# **Andrés Rahal MD PhD**

# Musculoskeletal Radiologist

The San Antonio Orthopaedic Group 400 Concord Plaza Dr. # 300 San Antonio, TX 78216 Phone (210) 289-5636, Fax (210) 804-5471 arahal@tsaoq.com

#### **EDUCATION**

Musculoskeletal Radiology, UTHSCSA, San Antonio, TX	12/2006 - 06/2007
PhD, Radiological Sciences, UTHSCSA, San Antonio, TX	07/2003 - 05/2007
Diagnostic Radiology, UTHSCSA, San Antonio, TX	07/2002 - 06/2007
Medicine Internship, UTHSCSA, San Antonio, TX	07/2001 - 06/2002
Radiology, Universidad CES, Medellín, Colombia	07/1997 - 10/2000
M.D. Universidad CES, Medellín, Colombia	01/1990 - 12/1995

#### **CURRENT POSITIONS AND EMPLOYMENT**

Musculoskeletal Radiologist,

12/2011 - Present

The San Antonio Orthopaedic Group, San Antonio, TX

On site radiologist at the imaging center, in charge of protocoling CT and MRI studies; performing image guided procedures including joint injections/aspirations, arthrograms, biopsies and MSK ultrasound.

Musculoskeletal Radiologist, Specialists in Diagnostic Imaging PA, NationalRad, Deerfield Beach, FL Interpretation of specialized MSK radiology studies.

12/2011 - Present

## **ACADEMIC APPOINTMENTS**

Assistant Professor of Radiology 07/2007 – Present Section of Musculoskeletal Radiology,

The University of Texas Health Science Center at San Antonio, Department of Radiology, San Antonio, TX

Associate Program Director for Resident Research 02/2009 – 02/2012 The University of Texas Health Science Center at San Antonio,

Department of Radiology, San Antonio, TX

Director, Musculoskeletal Ultrasonography

The University of Texas Health Science Center and Affiliated Hospitals, Department of Radiology,
San Antonio, TX

## **CERTIFICATION AND LICENSURE**

Board Certified in Diagnostic Radiology, active MOC 06/2007 – 06/2017

The American Peard of Padiology

The American Board of Radiology

Certified Densitometrist – The International Society 01/2011 – 01/2016

For Clinical Densitometry (ISCD)

BLS Certified – American Heart Association 04/2014 – 04/2016

ECFMG - 0-618-560-7 09/2000 - Present

Educational Commission for Foreign Medical Graduates

Diagnostic Radiology – Asociación Colombiana de Radiología 06/2000 – Present

# **Current State Medical Licenses:**

Texas

Florida

California

Delaware

## PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

07/2009-Present Society of Skeletal Radiology

10/2007-Present The American Roentgen Ray Society

07/2007-Present American Medical Association

01/2008-02/2012 UTHSCSA Institutional Review Board Member

08/2005-07/2010 International Society for Magnetic Resonance in Medicine

07/2002-Present Texas Radiological Society

07/2002-Present American College of Radiology

07/2001-Present Texas Medical Association

07/2001-Present Bexar County Medical Association
08/1997-Present Radiological Society of North America

07/1997-Present Asociación Colombiana de Radiología

07/1997-Present Asociación Antioqueña de Radiología

## **HONORS AND AWARDS**

04/2011 CERTIFICATE OF MERIT: RAHAL A, Wibskov JB, Smolik JS, Bean GW, Bridges SM, Garcia GM, Loredo RA, for Educational Exhibit: "Ultrasound in Early Rheumatoid Arthritis: How to Perform a Hand and Wrist Ultrasound Examination and Common Imaging Findings," designed for the 2011 American Roentgen Ray Society Annual Meeting in Chicago, Illinois.

03/2011 SOCIETY OF SKELETAL RADIOLOGY 2011 YOUNG INVESTIGATOR AWARD: RAHAL A, Smolik JS, Wibskov JB, Bean GW, Wirth MA, Bridges SM, Garcia GG, Loredo RA, for Educational Exhibit: "Shoulder Glenoid Version on CT Scan: Using a Plane Axial to the Scapula is Critical for a Precise Measurement," presented at the 2011 Society of Skeletal Radiology Annual Meeting in Scottsdale, Arizona.

03/2011 SOCIETY OF SKELETAL RADIOLOGY 2011 YOUNG INVESTIGATOR AWARD: RAHAL A, Wibskov JB, Smolik JS, Bean GW, Bridges SM, Garcia GM, Loredo RA, for Educational Exhibit: "Ultrasound in Early Rheumatoid Arthritis: How to Perform a Hand and Wrist Ultrasound Examination and Common Imaging Findings", designed for the 2011 Society of Skeletal Radiology Annual Meeting in Scottsdale, Arizona.

12/2010 CERTIFICATE OF MERIT: Loredo R, RAHAL A, Garcia G, Zgonis T, Wibskov J, for Educational Exhibit: "Imaging of the Diabetic Foot Revisited," designed for the 96th Annual Radiological Society of North America Conference, in Chicago, Illinois.

11/2007 CERTIFICATE OF MERIT: Citation to: Gomez-Cintron A, RAHAL A, Loredo RA, Garcia GM, Chhaya SA, for Educational Exhibit: "Metatarsal Plantar Plate Anatomy: A Pictorial Exhibit Featuring Microscopy Coil-MR Imaging and Ultrasonography," designed for the 93rd Annual Radiological Society of North America Conference, in Chicago, Illinois.

05/2007 AWARD - RADIOLOGICAL SOCIETY OF NORTH AMERICA: ROENTGEN RESIDENT/FELLOW RESEARCH AWARD.

06/2001 AWARD – BEST INTERN: AT THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO. Awarded by the UTHSCSA medical students.

12/1995 AWARD – THIRD PLACE RANKING: Recognized for 3rd place rank in the 1995 Medical School Graduating class.

12/1992 AWARD – "ESTÍMULO ACADEMICO": Received this award at the Instituto de Ciencias de la Salud (CES) for best grades in the third year medical school class.

12/1990 AWARD – "ESTÍMULO ACADEMICO": Received this award at the Instituto de Ciencias de la Salud (CES) for best grades in the first year medical school class.

#### **ABSTRACTS AND PRESENTATIONS**

## **Podium Presentations and Invited Speaker Lectures**

- 1. 09/2013 Degenerative spine disease, update. Invited speaker at the International MRI symposium in Cancún, Mexico. Held by IATM from Medellín, Colombia.
- 2. 09/2013 Plexopathies. Magnetic resonance neurography. IATM (invited speaker).
- 3. 09/2013 Update spine MRI: 3T, sequences for metal, diffusion and tractography.
- 4. 09/2013 What's new in spine trauma? IATM (invited speaker).
- 5. 09/2011 Musculoskeletal CT Scan, Orthopedic Surgery residents core curriculum lecture, Orthopedic Surgery Residents UTHSCSA, San Antonio, TX (Invited speaker).
- 6. 09/2011 Web Based Research Resources, Radiology residents' research conference series, Department of Radiology, UTHSCSA, San Antonio, TX.
- 7. 03/2011 Musculoskeletal Radiology, Orthopedic Surgery residents core curriculum lecture, Orthopedic Surgery Residents UTHSCSA, San Antonio, TX (Invited speaker).
- 8. 01/2011 Shoulder MRI, UTHSCSA Radiology Residents, UTHSCSA Department of Radiology, San Antonio, TX.
- 9. 12/2010 Educational exhibit "Imaging of the diabetic foot revisited", RSNA 2010, Musculoskeletal Radiology, Radiological Society of North America, Chicago, IL.
- 10. 02/2010 Bone marrow imaging, Imágenes Medicas Avanzadas, Madrid, SP (Invited Speaker).
- 11. 02/2010 Imaging ankle and foot trauma, Imágenes Medicas Avanzadas, Madrid, SP (Invited Speaker).
- 12. 02/2010 Muscle Imaging, Imágenes Medicas Avanzadas, Madrid, SP (Invited Speaker).
- 13. 02/2010 Shoulder MRI and CT, Imágenes Medicas Avanzadas, Madrid, SP (Invited Speaker).
- 14. 02/2010 Imaging of muscle lesions, Radiology residents seminar series, Department of Radiology, UTHSCSA, San Antonio, TX.
- 15. 01/2010 Web based research resources, Radiology residents research conference series, Department of Radiology, UTHSCSA, San Antonio, TX.
- 01/2010 Musculoskeletal System radiologic anatomy, Radiologic anatomy course, Radiological Sciences students, Graduate School of Biomedical Sciences, UTHSCSA, San Antonio, TX.
- 17. 10/2009 Radiographic positioning for upper and lower extremity studies, 13th Technologists Education Day, Texas Radiology Technologists, UTHSCSA, San Antonio, TX (Invited Speaker).
- 18. 02/2009 MSK radiologic anatomy. Radiologic anatomy course. Radiological Sciences students, Graduate School of Biomedical Sciences, UTHSCSA, San Antonio, TX.
- 19. 01/2009 Ankle and foot fractures., Radiology Resident Noon Conference, Department of Radiology, UTHSCSA, San Antonio, TX.
- 20. 09/2008 Ultrashort TE MRI on the musculoskeletal system, Philips Medical advisory board meeting for musculoskeletal magnetic resonance imaging., Philips Medical Systems, Vancouver, BC, Canada (Invited Speaker).

- 21. 09/2007 Radiographic positioning for upper and lower extremity studies, 11th Technologists Education Day, Texas Radiology Technologists, UTHSCSA, San Antonio, TX (Invited Speaker).
- 22. 01/2007 Bone Marrow Imaging, Noon conference radiology residents, Department of Radiology, UTHSCSA, San Antonio, TX.
- 23. 12/2006 MRI Methods to Demonstrate Urinary Tract Stones: An Alternative to Thin Slice CT Preliminary Results of in Vitro Studies. Rahal A, El-Merhi F, Dalrymple NC, Fullerton GD, RSNA 2006, Scientific Presentation, Chicago, IL.
- 24. 12/2006 Ultrashort Echo-time (UTE) MRI and Traditional MRI Sequences at 3.0 Tesla to Diagnose Tendon Pathologies from Hyperglycemia, Sports Injury, or Repetitive Stress., RSNA 2006, Scientific Presentation, Chicago, IL.
- 25. 11/2005 High Frequency Ultrasound and MR Imaging of tendons: Evaluation of exvivo models of normal and injured bovine tendon with histopathologic correlation, Rahal A, Chhaya SA, Garcia GM, Heim-Hall J, Fullerton GD., RSNA 2005, Scientific Presentation, Chicago, IL.
- 26. 04/2004 Radiofrequency Ablation of Hepatic Tumors: Variability of Lesion Size Using a Single Ablation Device, RS Montgomery, Rahal A, Dodd GD, Leyendecker JR, Hubbard LG, Society of Gastrointestinal Radiology 2004, Scientific Presentation, Scottsdale, AZ.
- 27. 12/2003 Radiofrequency Ablation of Hepatic Tumors: Variability of Lesion Size Using a Single Ablation Device, RS Montgomery, Rahal A, Dodd GD, Leyendecker JR, Hubbard LG., RSNA 2003, Scientific Presentation, Chicago, IL.

#### **Educational Exhibits and Posters**

- 05/2011 Educational Exhibit: "Shoulder glenoid version on CT Scan: using a plane axial to the scapula is critical for a precise measurement", American Roentgen Ray Society Meeting 2011, Musculoskeletal Radiology, American Roentgen Ray Society, Chicago, IL.
- 2. 05/2011 Educational exhibit: "Ultrasound in early rheumatoid arthritis. How to perform a handand wrist ultrasound examination and common imaging findings", American Roentgen Ray Society Meeting 2011, Musculoskeletal Radiology, American Roentgen Ray Society, Chicago, IL.
- 03/2011 Educational exhibit: "Ultrasound in early rheumatoid arthritis. How to perform a hand and wrist ultrasound examination and common imaging findings", Society of Skeletal Radiology Meeting 2011, Society of Skeletal Radiology, Scottsdale, AZ.
- 4. 03/2011 Educational Exhibit: "Shoulder glenoid version on CT Scan: using a plane axial to the scapula is critical for a precise measurement", Society of Skeletal Radiology Meeting 2011, Society of Skeletal Radiology, Scottsdale, AZ.
- 5. 04/2009 Educational Exhibit: Off on the right foot: A pictorial exhibit on conventional radiology and MDCT of talar injuries., American Roentgen Ray Society 2009 annual meeting, ARRS, Boston, MA J Wibskov, A RAHAL, RA Loredo, GM Garcia.
- 6. 04/2009 Scientific Poster: Ankle and foot fractures, Multidetector CT imaging versus plain film evaluation, American Roentgen Ray Society 2009 meeting, ARRS, Boston, MA.

- 7. 11/2008 Educational exhibit: Monday Physics case of the day, RSNA 2008, Radiological Society of North America, Chicago, IL Designated as 1 AMA PRA Category 1 Credit. Q Peng and A. RAHAL.
- 8. 09/2008 Ankle and foot fractures: Multidetector CT imaging versus plain film evaluation, Medical student research day poster, Medical School, UTHSCSA, San Antonio, TX.
- 9. 12/2007 Metatarsal Plantar Plate Anatomy: A Pictorial Exhibit Featuring Microscopy Coil-MR Imaging and Ultrasonography. Gomez-Cintron A, A Rahal, RA Loredo, GM Garcia, SA Chhaya., RSNA 2007, Educational Exhibit, Chicago, IL.
- 10. 06/2006 MRI method to monitor lifetime hyperglycemic damage in diabetes. Rahal A, Fullerton GD., BIROW 2006, Scientific Poster, Bethesda, MD.
- 11. 05/2006 MRI measurement of advanced glycation end-products: the MRI hyperglycemic damage index. Rahal A, Fullerton GD., International Society of Magnetic Resonance in Medicine., Scientific Poster, Seattle, WA.
- 12. 12/2005 The Human Imaging Radiology-Residency/PhD Program at the University of Texas Health Science Center at San Antonio: A new paradigm for the education of academic radiologists. Rahal A, Head H, Jung AJ, Garcia Rojas X, Dodd GD, RSNA 2005, Educational Poster, Chicago, IL.

#### JOURNAL PUBLICATIONS

- 1. Loredo R, Rahal A, Garcia G, Metter DF. Imaging of the Diabetic Foot, Diagnostic Dilemmas. Foot and Ankle Specialist 2010 3:249 2010 Oct:249-264.
- 2. Rahal A, Head HW, Jung AJ, Garcia-Rojas X, Vargas D, Dalrymple NC, Clarke GD, Dodd III GD, Fullerton GD. A combined radiology residency-PhD program for the education of academic radiologists: A response to the RSNA Revitalizing the Radiology Research Enterprise (RRRE) Initiative. Radiology 2007 Oct;245(1):14-20.
- 3. Bydder M, Rahal A, Fullerton GD, Bydder GM. The magic angle effect: a source of artifact, determinant of image contrast, and technique for imaging. J Magn Reson Imaging 2007 Feb;25(2):290-300.
- 4. Fullerton GD, Rahal A. Collagen structure: the molecular source of the tendon magic angle effect. J Magn Reson Imaging 2007 Feb;25(2):345-361.
- 5. Fullerton GD, Nes E, Amurao M, Rahal A, Krasnosselskaia L, Cameron I. An NMR method to characterize multiple water compartments on mammalian collagen. Cell Biol Int 2006 Jan; 30(1):66-73.
- 6. Rahal A, Montgomery RS, Dodd GD, Leyendecker JR, Hubbard LG. Radiofrequency Ablation of Hepatic Tumors: Variability of Lesion Size Using a Single Ablation Device. American Journal of Radiology 2004;182:657-661.