

Creating, Storing, and Sharing Teaching Files Using RSNA’s MIRC®: A Hands On Course

Thursday, 10:30 AM - 12:00 PM • S401AB

ICIW51 • AMA PRA Category 1 Credit ™:1.5 • ARRT Category A+ Credit:1.5
Moderator
Frederick E Weiss, MD
Krishna Juluru, MD
Mary R Wyers, MD

LEARNING OBJECTIVES
1) Learn how easy it is to install the new and improved RSNA teaching file software with the one-click installer. 2) Learn how to create, organize, and share teaching files, create conference documents and save interesting cases for yourself, your group or your department.

Mind Your Own Business! Required Business Skills for Your First Job

Thursday, 04:30 PM - 06:00 PM • S404AB

RC702 • AMA PRA Category 1 Credit ™:1.5
Jonathan R Medverd, MD
William P Shuman, MD *
Lukasz Babiarz, MD, MBA

LEARNING OBJECTIVES
1) Define for the applicant to an academic and private practice radiology job, the parameters critical to assessing the advantages and disadvantages of the potential employment opportunity. 2) Understand the value of creating a business strategic plan and its components. 3) Understand the importance and techniques of repetitive surveying of the various customer groups. 4) Understand the difference between marketing and advertising and how each is accomplished with high impact.

ABSTRACT
There are many factors that must be addressed prior to committing to an employment contract. The applicant must be skilled in assessing the health of the practice, identifying potential red flags in contracts and exclusion clauses, understanding the mission and vision of the practice and determining if goals and objectives are aligned, and determining if the practice has a high chance of satisfying the applicant. In some cases this requires a rudimentary understanding of legal, financial, strategic planning, and socioeconomic principles. These issues will be addressed. Once you become an employee, the strategic plan of your business is critical to its future. If there is no plan, how do you go about creating one? What are the key components of a good strategic plan? Data is critical in understanding your service, your market and your future business directions. Key data components are obtained from surveying - of patients, of referring physicians, and even of staff. The elements of a good survey and how you target each of these groups to produce useful data are discussed in depth. Once you have data and a strategic plan, how do you get the message out? Advertising is publishing your added value. Marketing is understanding the unique features and dynamics of your local and regional market place. The interplay of these two subjects will be critical to business and service success.

Professionalism and the Radiology Trainee

Thursday, 04:30 PM - 06:00 PM • S403A

RC724 • AMA PRA Category 1 Credit ™:1.5 • ARRT Category A+ Credit:1.5
Director
Ronald L Eisenberg, MD, JD
Stephen D Brown, MD
Priscilla J Slanetz, MD, MPH *

LEARNING OBJECTIVES
1) To discuss effective strategies to address the issue of the impaired and/or incompetent colleagues. 2) To explain how to handle unprofessional behavior within and across disciplines. 3) To formulate approaches to accountability, the unexpected outcome, and the role of apology.

ABSTRACT
Unprofessional behavior during medical school, residency, and fellowship training has been linked to subsequent disciplinary action by medical boards. Consequently, educational initiatives fostering professionalism are essential for residency and fellowship training in order to promote high quality patient care. Moreover, professionalism is now one of the six competencies that residents are required to achieve before completing their training and taking the new core examinations. Professionalism is one of the most challenging components of the core ACGME competencies to teach and evaluate during residency training. This interactive course will involve group participation using reflective practice, a technique that we have successfully incorporated into residency training at our institutions. These radiology-specific, case-based sessions will address the topics of (1) the clinically incompetent and/or impaired attending; (2) unprofessional behavior across...
disciplines; and (3) managing the unexpected outcome, the role of apology, and accountability. Although primarily geared toward trainees, we welcome radiologists in practice who can share their practical experiences regarding these issues with residents and fellows. All three of the course facilitators have received RSNA Education Scholar Awards. Dr. Brown is a pediatric radiologist and bioethicist, Dr. Slanetz is a breast imager and residency program director, and Dr. Eisenberg is general radiologist, associate program director, and non-practicing lawyer.

Leveraging Imaging Informatics to Improve Radiology Education: Beyond the Teaching File (An Interactive Session)

Thursday, 04:30 PM - 06:00 PM • S103AB

RC730 • AMA PRA Category 1 Credit ™:1.5 • ARRT Category A+ Credit:1.5
Moderator
Marc D Kohli, MD *

RC730A • Simulation Systems in Radiology Education

Kitt Shaffer MD,PhD (Presenter)

LEARNING OBJECTIVES
1) Describe two professional systems that currently use simulation extensively for teaching. 2) List three teaching situations in radiology where simulation could be integrated. 3) Describe three levels of training in radiology where simulation could play a role.

ABSTRACT
This interactive session will explore the role of simulation in all types of professional training outside of radiology, as well as potential educational, training, evaluation and quality improvement settings within radiology where simulation may play a role in the future.

RC730B • Educational Tools for the Next Generation in Radiology

Richard E Sharpe MD, MBA (Presenter)

LEARNING OBJECTIVES
1) Explain factors that are changing the face of radiology education. 2) Contrast the educational tools used by past, present and future generations of radiologists. 3) Describe cutting edge innovative educational tools for diagnostic radiology training.

RC730C • Quality Improvement Tools in Education

Jason N Itri MD, PhD (Presenter)

LEARNING OBJECTIVES
1) Define standards for evaluating the quality of an assessment method. 2) List quality-related educational outcomes for radiology trainees. 3) Describe IT tools that can be used to assess trainee performance and the impact of interventions. 4) Discuss educational and training interventions that improve quality-related outcomes.

ABSTRACT
This session will demonstrate ways to incorporate audience response devices into learning environments, and assist users how to use the data that is collected behind the scenes within audience response systems.

How to Be the Speaker Everyone Wants You to Be (An Interactive Session)

Friday, 08:30 AM - 10:00 AM • E353B

RC802 • AMA PRA Category 1 Credit ™:1.5 • ARRT Category A+ Credit:1.5
Jannette Collins, MD, MEd

LEARNING OBJECTIVES
1) Apply adult learning principles. 2) Demonstrate effective presentations skills.

ABSTRACT
Effectiveness of an oral presentation depends on the ability of the speaker to communicate with the audience. An important part of this communication is focusing on two to five key points and emphasizing those points during the presentation. Every aspect of the presentation should be purposeful and directed at facilitating learners’ achievement of the objectives. This necessitates that the speaker has carefully developed the objectives and built the presentation around attainment of the objectives. A presentation should be designed to include as much audience participation as possible, no matter the size of the audience. Techniques to encourage audience participation include questioning, brainstorming, small-group activities, role-playing, case-based examples, directed listening, and use of an audience response system. It is first necessary to motivate and gain attention of the learner for learning to take place. This can be accomplished through appropriate use of humor, anecdotes, and quotations. This course will review adult learning principles and effective presentation skills.

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URL’s
http://med.uc.edu/radiology/facstaff/collij4/index.html

Disclosure Index
Vining, D. J. - Royalties, Bracco Group CEO, VisionSR Stockholder, VisionSR

Wacker, F. K. - Research Grant, Siemens AG Research Grant, Pro Medicus Limited
Walker, E. A. - Research Consultant, Medical Metrics, Inc