

CURRICULUM VITAE

Ray H. Hashemi, M.D., Ph.D.

Diplomate American Board of Radiology

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EMPLOYMENT HISTORY

President and Medical Director, ADVANCED IMAGING CENTER, Inc., Lancaster, Palmdale, Valencia, Ridgecrest, CA	1/98-Present
Medical Director, Bay Harbor MRI & Diagnostic Center, Harbor City, CA	7/95-3/98

LICENSURE/CERTIFICATION

<i>CA Medical License</i>	1991	<i>X-Ray Supervisor</i>	1991
<i>DEA</i>	1991	<i>Board Certification (ABR)</i>	1994
<i>Citizenship</i>	U.S.A.		

EDUCATION

<i>M.D.</i>	University of Miami School of Medicine	June 1989
<i>Ph.D.</i>	Electrical & Computer Engineering University of California, Santa Barbara (UCSB)	Dec. 1985 <i>GPA: 4.0/4.0</i>
<i>M.S.</i>	Electrical & Computer Engineering University of California, Santa Barbara (UCSB)	Apr. 1983 <i>GPA: 4.0/4.0</i>
<i>B.S.</i>	Electrical & Computer Engineering (<i>with highest honors</i>) University of California, Santa Barbara (UCSB)	Mar. 1982 <i>GPA: 4.0/4.0</i>

POSTGRADUATE TRAINING

<i>Fellowship (MRI)</i>	Memorial MRI, Long Beach Memorial Medical Center, Long Beach, CA <i>Director: William G. Bradley, Jr., MD, PhD, FACR</i>	7/94-7/95
<i>Residency/Internship</i>	Diagnostic Radiology, Kaiser-Sunset Medical Center, LA, CA	1989-1994
<i>Other Training</i>	Children's Hospital (6 months), UCLA (3 months), USC (3 months)	1990-1994
<i>Vascular Symposium</i>	UCLA Symposium on Interventional Therapy of Vascular Disease <i>Director: Thomas O. McNamara, MD</i>	May 1992
<i>AFIP</i>	A six-week didactic course in radiologic-pathologic correlation, Washington D.C.	Aug. 1991

RADIOLOGY SKILLS

MRI (neuro, musculoskeletal, body, pediatrics); MR angiography; MR arthrography; MR fluoroscopy; MR Myelography; MR Urography; MR CholangioPancreatography (MRCP); CT (multi-detector); CT Angiography; ultrasound; mammography; nuclear medicine; pediatric radiology; neuroradiology; General radiography and fluoroscopy; arthrography; vascular imaging; interventional radiology.

RESEARCH EXPERIENCE

<i>Fellow</i>	Long Beach Memorial MRI Center <i>Director: William G. Bradley, Jr., M.D., Ph.D., FACR</i>	9/94-5/95
	Investigating the high sensitivity of the Fast Fluid Attenuated Inversion Recovery (Fast-FLAIR) MRI technique in detecting MS plaques in the brain and compared it to the conventional Spin Echo technique.	
<i>Senior Engineer</i>	TAU Corporation 485 Alberto Way, Los Gatos, CA 95030	10/86-5/87
	A "high-tech" company in the San Francisco "Silicon Valley" area; applied advanced computer-aided estimation and signal processing techniques to develop a new navigation system.	

TEACHING EXPERIENCE

<i>MRI</i>	Long Beach Memorial MRI Center	9/94-6/95
<i>Fast Scanning</i>	Lectures on Fast MR Scanning given at the visiting fellowship course at LBMMR Center every month.	
<i>MRI Physics</i>	Kaiser Medical Center, LA, CA (14 videotaped lectures on MRI physics)	1/93-8/93
<i>Assistant Professor</i>	Dept. of Elect. & Comp. Engineering, UCSB	1/86-6/86

BUSINESS ACHIEVEMENTS

In 1998, Dr. Ray founded Advanced Imaging Center in Lancaster and introduced many new imaging technologies and concepts to the Antelope Valley area for the first time. These included new equipment such as OPEN MRI, high-field short-bore MRI, PET scanning, Multi-Slice CT, and 3D/4D ultrasound. Dr. Ray also introduced procedures that had never been performed in the AV area in the past. These procedures include ultrafast contrast-enhanced MRA (including carotid, renal, pulmonary, and runoff), breathhold abdominal MRI, MR Cholangiopancreatography (MRCP), Whole-body CT scanning (HealthScan), Virtual Colonoscopy (VC), CT Coronary calcium scoring, CT Coronary Angiography, MRA and CTA runoff, MR and CT arthrography, MR and CT Urography, multi-slice CT scanning of the appendix, and many more. He introduced the concept of "service-oriented" imaging facility where the doctors and their patients come first.

Advanced Imaging Center, Inc. currently has 4 sites, serving 4 major cities: Lancaster, Palmdale, Valencia and Ridgecrest. Advanced Imaging Centers have become Antelope Valley, Santa Clarita Valley and Ridgecrest's premiere imaging centers. They have become the imaging centers that local doctors entrust to refer themselves and their own family members to.

Recently, Dr. Ray developed a revolutionary, easy-to-use digital reader PACS (Picture Archiving Communications System) software called EZPACS™, which allows digital "soft-copy" reading of all imaging modalities on-site and remotely via the internet using a Windows-based PC. He has also developed a radiology RIS (Radiology Information System) management software called EZRIS™, which enables integration of scheduling, scanning, billing/collection and management. These products are FDA approved and together offer one of the most technologically advanced and easy-to-use paperless Electronic Medical Records and Imaging systems in the world.

PROFESSIONAL AFFILIATIONS

- California Medical Association (CMA)
- LA County Medical Association (LACMA)
- American College of Radiology (ACR)
- Radiologic Society of North America (RSNA)
- Los Angeles Radiologic Society (LARS)

ACADEMIC HONORS

<i>Chief Resident</i>	Radiology Residency, Kaiser Medical Center	7/92-7/93
<i>In-service exams</i>	Diagnostic Radiology: 98% (Feb. 1991), 99% (Feb. 1992), 98% (Feb. 1993)	
<i>Graduate Scholarship</i>	University of California Regents Graduate Scholarship	1982-1985
<i>Undergrad Honors</i>	UCSB, College of Engineering, Dean's Honors List, continuously for 4 years	1979-1982
<i>GPA 4.0/4.0</i>	Maintained a straight 4.0 Grade Point Average at UCSB for 7 years straight	1979-1985.

COMMUNITY SERVICE

Involved with various charity organizations, especially those dealing with underprivileged children.

PUBLICATIONS

BOOKS

- 1• Hashemi RH, Bradley WG, Lisanti C. *MRI: The Basics, 3rd edition*. Williams & Wilkins; **2010** (a comprehensive textbook/handbook on MRI basics and recent advances covering the basic physics concepts to more advanced topics, such as fast scanning techniques and MR Angiography, in 385 pages and over 400 illustrations and images).
- 3• Hashemi RH, Bradley WG, Lisanti C. *MRI: The Basics, 2nd edition*. Williams & Wilkins; **2004**. 353 pages.
- 2• Hashemi RH and Bradley WG. *MRI: The Basics*. Williams & Wilkins; **1997**. 307 pages.

RADIOLOGY PRESENTATIONS

- 1• “AIC FUN PRESENTATIONS”: An entertaining clinical-radiological presentation covering various topics in radiology with clinical correlation, designed for non-radiologist doctors. Offered monthly or bimonthly by Advanced Imaging Center, Lancaster, CA. 2004-2005.

PERIODICAL NEWSLETTERS

PHYSICIAN NEWSLETTERS: A periodical newsletter covering various topics in radiology, designed for non-radiologist doctors.

Published periodically on Advanced Imaging Center’s website at www.advanced-imaging-center.com

ARTICLES

- 1• Hashemi RH, Bradley WG, et al. Suspected Multiple Sclerosis: MR Imaging with a Thin-Section Fast FLAIR Pulse Sequence. *Radiology* 1995; 196:505-510.
- 2• Atkinson DJ, Chen DY, Bradley WG, Mullin WJ, and Hashemi RH, "High Resolution Quantification Assessment of Aqueductal CSF Motion by Phase Contrast MRI Techniques: Correlation with Pulsatile Flow Phantom," submitted to *Radiology*, 1995.
- 3• Roy S, Hashemi RH, and Laub AJ, "Square-Root Parallel Kalman Filtering using Reduced-Order Local Filters," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 27, 1991, pp. 276-289.
- 4• Hashemi RH and Rhodes IB, "Decentralized Sequential Detection," *IEEE Transactions on Information Theory*, Vol. 35, No. 3, May 1989, pp. 509-520.
- 5• Hashemi RH and Laub AJ, "Kalman Filtering for Second-Order Models," *AIAA Journal of Guidance and Control*, Vol 11, No. 2, Mar.-Apr. 1988, pp. 181-186.
- 6• Hashemi RH and Laub AJ, "On the Suboptimality of a Parallel Kalman Filter," *IEEE Transaction on Automatic Control*, Vol. 33, No. 2, Feb. 1988, pp. 214-217.
- 7• Hashemi RH, Roy S, and Laub AJ, "Decentralized Structures for Parallel Kalman Filtering," *IEEE Trans. on Automatic Control*, Vol. 33, No. 1, Jan. 1988, pp. 88-93.
- 9• Hashemi RH and Rhodes IB (*Invited Session*), "Decentralized Dynamic Decision Making," *Proceedings of the 26th IEEE Conference on Decision and Control*, Los Angeles, CA, Dec. 1987, pp. 1836-1841.
- 10• Hashemi RH, Roy S, and Laub AJ, "Decentralized Structures for Parallel Kalman Filtering," *Proceedings of the 10th World Congress of the International Federation of Automatic Control*, Munich, W. Germany, July 1987.

ABSTRACTS/PRESENTATIONS

- 1• Hashemi RH, Bradley WG, *et al.*, "MR Imaging of Suspected Multiple Sclerosis Using a 2mm Sagittal Fast-FLAIR Pulse Sequence," presented at the *ASNR*, Chicago, April 1995 (paper 186, p. 105).
- 2• Atkinson DJ, Bradley WG, Chen DY, Moreau D, Hashemi RH, *et al.*, "3D Turbo Spin Echo Imaging of the Cervical Spine," presented at the *ASNR*, Chicago, April 1995 (paper 232, p. 129).
- 3• Atkinson DJ, Bradley WG, Chen DY, Moreau D, Hashemi RH, *et al.*, "Optimization of 3D Carotid MR Angiography with High Performance Gradients," presented at the *ASNR*, Chicago, April 1995 (paper 53, p. 41).
- 4• Mullin WJ, Atkinson DJ, Hashemi RH, Yu J, and Bradley WG "CSF Flow Quantification: Comparison of three measurement methods, *Annual Mtg. of Magnetic Resonance Imaging*, 1993, p. 55 (presented at the *Society of Magnetic Resonance Imaging*, San Francisco, Mar. 1993).
- 5• "Imaging of Right Lower Quadrant Pathology," with Rooholamini SA, Razavi M, Vickers R, Au AH, Wong LC, Saul R, and Kadell BM, *93rd Annual Mtg. of Amer. Roentgen Ray Society*, Apr. 1993, p. 154.
- 6• "CT Evaluation of Small Bowel Tumors," with Saul R, Au AH, Honda H, Franken EA, *et al.*, Poster Presentation at *RSNA*, Chicago, Nov. 1992 (also submitted to the *American Roentgen Ray Society*).
- 7• "Fibrous Tumors of the Abdomen," with Vickers R, Au A, Rooholahmini S, Saul R, *et al.*, submitted to the 93rd Annual Mtg. of the *American Roentgen Ray Society*, 1993.
- 8• Hashemi RH, Roy S, and Laub AJ (*Invited Session*), "Parallel Structures for Kalman Filtering (*Invited Session*)," *Proceedings of the 26th IEEE Conference on Decision and Control*, Los Angeles, CA, Dec. 1987, pp. 1476-1481.