

# 1<sup>st</sup> SEED PROGRAM

Radiology CME Seminar

## ACTIVITY DATES

July 12 (Saturday, PM) ~13 (Sunday, AM/PM), 2014

## VENUE

4F Conference Hall, United Medical Building (Front Building), Taipei Medical University, 250 Wu-Hsing Street, Taipei 110, Taiwan.

110 臺北市信義區吳興街 250 號 台北醫學大學 醫學綜合大樓前棟 4F 圓型會議廳(誠樸廳)

## COURSE DIRECTORS

**Dr. Wing P. Chan**, Chief, Department of Radiology, Wan Fang Hospital, Taipei Medical University; Professor and Director, Department of Radiology, School of Medicine, Taipei Medical University, Taipei.

**Dr. Jim Wu**, Assistant Professor, Department of Radiology, Harvard Medical School, and Attending Radiologist, Beth Israel Deaconess Medical Center, Boston.

## FACULTY

**Dr. Kimberly Ray**, Assistant Professor of Clinical Radiology, Women's Imaging Section, Department of Radiology and Biomedical Imaging, University of California, San Francisco.

**Dr. Jim Wu**, Assistant Professor, Department of Radiology, Harvard Medical School, and Attending Radiologist, Beth Israel Deaconess Medical Center, Boston.

**Dr. Pamela W. Schaefer**, Associate Professor of Radiology, Harvard Medical School; Director of MRI, Department of Radiology, Massachusetts General Hospital, Boston.

**Dr. Min-Szu Yao**, Clinical Instructor and Attending Radiologist, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

**Dr. Guo-Shu Huang**, Professor of Radiology, National Defense Medical Center, Chief of MSK Radiology, Tri-Service General Hospital, Taipei.

**Dr. Wing P. Chan**, Professor and Director, Department of Radiology, School of Medicine, College of Medicine, Taipei Medical University, and Chief, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

**Dr. Chia-Yuen Chen**, Chief of Neuroradiology, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

**Dr. Kou-Mou Huang**, Consultant Radiologist, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

## HOST

Department of Radiology, Wan Fang Hospital, Taipei Medical University.

## Co-HOST

Department of Radiology, School of Medicine, College of Medicine, Taipei Medical University  
The Radiological Society of the Republic of China (Taiwan).

## SPONSOR

西門子股份有限公司 (Siemens Limited Taiwan)

## OVERVIEW

This intensive 1.5-day course is designed to provide a focused, comprehensive, and in-depth learning experience in breast imaging, MSK imaging and neuroimaging.

The course format assumes basic prior knowledge and will accommodate learners with varying levels of experience.

This course is run by friendly, experienced faculty with extensive and established backgrounds in interactive teaching.

## TARGET AUDIENCE

This course is intended for residents, fellows, and radiologists interested in learning about breast imaging, MSK imaging and neuroimaging.

## COURSE OBJECTIVES

The purpose of this course is to increase competence and improve interpreting skills up to date through lectures and interactive case review in primary care radiology.

## PROGRAM FEES

Local	Medical Student (student card verification required)	Free
	Resident in training (written confirmation of hospital required)	NT 500.00
	RSROC member	NT 800.00
	Non-member	NT 1 200.00
International	Medical Student (student card verification required)	US 50.00
	Resident in training (written confirmation of hospital required)	US 100.00
	General	US 200.00

International participants: All amounts are payable in US dollars. All bank charges must be paid by the participant.

**Please wire the payment to below account (outside of Taiwan)**

BANK : THE CHINATRUST COMMERCIAL BANK DUNNAN BRANCH  
ADDRESS : 2F., NO.68, Sec. 2, Dunhua S. Rd., Da-an District, Taipei City 106, Taiwan (R.O.C.)  
TEL : +886-2-23253616 FAX : +886-2 -27020702  
SWIFT : CTCBTWTPXXX  
IN FAVOR OF : TAIPEI MEDICAL UNIVERSITY MUNICIPAL WAN FANG HOSPITAL  
A/C NO. : 163538122106

**Through The Following Bank**

USD : BANK OF NEW YORK, NEW YORK (SWIFT: IRVTUS3NXXX)  
HKD : HONKONG AND SHANGHAI BANKING, HONK KONG (SWIFT: HSBCHKHHHKH)  
JPY : BANK OF TOKYO MISUBISHI, TOKYO (SWIFT: BOTKJPJTXXX)  
EUR : DEUTSCHE BANK, FRANKFURT (SWIFT: DEUTDEFFXXX)  
GBP : NATIONAL WESTMINSTER BANK PLC, LONDON (SWIFT: NWBKGB2LXXX)  
AUD : ANZ BANKING, MELBOURNE (SWIFT: ANZBAU3MXXX)  
CAD : THE BANK OF NOVA SCOTIA, TORONTO (SWIFT: NOSCCATTXXX)

**Please wire the payment to below account (in Taiwan)**

國內郵政劃撥

戶名：台北市立萬芳醫院委託財團法人私立台北醫學大學辦理  
帳號：19032289

**REGISTRATION**

Registration is limited to 120 people (local: 80; International: 40).

Payment must be received on or before 5 July 2014.

Registration and payment Website: [www.seedradiology.com](http://www.seedradiology.com) (will be opened on 5 June 2014)

放射線專科醫師教育積分 10 分，全程參與者，請於課程結束後親自拿取參加證書，會後不補寄

**CANCELLATION POLICY**

Participants who cancel less than 5 days before the event will be required to pay the participation fee in full. Cancellations must be made by email or facsimile only.

**LIABILITY**

Neither the host/co-host organizers nor sponsors are liable for any losses, accidents or damage to persons or objects, regardless of the cause. Participants and accompanying persons attend the conference and all accompanying events at their own risk and responsibility.

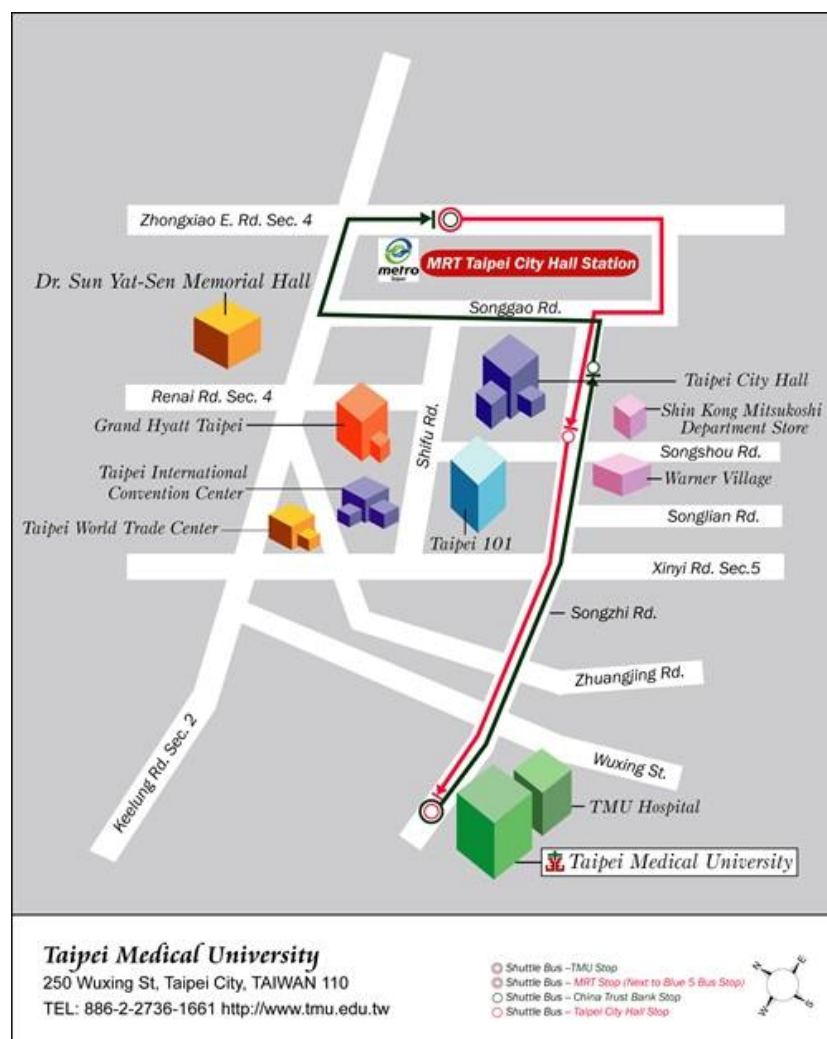
**CONTACT**

The Radiological Society of the Republic of China (Taiwan)

Office: +886 2 2586 5331; Fax: +886 2 2586 5330;

Email: [rsroc.tw@gmail.com](mailto:rsroc.tw@gmail.com)

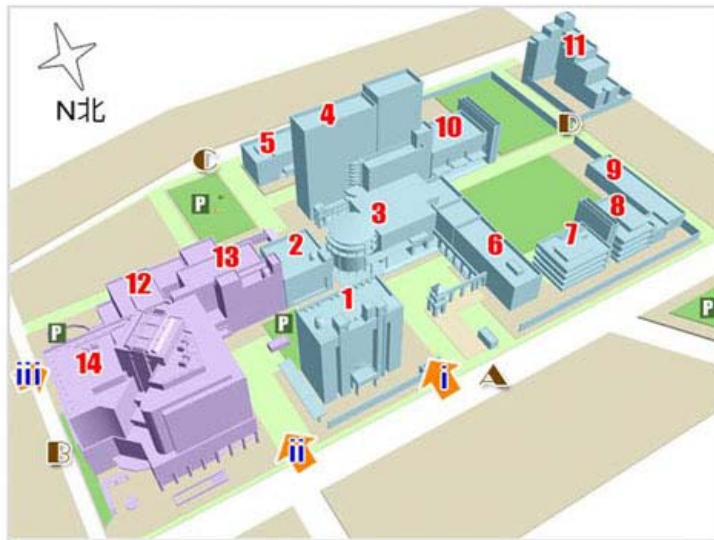
## ROUTE TO TAIPEI MEDICAL UNIVERSITY



因北醫校園停車場車位數量不多，建議搭乘大眾運輸工具前往，詳細交通資訊請參考臺北醫學大學網頁 [http://www3.tmu.edu.tw/v3/about/super\\_pages.php?ID=about4](http://www3.tmu.edu.tw/v3/about/super_pages.php?ID=about4)

1. 自行開車
  - (國道3號) 由信義快速道路下來進入信義路，左轉松仁路，右轉松勤街，左轉松智路後直行過莊敬路約再300公尺，左側即可見臺北醫學大學校園。
  - (環東大道)由基隆路下，直行往台北市政府方向，左轉松高路、右轉松智路。
2. 公車
  - 搭乘22、33、37、38、288、266(正副線)、首都客運226、欣欣客運1號，至「臺北醫學大學」站下車(新店地區搭乘新店客運至吳興街口轉乘、中永和地區搭乘福和客運至吳興街口轉乘、深坑地區搭乘指南客運至土庫公路至公館轉乘、木柵地區搭乘欣欣客運611至吳興街口轉乘)。
  - 搭乘市民小巴7至「臺北醫學大學附設醫院」站下車。

## CAMPUS MAP



### Roads & Streets

- A. 220 Lane, WuXing Street
- B. Wusing Street(WuXing Street)
- C. 284 Lane, WuXing Street
- D. 22 Alley, 284 Lane, WuXing Street

### Entrances

- i. University Entrance
- ii. Hospital Entrance
- iii. Ambulance Entrance

### Buildings

- 1. Health Science Building
- 2. Auditorium
- 3. United Medical Building (Front Building)
- 4. United Medical Building (Back Building)
- 5. Oral Medicine Building
- 6. Instruction Building
- 7. Medical Laboratory Science and Biotechnology Building A
- 8. Medical Laboratory Science and Biotechnology Building B
- 9. Morphology Building
- 10. Gymnasium
- 11. Mushan Dormitory
- 12. First Building, Taipei Medical University Hospital
- 13. Second Building, Taipei Medical University Hospital
- 14. Third Building, Taipei Medical University Hospital



## Breast Imaging

<b>SATURDAY (7/12)</b> <b>12:40-1:10 PM</b>	<b>Registration</b>	<b>Speaker</b>
1:10-1:20	Welcome  Course Introduction	Superintendent Prof. Fei-Peng Lee (Wan Fang Hospital)  President Prof. Wan-You Guo (RSROC)  Wing Chan
1:20-2:00	Breast Masses and Asymmetries	Kimberly Ray
2:00-2:30	The New BI-RADS 5 <sup>th</sup> Edition	Kimberly Ray
<b>2:30-2:50</b>	<b>Coffee and Tea Break</b>	
2:50-3:30	Breast MRI: Case Based Review	Kimberly Ray
3:30-4:00	Digital Breast Tomosynthesis	Kimberly Ray
4:00-4:40	Radiology Board Review	Min-Szu Yao
4:40	Adjourn	

### **FACULTY**

**Dr. Kimberly Ray**, Assistant Professor of Clinical Radiology, Women's Imaging Section, Department of Radiology and Biomedical Imaging, University of California, San Francisco

**Dr. Min-Szu Yao**, Clinical Instructor and Attending Radiologist, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

## MSK Imaging

<b>SUNDAY (7/13)</b>		
<b>8:00-8:30 AM</b>	<b>Registration</b>	<b>Speaker</b>
8:30-8:40	Welcome and Introduction	Wing Chan
8:40-9:20	Soft Tissue Tumors Made Easy: A Systematic Approach	Jim Wu
9:20-9:40	Non-traumatic MSK Emergencies	Jim Wu
<b>9:40-10:00</b>	<b>Coffee and Tea Break</b>	
10:00-10:20	Sports Injuries of the Foot and Ankle	Jim Wu
10:20-10:40	Imaging of Bone Marrow Disorders	Jim Wu
10:40-11:00	Interactive Case Review	Jim Wu
11:00-11:40	Imaging of Arthritis	Guo-Shu Huang
11:40-12:00	Radiology Board Review	Guo-Shu Huang
12:00-12:20	Radiology Board Review	Wing Chan
<b>12:20-1:10PM</b>	<b>Course Luncheon Provided</b>	

### **FACULTY**

**Dr. Jim Wu**, Assistant Professor, Department of Radiology, Harvard Medical School, and Attending Radiologist, Beth Israel Deaconess Medical Center, Boston.

**Dr. Guo-Shu Huang**, Professor of Radiology, National Defense Medical Center, Chief of MSK Radiology, Tri-Service General Hospital, Taipei.

**Dr. Wing Chan**, Professor and Director, Department of Radiology, School of Medicine, College of Medicine, Taipei Medical University, and Chief, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

## Neuroimaging

<b>SUNDAY (7/13) PM</b>		
1:10-1:20	Welcome and Introduction	Wing Chan
1:20-2:00	Acute Stroke Imaging: Algorithm for Work-up and Differential Diagnosis	Pamela W. Schaefer
2:00-2:40	Intraparenchymal hemorrhage: Algorithm for Work-up and Differential Diagnosis	Pamela W. Schaefer
2:40-3:00	Pediatric Brain Tumors	Pamela W. Schaefer
<b>3:00-3:20</b>	<b>Coffee and Tea Break</b>	
3:20-4:00	Imaging of the Spinal Cord and Spine: A pattern based approach	Pamela W. Schaefer
4:00-4:40	Neuroradiology Board Review	Chia-Yuen Chen
4:40-5:00	Neuroradiology Board Review	Kou-Mou Huang
5:00	END	

### **FACULTY**

**Dr. Pamela W. Schaefer**, Associate Professor of Radiology, Harvard Medical School; Director of MRI, Department of Radiology, Massachusetts General Hospital, Boston

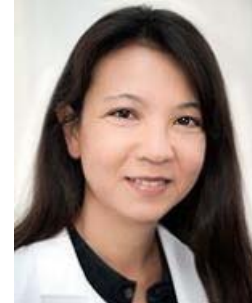
**Dr. Chia-Yuen Chen**, Chief of Neuroradiology, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.

**Dr. Kou-Mou Huang**, Consultant Radiologist, Department of Radiology, Wan Fang Hospital, Taipei Medical University, Taipei.



## International Speaker | Brief Curriculum Vitae

### Kimberly Marie Ray, MD



**Office Address:** Box 1667  
1600 Divisadero Street, C250  
University of California, San Francisco  
San Francisco, CA 94115

#### **Education:**

1992 - 1997	Stanford University	B.S.	Honors and Distinction in Biology, Honors in Humanities
1997 - 2001	University of California, Irvine	M.D.	
2001 - 2002	Loma Linda University Medical Center		Internship, Internal Medicine
2002 - 2006	University of California, Irvine		Residency, Diagnostic Radiology
2006 - 2007	University of California, San Francisco		Clinical Fellowship, Breast Imaging

#### **Principal Positions Held:**

2007 - 2007	University of California, San Francisco	Clinical Instructor	Department of Radiology
2007 - 2013	St. Joseph Hospital, Orange	Medical Director	Center for Breast Imaging and Diagnosis
2013 - present	University of California, San Francisco School of Medicine; San Francisco, CA	Assistant Professor of Clinical Radiology	Department of Radiology
2014 - present	University of California, San Francisco School of Medicine; San Francisco, CA	Associate Chief of Women's Imaging	Department of Radiology, San Francisco General Hospital

## **Professional Activities:**

### **Assistant Professor of Clinical Radiology, UCSF, Women's Imaging Section.**

2013-present.

I am an attending in the Women's Imaging section of the Department of Radiology at Mount Zion Hospital and San Francisco General Hospital. I work with the multidisciplinary teams at both sites to deliver excellent patient care. My primary duties include supervision and interpretation of mammography, breast ultrasound and breast MRI studies as well as supervision and performance of stereotactic, ultrasound and MRI guided breast biopsies and preoperative needle localizations. I supervise and teach the residents and fellows on the clinical service. I also serve as a breast imaging consultant to the surgeons, oncologists and other clinicians at both facilities. At Mount Zion I have spearheaded a Practice Quality Improvement project targeting reduction of mammography recall rates. Most recently I have been asked to take a leadership role in the Radiology department. As of May 1, 2014 I will become **Associate Chief of Women's Imaging at San Francisco General Hospital**. In this role I plan to introduce new imaging technology and improve the information technology infrastructure. As MQSA Lead Interpreting Physician I will oversee compliance with federal and state regulations. I will also seek facility accreditation as an American College of Radiology Breast Imaging Center of Excellence.

## **Teaching and Mentoring:**

### **Teaching Narrative**

I supervise and teach residents and fellows during the performance of clinical duties. In addition, I am one of a pool of faculty responsible for the two daily radiology resident conferences and noontime fellows lectures, which represents more formal and didactic teaching. On a postdoctoral level, I have participated in the postgraduate CME courses offered by the Department of Radiology this year both as an invited speaker and course co-chair. I have also served as course chair and faculty for the American College of Radiology webinar series, which was broadcast nationally. Recently, I was invited to lecture at an international course held at Taipei Medical University in Taiwan.

## **Publications:**

1. **Ray KM**, Huang H, Chu Y, Bert A, Hasso A, and Su M. Mild Cognitive Impairment: Apparent Diffusion Coefficient in Regional Gray Matter and White Matter Structures, *Radiology* 2006;241:197-205.
2. **Ray KM**, Cho RC, Forino M, Meng K, Turner E, Sickles EA, Joe BN. Suspicious Lesions Identified at Digital Breast Tomosynthesis Occult to Conventional Digital Mammography: Imaging Features and Pathology Findings. Manuscript in preparation.

## **Research Program:**

My research interests involve the application of breast imaging to improve clinical outcomes in women with breast disease.

1. **Tomosynthesis-** Digital breast tomosynthesis is a promising new technology which has the potential to improve both the sensitivity and specificity of screening and diagnostic mammography, particularly in younger women with dense breasts. I will direct the launch of this new technology at UCSF. I am also currently designing a prospective tomosynthesis screening trial to be conducted at UCSF. I will be presenting my findings on the imaging and pathology features of lesions identified at tomosynthesis that are occult to conventional mammography at a national conference and have prepared a manuscript describing my findings.
2. **Mammography outcomes analysis**– I am interested in improving mammography outcomes and helping to shape mammography practice standards through the auditing of our practice as well as analysis of data from larger databases including the Breast Cancer Surveillance Consortium and National Mammography Database. I have secured grant funding to investigate the impact of prior comparison studies on the accuracy of screening mammography interpretation. I have also initiated a Practice Quality Improvement project within the Women’s Imaging department that aims to reduce our screening mammography recall while maintaining our sensitivity for early cancer detection.
3. **Breast MRI**– I am involved in collaborative research to identify imaging biomarkers of breast cancer recurrence risk through correlation of MRI features of breast cancer with gene expression profiling assays. I am also helping to launch a prospective, multi-institutional, randomized trial sponsored by the American College of Radiology Imaging Network (ACRIN 6694) investigating the impact of preoperative MRI on breast cancer recurrence and re-excision rates.

## International Speaker | Brief Curriculum Vitae

### Jim S. Wu, MD

**Office Address:** Beth Israel Deaconess Medical Center  
Department of Radiology, Landry Room 358  
330 Brookline Avenue  
Boston, MA 02215



#### **Education:**

1994	B.S.	Biology	Massachusetts Institute of Technology
1999	M.D.	Medicine	Baylor College of Medicine

#### **Postdoctoral Training:**

07/1999-06/2000	Intern in Internal Medicine	Lahey Clinic
07/2000-06/2004	Resident in Diagnostic Radiology	Yale-New Haven Hospital
	1/2003-12/2003 Chief Resident	
07/2004-06/2005	Fellow in Musculoskeletal Imaging	Yale-New Haven Hospital

#### **Faculty Academic Appointments:**

08/2005-3/2011	Instructor	Radiology	Harvard Medical School
04/2011-current	Assistant Professor	Radiology	Harvard Medical School

#### **Appointments at Hospitals/Affiliated Institutions:**

08/2005-current	Attending Radiologist	Radiology (Musculoskeletal)	Beth Israel Deaconess Medical Center (BIDMC)
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#### **Major Administrative Leadership Positions:**

2006-2009	Co-director, Musculoskeletal imaging fellowship program	BIDMC
2009-2011	Director, Radiology residency program	BIDMC

### **Honors and Prizes:**

1993	Tang Foundation Scholar, Massachusetts Institute of Technology
1997, 1998	Alumni Student Scholarship, Baylor College of Medicine
2002	<i>Applied Radiology</i> /Bracco Diagnostics Computed Tomography Research Competition Winner (\$5000 educational grant)
2005	Fellow of the Year, Yale Department of Radiology
2006, 2009	Faculty Teacher of the Year, BIDMC Department of Radiology
2006, 2007, 2009, 2013	Radiology Section of the Year, Musculoskeletal Radiology, BIDMC
2010	“Rising Star” faculty award, BIDMC
2010	“Triple Threat” Award – Excellence in clinical, research, and educational achievement, BIDMC Department of Radiology
2012	Young Mentor Award, Harvard Medical School
2013	“Excellence in Medical Student Teaching” Award, Harvard Medical School

### **Editorial Activities:**

2005-current	American Journal of Roentgenology (AJR)
2009-current	Radiographics
2011-current	Radiology
2011-current	Journal of Thoracic Imaging
2012-current	Clinical Orthopaedics and Related Research (CORR) - Associate Editor
2013-current	Muscle and Nerve
2013-current	Skeletal Radiology

### **Publications and Grants:**

1. Articles (n = 43; including Research Investigations = 22, Reviews = 13, Case Reports = 6, Editorials and Correspondence = 2)
2. Conference abstracts (n = 40)
3. Books and book chapters (n = 5)
4. Grants (n = 39; including National Research Grants = 22)

### **Publications (Selective):**

1. **Wu JS**, Gorbachova T, Morrison WB, Haims AH. Imaging Guided Bone Biopsy for Osteomyelitis: Are There Factors Associated with Positive or Negative Cultures? *AJR*. 2007; 188(6):1529-34. PMID: 17515372
2. **Wu JS**, Goldsmith JD, Horwich PJ, Shetty SK, Hochman MG. Bone and soft-tissue lesions: what factors affect diagnostic yield of image-guided core-needle biopsy? *Radiology*. 2008; 248(3):962-970. PMID: 18710986
3. **Wu JS** and Hochman MG. Imaging of soft tissue tumors and tumor-like conditions: A systematic approach. *Radiology*. 2009; 253:297-316. PMID: 19864525
4. **Wu JS**, Darras BT, Rutkove SB. Assessing spinal muscular atrophy with quantitative ultrasound. *Neurology*. 2010; 75(6):526-31. PMID: 20697104.
5. **Wu JS**, Buettner C, Smithline H, Ngo LH, Greenman RL. Evaluation of skeletal muscle during calf exercise measured by 31P MR spectroscopy in patients on statin medications. *Muscle and Nerve*. 2011; 43:76-81. PMID: 21171098

### **Book (Selective):**

1. **Wu JS** and Hochman MG. *Bone Tumors: A Practical Guide to Imaging*. Springer. 2012. ISBN#978-1-4419-0807-0. 414 pages.

## International Speaker | Brief Curriculum Vitae

### Pamela W. Schaefer, MD

**Office Address:** Massachusetts General Hospital  
Department of Radiology  
Gray 2, 273A, Fruit St, Boston, MA 02114



#### **Education:**

1982	B.A. Summa Cum Laude	Biochemistry	Princeton University
1987	M.D.	Medicine	Johns Hopkins University

#### **Postdoctoral Training:**

07/87-06/89	Resident	Pediatrics	Rainbow Babies and Children's Hospital, Cleveland, OH
07/89-06/93	Resident	Diagnostic Radiology	Massachusetts General Hospital
07/93-06/94	Fellowship	Neuroradiology	Massachusetts General Hospital

#### **Faculty Academic Appointments:**

7/94-6/01	Instructor	Radiology	Harvard Medical School
7/01-9/04	Assistant Professor	Radiology	Harvard Medical School
10/04-	Associate Professor	Radiology	Harvard Medical School

#### **Major Administrative Leadership Positions (Local):**

1994 – 1999	Neuroradiology Liaison to Clinical Director of Magnetic Resonance Imaging	Massachusetts General Hospital
1994 - 2011	Coordinator of Resident Curriculum and Evaluations in Neuroradiology	Massachusetts General Hospital
1995 -	Neuroradiology Fellowship Director	Massachusetts General Hospital
1997 -	Associate Director of Neuroradiology	Massachusetts General Hospital

1999 -	Clinical Director of Magnetic Resonance Imaging	Massachusetts General Hospital
2007-	Co-Course Director Neuroradiology Post Graduate Course	Massachusetts General Hospital/Harvard Medical School

**Committee Service (National):**

2013	Neuroradiology Milestone Committee	Accreditation Council for Graduate Medical Education (ACGME)
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**Editorial Activities (Selective):**

New England Journal of Medicine  
 Stroke  
 Radiology  
 American Journal of Neuroradiology  
 American Journal of Roentgenology

**Honors and Prizes:**

1982	Summa Cum Laude	Princeton University	Biochemistry
1998	Laurence S. Robbins Radiology Resident Teaching Award	Massachusetts General Hospital	
2003	Berlex Best Paper Award in General Neuroradiology	American Society of Neuroradiology	
2004	Berlex Best Paper Award in General Neuroradiology	American Society of Neuroradiology	
2009	Laurence S. Robbins Radiology Resident Teaching Award	Massachusetts General Hospital	
2009	Partners in Excellence Award for Teamwork	Massachusetts General Hospital	



## Teaching and Publications:

1. Invited Teaching and Presentations (n = 84; including Regional = 8, Nationals = 65, Internationals = 11)
2. Articles (n = 128; including Research Investigations = 93, Reviews = 14, Case Reports = 18, Letter to the Editor = 3)
3. Book chapters (n = 31)
4. Books (n = 4)

## Publications (Selective):

1. **Schaefer PW**, Huisman TA, Sorensen AG, Gonzalez RG, Schwamm LH. Diffusion magnetic resonance imaging in closed head injury: High correlation with early Glasgow Coma Scale and Modified Rankin Scale on discharge. *Radiology* 2004;233(1):58-66.
2. **Schaefer PW**, Miller JC, Singhal AB, Thrall JH, Lee SI. Headache: when is neurologic imaging indicated? *J Am Coll Radiol.* 2007 Aug;4(8):566-569.
3. **Schaefer PW**, Yoo AJ, Bell D, Barak ER, Romero JM, Nogueira RG, Lev MH, Schwamm LH, Gonzalez RG, Hirsch JA.. CTA source image hypoattenuation predicts clinical outcome in posterior circulation strokes treated with intra-arterial therapy. *Stroke.* 2008 Nov;39(11):3107-3109.
4. **Schaefer PW**, Barak ER, Kamalian S, Gharai LR, Schwamm LH, Gonzalez RG, Lev MH. Quantitative assessment of core/penumbra mismatch in acute stroke: CT and MR perfusion imaging are strongly correlated when sufficient brain volume is imaged. *Stroke.* 2008 Nov;39(11):2986-2992.
5. **Schaefer PW**, Mui K, Kamalian S, Nogueira RG, Gonzalez RG, Lev MH. Avoiding "Pseudo-Reversibility" of CT-CBV infarct core lesions in acute stroke patients after thrombolytic therapy. The need for algorithmically "delay-corrected" CT perfusion map postprocessing software. *Stroke.* 2009 Aug;40(8):2875-2878.