

# Kenneth S. Lee, MD, MBA

#### **Personal Data**

Office Address
University of Wisconsin Hospital and Clinics
Department of Radiology
600 Highland Avenue, CSC E3/366
Madison WI 53792-3252

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## **Education**

## Undergraduate

August 1992 – June 1996 University of Michigan

Ann Arbor, Michigan

Degree: B.S. Microbiology

**Graduate/Medical School** 

July 1998 – June 2002 **Tufts University School of Medicine** 

Boston, Massachusetts Degree: M.D. and M.B.A.

Residency

July 2002 – June 2003 Henry Ford Hospital

Internship, Transitional

Detroit, Michigan

July 2003 – June 2007 Henry Ford Hospital, Chief Resident 2006-07

Residency, Diagnostic Radiology

Detroit, Michigan

#### Post-Graduate/Fellowship

July 2007 – June 2008 University of Wisconsin

**School of Medicine & Public Health** 

Fellowship, Musculoskeletal (MSK) Radiology

Madison, Wisconsin



#### **Certification and Licensure**

#### **Specialty/Subspecialty Certification**

American Board of Radiology Certified - June 2007

#### **Medical Professional Licensure**

Wisconsin Medical License

# **Present Appointment/Position**

2015 – present Fellowship Director, MSK Imaging and Intervention

University of Wisconsin Hospital and Clinics

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin

2013 – present **Associate Professor (CHS)** 

University of Wisconsin School of Medicine & Public Health

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin

2013 – present Medical Director, WIMR Translational Imaging

Wisconsin Institutes for Medical Research University of Wisconsin Hospital and Clinics

Department of Radiology Madison, Wisconsin

2010 – present **Director, Ultrasound Research** 

Wisconsin Institutes for Medical Research (WIMR)

University of Wisconsin Hospital and Clinics

Department of Radiology Madison, Wisconsin

2008 – present Medical Director, Clinical Musculoskeletal Ultrasound

University of Wisconsin Hospital and Clinics

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin

# **Past Appointments/Positions**

2014 – 2015 Fellowship Co-Director, MSK Imaging and Intervention

University of Wisconsin Hospital and Clinics

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin



2008 – 2013 Assistant Professor (CHS)

University of Wisconsin School of Medicine & Public Health

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin

2007 – 2008 Clinical Instructor

University of Wisconsin Hospital and Clinics

Department of Radiology, Musculoskeletal Radiology

Madison, Wisconsin

## **Professional Society Memberships**

American College of Radiology
Society of Skeletal Radiology
World Federation of Ultrasound in Medicine and Biology
American Institute of Ultrasound in Medicine

**International Skeletal Society** 

2005 – present Association of University Radiologists

2004 – present American Roentgen Ray Society

2003 – present Radiological Society of North America

## **Honors and Awards**

2015 - present

2016	for Education Exhibit
2016	Radiological Society of North America (RSNA) Cum Laude Award for Education Exhibit
2016	Society of Skeletal Radiology (SSR) Seed Grant Research Award
2015	Society of Skeletal Radiology (SSR) Best Scientific Paper Award



2014	Radiological Society of North America (RSNA) Research Scholar Grant Award
2013	American Institute of Ultrasound in Medicine (AIUM), Senior Member
2012	Radiological Society of North America (RSNA) Cum Laude Award for Education Exhibit
2012	Distinguished Reviewer Award Journal of Ultrasound in Medicine (JUM)
2011	American Institute of Ultrasound in Medicine (AIUM) First Place, Scientific Poster Exhibit Award
2011	Patrick T. Liu Innovation in Research Award, Society of Skeletal Radiology
2011	Radiological Society of North America (RSNA) Research Seed Grant Award
2011	Society of Skeletal Radiology (SSR) Young Investigator Award
2010	Radiological Society of North America (RSNA) Certificate of Merit Education Exhibit
2009	American Roentgen Ray Society (ARRS) Cum Laude Award - Scientific Presentation
2008	Radiological Society of North America (RSNA) Certificate of Merit Education Exhibit
2007	William R. Eyler, M.D. Distinguished Senior Resident Award
2005	Radiological Society of North America (RSNA) Roentgen Resident/Fellow Research Award
2004	Radiological Society of North America (RSNA) Introduction to Research Scholarship
2004	Howard P. Doub, M.D. Distinguished First Year Resident Award
1994	Parke-Davis/Warner Lambert Research Scholarship Award

# **Grant Support**

#### **Current Awards**

Title: Muscle Quality: A Future Target for Nutritional Intervention
 Source: UW Institutional Clinical and Translational Research Award

**Amount**: \$50,000

Year of Award: 7/1/2018-6/30/2019

PI: Kuchnia, Adam J, PhD (UW Department of Nutritional Sciences)

Role of Faculty Member: Co-Investigator

2. Title: Pivotal Study Comparing Two Injections of MONOVISC to Two Injections of

Saline in Patients with Osteoarthritis of the Hip

Source: DePuy Synthes, Mitek

**Amount**: \$74,017

Year of Award: 7/1/2018-6/30/2020

PI: Wilson John W, MD. MS (UW Department of Orthopedics)

Role of Faculty Member: Co-Investigator

3. **Title**: The Clinical, Biomechanical, and Tissue Regenerating Effects of a Single PEAK Platelet-Rich Plasma Injection for the Treatment of Chronic Lateral

Epicondylosis: a Randomized Controlled Trial

**Source**: DePuy Synthes Companies of Johnson & Johnson (Mitek)

**Amount**: \$105,000

**Year of Award**: 1/1/2016 – 1/1/2019

PI: Wilson, John J., MD, UW Department of Orthopedics, Sports Medicine

Role of Faculty Member: Co-Investigator

4. **Title**: Influence of Age-Related Changes in Tendon on Motor Performance

**Source**: National Institutes of Health – National Institute on Aging

Amount: \$347,094

Year of Award: 4/1/2016 - 3/31/2021

PI: Thelen, Darryl G., PhD, UW Department of Biomechanical Engineering

Role of Faculty Member: Co-Investigator

5. **Title**: Platelet-Rich Plasma Therapy for Patellar Tendinopathy: A Randomized Controlled Trial Correlating Clinical, Biomechanical and Novel Imaging Biomarkers **Source**: NBA/GE Healthcare Orthopedics and Sports Medicine Collaboration

Amount: \$296,880

**Year of Award**: 5/1/2016 – 6/30/2019

PI: Lee, Kenneth S., MD



6. Title: Clinical, Biomechanical and Novel Imaging Biomarkers of Hamstring Strain

Injury Potential in Elite Athletes

**Source**: NBA/GE Healthcare Orthopedics and Sports Medicine Collaboration

**Amount**: \$300,000

Year of Award: 12/15/2016 - 12/15/2019

PI: Heiderscheit, Brian, PhD

Role of Faculty Member: Co-Investigator

7. **Title**: Research Core Labs, Imaging: UL1 TTRC Imaging Y7 UW-ICTR

Source: UW Institutional Clinical and Translational Research Award; NIH National

Center for Advancing Translational Sciences

**Amount**: \$134,605

**Year of Award**: 6/1/2013 – 5/31/2017

PI: Drezner, Marc, K., MD (UW Department of Medicine, Section of Endocrinology,

Diabetes and Metabolism)

Role of Faculty Member: Co-Investigator

#### **Past Awards**

1. Title: Quantitative Imaging of the Tendon: Use of Ultrasound Shear Wave

Elastography as a Biomarker to Predict Tendon Rupture

Source: Radiological Society of North America (RSNA) Research Scholar Grant

**Amount**: \$152.000

Year of Award: 7/1/2013 - 6/30/2017

PI: Lee, Kenneth, S., MD

2. **Title**: Acoustoelastography as an Outcome Measure for Treatment of Chronic

Plantar Fasciitis with Platelet-Rich Plasma **Source**: RSNA Research Seed Grant

**Amount**: \$40,000

**Year of award**: 7/1/2010 – 6/30/2015

PI: Lee, Kenneth S., MD

3. **Title:** Platelet-Rich Plasma Injection Therapy for Achilles Tendinopathy:

Correlating Novel Ultrasound-based Biomarkers

Source: UW Institutional Clinical and Translational Research Award; NIH National

Center for Advancing Translational Sciences

**Amount: \$50.000** 

**Year of Award:** 8/1/2012 – 5/31/2015

PI: Lee, Kenneth, S., MD



4. **Title:** Shear Wave Ultrasound Elastography of the Tendon

Source: UW Department of Radiology Research and Development Committee

Amount: \$12,000

Year of award: 7/1/2012 - 6/30/2013

PI: Lee, Kenneth S., MD

Co- I: DeWall, Ryan PhD, UW Department of Biomedical Engineering

5. **Title:** Clinical, Biomechanical, and Tissue Regenerating Effects of a Single Platelet-Rich Plasma Injection for the Treatment of Chronic Patellar Tendinopathy: a Pilot Randomized Controlled Trial

Source: UW Department of Family Medicine and UW Department of Radiology

**Amount:** \$60,000

**Year of Award:** 11/1/2011 – 1/1/2013

PI: Wilson, John J., MD, UW Department of Orthopedics and Rehab Medicine

Role of Faculty member: Co-Investigator

6. **Title:** Effect of a Single Injection of Autologous Platelet-rich Plasma for the Treatment of Chronic Patellar Tendinosis: Clinical and Radiographic Outcomes

Source: UW Department of Family Medicine

**Amount:** \$4,000

**Year of Award:** 1/01/2011 – 12/31/2013

PI: Wilson, John J., MD, UW Department of Orthopedics and Rehab Medicine

Role of Faculty member: Co-Investigator

7. Title: Platelet-Rich Plasma Injections for Chronic Lateral Epicondylosis: Pilot Study

**Source**: UW Department of Orthopedics and Rehabilitation

**Amount**: \$42,440

**Year of Award**: 7/1/2010 – 6/30/2012

PI: Wilson, John J., MD, UW Department of Department of Orthopedics and Rehab

Role of Faculty member: Co-Investigator

8. **Title:** The Efficacy of Prolotherapy for Lateral Epicondylosis: A Pilot Study

**Source**: American Association of Family Physicians Foundation

**Amount**: \$30,000

Year of award: 7/1/2009 - 6/30/2011

PI: Rabago, David, MD, UW of Family Medicine

Role of Faculty member: Co-Investigator



9. Title: Biocomputation of the Links between Muscle Morphology, Coordination, and

Injury

Source: NIH Supplemental Award

**Amount**: \$140,740

**Year of award**: 9/15/2007 – 8/31/2010

PI: Thelen, Darryl G., PhD, UW Department of Biomechanical Engineering

Role of Faculty member: Co-Investigator

## **Publications**

#### **Refereed Articles**

- Ross AB, Chan BY, Yi PH, Repplinger MD, Vanness DJ, Lee KS. *Diagnostic accuracy of an abbreviated MRI protocol for detecting radiographically occult hip and pelvis fractures in the elderly.* Skeletal Radiology. 2018 June. PMID: 29915937 Online publication at <a href="https://doi.org/10.1007/s00256-018-3004-7">https://doi.org/10.1007/s00256-018-3004-7</a>.
- 2. Lee KS, Sin JM, Patil PP, Hanna AS, Greenberg JA, Zea RD, Brace CL. Ultrasound-Guided Microwave Ablation for the Management of Inguinal Neuralgia after Inguinal Herniorrhaphy: A Preliminary Study with 1-year Follow-Up. In press.
- 3. Chang EY, Tadros AS, Behrang A, Bell A, Bernard SA, Fox MG, Gorbachova T, Ha AS, **Lee KS**, Metter DF, Mooar PA, Shah NA, Singer AD, Smith SE, Talijanovic MS, Thiele R, Kransdorf MJ. *ACR Appropriateness Criteria*® *Chronic Ankle Pain*. JACR. 2018 15(5) S26-S38.
- 4. Amini B, Beckmann NM, Beaman FD, Wessell DE, Bernard SA, Cassidy RC, Czuczman GJ, Demertzis JL, Greenspan BS, Khurana B, Lee KS, Lenchik L, Motamedi K, Sharma A, Walker EA, Kransdorf MJ. ACR Appropriateness Criteria® Shoulder Pain-Traumatic. JACR. 2018 15(5) S171-S188.
- Grabowski PJ, Slane LC, Thelen DG, Obermire T, Lee KS. Evidence of Generalized Muscle Stiffness in the Presence of Latent Trigger Points Within Infraspinatus. Arch Phys Med Rehabil. PMID: 29709524 online: https://doi.org/10.1016/j.apmr.2018.03.024.
- Michelin P, Legrand J, Lee KS, Leleup G, Etancelin M, Banse C, Dacher JN, Duparc F. Axillary Sonography of the Shoulder: An Adjunctive Approach. Journal of Ultrasound. 2018, March. PMID: 29575005. Online: https://doi.org/10.1002/jum.14601



- Nguyen JC, Lee KS, Thapa MM, Rosas HG. US Evaluation of Juvenile Idiopathic Arthritis and Osteoarticular Infection. Radiographics. 2017 37(4) 1181-1201.
- Hanna AS, Ehlers ME, Lee KS. Preoperative Ultrasound-Guided Wire Localization of the Lateral Femoral Cutaneous Nerve. Operative Neurosurgery. 2017 13(3) 402-408.
- Bernard SA, Kransdorf MJ, Beaman FD, Adler RS, Amini B, Appel M, Arnold E, Cassidy RC, Greenspan BS, Lee KS, Tuite MJ, Walker EA, Ward RJ, Wessell DE, Weissman BN. ACR Appropriateness Criteria® Chronic Back Pain Suspected Sacroiliitis-Spondyloarthropathy. Expert Panel on Musculoskeletal Imaging. Journal American College Radiology. 2017 14(5S): S62-S70.
- 10. Beaman FD, von Herrmann PF, Kransdorf MJ, Adler RS, Amini B, Appel M, Arnold E, Bernard SA, Greenspan BS, Lee KS, Tuite MJ, Walker EA, Ward RJ, Wessell DE, Weissman BN. ACR Appropriateness Criteria®, Suspected Osteomyelitis, Septic Arthritis, or Soft Foot Infection (Excluding Spine and Diabetic Foot). Journal American College Radiology. 2017 14(5S): S326-S337.
- 11. Slane LC, Martin J, DeWall R, Thelen D, Lee KS. Quantitative ultrasound mapping of regional variations in shear wave speeds of the aging Achilles tendon. European Radiology. 2017 27(2): 474-482.
- 12. Lee KS, Martin J, Thelen D. Science to Practice: Quantitative Ultrasound Elastography can Quantify Mechanical and Histological Tendon Healing in a Rabbit Model of Achilles Tendon Transection. Radiology. 2017 283(2): 311-313.
- 13. Sheehan SE, Coburn JA, Singh H, Vanness DJ, Sittig DF, Moberg DP, Safdar N, Lee KS, Brunner MC. Reducing Unnecessary Shoulder MRI Examinations Within a Capitated Health Care System: A Potential Role for Shoulder Ultrasound. Journal American College Radiology. 2016 13(7):780-7.
- 14. Lee MH, Sheehan SE, Orwin JF, Lee KS. Comprehensive Shoulder US Examination: A Standardized Approach with Multimodality Correlation for Common Shoulder Disease. Radiographics. 2016 36(6): 1606-1627.
- 15. Wilson J, Lee KS, Chamberlain C, DeWall R, Baer G, Greatens M, Kamps N. *Intratendinous injections of platelet-rich plasma: feasibility and effect on tendon morphology and mechanics*. Journal of Experimental Orthopaedics. 2015 2(1):5.



- 16. Garg RV, Lee KS, Kohn SC, Baskaya MK, Afifi AM. Can Sonography Distinguish a Supraorbital Notch From a Foramen? Journal of Ultrasound in Medicine. 2015 34 (11) 2089-91.
- 17. Martin JA, Biedrzycki AH, Lee KS, DeWall RJ, Brounts SH, Murphy WL, Markel MD, Thelen DG. *In Vivo Measures of Shear Wave Speed as a Predictor of Tendon Elasticity and Strength*. Ultrasound in Medicine and Biology. 2015 41(10) 2722-30.
- 18. Al Saleh H, Hernandez L, **Lee KS**, Rosas HG, Block W, Kijowski R. *Rapid Isotropic Resolution Cartilage Assessment Using Alternating Repetition Time Steady-State Free-Precession Imaging*. Journal of Magnetic Resonance Imaging. 2014 40(4) 796-803.
- 19. Backer MW, Lee KS, Blankenbaker DG, Kijowski R, Keene JS. Correlation of ultrasound-guided corticosteroid injection of the quadratus femoris with MRI findings of ischiofemoral impingement. American Journal of Roentgenology. 2014 203(3) 589-93.
- 20. DeWall RJ, Slane LC, **Lee KS**, Thelen DG. **Spatial variations in Achilles tendon shear wave speed**. Journal of Biomechanics. 2014 22; 47(11) 2685-92.
- 21. Craig JG, Lee KS, Morrison WB, Peterson JJ, Mulcahy H, Umans HR. *Musculoskeletal Radiology.* ACR Continuous Professional Improvement Self-Assessment Modules. August 1, 2014, 1-74.
- 22. Kijowski R, Rosas H, **Lee KS**, Cheung A, Munoz del Rio A, Graf BK. *MRI Characteristics of Healed and Unhealed Peripheral Vertical Meniscal Tears*.

  American Journal of Roentgenology. 2014 March 202: 585 592.
- 23. DeWall RJ, Jiang J, Wilson JJ, **Lee KS**. *Visualizing tendon elasticity in an ex vivo partial tear model*. Ultrasound Med Biol. 2014 Jan 40(1) 158-167.
- 24. Lee KS, De Smet AA, Liu G, Staab MJ. High Resolution Ultrasound Features of Prostatic Rib Metastasis: A Prospective Feasibility Study with Implication in the High Risk Prostate Cancer Patient. Urologic Oncology: Seminars and Original Investigations. 2014 Jan 32(1) 7 24.
- 25. Wilson JJ, **Lee KS**, Miller AT, Wang S. *Platelet-Rich Plasma for the Treatment of Chronic Plantar Fasciopathy in Adults: a Case Series.* Foot Ankle Spec. 2014 Feb 7(1) 61-67.



- 26. Wilson JJ, Rabago DP, Lee KS. Platelet-Rich Plasma Treatment for Lateral Epicondylitis. Letter to the Editor/Response. American Journal of Sports Medicine. 2013 Jul 41(7) NP 33-4.
- 27. Wagner JM, Lee KS, Rosas HR, Kliewer M. *Accuracy of Sonographic Diagnosis of Superficial Masses*. J Ultrasound Medicine. 2013 Aug 32(8) 1443-50.
- 28. Chourasia A, Buhr KA, Rabago DP, Kijowski R, **Lee KS**, Ryan MP, Grettie-Belling JM, Sesto ME. *Relationship between biomechanics, tendon pathology and function in individuals with lateral epicondylosis*. Journal of Orthopedic and Sports Physical Therapy. 2013 June, 43(6) 368-378.
- 29. Rabago DP, **Lee KS**, Ryan M, Chourasia AO, Sesto ME, Zgierska AE, Kijowski R, Grettie J, Wilson JJ, Miller D. *Hypertonic Dextrose and Morrhuate Sodium Injections (Prolotherapy) for Lateral Epicondylosis (Tennis Elbow): Results of a Single-Blind, Pilot-Level Randomized Controlled Trial.* American Journal of Physical Medicine and Rehabilitation. 2013 July; 92(7) 587-96.
- 30. McEvoy JR, Lee KS, Blankenbaker DG, Munoz del Rio A, Keene J. Ultrasound-Guided Corticosteroid Injections for Treatment of Greater Trochanteric Pain Syndrome: Greater Trochanter Bursa versus Subgluteus Medius Bursa? American Journal Roentgenology (AJR). 2013 Aug; 201(2) W313-7.
- 31. Chernak LA, DeWall RJ, **Lee KS**, Thelen DG. **Length and activation dependent variations in muscle shear wave speed**. Physiological Measurement. 2013 June, 34(6) 713- 21.
- 32. Lee KS. *Musculoskeletal Sonography of the Tendon.* Journal of Ultrasound in Medicine. December 2012, 31: 1879-1884.
- 33. Davis KW, Bancroft LW, Craig JG, **Lee KS**, Morrison WB, Monu JUV, Peterson JJ, Richardson ML, Roberts CC, Stull MA, Umans HR. *Musculoskeletal Radiology*. ACR Continuous Professional Improvement Self-Assessment Modules. October 2012, 1-74.
- 34. Rosas HG, Lee KS. *Performing Fluoroscopically Guided Interlaminar Lumbar Epidural Injections*. American Journal of Roentgenology (AJR). 2012 Aug; 199 (2):419.



- 35. Kijowski R, Sanogo ML, **Lee KS**, Muñoz Del Río A, McGuine TA, Baer GS, Graf BK, De Smet AA. **Short-term Clinical Importance of Osseous Injuries Diagnosed at MR Imaging in Patients with Anterior Cruciate Ligament Tear.**Radiology. 2012 Aug; 264 (2):531-41.
- 36. Lee KS, Rosas HG. Response to "Few Considerations on Musculoskeletal ultrasound: how to treat calcific tendinitis of the rotator cuff by ultrasound-guided single-needle lavage technique". American Journal of Roentgenology. 2011 Aug: 197: W367.
- 37. Ryan M, Wong A, Rabago RP, **Lee KS**, Taunton J. *Ultrasound guided injections of hyperosmolar dextrose for overuse patellar tendinopathy: a pilot study.* British J Sports Medicine. 2011 Sep; 45 (12):972-7.
- 38. Lee KS, Wilson JJ, Rabago DP, Baer GS, Jacobson JA, Borreo CG. *Musculoskeletal Applications of Platelet-Rich Plasma: Fad or Future?*American Journal of Roentgenology (AJR). 2011 Mar; 196: 628 – 636.
- 39. Lee KS, Rosas HG. *Musculoskeletal Ultrasound: How to treat calcific tendinitis of the rotator cuff by ultrasound guided single-needle lavage technique*. American Journal Roentgenology (AJR). 2010 Sep;1995(3) W213.
- 40. Bancroft LW, Davis KW, Craig JG, **Lee KS**, Morrison WB, Monu JUV, Peterson JJ, Richardson ML, Roberts CC, Stull MA, Umans HR. *Musculoskeletal Radiology*. *ACR Continuous Professional Improvement Self-Assessment Modules*. August 2010.
- 41. Lee KS, van Holsbeeck MT, Abbud A. Atypical rapid progression of osteoarticular amyloidosis involving the hip in a patient on hemodialysis using polyacrylonitrile membranes. Skeletal Radiology. 2010 Jan 39(1): 79-83.
- 42. Lee KS, Ablove RH, Singh S, De Smet AA, Haaland B, Fine JP. *Ultrasound Imaging of Normal Displacement of the Extensor Carpi Ulnaris Tendon within the Ulnar Groove in 12 Forearm-Wrist Positions*. American Journal Roentgenology (AJR). 2009 Sep; 193(3):651-5.
- 43. Lee KS. *Musculoskeletal Ultrasound: How to Evaluate for Morton's Neuroma*. American Journal Roentgenology (AJR). 2009 Sep; 193(3):W172.



- 44. Kijowski R, Woods MA, Lee KS, Takami K, Yu H, Shimikawa A, Brittain JH, Reeder SB. *Improved fat suppression using multipeak reconstruction for IDEAL chemical shift fat-water separation: application with fast spin echo imaging.* Journal of MRI. 2009 Feb; 29(2): 436-442.
- 45. Bancroft LW, Peterson JJ, Davis KW, **Lee KS**, Monu JUV, Morrison WB, Richardson ML, Roberts CC, Stull MA, Umans HR. Module 76: **Musculoskeletal Radiology**. ACR Continuous Professional Improvement Self-Assessment Modules. December, 2008. Volume 76:1-58.

#### **Non-Refereed Articles**

- 1. Chan BY, Lee KS. Ultrasound Intervention of the Lower Extremity/Pelvis. Radiologic Clinics of North America. 2019 In press.
- 2. Gustas CN, Lee KS. Multimodality Imaging of the Painful Elbow: Current Imaging Concepts and Image-Guided Treatments for the Injured Thrower's Elbow. Radiologic Clinics of North America. 2016; 54(5): 817-39.
- Lee KS. Ultrasound-Guided Platelet-Rich Plasma Treatment: Application and Technique. Seminars in Musculoskeletal Radiology. 2016; Nov; 20(5) 422-431.
- 4. **Lee KS**. *Non-Spine MSK Interventions*. Seminars in Musculoskeletal Radiology. 2016; Nov; 20(5) 399-400.
- 5. **Lee KS**, Rosas HG, Phancao JP. **Snapping hip: imaging and treatment**. Seminars in Musculoskeletal Radiology. 2013 Jul;17(3) 286-94.
- 6. Lee KS. *Platelet-Rich Plasma Injection*. Seminars in Musculoskeletal Radiology. 2013 Feb;17(1):91-8.
- 7. Yablon CM, Lee KS, Jacobson JA. *Musculoskeletal Ultrasound: Starting Your Practice*. Seminars in Musculoskeletal Radiology. 2013 Apr; 48(2):167-77.
- 8. Currie JW, Davis KW, Lafita VS, **Blankenbaker DG**, De Smet AA, Rosas H, Lee KS. *Musculoskeletal Mnemonics: Differentiating Features*. Current Problems Diagnostic Radiology. 2011 Mar (40), 45-71.
- 9. Rosas HG, Lee KS. *Imaging Acute Trauma of the Elbow*. Seminars in Musculoskeletal Radiology. 2010 Nov 14: 394-411.



 Lee KS, Rosas HG, Craig JG. Musculoskeletal Ultrasound: Elbow Imaging and Procedures. Seminars in Musculoskeletal Radiology. 2010 Sep 14: 449-460.

#### **Books**

1. *Netter's Concise Radiologic Anatomy.* 2<sup>nd</sup> *Edition*. Weber, EC, Vilensky JA, Carmichael SW, Lee KS. Elsevier, March 2014.

## **Book Chapters**

- Lee KS. Case 7: Osteoarticular Amyloidosis. Bone Disease, Fifth Series, Test and Syllabus. Cohen, Jacobson, van Holsbeeck. American College of Radiology (ACR) April 2010: 66 – 76.
- 2. **Lee KS,** Tuite MJ, Rosas HG. *Elbow Injuries.* Essential Radiology for Sports Medicine. Robinson P. Springer, 2010:127 141.
- Squire M, Boushea D, Schmidt A, Huebner J, Kijowski R, Lee, KS, et al. The Diagnosis and Management of Osteoarthritis of the Knee and Hip Adult: In Ambulatory Clinical Practice Guideline. E Publication, UW Health, June 20, 2016. <a href="https://uconnect.wisc.edu/clinical/cckm-tools/content/?path=/content/cpg/orthopedics/name-100988-en.cckm">https://uconnect.wisc.edu/clinical/cckm-tools/content/?path=/content/cpg/orthopedics/name-100988-en.cckm</a>

#### **Abstracts**

- Gimarc D (Musculoskeletal (MSK) Fellow), Michelin P, Thelen D, Wilson J, Lee KS. Platelet-Rich Plasma for Treatment of Moderate-to-Severe Midsubstance Achilles Tendinopathy: A Pilot RCT with Conventional and Novel Ultrasound Imaging Correlation. Society of Skeletal Radiology (SSR) Annual Meeting. March 10- 13. 2019. Scottsdale, AZ
- 2. Stratchko L (MSK Fellow), **Lee KS**, Kijowski R. "*Possible" Meniscal Tears at Knee MRI: Revisiting the Single-Touch Rule.* Society of Skeletal Radiology (SSR) Annual Meeting. March 10- 13. 2019. Scottsdale, AZ
- 3. Chernak Slane L (Biomedical Engineering Graduate Student), Martin J, DeWall R, Thelen D, Lee KS. *Achilles Tendon Shear Wave Speeds Show Non-Uniform Aging Effects*. International Society of Biomechanics (ISB). Glasgow, Scotland. July 14, 2015.



- Brunner M, Holayter RA, Pinchot JW, Dalvie P, Lee KS, Moberg DP, Busarow S, Ozkan O. A model for co-designing clinical decision support to advance more efficient IO imaging. World Conference on International Oncology (WICO) Annual Conference. New York, NY. May 6 – 9, 2015.
- Peterson II W, (MSK Fellow), Lee KS, Wilson JJ, Almasi SJ, Munoz del Rio A. Platelet-Rich Plasma Injection for Patellar Tendinopathy: Imaging and Clinical Outcomes in Athletes at 1-Year Follow Up. Society of Skeletal Radiology (SSR) Annual Meeting. Skeletal Radiology 2014 Dec (34) 1797-1798.
- Cheung AC (MSK Fellow), Rosas HG, Lee KS, Munoz del Rio A, Kijowski R. MRI Characteristics of Healed and Unhealed Peripheral Vertical Meniscus Tears. European Society of Musculoskeletal Radiology 2013 Annual Conference. Marbella, Spain. June 14, 2013.
- Wilson J, Lee KS. Platelet-rich plasma for the treatment of chronic plantar fasciopathy in adults: a randomized controlled clinical trial. Presented at American Medical Society for Sports Medicine Annual Meeting (AMSSM). San Diego, CA. April 19, 2013.
- 8. Lee KS. Overview of Platelet Rich Plasma (PRP) Therapy in Treatment of Tendinopathies. American Roentgen Ray Society (ARRS) Annual Meeting. Washington, DC. April 14 19, 2013.
- 9. Wilson JJ, Kamps N (Shapiro Medical Student), DeWall R, **Lee KS**. **Biomechanical effects of In Vitro Intratendinous Injection and Tendon Fenestration.** UW SMPH. Shapiro Research Foundation. February 2013.
- 10. Wilson JJ, Greatens M, Baer GS, Lee KS, Chamberlain CS, Clancy WG. *Intratendinous Injection of Platelet-rich Plasma into Lamb Extensor Carpi Ulnaris Tendon*. Clinical Journal of Sport Medicine. May 2012; 22(2):189.
- 11. Wilson JJ, Rabago DP, Lee KS, Ryan M, Sesto M. *The Efficacy of an Ultrasound Guided Platelet-Rich Plasma Injection for Chronic Lateral Epicondylopathy*. 2012 American College of Sports Medicine (ACSM) Annual Meeting. San Francisco, CA. May 30, 2012.
- 12. Wilson JJ, Kijowski R, Lee KS, Miller D, Ryan M, Sesto M. *The Efficacy of prolotherapy for lateral epicondylosis: A pilot-level randomized controlled trial*. 2012 American College of Sports Medicine (ACSM) Annual Meeting. San Francisco, CA. May 30, 2012.



- 13. Wilson JJ, Lee KS, Miller A, Ryan M, Sesto M. The Efficacy of an Ultrasound Guided Platelet-Rich Plasma Injection for Chronic Lateral Epicondylopathy. 2012 American College of Sports Medicine (ACSM) Annual Meeting. San Francisco, CA. May 30, 2012.
- 14. Vanderby R, Kuehl SE, Wu MJ, Kobayashi H, **Lee KS**, Sethares WA. *An in vivo method to quantify biomechanical compromise in tendon.* 10<sup>th</sup> Annual International Symposium Computer Methods in Biomechanics and Biomedical Engineering 2012 (Paper #187), Berlin, Germany. April 11 14, 2012. (ISBN:978-0-9562121-5-3).
- 15. Kijowski R, Sanago M, Lee KS, McGuine T, Baer G, Graf B, and De Smet A. Short-Term Clinical Significance of Osteochondral Injuries in Patients with Anterior Cruciate Ligament Tears. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, Arizona. March 12, 2011.
- 16. Kijowski R, Lee KS, Rosas H. Rapid Multi-Planar Assessment of Articular Cartilage of the Knee Joint Using Isotropic Resolution VIPR-ATR Imaging. International Society Magnetic Resonance in Medicine (ISMRM) Annual Meeting. Montreal, Canada. May 11, 2011.
- 17. Kijowski R, Klaers J, **Lee KS**, Rosas H, Hernandez L, and Block W. *Rapid Multi-Planar Assessment of Articular Cartilage Using High Isotropic Resolution Magnetic Resonance Imaging.* Osteoarthritis Research Society International Annual Meeting. Brussels, Belgium. September 24, 2010.
- 18. Wagner J (Abdominal Fellow), Rosas, HG, Lee KS, Kliewer M. Accuracy of sonographic diagnosis of superficial masses. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 25, 2010.
- 19. Frisch K (Biomedical Engineering Graduate Student), Lee KS, Verma R, Baer G, Kobayashi H, Vanderby R. Acoustoelastographic mapping of the stiffness gradient distribution in the rotator cuff for pathologic identification. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. San Diego, CA. March 24, 2010.
- 20. Runyan B (MSK Fellow), **Lee KS**, Rabago D, Frisch C, Rosas H. *Ultrasound changes during prolotherapy injections for the treatment of chronic lateral epicondylosis*. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 15, 2010.



21. Rosas H, Lee KS, Baer G, Kobayashi H, Vanderby R. *Acoustoelastography of the Achilles Tendon: Normal and Abnormal Assessment*. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 15, 2010.

#### **Invited Research Presentations**

#### Local

- Lee KS. Platelet Rich Plasma for Tendinopathy: The Wisconsin Studies.
  The Anatomy, Diagnosis, and Treatment of Chronic Myofascial Pain with
  Prolotherapy Conference Research Symposium. Madison, WI. October 18,
  2017.
- Lee KS. Acoutoelastography as a biomarker for tendinopathy: Results from recent clinical trials. The Anatomy, Diagnosis, and Treatment of Chronic Myofascial Pain with Prolotherapy Conference Research Symposium. Madison, WI. October 17, 2012.
- 3. Lee KS. *Ultrasound-guided Platelet Rich Plasma Injections for Chronic Plantar Fasciitis: Interim Results in an RCT.* The Anatomy, Diagnosis, and Treatment of Chronic Myofascial Pain with Prolotherapy Conference Research Symposium. Madison, WI. October 12, 2011.
- 4. Lee KS, Wilson J, Jacobson J, Baer G. *Ultrasound Guided Platelet-Rich Plasma (PRP) Treatment of Tendinopathies*. University of Wisconsin Stem Cell and Regenerative Medicine Center (SCRMC) Fall Conference. Madison, WI. September 16, 2011.
- 5. Lee KS, Wilson J, Post M. *Musculoskeletal Applications of Platelet-rich Plasma*. University of Wisconsin School of Medicine and Public Health Quality Week. Madison, WI. October 18 22, 2010.

#### National/International

 Sin JM (MSK Fellow), Patil P, Adamany C, Lee KS. Ultrasound-Guided Microwave Ablation for the Management of Inguinal Neuralgia: Preliminary Results. Association of University Radiologists Annual Meeting. Hollywood, FL. May 9, 2017.



- Ross AB (MSK Fellow), Chan B, Yi P, Repplinger M, Vanness D, Lee KS. Rapid Hip MRI: Feasibility of Detecting Radiographically Occult Hip Fractures in the Elderly. Society of Skeletal Radiology Annual Meeting. Santa Barbara, CA. March 19, 2017.
- 3. Llewellyn M (MSK Fellow), **Lee KS**. **Shear Wave Imaging in Moderate to Severe Achilles Tendinopathy**. American Institute of Ultrasound in Medicine Annual Convention. Orlando, FL. March 28, 2017.
- Nitschke AM (MSK Fellow), Lee KS, Stephenson JW. Osteomyelitis of the patella with septic arthritis. SSR Case of the Day. Society of Skeletal Radiology (SSR) Annual Meeting. Santa Barbara, CA. March 19, 2017,
- 5. Lee KS. MSK Quantitative Imaging Biomarkers: MRI and Beyond. Hot Topic Session SPSH20C. Radiological Society of North America Annual Meeting. Chicago, IL. November 28, 2016.
- Lee KS. PRP Injection. International Skeletal Society (ISS) 43nd Annual Meeting and Musculoskeletal Imaging Course. Paris, France. September 9, 2016.
- 7. Woodbury G (MSK Fellow), Wilson JJ, Taggart K, Baer G, McGuine T, Lee KS. Ultrasound-Guided Platelet-Rich Plasma Injection: Clinical Outcomes in Patients With Patellar Tendinopathy Following Anterior Cruciate Ligament Reconstruction Using a Patellar Tendon Autograft. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. New York, NY. March 19, 2016.
- 8. Lee KS, Tresley J, Wilson JJ. *Ultrasound Guided Baker's Cyst Aspiration with Corticosteroid Injection: A "Do Not Touch" Lesion?* Society of Skeletal Radiology (SSR) Annual Meeting. New Orleans, LA. March 16, 2016.
- Lee KS, Hochman MG. Musculoskeletal Applications of Dual Energy CT. Hot Topic Session SPSH51. Radiological Society of North America Annual Meeting. Chicago, IL. December 3, 2015.
- 10. Lee KS, Wilson JJ, Kohn S, Plovanich E, Swick J, Vanderby R. Ultrasound-Guided Treatment of Refractory Chronic Plantar Fasciopathy: A Randomized Controlled Pilot Study of Platelet-Rich Plasma versus Corticosteroid Injection. Radiological Society of North America Annual Meeting. Chicago, IL. December 1, 2015.



- 11. Knudtson T (MSK Fellow), Lee KS. Ultrasound-Guided Corticosteroid Injection: Efficacy of Treatment in Patients With Moderate to Severe Plantar Fasciitis Who Have Failed Conservative Therapies. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 24, 2015.
- 12. Schapiro A (Resident), Lee KS, Rabago D, Wilson J. *Platelet-Rich Plasma and Hyperosmolar Dextrose (Prolotherapy) for Lateral Epicondylosis: Power Doppler Sonographic Assessment of Tendon Neovascularity as a Measure of the Healing Response*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 23, 2015.
- 13. Patil P (MSK Fellow), **Lee KS**, Rosas HG, Kenyon L, Munoz del Rio A. *Ultrasound-Guided Microwave Ablation in the Management of Inguinal Neuralgia: A Preliminary Study with 1-Year Follow-up*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 23, 2015.
- 14. Lee KS, Wilson J, Kohn S, Plovanich E, Vanderby R. Ultrasound-Guided Treatment for Refractory Plantar Fasciopathy: A Randomized Controlled Pilot Study of Platelet-Rich Plasma Versus Standard of Care Corticosteroid Injections. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. March 8, 2015. Awarded 2015 SSR Best Scientific Paper.
- 15. Lee KS. Quantitative Imaging of the Tendon: Shear Wave Elastography as a Biomarker to Predict Tendon Rupture. RSNA R&E Foundation Scholar Presentation. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. December 2, 2014.
- 16. Lee KS, Peterson II W, Wilson JJ, Munoz del Rio A. *Ultrasound Imaging Features of Tendon Healing After Platelet-Rich Plasma Injection for Patellar Tendinosis*. American Institute for Ultrasound in Medicine (AIUM) Annual Convention. Las Vegas, NV. April 2, 2014.
- 17. Lee KS, Rosas HG. *Ultrasound guided neurolysis using microwave ablation*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Las Vegas, NV, March 28, 2014.
- 18. Peterson II W (MSK Fellow), **Lee KS**, Wilson JJ, Almasi SJ, Munoz del Rio A. *Platelet-Rich Plasma Injection for Patellar Tendinopathy: Imaging and Clinical Outcomes in Athletes at 1-Year Follow Up*. Society of Skeletal Radiology (SSR) Annual Meeting. San Diego, CA. March 18, 2014.



- 19. DeWall R (Post Doctorate Student), Wilson J, Lee KS. Quantifying Tendon Damage with Ultrasound (US) Shear Wave Elastography using a Porcine Flexor Tendon Tear Model. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. December 1, 2013.
- 20. Lee KS, Wilson J. Clinical and Radiological Applications in Prolotherapy and Platelet-Rich Plasma Research. 14<sup>th</sup> World Congress of Ultrasound in Medicine and Biology (WFUMB 2013). Sao Paulo, Brazil. May 5, 2013.
- 21. Lee KS. *Ultrasound-guided neurolysis of the peripheral nerves using microwave ablation technology*. Musculoskeletal Ultrasound Research Annual Meeting. New York, NY. April 20, 2013.
- 22. Kohn S (Research Sonographer), Lee KS. Musculoskeletal US of Full Thickness Rotator Cuff Tear. Case of the Day. American Institute for Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 7, 2013.
- 23. Kijowski R, Rosas H, Cheung A, **Lee KS**, Munoz del Rio A, Graf B. *Magnetic Resonance Imaging Findings of Healed and Unhealed Peripheral Vertical Meniscus Tears*. Society of Skeletal Radiology (SSR) Annual Meeting. San Antonio, Texas. March 18, 2013.
- 24. Backer MW (MSK Fellow), Lee KS, Blankenbaker DG, Kijowski R, Keene JS. Correlation of ultrasound-guided corticosteroid injection of the quadratus femoris with MRI findings of ischiofemoral impingement. Society of Skeletal Radiology (SSR) Annual Meeting. San Antonio, TX. March 18, 2013.
- 25. McEvoy, JR (MSK Fellow), Lee KS, Blankenbaker DG, Munoz del Rio A, Keene JS. *Greater trochanteric pain syndrome: US guided steroid injection of the greater trochanteric bursa versus the subgluteus medius bursa*. Society of Skeletal Radiology (SSR) Annual Meeting. Miami, FL. March 19, 2012.
- 26. Ryan M (Post Doctorate Student), Kobayashi H, Lee KS, Rabago D. *Ultrasound-Based Acoustoelastic Measurement of In-Vivo Stiffness Discriminates Common Elbow Extensor Tendinopathy*. American Physical Therapy Association Combined Sections Meeting. Chicago, IL. February 8 -11, 2012.
- 27. Hanson J (Resident), Lee KS, Heiner JP, Peterson AR. Cost-effectiveness of ultrasound-versus computed tomography-guided soft tissue biopsy (a pilot study and sensitivity analysis). American Medical Society for Sports Medicine (AMSSM) Salt Lake City, UT. April 30 May 4, 2011.



- 28. Wilson J, Rabago DP, Lee KS, Vanderby R, Sesto M. Platelet-rich plasma injections for chronic lateral epicondylitis: A pilot study. American Medical Society for Sports Medicine Annual Meeting (AMSSM). Salt Lake City, UT. April 30 May 4 2011.
- 29. Lee KS, Kobayashi H, Vanderby R, Wilson J, Rosas HR, Rabago D. Treatment of Chronic Lateral Epicondylosis Using a Hyperoslar Dextrose Solution: Can Acoustoelastography Monitor Tissue Healing? American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 16, 2011.
- 30. Ryan MB (Post Doctorate Student), Lee KS, Kobayashi H, Heidersheit B, Vanderby R. Ultrasound-Based Acoustoelastic Measurement of In Vivo Stiffness of the Common Lateral Elbow Extensor Tendon in Chronic Tendinopathy and Healthy Controls. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 31. Lee KS, Wilson JJ. *Platelet-rich plasma therapy: The radiologist's role in diagnosis and treatment*. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 14 17, 2011. Awarded 1st Place scientific poster presentation.
- 32. Frisch K (Biomedical Engineering Graduate Student), Marcu D, Lee KS, Baer G, Thelen D, Vanderby R. *Acoustoelastographic Stiffness and Strain Reflect Tendon Tearing.* American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 33. Lee KS, Rabago D, Kobayashi H, Vanderby R, Rosas HR, Wilson J. Treatment of Chronic Lateral Epicondylosis Using Hyperosmolar Dextrose Solution: Can Acoustoelastography Monitor Tissue Healing? Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. March 16, 2011. Received the Patrick T. Liu Innovation in Research Award.
- 34. Rosas HG, Lee KS. Secondary Amyloidosis of the Lumbar Spine. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. March 16, 2011.
- 35. Lee KS. The Basic Science and Clinical Applications of Platelet-Rich Plasma Therapy: Why Should Radiologists Care? Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. March 13, 2011.



- 36. Kijowski R, Sanago M, Lee KS, McGuine T, Baer G, Graf B, and De Smet A. Short-Term Clinical Significance of Osteochondral Injuries in Patients with Anterior Cruciate Ligament Tears. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. March 12, 2011.
- 37. Kijowski R, Klaers J, **Lee KS**, Posas H, Hernandez L, and Block W. *Rapid Multi-Planar Assessment of Articular Cartilage Using High Isotropic Resolution Magnetic Resonance Imaging*. Osteoarthritis Research Society International Annual Meeting. Brussels, Belgium. September 24, 2010.
- 38. Frisch C (Biomedical Engineering Graduate Student), Lee KS, Baer G, Kobayashi H, Vanderby R. *Acoustoelastic Mapping of Stiffness Gradient Distribution in the Rotator Cuff for Pathology Identification*. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 27, 2010.
- 39. Wagner J (Abdominal Fellow), **Lee KS**. *Ultrasound of superficial lumps: a pictorial essay*. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 24 -27, 2010.
- 40. Wagner J (Abdominal Fellow), Rosas, HG, Lee KS, Kliewer M. Accuracy of sonographic diagnosis of superficial masses. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 25, 2010.
- 41. Runyan B (MSK Fellow), **Lee KS**, Rabago D, Frisch C, Rosas H. *Ultrasound changes during prolotherapy injections for the treatment of chronic lateral epicondylosis*. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 15, 2010.
- 42. Runyan B (MSK Fellow), Lee KS, Rosas HG, Rabago DP, Wilson J. Ultrasound changes seen in the common extensor tendon during hyperosmolar dextrose treatment for chronic lateral epicondylitis. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 15, 2010.
- 43. Rosas H, Lee KS, Baer G, Kobayashi H, Vanderby R. *Acoustoelastography of the Achilles Tendon: Normal and Abnormal Assessment*. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 15, 2010.
- 44. Lee KS, Blankenbaker DG, Davis KW. *Musculoskeletal Section. Wednesday Case of the Day. Anterior Interosseous Nerve Syndrome.* Radiological Society of North America (RSNA) Annual Meeting. Chicago, IL. December 2, 2009.



- 45. Lee KS, Kobayashi H, Vanderby R, Frisch K, Baer G, Rosas HG. Acoustoelastography of the Achilles tendon: a pilot study. 12th World Congress of the World Federation for Ultrasound in Medicine and Biology (WFUMB). Sydney, Australia. Aug 31 – Sep 3, 2009.
- 46. Lee KS, Kobayashi H, Vanderby R, Frisch K, Baer G, Rosas HG. Acoustoelastography of the tendon: Applying a new method for evaluating tissue properties and deformation of a porcine flexor tendon using A-mode US. American Roentgen Ray Society (ARRS) Annual Meeting. Boston, MA. April 27 – May 1, 2009. Received Cum Laude Award.
- 47. Lee KS, De Smet AA, Liu G. *High resolution ultrasound evaluation of rib metastases from renal cell and prostate carcinomas*. American Roentgen Ray Society (ARRS) Annual Meeting, Boston, MA. May 1, 2009.
- 48. Lee KS, Kobayashi H, Vanderby R, Frisch K, Baer G, Rosas HG. Acoustoelastography of the tendon: Applying a new method for evaluating tissue properties and deformation of a porcine flexor tendon using B-mode US. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. New York, NY. April 5, 2009.
- 49. Lee KS. Sonographic evaluation of the subscapularis tendon after shoulder hemiarthroplasty. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. New York, NY. April 2 5, 2009.
- 50. Lee KS, De Smet AA, van Holsbeeck MT, Craig JG. Sonographic Evaluation of the Subscapularis Tendon after Shoulder Hemiarthroplasty Retrospective Study. Poster presented at American Institute of Ultrasound and Medicine (AIUM). New York, NY. March 2-5, 2009.
- 51. Patel AA, Smith SE, Lee KS, Davis KW. *Musculoskeletal Section. Thursday Case of the Day. T-sign of the Elbow*. Radiological Society of North America (RSNA) Annual Meeting. Chicago, IL. December 4, 2008.
- 52. Lafita V (MSK Fellow), Davis KW, Blankenbaker DG, De Smet AA, Rosas H, Lee KS. Musculoskeletal Mnemonics: What do they look like? Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. December 2, 2008. Awarded Certificate of Merit.
- 53. Lee KS, Blankenbaker DG, Davis KW. *Musculoskeletal Section. Tuesday Case of the Day. Primary Lymphoma of Bone*. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. December 2, 2008.



- 54. Lee KS, De Smet AA, van Holsbeeck MT, Craig JG. Sonographic Evaluation of the Subscapularis Tendon after Shoulder Hemiarthroplasty Retrospective Study. Two-institution study between HFHS and University of Wisconsin. Presented at Power Session at American Roentgen Ray Society (ARRS) Annual Meeting, Washington DC. April 13 18, 2008.
- 55. Lee KS, Ablove RH, Singh ST, De Smet AA, Haaland BA, Fine JP. *Ultrasound Determination of Normal Displacement of the ECU Tendon within the Ulnar Groove in Twelve Different Forearm-Wrist Positions*. Society of Skeletal Radiology (SSR) Annual Meeting. LaQuinta, California. March 9 13, 2008.
- 56. Lee KS, Van Holsbeeck MT. Atypical rapid progression of ß2-Microglobulin Amyloid Involvement of the Hip in a Hemodialysis Patient. International Skeletal Society (ISS) Annual Meeting. Budapest, Hungary. October 12, 2007.
- 57. Ksar J, Craig JG, Flynn M, Lee KS, Nelson F, Van Holsbeeck MT. *Digital Tomosynthesis: A New Imaging Technique to Evaluate Knee Pathology*. Society of Skeletal Radiology, (SSR) Orlando, Florida, March 18 21, 2007.
- 58. Ksar J, Lee KS, Van Holsbeeck MT. *Ultrasound Imaging of Ganglia Located at the Medial and Lateral Gastrocnemius with MR and Histopathologic Correlation*. American Institute of Ultrasound (AIUM) in Medicine Annual Convention. New York, NY. March 15-18, 2007.
- 59. Lee KS, Van Holsbeeck MT. *Ultrasound Imaging of Ganglia Located at the Medial and Lateral Gastrocnemius with MR and Histopathologic Correlation*. Scientific exhibit at the World Federation for Ultrasound in Medicine and Biology (WFUMB) Meeting, Seoul, Korea, May 28 June 1, 2006.
- 60. Lee KS, Craig JG, Bouffard, JA, Van Holsbeeck MT. *Ultrasound Imaging of the Ankle: Didactic on Technique and Display of Anatomy and Common Pathology*. Educational exhibit at the American Roentgen Ray Society (ARRS) Annual Meeting, Vancouver, Canada, April 30 May 5, 2006.
- 61. Craig JG, Lee KS, Van Holsbeeck MT. *Current Application and Pitfalls in 3 Tesla Imaging of the Wrist*. Society of Skeletal Radiology (SSR) Annual Meeting, Tucson, Arizona, March 8, 2006.
- 62. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Ankle Using a Dedicated Ankle Coil: Anatomy and Common Pathology. Educational exhibit at the Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. November 27 December 2, 2005.



- 63. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Wrist Using a Dedicated Surface Coil. Educational exhibit at the American Roentgen Ray Society (ARRS) Annual Meeting, New Orleans, LA, May 15 20, 2005.
- 64. Lee KS, Croteau DS, Sharma R. *Variant Anatomy Involving the Celiac Trunk and The Arc of Buhler*. Michigan Society of Interventional Radiology Meeting. February 12, 2005.
- 65. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Ankle: Pictorial Review of Normal Anatomy. Educational exhibit at the American Roentgen Ray Society (ARRS) Annual Meeting. Miami, FL. May 3 7, 2004.
- 66. Syed MA, Lee KS, Al-Mallah M, Venkat S. Acyclovir-Induced Neurotoxicity in a Hemodialysis Patient. Poster presentation at the American College of Physicians (ACP) Meeting, Novi, Michigan. May 7, 2003 and ACP Regional Meeting. Department of Internal Medicine, Henry Ford Hospital. Traverse City, MI. September 21, 2003.

#### Scientific Exhibits

- 1. Blaichman J, Chan B, Michelin P, Lee KS. *Shooting from the Hip: Ultrasound-Guided Musculoskeletal Intervention of the Hip*. Radiological Society of North America Annual Meeting. 11/25/2018 11/30/18. Chicago, IL.
- Blaichman J, Chan B, Michelin P, Lee KS. Ultrasound-Guided Intervention of the Knee and Ankle. Radiological Society of North America Annual Meeting. 11/25/2018 – 11/30/18. Chicago, IL.
- Wilz L, Kleckner T, Hetzel, Lee KS, Wilson John. Long Term Follow Up of Platelet Rich Plasma (PRP) Treatment for Chronic Tendinopathies. American Medical Society for Sports Medicine. Orlando, FL. 04/24/2018 – 04/29/2018.
- Blaichman J (MSK Fellow), Sheehan SE, Wilson JJ, Lee KS. How to Wash the Pain Away: Ultrasound-Guided Lavage for the Treatment of Calcific Tendinitis of the Shoulder. Radiological Society of North America Annual Meeting. 11/27/2016 – 12/2/2016. Chicago, IL. Awarded Cum Laude RSNA Education Exhibit.
- Pipho MG (Resident), Peterson KM, Lee KS, Stephenson JW. Some Strings Attached: Head to Toe Overview of Tendon Imaging. Radiological Society of North America Annual Meeting. 11/27/2016 – 12/2/2016. Chicago, IL. Awarded Magna Cum Laude RSNA Education Exhibit.



- Lee MH (Resident), Sheehan S, Lee KS. What's that Sound? Sonographic Evaluation of Common Shoulder Pathologies with MRI Correlation.
   Radiological Society of North America Annual Meeting. Chicago, IL. 12/3/2015.
- Nguyen JC (Resident), Lee KS, Rosas HG. Inflammatory Conditions in the Pediatric Population: Expanding Role of Musculoskeletal Ultrasound. Radiological Society of North America Annual Meeting. Chicago, IL. 12/1/2015.
- Patil P (MSK Fellow), Lee KS. A New MSK Application of Microwave Ablation. Society of Skeletal Radiology Annual Meeting. Scottsdale, AZ. 3/8/2015 – 3/11/2015.
- Schapiro A (Resident), Lee KS, Rosas HG. *Ultrasound-Guided Calcific Tendinitis Lavage: Application, Technique, and Outcome*. American Institute for Ultrasound in Medicine Annual Convention. Orlando, FL. 3/21/2015 3/25/2015.
- Davis KW, Lee KS, Johnson KA. *Ultrasound to Distinguish Extremity Soft Tissue Neoplasms from Hematomas*. Society of Skeletal Radiology Annual Meeting, San Diego, CA. 3/16/2014 3/19/2014.
- 11. Hanna A, Lee KS, Ehlers M. Preoperative Ultrasound-Guided Wire Localization of the Lateral Femoral Cutaneous Nerve. American Association for Hand Surgery (AAHS) (ASPN) (ASRM) Annual Meeting. Kauai, HI. 1/8/2014 - 1/14/2014.
- 12. Ebben B (Shapiro Student), Lee KS, DeWall R, Wang A. Noninvasive Quantification of Tendon Biomechanics: Shear Wave Elastography Imaging in a Porcine Tendinopathy Model. University of Wisconsin School of Medicine and Public Health Shapiro Summer Research Program presentation, Madison, WI. 11/26/2013.
- 13. Patel-Lippmann K (Resident), Rosas H, Lee KS, Blankenbaker D. Shoot from the Hi: Etiologies, Imaging Findings, and Potential Treatments of Hip and Groin Pain. University of Wisconsin Radiology Residents Research Day. Madison, WI. 5/15/2013.
- 14. Wilson J, Kamps N, DeWall R, Lee KS. Biomechanical Effects of In Vitro Intratendinous Injection and Tendon Fenestration. Presented at American Medical Society for Sports Medicine Annual Meeting (AMSSM). San Diego, CA. 4/17/2013 – 4/21/2013.



- 15. Knudtson, TJ (Resident), Lee KS. Overview of Platelet Rich Plasma (PRP) Therapy in Treating Tendinopathies. University of Wisconsin Radiology Residents Research Presentation Day. Madison, WI. 5/15/2013.
- 16. Knudtson, TJ (Resident), Lee KS. *Overview of Platelet Rich Plasma (PRP) Therapy in Treating Tendinopathies*. American Roentgen Ray Society (ARRS)
  Annual Meeting. Washington, DC. 4/14/2013 4/19/2013.
- 17. Hanson JA (MSK Fellow), Lee KS, Peterson A. Ultrasound versus CT-Guided Musculoskeletal Soft Tissue Mass Biopsy: A Comparative Effectiveness Analysis. Society of Skeletal Radiology Annual Meeting. San Antonio, TX. 3/17/2013 3/20/2013.
- Patel-Lippmann K (Resident), Rosas H, Lee KS, Blankenbaker D. Shoot from the Hi: Etiologies, Imaging Findings, and Potential Treatments of Hip and Groin Pain. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. 11/25/2012 -11/30/2012.
- 19. Hanna AS, Lee KS. *Preoperative Ultrasound Localization of the Lateral Femoral Cutaneous Nerve.* Congress of Neurological Surgeons Annual Meeting. Chicago, IL. 10/6/2012 10/10/2012.
- 20. Rabago D, Lee K, Ryan MS, Chourasia AO, Sesto AE, Zgierska, A, Miller A, Wilson J. The efficacy of prolotherapy for lateral epicondylosis: A pilot-level randomized controlled trial. Poster presentation, Abstract number 3822vbCrLf). American College of Sports Medicine Annual Conference; San Francisco, California. 5/29/2012 6/2/2012.
- 21. Rabago D, Lee K, Ryan MS, Chourasia AO, Sesto M, Zgierska, A, Miller A, Kijowski R, Wilson J. *The efficacy of prolotherapy using dextrose-morrhuate for lateral epicondylosis: a pilot randomized controlled trial*. Poster presentation, Abstract number 235094); International Research Congress on Integrative Medicine and Health; Portland, Oregon. 5/15/2012 5/18/2012.
- 22. DeWall R (Post-Doc Graduate Student), **Lee KS**. **Shearwave Elastography Applications in the Musculoskeletal System.** American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. 4/29/2012 5/1/2012.
- 23. Kohn S (Research Sonographer), **Lee KS**, Field A. *Importance of the Sonographer in the Investigation of Chronic Cerebrospinal Venous Insufficiency.* American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. 4/29/2012 5/1/2012.



- 24. Wilson JJ, Lee KS, Miller AT. *Platelet-Rich Plasma for the Treatment of Chronic Plantar Fasciopathy in Adults: a Case Series.* American Medical Society for Sports Medicine (AMSSM) 21<sup>st</sup> Annual Meeting. Atlanta, GA. 4/20/2012 4/25/2012.
- 25. Wilson JJ, Greatens M, Baer GS, **Lee KS**, Chamberlain CS, Clancy WG. *Intratendinous Injection of Platelet-rich Plasma into Lamb Extensor Carpi Radialis Tendon.* American Medical Society for Sports Medicine (AMSSM) 21<sup>st</sup> Annual Meeting. Atlanta, GA. 4/20/2012 4/25/2012.
- 26. Wilson JJ, Lee KS, Almasi SJ, Baer GS, Johnson GB, Dubin E. *Autologous Platelet-rich Plasma for the Treatment of Chronic Patellar Tendinopathy: Clinical and Radiographic Outcomes.* American Medical Society for Sports Medicine (AMSSM) 21<sup>st</sup> Annual Meeting. Atlanta, GA. 4/20/2012 4/25/2012.
- 27. Stoll D (Graduate student), Duenwald-Kuehl S, **Lee KS**, Kobayashi H, Vanderby R Jr, Tueting J. *Acoustoelastic Evaluation of a Zone 3 Flexor Tendon Injury-Case Study*. American Society for Surgery of the Hand and Australian Hand Surgery Society. Kauai, HI. 3/22/2012 3/25/2012.
- 28. Lee KS. Wilson JJ, Strickland C. *Platelet Rich Plasma Therapy: The Radiologist's role in diagnosis and treatment*. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. 4/14/2011 4/17/2011. Awarded First Place.
- 29. Wilson, JJ, **Lee KS**, Rabago D, Sesto M, Vanderby R. *Effect of an Ultrasound Guided Platelet-rich Plasma Injection for chronic lateral epicondylopathy*. Presented at American Medical Society for Sports Medicine (AMSSM) Annual Meeting. Salt Lake City, UT. 4/30/2011 5/4/2011.
- 30. Lee, KS, Wilson, JJ. *The Basic Science and Clinical Applications of Platelet-Rich Plasma Therapy: Why Should Radiologists Care?* Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, AZ. 3/13/2011 3/16/2011.
- 31. Wagner J (Abdominal Fellow), Lee KS, Rosas H, Kliewer M. Ultrasound of superficial masses: how to distinguish lipomas from other lesions. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. 11/28/2010 -12/3/2010.
- 32. Almasi S (Resident), Wilson JJ, Lee KS. *Treatment of elbow ulnar collateral ligament injury with platelet-rich plasma: a case report*. University of Wisconsin Department of Family Medicine 40<sup>th</sup> Anniversary CME event, Caring for Wisconsin and the World Today and Tomorrow. Madison, WI. 7/17/2010.



- 33. Wagner J (Abdominal Fellow), Lee KS, Rosas HR, Kliewer M. Ultrasound of superficial masses: a pictorial essay. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. San Diego, CA. 3/27/2010.
- 34. Lee KS, Blankenbaker DG, Davis KW. *Musculoskeletal Section. Wednesday Case of the Day. Anterior Interosseous Nerve Syndrome*. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. 12/2/2009.
- 35. Lee KS, Kobayashi H, Vanderby R, Frisch K, Baer G, Rosas HG. Acoustoelastography of the tendon: Applying a new method for evaluating tissue properties and deformation of a porcine flexor tendon using A-mode US. American Roentgen Ray Society (ARRS) Annual Meeting. Boston, MA. 4/27/2009 - 5/1/2009. Received Cum Laude Award.
- 36. Lee KS, De Smet AA, van Holsbeeck MT, Craig JG. Sonographic Evaluation of the Subscapularis Tendon after Shoulder Hemiarthroplasty Retrospective Study. Poster presented at American Institute of Ultrasound and Medicine (AIUM). New York, NY. 3/2/2009 3/5/2009.
- 37. Lafita V (MSK Fellow), Davis KW, Blankenbaker DG, De Smet AA, Rosas H, **Lee KS**. *Musculoskeletal Mnemonics: What do they look like?* Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. 12/6/2008. Awarded Certificate of Merit.
- 38. Lee KS, Blankenbaker DG, Davis KW. *Musculoskeletal Section. Tuesday Case of the Day. Primary Lymphoma of Bone*. Radiological Society of North America (RSNA) Annual Meeting. Chicago, IL. 12/2/2008.
- 39. Patel AA (Resident), Smith SE, Lee KS, Davis KW. *Musculoskeletal Section. Thursday Case of the Day. T-sign of the Elbow*. Radiological Society of North America (RSNA) Annual Meeting. Chicago, IL. 12/4/2008.
- 40. Lee KS, Craig JG, Bouffard, JA, Van Holsbeeck MT. *Ultrasound Imaging of the Ankle: Didactic on Technique and Display of Anatomy and Common Pathology*. Educational Exhibit at American Roentgen Ray Society (ARRS) Annual Meeting. Vancouver, Canada. 4/30/2006 2006.
- 41. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Ankle Using a Dedicated Ankle Coil: Anatomy and Common Pathology. Educational Exhibit at The Radiological Society of North America (RSNA) Annual Meeting. Chicago, IL. 11/27/2005 – 12/2/2005.



- 42. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Wrist Using a Dedicated Surface Coil. Educational Exhibit at American Roentgen Ray Society (ARRS) Annual Meeting, New Orleans, LA. 5/15/2005 5/20/2005.
- 43. Lee KS, Craig JG, Van Holsbeeck MT. 3 Tesla Imaging of the Ankle: Pictorial Review of Normal Anatomy. Educational Exhibit at American Roentgen Ray Society (ARRS) Annual Meeting, Miami, FL. 5/3/2004 5/7/2004.

#### **Educational Activities & Presentations**

#### **Medical Student Lectures**

- Radiologists Perform Procedures? Course 832-813

   2009
   February 20, March 16, April 21, May 28, July 21, August 18, September 15, October 23, November 12, December 10. 2010
   January 7, February 2, February 22, April 1. 2011
   January 7, February 17, May 10, July 7, October 10. 2012
   January 9
- 2. Ultrasound Basics 2011 September 16
- 3. Integrated Medical Anatomy: Introduction to MSK US Applications in Sports Medicine with Focus on Advanced Anatomy October 14, 2011
- 4. Integrated Medical Anatomy: Common and Uncommon MSK US Interventional Procedures. October 14, 2011
- 5. Musculoskeletal US: Shoulder Anatomy -Pathology. October 23, 2013
- 6. Musculoskeletal Ultrasound of the shoulder: Advanced Anatomy and Pathology. October 3, 2014
- 7. Diagnostic Radiology Clerkship: Course 832-920 2017 April 10-21

#### **UW Athletic Trainer Program – Department of Kinesiology**

1. Uses of diagnostic ultrasound for msk injury (specifically sports related injury). November 3, 2016

#### **UW School of Sonography Lectures**

 General Sonography III: Anatomy of the Shoulder – September 17, 2009



- 2. General Sonography III: Anatomy of the Wrist September 17, 2009
- 3. **General Sonography III: Hands-on scan lab Shoulder and Wrist** September 17, 2009
- 4. **General Sonography III: Anatomy of the Hip** September 24, 2009
- 5. **General Sonography III: Anatomy of the Foot** September 24, 2009
- 6. **General Sonography III: Hands-on scan lab Hip and Foot** September 24, 2009
- 7. *Ultrasound of Shoulder part I: Normal Anatomy* September 16, 2010, October 6, 2011, October 4, 2012
- 8. Hands-on scan lab Shoulder and Wrist October 6, 2011
- 9. *Ultrasound of Shoulder part II: Common Pathology* September 16, 2010, October 4, 2012
- Ultrasound of the Wrist September 16, 2010, October 6, 2011, October 4, 2012
- 11. *Ultrasound of the Ankle: Normal Anatomy and Common Pathology* September 23, 2010, October 11, 2012
- 12. *Ultrasound evaluation of Morton's Neuroma* September 23, 2010, October 13, 2011, October 11, 2012
- Ultrasound of the Hip: Normal Anatomy and Common Pathology October 13, 2011
- MSK US of Shoulder: Normal Anatomy and Standard Protocol September 10, 2013
- 15. MSK US of Shoulder: Common Pathology September 10, 2013
- 16. **MSK US of Wrist: how we do it** September 10, 2013
- 17. **MSK US of the Normal Hip** September 24, 2013
- 18. MSK US of the Ankle: Normal Anatomy September 24, 2013



- 19. MSK US of the Ankle: Common Pathology seen in Clinical Practice September 24, 2013
- 20. **Essentials of PRP for the Sonographer** September 24, 2013
- 21. *Morton's Neuroma: US Diagnosis and Treatment* September 24, 2013, October 8, 2015
- 22. **Standard Protocol and Algorithm for Shoulder US** September 24, 2014
- 23. Common Pathology seen with Shoulder US. September 24, 2014
- 24. Common Pathology seen with Wrist US September 24, 2014
- 25. Normal anatomy and approach to the Wrist September 24, 2014
- 26. **Normal anatomy of the hip: what the sonographer needs to know**. October 1, 2014, October 8, 2015
- 27. Common pathology of the hip. October 1, 2014
- 28. Ankle US: If you do the twist. October 1, 2014
- 29. How to image for a Morton's neuroma. October 1, 2014
- 30. Normal Anatomy and Standard Approach to Shoulder Ultrasound. September 24, 2015
- 31. **Common Pathology of the Shoulder using Ultrasound**. September 24, 2015
- 32. Normal Anatomy of the Wrist and Hand. September 24, 2015
- 33. Common Pathology of the Wrist and Hand. September 24, 2015
- 34. Common US Pathology of the Hip and Thigh. October 8, 2015
- 35. Ankle US: Bony and US Anatomy. October 8, 2015



# **Clinical Teaching**

#### **Rehabilitative Medicine Residents**

- 1. Introduction to Musculoskeletal Ultrasound 9/16/11
- 2. Why shoulder ultrasound is important for your practice 9/16/11

**Department of Medicine Rheumatology Conference**: 8/21/08, 12/18/08, 3/19/09, 9/17/09, 5/27/10, 12/16/10, 1/20/11, 8/18/11, 2/16/12, 4/19/12, 1/9/14, 12/11/14, 5/12/16, 8/25/16, 6/8/17, 11/16/17, 9/13/18

## **Department of Pathology Bone Tumor Conference:**

11/14/08,1/9/09,11/13/09, 11/24/10, 5/25/11, 9/28/11, 5/30/12, 9/5/12, 9/18/13, 6/5/15, 10/21/15, 4/13/16, 2/15/17, 8/16/17

**Sarcoma Conference UW SMPH Interdisciplinary:** 9/27/10, 10/11/10, 2/21/11, 5/16/11, 11/21/11, 4/23/12, 11/5/12, 5/13/13, 6/24/13, 7/15/13, 8/25/14, 4/27/15, 7/27/15, 2/29/16, 8/22/16, 12/11/17

#### **UW Health Sonographers In-Service**

- 1. Musculoskeletal ultrasound: How to Scan the Shoulder. 6/4/2010
- 2. Problem Solving: Cases in Shoulder Ultrasound. 7/30/2010
- 3. Ultrasound of the Foot and Ankle. 10/22/2010
- 4. *Musculoskeletal Ultrasound: Hip Effusion and Scanning Protocol.* 5/13/2014

#### **GHC Rehabilitative Medicine Staff In-Service**

1. Application of MSK US in Orthopedic and Rehab Medicine. 2/6/2012

# Visiting Professorships/Invited Grand Rounds Speaker

- 1. Medical University of South Carolina, Charleston, SC. February 22-23, 2018;
  - MSK US of the Shoulder: A Complementary Tool with MRI Correlation
  - b. Innovation in MSK US-Guided Interventions
  - c. Musculoskeletal Imaging Board Cases



- 2. Mallinckrodt Institute of Radiology, Washington University, St. Louis, MO. February 18, 2015;
  - a. MSK Ultrasound: Building a Busy Academic-Based Clinical Practice
  - b. Update on Adjuncts to MSK Ultrasound: Is There a Role for Prolotherapy, PRP, or Elastography?
- 3. University of Maryland, Baltimore, MD. January 15, 2014;
  - a. Different Ultrasound-Guided Therapies of Tendon Disorders
  - b. Senior Radiology Residents Board Review I
  - c. Senior Radiology Residents Board Review II
  - d. MSK US: A Complementary Tool to Diagnose and Treat Common Sports-Related Injuries
- 4. West Penn Allegheny Hospital, Pittsburgh, PA. August 28 30, 2013;
  - a. Four MSK case conferences
  - b. Key differences between MSK US and MRI
  - c. MSK US utilization over the past decade: what is trending?
  - d. US guided treatment options for common tendon diseases
- 5. University of North Carolina, Chapel Hill, NC. August 21, 2012;
  - a. Musculoskeletal Ultrasound: A complementary tool for diagnosing and treating common sports-related injuries
  - b. Senior Radiology Residents Board Review
- 6. Fundamentals of Musculoskeletal Ultrasound iiCME. San Diego, CA. March 7 11, 2012, April 5 9, 2014, April 24 28, 2016;
  - a. Shoulder Beginning Hands-on workshop
  - b. Shoulder Advanced Hands-on workshop
  - c. Elbow Beginning Hands-on workshop
  - d. Elbow Advanced Hands-on workshop
  - e. Wrist and Hand Beginning Hands-on workshop
  - f. Wrist and Hand Advanced Hands-on workshop
  - g. Hip and Thigh Beginning Hands-on workshop
  - h. Hip and Thigh Advanced Hands-on workshop
  - i. Knee Beginning Hands-on workshop
  - j. Knee Advanced Hands-on workshop
  - k. Interventional Techniques Ankle and Foot
  - I. Ankle and Foot Beginning Hands-on workshop
  - m. Ankle and Foot Advanced Hands-on workshop
  - n. Interventional Beginning Hands-on workshop
  - o. Interventional Needle Guidance / Joint Injection / Fenestration
  - p. US-guided Joint Aspiration and Injection



- q. US-guided calcific tendinitis lavage using the single needle technique
- r. US-guided Platelet-Rich Plasma Therapy of the Tendon

## 7. West Penn Allegheny Hospital, Pittsburgh, PA. April 7, 2011;

- a. Musculoskeletal Ultrasound of the Shoulder how and why we should be doing them?
- b. Case based review of malignant soft tissue sarcomas of the upper and lower extremity.
- c. Platelet rich plasma therapy: why should the radiologist care?
- d. Case Conferences
- e. Senior Level Board Review (3 hours)

## 8. University of Pittsburgh, Pittsburgh, PA. May 28, 2010;

a. Musculoskeletal Ultrasound of the Shoulder - why and how it should be done?

#### **CME Presentations**

#### **Departmental - Radiology Residents and Fellows**

- Basics of hand and wrist trauma: 2010 September 7, 2011 July 14, 2013
   August 27 2014 August 26, 2016 August 2, 2017 September 12, 2018
   August 16;
- Basics of Shoulder Ultrasound: UW MSK Fellows 2009 February 10, September 15;
- 3. **Basic Step-by-Step Approach to the Shoulder Ultrasound Exam**: 2015 March 6;
- 4. **Controversies of Injections of the Shoulder:** UW MSK Fellows and Faculty **2011** November 22;
- 5. *Emergency Joint Evaluation using Ultrasound*. UW Radiology Resident Call Series. <u>2008</u> October 7, <u>2009</u> October 12;
- Hip Labrum: MSK Scope Correlation Conference 2017 May 25, 2018 May 3;
- 7. *Introduction to Malignant Soft Tissue Tumors.* UW Radiology Residents <u>2011</u> February 24;



- Introduction to Prolotherapy and Platelet-Rich Plasma: UW MSK Fellows
   2009 October 10;
- 9. *Introduction to Soft Tissue Tumors.* UW Radiology Residents <u>2009</u> January 12 <u>2012</u> June 7;
- 10. Joint Aspiration On-Call: What to do. UW Radiology Residents 2009 May 18. 2010 October 7, 2011 October 10, 2012 September 18, 2013 October 3, 2014 September 30, 2015 September 16, 2016 October 4, 2017 September 20, 2018 August 17;
- 11. Knee Meniscus: MSK Scope Correlation Conference 2015 November 3, 2017 January 13, December 7;
- 12. *Musculoskeletal Cases* <u>2008</u> November 6, <u>2009</u> March 3, June 16, July 10, November 3, <u>2010</u> February 2, April 26, August 20, November 18, <u>2011</u> May 5, November 1, <u>2012</u> February 7, <u>2013</u> January 25, February 22, <u>2014</u> June 26;
- 13. *Musculoskeletal Fellows Journal Club* <u>2015</u> August 28, <u>2016</u> November 18, <u>2017</u> October 20;
- 14. Musculoskeletal Senior Capstone Case Series Part I 2016 September 13;
- 15. Musculoskeletal Senior Capstone Case Series Part II 2016 September 13:
- 16. Musculoskeletal Ultrasound Guided Procedures to Treat Tendon Disease: 2013 January 17;
- 17. Musculoskeletal Ultrasound: Is It Good for the Shoulder? 2012 April 3;
- 18. *Musculoskeletal Ultrasound vs MRI: The Main Differences.* UW Radiology Residents <u>2012</u> May 1;
- 19. Platelet-rich Plasma Therapy: Protocol and Outcomes: <u>2014</u>
  January 28;
- 20. **Rotator Cuff: MSK Scope Correlation Conference 2016** February 9;



- 21. Senior Board Review: UW Radiology Residents. <u>2010</u> April 22, April 23, <u>2011</u> March 29, April 5, April 13, <u>2012</u> March 23, April 23, <u>2013</u> February 22, April 19, April 23, April 25, May 13, August 19, September 3, <u>2014</u> May 20, <u>2015</u> May 27, <u>2016</u> May 25;
- 22. **Shoulder 1 Anatomy and Ultrasound Technique with Artifacts 2017** February 20;
- 23. Shoulder 2 Rotator cuff, biceps, and bursa pathology with Ultrasound Intervention 2017 May 23;
- 24. **Shoulder Labrum: MSK Scope Correlation Conference** <u>2016</u> April 12, <u>2017</u> April 27, <u>2018</u> February 15;
- 25. *Ultrasound guided PRP therapy for sports-related tendon injuries*. **2012** January 13;
- 26. *Ultrasound of the shoulder:* 2011 January 20;
- 27. Ultrasound applications in sports medicine: 2011 March 31;
- 28. Ultrasound of the Knee Advanced Imaging with Focus on Interventional Procedures: 2011 March 1;

#### UWSMPH/Hospital

- MSK Ultrasound of the Shoulder: Technique and Application. UW
   Orthopedic and Rehabilitative Medicine Grand Rounds, UW Health. February
   15, 2017;
- 2. **The Use of Ultrasound in Sports Medicine**. UW Sports Medicine Conference, UW Health. December 12, 2014, December 18, 2015, December 16, 2016, December 15, 2017;
- 3. *Ultrasound for Sports Medicine*. UW Sports Medicine Grand Rounds, UW Health. November 15, 2013;
- 4. *Ultrasound: It's Uses in Sports Medicine.* UW Sports Medicine Grand Rounds, UW Health. January 13, 2013;
- 5. **MSK US in Sports Medicine: Emphasis on how US is different from MRI.** UW Sports Medicine Grand Rounds, UW Health. November 4, 2011;



- Current Applications of Platelet-Rich Plasma. UW Sports Medicine Conference, Wisconsin Institutes for Medical Research. June 28, 2011
- 7. *Musculoskeletal Ultrasound for Sports Injuries Diagnosis with Emphasis on PRP*. UW Sports Medicine Grand Rounds, UW Health, Research Park. February 25, 2011;
- 8. *Musculoskeletal Ultrasound Evaluation of the Shoulder*. UW Sports Medicine Grand Rounds, UW Health, Research Park. March 12, 2010;
- Musculoskeletal Ultrasound Applications in Sports Medicine. UW Sports Medicine Grand Rounds. December 19, 2008;

#### State & Regional

1. *Musculoskeletal Ultrasound: Diagnostic Evaluation of Common Shoulder Problems. UW* Sports Medicine Symposium. April 28, 2017;

#### 2. Shoulder Ultrasound

William S. Middleton Veterans Hospital Primary Care Physician Conference Baraboo, WI. January 5, 2017;

#### 3. Musculoskeletal Ultrasound

University of Wisconsin SMPH General Internal Medicine Conference Madison, WI. October 8, 2014;

#### 4. Musculoskeletal Ultrasound in Sports Medicine

South Central Wisconsin Ultrasound Society (SCWUS) Madison, WI. March 4, 2013;

#### 5. Madison Rheumatologists

Meriter Hospital - 1 S. Park Madison, WI. January 30, 2013;

#### 6. Musculoskeletal Ultrasound in Sports Medicine

South Central Wisconsin Ultrasound Society (SCWUS) Madison, WI. September 10, 2012;

#### 7. Ultrasound Diagnosis and Treatment of Hip Pain

UW WOW - What to Order When – Hip Imaging Madison, WI. October 8, 2011;



- 8. *Musculoskeletal Ultrasound in Sports Medicine*South Central Wisconsin Ultrasound Society (SCWUS)
  Madison, WI. February 14, 2011;
- Musculoskeletal Ultrasound Evaluation of the Shoulder
   UW WOW US Conference What to Order When Ultrasound Edition Madison, WI. October 30, 2010;
- 10. Hands-on Learning Shoulder Ultrasound Scanning UW WOW - US Conference What to Order When - Ultrasound Edition Madison, WI. October 30, 2010;
- 11. US evaluation with MRI Correlation in Patients Presenting with Shoulder Pain. Freeport Hospital - Illinois Grand Rounds CME Lecture Freeport, IL. May 11, 2010;
- 12. *Imaging of Soft Tissue Injuries of the Ankle and Foot: Focus on US and MRI* 33rd Annual Sports Medicine Symposium Madison, WI. April 9, 2010;
- 13. *Introduction to MSK US Course: Diagnostic Imaging*. Medical Technology Management Institute. Milwaukee, WI. September 18 19, 2009, February 26 27, 2010, September 28 29, 2012, February 16 16, 2013, September 20 21, 2013, February 21-22, 2014, September 19-20, 2014;
  - a. Shoulder Anatomy and Pathology
  - b. Ankle Anatomy and Pathology
  - c. Hip Anatomy and Pathology
  - d. Ankle: Hands-on workshop
  - e. Shoulder: Hands-on workshop
  - f. Wrist: Hands-on workshop
  - g. Knee: Hands-on workshop
  - h. Hip: Hands-on workshop
  - i. Injection and Aspiration Techniques with Demonstration
  - j. Hands-on workshop: Injection and Aspiration
- 14. Essentials of Musculoskeletal Ultrasound: Diagnostic and Interventional Skills. Medical Technology Management Institute. New Orleans, LA. January 29 31, 2016, January 20 22, 2017, January 26 28, 2018;
  - a. Principles and Techniques of Ultrasound Guided Interventions
  - b. Ultrasound Basics and Image Optimization
  - c. Normal Ultrasound Anatomy of Shoulder with Live Demonstration
  - d. Shoulder Procedures Calcific Tendinitis Lavage and SASD Bursa
  - e. Shoulder: Intermediate Hands-on workshop



- f. Rotator Cuff Tears and Biceps Tendon
- g. Elbow and Wrist: Introductory Hands-on workshop
- h. Epicondylosis and UCL Injuries
- i. Principles and Techniques of Ultrasound Guided Interventions
- j. Hip Procedures Iliopsoas Bursa, Hamstring, Ischiofemoral Impingement
- k. Hip and Thigh: Intermediate Hands-on workshop
- I. Interventional Hands-on workshop
- m. Achilles, Plantar Fascia and Common Procedures
- n. Knee and Ankle: Intermediate Hands-on workshop
- o. Ankle Tendons and Ligaments

# 15. Essentials of Musculoskeletal Ultrasound: Diagnostic and Interventional

**Skills.** Medical Technology Management Institute. Alexandria, VA. September 30 – October 2, 2016;

- a. Ultrasound Basics and Image Optimization
- b. Normal Ultrasound Anatomy of Shoulder with Live Demonstration
- c. Shoulder Procedures Calcific Tendinitis Lavage and SASD Bursa
- d. Shoulder: Intermediate Hands-on workshop
- e. Elbow and Wrist: Introductory Hands-on workshop
- f. Principles and Techniques of Ultrasound Guided Interventions
- g. Hip Procedures Iliopsoas Bursa, Hamstring, Ischiofemoral Impingement
- h. Hip and Thigh: Intermediate Hands-on workshop
- i. Interventional Hands-on workshop
- j. Achilles, Plantar Fascia and Common Procedures
- k. Knee and Ankle: Intermediate Hands-on workshop

# 16. Essentials of Musculoskeletal Ultrasound: Diagnostic and Interventional

**Skills.** Medical Technology Management Institute. Baltimore, MD. October 13 – 15, 2017;

- a. Normal Ultrasound Anatomy of Shoulder with Live Demonstration
- b. Shoulder: Introductory Hands-on workshop
- c. Shoulder Procedures Calcific Tendinitis Lavage and SASD Bursa
- d. Elbow: Hands-on workshop
- e. Wrist/Hand Intermediate hands-on workshop
- f. Interventional Technique- Intermediate Hands-on workshop
- g. Snapping Hip and Groin Injury Intermediate
- h. Hip Procedures Iliopsoas Bursa, Hamstring, Ischiofemoral Impingement
- i. Hip and Thigh Intermediate Hands-on workshop
- i. Achilles, Plantar Fascia and Common Procedures Intermediate



#### National/International

- Vertical Session: Elbow and Wrist Interventions. Radiological Society of North America (RSNA) 103rd Annual Meeting. Chicago, IL. November 29, 2018.
- 2. *MSK Interventions for Tissue Healing. What Should We Be Injecting and When?* International Skeletal Society. Berlin, Germany. September 26, 2018.
- 3. *Ultrasound of the Shoulder: Complementary Tool and Correlation with MRI.* NYU 36<sup>th</sup> Annual Morton A. Bosniak, Head to Toe Imaging Conference. New York, NY. December 21, 2017.
- 4. *Ultrasound-Guided Platelet-Rich Plasma Therapy for Tendinopathy.* NYU 36<sup>th</sup> Annual Morton A. Bosniak, Head to Toe Imaging Conference. New York, NY. December 21, 2017.
- Dynamic Musculoskeletal US: Clicks and Clunks of the Lower Extremity (Hands-on). Radiological Society of North America (RSNA) 103rd Annual Meeting. Chicago, IL. November 30, 2017.
- 6. Nerve Ultrasound Based on a Regional Approach: Hip to Knee (Hands-on). Radiological Society of North America (RSNA) 103rd Annual Meeting. Chicago, IL. November 30, 2017.
- 7. **MSK Interventions**. Society of Radiologists in Ultrasound Annual Meeting. Chicago, IL. October 28, 2017.
- 8. *Ultrasound-Guided Shoulder Injections*. International Skeletal Society (ISS) 44th Annual Meeting and Musculoskeletal Imaging Course. New York, NY. August 29, 2017.
- 9. *Platelet-Rich Plasma Injection for Treatment of Sports-Related Tendon Injuries*. Practical Imaging and Intervention Conference University of Wisconsin. Prince Albert, Saskatchewan, Canada. July 11, 2017.
- Peripheral Nerve Imaging: Focus Session / Self-Assessment Module I.
   Society of Skeletal Radiology Annual Meeting. Santa Barbara, CA. March 19-22, 2017.
- 11. Dynamic Musculoskeletal US: Clicks and Clunks of the Upper Extremity (Hands-on). Radiological Society of North America Annual Meeting. Chicago, IL. November 30, 2016.



- Nerve Ultrasound Based on a Regional Approach: Elbow to Hand (Handson).
   Radiological Society of North America Annual Meeting. Chicago, IL.
   November 29, 2016.
- 13. *Ultrasound Program, Hands-on Tutorial*. International Skeletal Society (ISS) 43nd Annual Meeting and Musculoskeletal Imaging Course. Paris, France. September 6, 2016.
- 14. *Ankle and Foot Ultrasound*. Annual Fundamentals of Musculoskeletal Ultrasound iiCME. San Diego, CA. April 27, 2016.
- 15. *Interventional Techniques: Hip and Knee*. Annual Fundamentals of Musculoskeletal Ultrasound iiCME. San Diego, CA. April 26, 2016.
- 16. *Knee Joint and Baker's Cyst*. Annual Fundamentals of Musculoskeletal Ultrasound iiCME. San Diego, CA. April 26, 2016.
- 17. *Athletic Groin Evaluation*. Annual Fundamentals of Musculoskeletal Ultrasound iiCME. San Diego, CA. April 26, 2016.
- Dynamic Musculoskeletal US: Clicks and Clunks of the Lower Extremity, Hands-On Session. Radiological Society of North America Annual Meeting. Chicago, IL. December 2, 2015.
- 19. Nerve Ultrasound Based on a Regional Approach: Elbow to Hand, Hands-On Session. Radiological Society of North America Annual Meeting. Chicago, IL. December 1, 2015.
- 20. *Ultrasound-guided Interventions*. Radiological Society of North America Annual Meeting. Chicago, IL. December 1, 2015.
- 21. *PRP: An Overview. Musculoskeletal Disease Hot Injectables*. International Skeletal Society (ISS) 42nd Annual Meeting and Musculoskeletal Imaging Course. Wailea, Maui, Hawaii. September 30 October 2, 2015.
- 22. **MSK US: What is the Big Deal?** Practical Imaging and Intervention Conference University of Wisconsin. Prince Albert, Saskatchewan, Canada. July 11, 2015.
- 23. *Ultrasound-guided Procedures, Ankle and Foot*. Federation of the Latin America Ultrasound Society Meeting. San Jose, Costa Rica. May 21, 2015.
- 24. *Ultrasound of the Ankle and Foot*. Federation of the Latin America Ultrasound Society Meeting. San Jose, Costa Rica. May 21, 2015.



- Ultrasound of the Knee: Tendons and Superficial Ligaments. Federation of the Latin America Ultrasound Society Meeting. San Jose, Costa Rica. May 21, 2015.
- 26. *Ultrasound of the Hip: Anatomy and Pathology*. Federation of the Latin America Ultrasound Society Meeting. San Jose, Costa Rica. May 21, 2015.
- 27. PRP of plantar fasciopathy a randomized controlled trial. Radiological Society of North America (RSNA) Grant Writing Workshop. Oakbrook, IL. May 1, 2015.
- 28. **Shoulder Ultrasound: Diagnosis and Treatment of Common Degenerative Conditions**. American Roentgen Ray Society Annual Meeting. Toronto, Ontario. April 20, 2015.
- 29. *Ultrasound-guided Procedures: Hip.* American Roentgen Ray Society Annual Meeting. Toronto, Ontario. April 20, 2015.
- 30. *Hands-on Scanning: Upper Extremity Joints (Shoulder, Elbow, and Wrist)*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 22, 2015.
- 31. *Ultrasound-guided PRP therapy for Refractory Plantar Fasciopathy Experimental Approach*. Radiological Society of North America (RSNA) Advanced Course in Grant Writing. Chicago, IL. March 13, 2015.
- 32. Ultrasound-guided PRP therapy for Refractory Plantar Fasciopathy Preliminary Data and Analysis. Radiological Society of North America (RSNA) Advanced Course in Grant Writing. Chicago, IL. January 30, 2015.
- 33. *Platelet-Rich Plasma Therapy of the Tendon, Special Course*. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. December 4, 2014.
- 34. **Dynamic Musculoskeletal US: Clicks and Clunks of the Upper Extremity Hands-on Workshop**. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. December 3, 2014.
- 35. Nerve Ultrasound Based on a Regional Approach: Shoulder and Neck Hands-on Workshop. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. December 2, 2014.



- 36. *Master Class in Musculoskeletal Ultrasound How-to Workshop*. Radiological Society of North America (RSNA) 100th Annual Meeting. Chicago, IL. December 1, 2014.
- 37. **Techniques for Interventional Sonography and Thermal Ablation Hands-on Workshop**. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. November 30, 2014.
- 38. *Interventional MSK US: Ankle and Foot*. Society of Radiologists in Ultrasound. 24<sup>th</sup> Annual Meeting and Postgraduate Course. Denver, CO. October 24, 2014.
- 39. *Ultrasound-guided Platelet Rich Plasma Therapy of the Tendon Specific Aims and Background.* Radiological Society of North America (RSNA) Advanced Course in Grant Writing. Chicago, IL. October 20, 2014.
- 40. *Elbow, Shoulder, and Wrist Hands-On Workshop Recap*. AIUM postgraduate course Upper Extremity Musculoskeletal Ultrasound. American Institute of Ultrasound and the United States Olympic Committee. Colorado Springs, CO. September 14, 2014.
- 41. Wrist I & II: Hands-On Workshop. AIUM postgraduate course Upper Extremity Musculoskeletal Ultrasound. American Institute of Ultrasound and the United States Olympic Committee. Colorado Springs, CO. September 14, 2014.
- 42. **Normal Wrist Ultrasound**. AIUM postgraduate course Upper Extremity Musculoskeletal Ultrasound. American Institute of Ultrasound and the United States Olympic Committee. Colorado Springs, CO. September 14, 2014.
- 43. *Elbow I & II: Hands-On Workshop*. AIUM postgraduate course Upper Extremity Musculoskeletal Ultrasound. American Institute of Ultrasound and the United States Olympic Committee. Colorado Springs, CO. September 13, 2014.
- 44. **Shoulder I & II: Hands-On Workshop**. AIUM postgraduate course Upper Extremity Musculoskeletal Ultrasound. American Institute of Ultrasound and the United States Olympic Committee. Colorado Springs, CO. September 13, 2014.
- 45. **MSK US: Lumpy Bumpy Diagnostic Dilemmas.** American Roentgen Ray Society Annual Meeting. San Diego, CA. May 6, 2014.
- 46. *Pediatric Ultrasound: Hands-on Special Interest Sessions T2 and T3*. American Institute for Ultrasound in Medicine Annual Convention. Las Vegas, NV. April 1, 2014.



- 47. **MSK Ultrasound of Lower Extremity Nerves**. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Las Vegas, NV. March 30, 2014.
- 48. Advances in MSK Imaging with Shear Wave Elastography. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 3, 2013.
- 49. Nerve Ultrasound Based on a Regional Approach: Shoulder and Neck Hands-on Workshop. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 4, 2013.
- 50. **Dynamic Musculoskeletal US of the Lower Extremity Hands-on Workshop**. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 4, 2013.
- 51. *Master Class in Musculoskeletal Ultrasound How-to Workshop*. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 2, 2013.
- 52. **Techniques for Interventional Sonography and Thermal Ablation Hands-on Workshop**. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 1, 2013.
- 53. *Ultrasound Evaluation of Tendinous and Ligamental Lesions of the Knee*. 14<sup>th</sup> World Congress of Ultrasound in Medicine and Biology (WFUMB 2013). Sao Paulo, Brazil. May 4, 2013.
- 54. Musculoskeletal Ultrasound in Sports Medicine: Key Differences between US and MRI. 14<sup>th</sup> World Congress of Ultrasound in Medicine and Biology (WFUMB 2013). Sao Paulo, Brazil. May 4, 2013.
- 55. **Sonographic Anatomy of the Shoulder**. 14<sup>th</sup> World Congress of Ultrasound in Medicine and Biology (WFUMB 2013). Sao Paulo, Brazil. May 4, 2013.
- 56. **Basic US Scanning technique of the upper extremity peripheral nerves**. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 9, 2013.
- 57. MSK US Hands-on session: Review of Peripheral Nerves of the Upper Extremity. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 9, 2013.



- 58. *Hands-on Scanning: Peripheral Nerves of the Upper Extremity*. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 9, 2013.
- 59. *Platelet-Rich Plasma Injections*. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 7, 2013.
- 60. *Musculoskeletal Ultrasound Hands-on Workshop: Shoulder*. Society of Skeletal Radiology Annual Meeting. San Antonio, Texas. March 18, 2013.
- 61. **Techniques for Interventional Sonography and Thermal Ablation (Hands-on Workshop)**. Radiological Society of North America (RSNA) 98<sup>th</sup> Annual Meeting. Chicago, IL. November 25, 2012.
- 62. **Dynamic Musculoskeletal US of the Upper Extremity (Hands-on Workshop)**. Radiological Society of North America (RSNA) 98<sup>th</sup> Annual Meeting. Chicago, IL. November 28, 2012.
- 63. *Hand-held Ultrasound: Is it a Threat to Radiology?* Radiological Society of North America (RSNA) 98<sup>th</sup> Annual Meeting. Chicago, IL. November 28, 2012.
- 64. Master Class in MSK US Musculoskeletal Elastography: Is it Useful?
  Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL.
  November 25 30, 2012.
- 65. *Musculoskeletal Ultrasound Hands-On Sessions: Ankle*. 6th Annual American Institute of Ultrasound in Medicine (AIUM) Mayo Clinic Diagnostic & Interventional Musculoskeletal Ultrasound Course. Rochester, MN. July 19-21, 2012.
- 66. *Musculoskeletal Ultrasound Hands-On Sessions: US-guided lower extremity joints.* 6<sup>th</sup> Annual American Institute of Ultrasound in Medicine (AIUM) Mayo Clinic Diagnostic & Interventional Musculoskeletal Ultrasound Course. Rochester, MN. July 19-21, 2012.
- 67. *Musculoskeletal Ultrasound Hands-On Sessions: Knee.* 6<sup>th</sup> Annual American Institute of Ultrasound in Medicine (AIUM) Mayo Clinic Diagnostic & Interventional Musculoskeletal Ultrasound Course. Rochester, MN. July 19-21, 2012.



- 68. *Musculoskeletal Ultrasound Hands-On Sessions: US-guided lower extremity soft tissue*. 6<sup>th</sup> Annual American Institute of Ultrasound in Medicine (AIUM) Mayo Clinic Diagnostic & Interventional Musculoskeletal Ultrasound Course. Rochester, MN. July 19-21, 2012.
- 69. *Musculoskeletal Ultrasound in Sports Medicine with MRI Correlation*. Stem Cell Module VI. 20<sup>th</sup> Annual World Congress on Anti-Aging and Regenerative Medicine. Orlando, FL. May 19, 2012.
- 70. *Musculoskeletal Ultrasound: Platelet-Rich Plasma Therapy of the Tendon*. Stem Cell Module VI. 20<sup>th</sup> Annual World Congress on Anti-Aging and Regenerative Medicine. Orlando, FL. May 19, 2012.
- 71. Clinical and Radiological Applications in Prolotherapy and Platelet-Rich Plasma Research. Stem Cell Module VI. 20th Annual World Congress on Anti-Aging and Regenerative Medicine. Orlando, FL. May 19, 2012.
- 72. Cutting-Edge Musculoskeletal Ultrasound: Platelet-rich Plasma Therapy of the Tendon. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. Phoenix, AZ. March 30, 2012.
- 73. **Dynamic Musculoskeletal Ultrasound for Diagnosis and Treatment of Shoulder Calcific Tendinitis.** American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. Phoenix, AZ. March 30, 2012.
- 74. *Musculoskeletal Ultrasound Hands-On Session: Knee, Ankle and Foot.*American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. Phoenix, AZ. March 30, 2012.
- 75. *Ultrasound-Guided Procedures: Hands-On Instructor*. Society of Skeletal Radiology (SSR) Annual Meeting. Miami, FL. March 18, 2012.
- 76. *Musculoskeletal Ultrasound: Advanced US-Guided Procedures*. Society of Skeletal Radiology (SSR) Annual Meeting. Miami, FL. March 18, 2012.
- 77. Dynamic Musculoskeletal US of the Small Peripheral Nerves: Lower Extremity (Hands-on Workshop). Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. December 1, 2011.
- 78. Dynamic Musculoskeletal US of the Upper Extremity (Hands-On Workshop). Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. December 1, 2011.



- 79. **US versus MRI of the Shoulder: What Controversy?** Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. November 30, 2011.
- 80. *Tendinosis: Steroid Injection, Tendon Fenestration, or Platelet-Rich Plasma Injection?* Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. November 30, 2011.
- 81. *Introduction to Academic Radiology*. Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. November 29, 2011.
- 82. **Techniques for Interventional Sonography and Thermal Ablation (Hands-on Workshop)**. Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. November 27, 2011.
- 83. If You Do the Twist? MSK US of the Ankle video conference. Society of Radiologists in Ultrasound (SRU) 2011 Annual Meeting. October 18 23, 2011.
- 84. **Sonography of the Ankle.** Society of Radiologists in Ultrasound (SRU) 2011 Annual Meeting. October 18 23, 2011.
- 85. *Ultrasound-Guided Therapies in the Musculoskeletal System: Tendons*. World Congress of Ultrasound in Medicine and Biology (WFUMB). Vienna Austria. August 26 29, 2011.
- 86. **Sonoanatomy of the Shoulder.** American Society of Regional Anesthesia and Pain Management (ASRA). Boston, MA. June 10, 2011.
- 87. **Sonoanatomy of the Hip.** American Society of Regional Anesthesia and Pain Management (ASRA). Boston, MA. June 10, 2011.
- 88. *Diagnostic Ultrasound of the Shoulder, hands-on live demonstration.*American Society of Regional Anesthesia and Pain Management (ASRA).
  Boston, MA. June 10, 2011.
- 89. Cadaveric Ultrasound of the Shoulder, hands-on instructor. American Society of Regional Anesthesia and Pain Management (ASRA). Boston, MA. June 11, 2011.
- 90. **Scanning Technique of the Shoulder, Wrist and Hand.** American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 17, 2011.



- 91. Advanced Sonoanatomy of the Hand and Wrist. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 92. **Normal Sonographic Anatomy of the Wrist and Hand.** American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 93. **US** of the Knee: Advanced Evaluation with Focus on **US**-Guided **Procedures**. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, Arizona. March 13, 2011.
- 94. Diagnostic Ultrasound of the Knee Tendon and Ligament Structures.

  Ultrasound hands-on instructor. Society of Skeletal Radiology (SSR) Annual Meeting. Scottsdale, Arizona. March 12, 2011.
- 95. *Platelet-Rich Plasma (PRP) Treatments and Prolotherapy of Common MSK Disorders.* University of Wisconsin Big Sky Conference. Big Sky, MT. February 2, 2011.
- 96. *Musculoskeletal US Evaluation of the Ankle.* University of Wisconsin Big Sky Conference. Big Sky, MT. February 2, 2011.
- 97. **MRI and US Imaging of Sports Related Injuries of the Elbow.** University of Wisconsin Big Sky Conference. Big Sky, MT. February 2, 2011.
- 98. *Musculoskeletal US Evaluation of the Shoulder*. University of Wisconsin Big Sky Conference. Big Sky, MT. February 2, 2011.
- 99. *Musculoskeletal Ultrasound Applications in Sports Medicine*. Southern Radiological Society Meeting 2009 and 2010. Clear Point, Alabama. January 22 24, 2009 and January 29 31, 2010.
- 100. Van Holsbeeck MT, Martinoli C, Cardinal E, Jacobson JA, Introcaso JH, Fessell DP, Ceulemans RY, Bouffard JA, Lee KS, Rosas H. Course No. RC 552, Ultrasound of the Brachial Plexus (Hands-On Workshop), Radiological Society of North America (RSNA) Meeting, Chicago, Illinois. December 3, 2009.
- 101. Van Holsbeeck MT, Martinoli C, Cardinal E, Jacobson JA, Introcaso JH, Fessell DP, Ceulemans RY, Bouffard JA, Lee KS, Schooley BS. Course No. RC 452, *Dynamic Musculoskeletal Ultrasound of the Upper Extremity (Hands-On Workshop)*, Radiological Society of North America (RSNA) Meeting, Chicago, Illinois, 2006, 2007, 2009.



- 102. Van Holsbeeck MT, Martinoli C, Cardinal E, Jacobson JA, Introcaso JH, Fessell DP, Ceulemans RY, Bouffard JA, Lee KS. Course No. RC 552, Musculoskeletal Ultrasound with Focus on Lower Extremity Peripheral Nerves (Hands-On Workshop), Radiological Society of North America (RSNA) Meeting, Chicago, Illinois, 2007, 2008.
- 103. Van Holsbeeck MT, Martinoli C, Cardinal E, Jacobson JA, Introcaso JH, Fessell DP, Ceulemans RY, Bouffard JA, Lee KS. Course No. RC 452, *Dynamic Musculoskeletal Ultrasound of the Lower Extremity (Hands-On Workshop)*, Radiological Society of North America (RSNA) Meeting, Chicago, Illinois. December 3, 2008.
- 104. Van Holsbeeck MT, Martinoli C, Cardinal E, Jacobson JA, Introcaso JH, Fessell DP, Ceulemans RY, Bouffard JA, Lee KS, Schooley BS. Course No. RC 552, Musculoskeletal Ultrasound with Focus on Upper Extremity Peripheral Nerves (Hands-On Workshop), Radiological Society of North America (RSNA) Meeting, Chicago, Illinois. December 2, 2006.

## **Community Outreach**

**1.** "What is a Radiologist?", "Radiology Jeopardy". Eagle Middle School, Fitchburg, WI. March 5, 2014, February 23, 2016;

# **Clinical Teaching**

#### Mentoring

- Sin JM (Radiology Fellow), Patil P, Adamany C, Lee KS. Ultrasound-Guided Microwave Ablation for the Management of Inguinal Neuralgia: Preliminary Results. Association of University Radiologists Annual Meeting. Hollywood, FL. May 9, 2017.
- Llewellyn M (Radiology Fellow), Lee KS. Shear Wave Imaging in Moderate to Severe Achilles Tendinopathy. American Institute of Ultrasound in Medicine Annual Convention. Orlando, FL. March 28, 2017.
- Chernak Slane L (Post Doctorate), Martin J, DeWall R, Thelen D, Lee KS.
   Achilles Tendon Shear Wave Speeds Show Non-Uniform Aging Effects.
   International Society of Biomechanics (ISB). Glasgow, Scotland. July 14, 2015.



- 4. Knudtson T (Radiology Fellow), Lee KS. Ultrasound-Guided Corticosteroid Injection: Efficacy of Treatment in Patients With Moderate to Severe Plantar Fasciitis Who Have Failed Conservative Therapies. American Institute of Ultrasound in Medicine Annual Convention. Orlando, FL. March 24, 2015.
- Schapiro A (Radiology Resident), Lee KS, Rabago D, Wilson J. Platelet-Rich Plasma and Hyperosmolar Dextrose (Prolotherapy) for Lateral Epicondylosis: Power Doppler Sonographic Assessment of Tendon Neovascularity as a Measure of the Healing Response. American Institute of Ultrasound in Medicine Annual Convention. Orlando, FL. March 23, 2015.
- 6. Patil P (Radiology Fellow), **Lee KS**, Rosas HG, Kenyon L, Munoz del Rio A. *Ultrasound-Guided Microwave Ablation in the Management of Inguinal Neuralgia: A Preliminary Study with 1-Year Follow-up*. American Institute of Ultrasound in Medicine Annual Convention. Orlando, FL. March 23, 2015.
- 7. Schapiro A, (Radiology Resident), **Lee KS**, Rosas HG. "**Ultrasound-Guided Calcific Tendinitis Lavage: Application, Technique, and Outcome**". American Institute for Ultrasound in Medicine Annual Convention. Orlando, FL. March 21 25, 2015.
- 8. Patil P, (Radiology Fellow), **Lee KS**. *A New MSK Application of Microwave Ablation*. Society of Skeletal Radiology Annual Meeting. Scottsdale, AZ. March 8, 2015.
- Slane L (Post-Doctorate), DeWall R, Martin J, Lee KS, Thelen D. Supersonic Shear Imaging identifies potential evidence of localized changes in Achilles tendon compliance in middle-aged adults. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. December 2, 2014.
- Peterson II W, (Radiology Fellow), Lee KS, Wilson JJ, Almasi SJ, Munoz del Rio A. *Platelet-Rich Plasma Injection for Patellar Tendinopathy: Imaging and Clinical Outcomes in Athletes at 1-Year Follow Up*. Society of Skeletal Radiology Annual Meeting. San Diego, CA. March 18, 2014.
- 11. Ebben B (Shapiro Medical Student), Lee KS, DeWall R, Wang A. Noninvasive Quantification of Tendon Biomechanics: Shear Wave Elastography Imaging in a Porcine Tendinopathy Model. University of Wisconsin School of Medicine and Public Health Shapiro Summer Research Program presentation, Madison, WI. November 26, 2013.



- DeWall R (Post-Doctorate), Lee KS, Wilson J. Quantifying Tendon Damage with Ultrasound (US) Shear Wave Elastography using a Porcine Flexor Tendon Tear Model. Radiological Society of North America (RSNA) Annual Meeting, Chicago, IL. December 1, 2013.
- Knudtson, TJ, (Radiology Resident), Lee KS. Overview of Platelet Rich Plasma (PRP) Therapy in Treating Tendinopathies. University of Wisconsin Radiology Residents Research Presentation Day. Madison, WI. May 15, 2013.
- Knudtson, TJ, (Radiology Resident), Lee KS. Overview of Platelet Rich Plasma (PRP) Therapy in Treating Tendinopathies. American Roentgen Ray Society (ARRS) Annual Meeting. Washington, DC. April 16, 2013.
- Kohn S, (Research Sonographer) Lee KS. Musculoskeletal US of Full Thickness Rotator Cuff Tear. Case of the Day. American Institute for Ultrasound in Medicine Annual Meeting. New York, NY. April 7, 2013.
- 16. Backer MW, (Radiology Fellow) Lee KS, Blankenbaker DG, Kijowski R, Keene JS. Correlation of ultrasound-guided corticosteroid injection of the quadratus femoris with MRI findings of ischiofemoral impingement. Society of Skeletal Radiology Annual Meeting. San Antonio, TX. March 18, 2013.
- 17. Hanson JA, (Radiology Fellow) Lee KS, Peterson A. *Ultrasound versus CT-Guided Musculoskeletal Soft Tissue Mass Biopsy: A Comparative Effectiveness Analysis*. Society of Skeletal Radiology Annual Meeting. San Antonio, TX. March 17-20, 2013.
- DeWall R (Post-Doctorate), Lee KS. Shearwave Elastography Applications in the Musculoskeletal System. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 29 – May 1, 2012.
- Kohn S (Research Sonographer), Lee KS, Field A. The Importance of the Sonographer in the Investigation of Chronic Cerebrospinal Venous Insufficiency. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 29 – May 1, 2012.



- 20. McEvoy, JR (Musculoskeletal Fellow), Lee KS, Blankenbaker DG, Munoz del Rio A, Keene JS. Greater trochanteric pain syndrome: US guided steroid injection of the greater trochanteric bursa versus the subgluteus medius bursa. Society of Skeletal Radiology (SSR) Annual Meeting. March 19, 2012.
- 21. Hanson J (Radiology Resident), **Lee KS**, Heiner JP, Peterson AR. **Costeffectiveness of ultrasound-versus computed tomography-guided soft tissue biopsy (a pilot study and sensitivity analysis).** American Medical Society for Sports Medicine (AMSSM) Salt Lake City, UT. April 30 May 4, 2011.
- 22. Ryan MB (Post-Doctorate), Lee KS, Kobayashi H, Heidersheit B, Vanderby R. Ultrasound-Based Acoustoelastic Measurement of In Vivo Stiffness of the Common Lateral Elbow Extensor Tendon in Chronic Tendinopathy and Healthy Controls. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 23. Frisch K (Biomedical Engineering Graduate Student), Marcu D, Lee KS, Baer G, Thelen D, Vanderby R. Acoustoelastographic Stiffness and Strain Reflect Tendon Tearing. American Institute of Ultrasound Medicine (AIUM) Annual Meeting. New York City, NY. April 15, 2011.
- 24. Frisch K (Biomedical Engineering Graduate Student), Lee KS, Verma R, Baer G, Kobayashi H, Vanderby R. Acoustoelastographic mapping of the stiffness gradient distribution in the rotator cuff for pathologic identification. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 24, 2010.
- 25. Wagner J (Abdominal Fellow), **Lee KS**. *Ultrasound of superficial lumps: a pictorial essay*. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 24 -27, 2010.
- Wagner J (Abdominal Fellow), Rosas, HG, Lee KS, Kliewer M. Accuracy of sonographic diagnosis of superficial masses. American Institute of Ultrasound in Medicine (AIUM). San Diego, CA. March 25, 2010.
- Runyan, B. (Musculoskeletal Fellow), Lee KS. Ultrasound changes seen in the common extensor tendon during hyperosmolar dextrose (Prolotherapy) treatment for chronic lateral epicondylosis. Society of Skeletal Radiology (SSR) Annual Meeting. Las Vegas, NV. March 16, 2010.



# **Academic Mentoring**

2017 - present Paul Michelin, MD

Visiting Research Fellow, Musculoskeletal Radiologist

Section Head, Rouen University Hospital

Rouen, France

2017 – present Jack A. Martin, MS

University of Wisconsin

Materials Science PhD Program Co-Advisor- Darryl Thelen, PhD

2017 – present Andrew B. Ross, MD, MPH

University of Wisconsin

Musculoskeletal Radiology Faculty

2017 SSR Seed Grant 2017 GERRAF Grant

2014 – present Scott Sheehan, MD, MS

University of Wisconsin

Musculoskeletal Radiology Faculty 2016 RSNA Education Scholar Grant

2012 – 2014 Ryan J. DeWall, PhD

University of Wisconsin

Medical Physics PhD Program Co-Advisor- Tomy Varghese, PhD

2011 – 2015 Laura A. Chernak Slane, PhD

University of Wisconsin

Biomechanical Engineering PhD Program

Co-Advisor- Darryl Thelen, PhD

#### **Service Activities**

#### **Departmental**

**2015 – present** Finance Committee

University of Wisconsin School of Medicine and Public

Health, Department of Radiology



2013 – present	Executive Committee University of Wisconsin School of Medicine and Public Health, Department of Radiology
2012 – present	Research and Development Committee University of Wisconsin School of Medicine and Public Health, Department of Radiology
2011 – 2014	Radiology Computing Oversight Committee University of Wisconsin School of Medicine and Public Health, Department of Radiology
2018 - present	Scott Sheehan, MD, MS, Mentor Committee
2017 - present	Chair – Andrew B. Ross, MD, MPH, Mentor Committee
2014 - present	Chair - Michael Woods, MD, Mentor Committee
2014 – 2015	Beth Burnside MD, MPH, Post-Promotion Committee
2014 - present	Timothy Szczykutowicz, PhD, Mentor Committee
2006 – 2007	Chief Resident Henry Ford Hospital
2006 – 2007	Residency Selection Committee Henry Ford Hospital
2006 – 2007	Radiology Medical Education Committee Henry Ford Hospital
2006	Executive House Officer Council Member Henry Ford Hospital
2006	Contrast Consent Focus Group Henry Ford Hospital
2006	Quality Assurance Committee Henry Ford Hospital
2005	PACS Committee Henry Ford Hospital



2016 UW Health Center for Clinical Knowledge Management

**2008 – 2015** Residency Selection Committee

**2012 – 2014** MD Degree Admissions Committee

**2017 – present** Search Committee – Clinical Coordinator

**2011** Search Committee - Musculoskeletal Radiology Faculty

**2011** Search Committee – Associate Director Business Services

**2011 - present** Search Committee – Clinical Research Nurse

**2011, 2018** Search Committee – Research Sonographer

# Regional

**2012 - present** Course Director: MSK Ultrasound: Imaging and Intervention.

Medical Technology Management Institute. Milwaukee, WI.

**2010** Course Director: What to Order When – Musculoskeletal

Ultrasound Conference, October 30, 2010

Department of Radiology, University of Wisconsin School of

Medicine and Public Health

**2004 – 2007** Michigan Radiological Society, Member-At-Large

#### National/International

**2017 – present** Scientific Session Committee

International Skeletal Society (ISS)

**2015 – present** Appropriateness Criteria Panel on Musculoskeletal Imaging

American College of Radiology (ACR)

**2010 – 2016** Scientific Program Subcommittee Musculoskeletal Section

Radiological Society of North America (RSNA)



2013 – 2014	Oral Boards Examiner - Musculoskeletal Section American Board of Radiology (ABR)
2014 – 2017	Finance Committee Society of Skeletal Radiology (SSR)
2015 – 2016	Scientific Presentation Podium Judge Committee Society of Skeletal Radiology (SSR)
2013 – 2016	Board of Governors American Institute of Ultrasound in Medicine (AIUM)
2013 – 2016	Society Officer: Chair of Musculoskeletal Ultrasound Group American Institute of Ultrasound in Medicine (AIUM)
2014 – 2016	Chair – Review Panel for the AIUM Endowment of Education and Research Grant
2013 – 2016	Chair – Scientific Session, Musculoskeletal American Institute of Ultrasound in Medicine (AIUM)
2014 – 2016	Chair – Musculoskeletal Ultrasound Proposals, Review Panel, American Institute of Ultrasound in Medicine (AIUM)
2012 – 2016	Ultrasound Practice Accreditation Council American Institute of Ultrasound in Medicine (AIUM)
2012 – 2016	Annual Convention Committee American Institute of Ultrasound in Medicine (AIUM)
2011 – 2016	Membership Committee American Institute of Ultrasound in Medicine (AIUM)
2013 – 2016	Scientific Poster Review Committee American Institute of Ultrasound in Medicine (AIUM)
2013 – 2016	Co-Chair Preconvention Program American Institute of Ultrasound in Medicine (AIUM)
2013 – 2016	Co-Chair Hands-on Special Interest Session American Institute of Ultrasound in Medicine (AIUM)



2012 - 2013	Chair - Case of the Day, MSK Liaison American Institute of Ultrasound in Medicine (AIUM)
2011 – 2013	Society Officer: Vice-Chair of Musculoskeletal Ultrasound Group, American Institute of Ultrasound in Medicine (AIUM)
2009 – 2011	Society Officer: Secretary of Musculoskeletal Ultrasound Group, American Institute of Ultrasound in Medicine (AIUM)

#### **Grant Reviewer**

ICTR Grant Reviews: Novel Methods Pilot Awards Program: Platforms for Advancing Therapeutic Discovery and Development, March 10, 2014.

VA Hospital Grant Review: Hydrodissection versus corticosteroid for carpal tunnel syndrome, February 25, 2016.

VA Hospital Grant Review: Value of platelet rich plasma injection for gluteal tendinopathy, February 25, 2016.

# **Other Activities**

#### **Moderator/Panelist**

- 1. **Scientific Session I and II.** International Skeletal Society (ISS) 2018 Annual Meeting. Berlin, Germany. September 25, 2018.
- Musculoskeletal Ultrasound: SSM 14 Scientific Presentations. Radiological Society of North America (RSNA) 103rd Annual Meeting. Chicago, IL. November 29, 2017.
- 3. *Hands-on Scanning: Peripheral Nerves of the Upper Extremity*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 24, 2015.
- Musculoskeletal Ultrasound: Upper Extremity Joints. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 24, 2015.
- 5. *Hands-on Scanning: Upper Extremity Joints (Shoulder, Elbow, and Wrist)*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Orlando, FL. March 22, 2015.



- Musculoskeletal Scientific Poster Session. Radiological Society of North America (RSNA) 100<sup>th</sup> Annual Meeting. Chicago, IL. December 4, 2014.
- 7. *Musculoskeletal Ultrasound: Special Interest Session*. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. Las Vegas, NV. March 30, 2014.
- 8. *Musculoskeletal Radiology Series: Ultrasound VSMK31 moderator*. Radiological Society of North America (RSNA) 99<sup>th</sup> Annual Meeting. Chicago, IL. December 3, 2013.
- 9. Comprehensive Review of Musculoskeletal Ultrasound. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 6, 2013.
- 10. *Hands-on Scanning: Peripheral Nerves of the Upper Extremity*. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. New York, NY. April 9, 2013.
- 11. *Musculoskeletal (knee) program SSG11 moderator*. Radiological Society of North America (RSNA) 98<sup>th</sup> Annual Meeting. Chicago, IL. November 27, 2012.
- 12. *Focus on Dynamic Musculoskeletal Ultrasound Imaging*. American Institute of Ultrasound in Medicine (AIUM) Annual Meeting. Phoenix, AZ. Mar 30, 2012.
- 13. Scientific Session: Musculoskeletal (Interventions: Pain and Tumor Treatments). Moderator. Radiological Society of North America (RSNA) 97<sup>th</sup> Annual Meeting. Chicago, IL. November 27 December 1, 2011.
- Hands-On Session: Musculoskeletal Ultrasound Hands-On Workshop Shoulder, Hand, and Wrist. Chair and Moderator. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. New York, NY. April 17, 2011.
- 15. *Hands-On Session: Musculoskeletal Ultrasound*. Co-moderator: William Medford, RDMS. American Institute of Ultrasound in Medicine (AIUM) Annual Convention. New York, NY. April 5, 2009.

### **Service for Journals**

**2011 – present** Advisory Editorial Board Member – Journal of Ultrasound in Medicine (JUM)



#### **Journal Editor**

**2016** Seminars in Musculoskeletal Radiology, Guest Editor

#### **Journal Reviewer**

**2017 – present** Radiology

**2014 – present** European Radiology

**2013 – present** Journal of Orthopaedic and Sports Physical Therapy

2011 - present Clinical Orthopaedics and Related Research

**2009 – present** Journal of Ultrasound in Medicine

**2009 – present** Skeletal Radiology

**2008 – present** American Journal of Roentgenology

#### **Program Development**

2008 – present
 2010 – present
 2013 – present
 Clinical Musculoskeletal Ultrasound
 Research Ultrasound Program, WIMR
 Translational Research Program, WIMR