



Robert Downey Boutin

Clinical Professor, Radiology

CLINICAL OFFICES

- **Dept Of Radiology**

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Bio

BIO

Dr. Boutin works clinically as a musculoskeletal radiologist interpreting a broad array of diagnostic imaging examinations, most frequently MRI, CT, sonography, and radiography.

The clinical focus for Dr. Boutin is MRI of joints, bones, and muscles, as well as adding value to routine radiology exams by translating advancements from fields of artificial intelligence and imaging informatics.

These advancements include enhancing routine imaging exams to help promote physical function, quality of life, and health span in our patients. Because the worldwide population of people > 60 years of age is projected to double by 2050, there is a crucial need for improvements in the accurate and efficient management of derangements associated with biological aging, including osteoporosis, sarcopenia, and visceral adiposity.

Dr. Boutin is a leader in the field of musculoskeletal imaging. He currently serves as Chair of the Musculoskeletal Imaging Program Committee for the largest medical meeting in the world (RSNA) and is in line to become President of the Society of Academic Bone Radiologists. Core professional values include an emphasis on outstanding quality, compassion, safety, and integrity.

Dr. Boutin was introduced to Orthopaedics at an early age by his father and older brother -- both orthopaedists. After earning undergraduate and graduate degrees at Stanford University, Dr. Boutin completed advanced fellowship training in Musculoskeletal Imaging at the University of California, San Diego, and worked on the faculty at Harvard Medical School.

Dr. Boutin is dedicated to excellence in musculoskeletal imaging. Dr. Boutin has written over 100 peer-reviewed articles and textbook chapters. He has also served as Guest Editor for 2 volumes of the 'Orthopaedic Clinics of North America', and volumes of 'Seminars in Musculoskeletal Radiology'. Dr. Boutin also has served for many years as a Peer Reviewer for premier radiology journals.

Dr. Boutin is a popular invited lecturer for Continuing Medical Education Courses, such as those at the annual meetings of the 'Radiological Society of North America', the 'International Skeletal Society', the 'Arthroscopy Association of North America', the 'American Academy of Orthopaedic Surgeons', and the 'International Society for Magnetic Resonance in Medicine'. He is also a repeat lecturer at the prestigious Orthopaedic Imaging course in Davos, Switzerland.

CLINICAL FOCUS

- Diagnostic Radiology

ACADEMIC APPOINTMENTS

- Clinical Professor, Radiology

ADMINISTRATIVE APPOINTMENTS

- Director, Musculoskeletal Imaging Fellowship, Department of Radiology, (2021- present)

HONORS AND AWARDS

- CMS and Calculators: Hospital Price Transparency Requirements and Imaging Cost Variability, American Roentgen Ray Society (ARRS) (2022)
- Liposclerosing Myxofibrous Tumor (LSMFT), Society of Skeletal Radiology (AIRP Award) (2022)
- Meniscus Roots, Ramps, Repairs, and Repercussions, RSNA - Magna Cum Laude Award (2021)
- The Sternum and Sternoclavicular Joints, RSNA - Magna Cum Laude Award (2021)
- Altered Biomechanics and Patterns of Injury in the Presence of Rotator Cuff Insufficiency, Radiological Society of North America (2020)
- Fast Musculoskeletal MRI: What the Radiologist Needs to Know, Radiological Society of North America (2019)
- Value-Added 'Opportunistic' CT: State-of-the-Art Insights into Bone, Muscle, and Fat, Radiological Society of North America (2019)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chair, RSNA Msk Meeting Program Committee (2021-23); RadioGraphics Subspecialty Panel (2021-24), Radiological Society of North America (RSNA) (1992 - present)
- SABR Secretary, Executive Committee (2020 - 2022), Society of Academic Bone Radiologists (SABR) (2013 - present)
- ISS Scientific Session Cmte (2021-22); Chair, Grants Cmte (2019-20); Chair, Audit Cmte (2017-18), International Skeletal Society (ISS) (2001 - present)
- ARRS Musculoskeletal Radiology Scientific Program Committee (2011 - Present), American Roentgen Ray Society (ARRS) (1991 - present)
- ACR Practice Parameters and Technical Standards Development (Quantitative CT Bone Densitometry; DXA), American College of Radiology (ACR) (2022 - present)
- QIBA Musculoskeletal Biomarkers Committee (Articular Cartilage MRI), Quantitative Imaging Biomarkers Alliance (QIBA) (2019 - present)

PROFESSIONAL EDUCATION

- Fellowship: UCSD Musculoskeletal Radiology Fellowship (1996) CA
- Board Certification: Diagnostic Radiology, American Board of Radiology (1995)
- Residency: University of New Mexico Office of GME (1995) NM
- Medical Education: UC Davis School of Medicine (1991) CA

Publications

PUBLICATIONS

- **Imaging of Sarcopenia.** *Radiologic clinics of North America*
Boutin, R. D., Houston, D. K., Chaudhari, A. S., Willis, M. H., Fausett, C. L., Lenchik, L.
2022; 60 (4): 575-582
- **Ultrasound Identifies First Rib Stress Fractures: A Case Series in Division I Athletes.** *Journal of athletic training*
Sheng, D. L., Burnham, K., Boutin, R. D., Ray, J. W.

2022

- **MR Imaging of Benign Soft Tissue Tumors: Highlights for the Practicing Radiologist.** *Radiologic clinics of North America*
Riley, G. M., Kwong, S., Steffner, R., Boutin, R. D.
2022; 60 (2): 263-281
- **The Global Reading Room: Knee MRI Protocols.** *American Journal of Roentgenology (AJR).*
Boutin, R. D., Eshed, I., Kassarian, A., Vemuri, N. V.
2022
- **Sarcopenia in Rheumatic Disorders: What the Radiologist and Rheumatologist Should Know** *Skeletal Radiology.*
Manzano, W., Lenchik, L., Chaudhari, A. S., Yao, L., Gupta, S., Boutin, R. D.
2022
- **Charges for Shoppable Musculoskeletal Imaging Examinations: CMS Transparency Compliance and Variability Among 250 U.S. Hospitals.** *American Journal of Roentgenology (AJR).*
Peterson, M. B., Willis, M. H., Rosenberg, J. K., Boutin, R. D.
2022
- **Feasibility of dual-phase 99mTc-MDP SPECT/CT imaging in rheumatoid arthritis evaluation.** *Quantitative imaging in medicine and surgery*
Abdelhafez, Y. G., Godinez, F., Sood, K., Hage, R. J., Boutin, R. D., Raychaudhuri, S. P., Badawi, R. D., Chaudhari, A. J.
2021; 11 (6): 2333-2343
- **Rapidly progressive idiopathic arthritis of the hip: incidence and risk factors in a controlled cohort study of 1471 patients after intra-articular corticosteroid injection** *SKELETAL RADIOLOGY*
Boutin, R. D., Pai, J., Meehan, J. P., Newman, J. S., Yao, L.
2021
- **Body composition measurements and overall survival in patients with resectable pancreatic adenocarcinoma receiving neoadjuvant chemotherapy: Analysis from SWOG S1505.**
Sohal, D., Duong, M. T., Boutin, R., Lenchik, L., Kim, J., Gandhi, N., Beg, M., Wang-Gillam, A., Wade, J., Guthrie, K. A., Chiorean, E., Ahmad, S. A., Lowy, et al
LIPPINCOTT WILLIAMS & WILKINS.2021
- **Assessment of Myofascial Trigger Points via Imaging: A Systematic Review.** *American journal of physical medicine & rehabilitation*
Mazza, D. F., Boutin, R. D., Chaudhari, A. J.
2021
- **Displaced Flap Tears of the Triangular Fibrocartilage Complex: Frequency, Flap Location, and the "Comma" Sign on Wrist MRI.** *AJR. American journal of roentgenology*
Boutin, R. D., Fritz, R. C.
2021
- **Reply to "Sarcopenia and Osteoporosis: A Practical Approach to Obtaining Valuable Information With CT".** *AJR. American journal of roentgenology*
Boutin, R. D., Lenchik, L. n.
2021: W1
- **Interdisciplinary consensus statements on imaging of scapholunate joint instability.** *European radiology*
Dietrich, T. J., Toms, A. P., Cerezal, L., Omoumi, P., Boutin, R. D., Fritz, J., Schmitt, R., Shahabpour, M., Becce, F., Cotten, A., Blum, A., Zanetti, M., Llopis, et al
2021
- **Genetic Algorithm based L4 Identification and Psoas Segmentation**
Benjamin, N., Boutin, R. D., Chaudhari, A. J., Ma, K., Douplik, A., Fred, A., Gamboa, H.
SCITEPRESS.2021: 120-127
- **Pelvis and Groin: Practical Anatomy, Injury Patterns, and Imaging Findings** *Musculoskeletal Diseases 2021-2024: Diagnostic Imaging*
Boutin, R. D., Robinson, P.
Springer.2021
- **Diagnosing sarcopenia at the point of imaging care: analysis of clinical, functional, and opportunistic CT metrics.** *Skeletal radiology*
Yao, L., Petrosyan, A., Fuangfa, P., Lenchik, L., Boutin, R. D.
2020

- **Computed Tomography (CT) Measurements of Sarcopenia Predict Length of Stay in Older Burn Patients.** *Journal of burn care & research : official publication of the American Burn Association*
Romanowski, K. S., Fuanga, P., Siddiqui, S., Lenchik, L., Palmieri, T. L., Boutin, R. D.
2020
- **Soft tissue pathology for the radiologist: a tumor board primer with 2020 WHO classification update.** *Skeletal radiology*
Kuhn, K. J., Cloutier, J. M., Boutin, R. D., Steffner, R., Riley, G.
2020
- **Association of adipose tissue and skeletal muscle metrics with overall survival and postoperative complications in soft tissue sarcoma patients: an opportunistic study using computed tomography.** *Quantitative imaging in medicine and surgery*
Boutin, R. D., Katz, J. R., Chaudhari, A. J., Yabes, J. G., Hirschbein, J. S., Nakache, Y. P., Seibert, J. A., Lamba, R., Fananapazir, G., Canter, R. J., Lenchik, L.
2020; 10 (8): 1580-1589
- **Value-Added Opportunistic CT: Insights Into Osteoporosis and Sarcopenia.** *AJR. American journal of roentgenology*
Boutin, R. D., Lenchik, L.
2020: 1–13
- **Marrow uptake on FDG PET/CT is associated with progression from smoldering to symptomatic multiple myeloma.** *Skeletal radiology*
Amini, B., Nakache, Y. N., Nardo, L., Manasanch, E. E., Sun, J., Lenchik, L., Boutin, R. D.
2020
- **Opportunistic muscle measurements on staging chest CT for extremity and truncal soft tissue sarcoma are associated with survival.** *Journal of surgical oncology*
Phan, E. N., Thorpe, S. W., Wong, F. S., Saiz, A. M., Taylor, S. L., Canter, R. J., Lenchik, L., Randall, R. L., Boutin, R. D.
2020
- **Capsular thinning on magnetic resonance arthrography is associated with intra-operative hip joint laxity in women.** *Journal of hip preservation surgery*
Packer, J. D., Foster, M. J., Riley, G. M., Stewart, R., Shibata, K. R., Richardson, M. L., Boutin, R. D., Safran, M. R.
2020; 7 (2): 298–304
- **Accurate prediction of lumbar microdecompression level with an automated MRI grading system.** *Skeletal radiology*
Roller, B. L., Boutin, R. D., O'Gara, T. J., Knio, Z. O., Jamaludin, A., Tan, J., Lenchik, L.
2020
- **Automated Muscle Measurement on Chest Computed Tomography (CT) Predicts All-cause Mortality in Older Adults from the National Lung Screening Trial.** *The journals of gerontology. Series A, Biological sciences and medical sciences*
Lenchik, L., Barnard, R., Boutin, R. D., Kritchevsky, S. B., Chen, H., Tan, J., Cawthon, P. M., Weaver, A. A., Hsu, F.
2020
- **Preoperative MRI of Articular Cartilage in the Knee: A Practical Approach.** *The journal of knee surgery*
Fritz, R. C., Chaudhari, A. S., Boutin, R. D.
2020; 33 (11): 1088–99
- **CT Phantom Evaluation of 67,392 ACR Accreditation Examinations: Implications for Opportunistic Screening of Osteoporosis Using CT.** *AJR. American journal of roentgenology*
Boutin, R. D., Hernandez, A. M., Lenchik, L. n., Seibert, J. A., Gress, D. A., Boone, J. M.
2020
- **Top 3 Differentials in Musculoskeletal Imaging: A Case Review.**
Bindra, J., Boutin, R. D.
Thieme.2020
- **Opportunistic body composition evaluation in patients with esophageal adenocarcinoma: association of survival with 18F-FDG PET/CT muscle metrics.** *Annals of nuclear medicine*
Zhou, C., Foster, B., Hagg, R., Foster, C., Lenchik, L., Chaudhari, A. J., Boutin, R. D.
2019
- **Automated Segmentation of Tissues Using CT and MRI: A Systematic Review.** *Academic radiology*
Lenchik, L., Heacock, L., Weaver, A. A., Boutin, R. D., Cook, T. S., Itri, J., Filippi, C. G., Gullapalli, R. P., Lee, J., Zagurovskaya, M., Retson, T., Godwin, K., Nicholson, et al

2019; 26 (12): 1695-1706

- **Machine Learning for Automatic Paraspinous Muscle Area and Attenuation Measures on Low-Dose Chest CT Scans.** *Academic radiology*
Barnard, R., Tan, J., Roller, B., Chiles, C., Weaver, A. A., Boutin, R. D., Kritchevsky, S. B., Lenchik, L.
2019; 26 (12): 1686-1694
- **The medial epicondyle of the distal femur is the optimal location for MRI measurement of semitendinosus and gracilis tendon cross-sectional area.** *Knee surgery, sports traumatology, arthroscopy : official journal of the ESSKA*
Hodges, C. T., Shelton, T. J., Bateni, C. P., Henrichon, S. S., Skaggs, A. W., Boutin, R. D., Lee, C. A., Haus, B. M., Marder, R. A.
2019; 27 (11): 3498-3504
- **Real-time three-dimensional MRI for the assessment of dynamic carpal instability.** *PloS one*
Shaw, C. B., Foster, B. H., Borgese, M., Boutin, R. D., Bateni, C., Boonsri, P., Bayne, C. O., Szabo, R. M., Nayak, K. S., Chaudhari, A. J.
2019; 14 (9): e0222704
- **Subchondroplasty of the Ankle and Hindfoot for Treatment of Osteochondral Lesions and Stress Fractures: Initial Imaging Experience.** *Foot & ankle specialist*
McWilliams, G. D., Yao, L., Simonet, L. B., Haysbert, C. W., Giza, E., Kreulen, C. D., Boutin, R. D.
2019: 1938640019863252
- **Dynamic MRI of the wrist in less than 20 seconds: normal midcarpal motion and reader reliability.** *Skeletal radiology*
Henrichon, S. S., Foster, B. H., Shaw, C., Bayne, C. O., Szabo, R. M., Chaudhari, A. J., Boutin, R. D.
2019
- **Opportunistic Measurement of Skeletal Muscle Size and Muscle Attenuation on Computed Tomography Predicts 1-Year Mortality in Medicare Patients.** *The journals of gerontology. Series A, Biological sciences and medical sciences*
Lenchik, L., Lenoir, K. M., Tan, J., Boutin, R. D., Callahan, K. E., Kritchevsky, S. B., Wells, B. J.
2019; 74 (7): 1063-1069
- **Approaches to Assessment of Muscle Mass and Myosteatosis on Computed Tomography (CT): A Systematic Review.** *The journals of gerontology. Series A, Biological sciences and medical sciences*
Amini, B., Boyle, S. P., Boutin, R. D., Lenchik, L.
2019
- **Tears in the distal superficial medial collateral ligament: the wave sign and other associated MRI findings.** *Skeletal radiology*
Boutin, R. D., Fritz, R. C., Walker, R. E., Pathria, M. N., Marder, R. A., Yao, L. n.
2019
- **Imaging of the Musculoskeletal System** *Chapman's Comprehensive Orthopaedic Surgery*
Kim, W. D., Bindra, J., Boutin, R. D.
2019; 4th
- **Imaging of Bone Tumors** *Chapman's Comprehensive Orthopaedic Surgery*
Boutin, R. D., Bindra, J.
2019
- **Imaging of Soft-tissue Tumors** *Chapman's Comprehensive Orthopaedic Surgery*
Boutin, R. D., Bindra, J., Canter, R.
2019
- **Opportunistic Screening for Osteoporosis Using Computed Tomography: State of the Art and Argument for Paradigm Shift.** *Current rheumatology reports*
Lenchik, L., Weaver, A. A., Ward, R. J., Boone, J. M., Boutin, R. D.
2018; 20 (12): 74
- **MR Imaging of SLAP Lesions.** *The open orthopaedics journal*
Boutin, R. D., Marder, R. A.
2018; 12: 314-323
- **Sarcopenia: Beyond Muscle Atrophy and into the New Frontiers of Opportunistic Imaging, Precision Medicine, and Machine Learning.** *Seminars in musculoskeletal radiology*
Lenchik, L., Boutin, R. D.

2018; 22 (3): 307-322

- **Skeletal Muscle Metrics on Clinical 18F-FDG PET/CT Predict Health Outcomes in Patients with Sarcoma.** *Journal of nature and science*
Foster, B., Boutin, R. D., Lenchik, L., Gedeon, D., Liu, Y., Nittur, V., Badawi, R. D., Li, C. S., Canter, R. J., Chaudhari, A. J.
2018; 4 (5)
- **WRIST: A WRist Image Segmentation Toolkit for carpal bone delineation from MRI.** *Computerized medical imaging and graphics : the official journal of the Computerized Medical Imaging Society*
Foster, B., Joshi, A. A., Borgese, M., Abdelhafez, Y., Boutin, R. D., Chaudhari, A. J.
2018; 63: 31-40
- **Association of lunate morphology, sex, and lunotriquetral interosseous ligament injury with radiologic measurement of the capitate-triquetrum joint.** *Skeletal radiology*
Borgese, M., Boutin, R. D., Bayne, C. O., Szabo, R. M., Chaudhari, A. J.
2017; 46 (12): 1729-1737
- **Musculotendinous Disorders in the Upper Extremity: Part 2. MRI of the Elbow, Forearm, Wrist, and Hand.** *Seminars in musculoskeletal radiology*
Fritz, R. C., Boutin, R. D.
2017; 21 (4): 376-391
- **Muscle Imaging: Beyond the Basics.** *Seminars in musculoskeletal radiology*
Boutin, R. D., Fritz, R. C.
2017; 21 (4): 357-358
- **Musculotendinous Disorders in the Upper Extremity: Part 1. MRI of the Shoulder and Upper Arm.** *Seminars in musculoskeletal radiology*
Fritz, R. C., Boutin, R. D.
2017; 21 (4): 359-375
- **CT of Patients With Hip Fracture: Muscle Size and Attenuation Help Predict Mortality.** *AJR. American journal of roentgenology*
Boutin, R. D., Bamrunghart, S., Bateni, C. P., Beavers, D. P., Beavers, K. M., Meehan, J. P., Lenchik, L.
2017; 208 (6): W208-W215
- **Pelvic Tilt Evaluation From Frontal Radiographs: The Validity, Interobserver Reliability and Intraobserver Reproducibility of the Sacro-Femoral-Pubic Parameter.** *The Journal of arthroplasty*
Ragsdale, M. I., Wong, F. S., Boutin, R. D., Meehan, J. P.
2017; 32 (5): 1665-1669
- **"Knuckle Cracking": Can Blinded Observers Detect Changes with Physical Examination and Sonography?** *Clinical orthopaedics and related research*
Boutin, R. D., Netto, A. P., Nakamura, D., Bateni, C., Szabo, R. M., Cronan, M., Foster, B., Barfield, W. R., Seibert, J. A., Chaudhari, A. J.
2017; 475 (4): 1265-1271
- **Predictors of residual disease after unplanned excision of soft tissue sarcomas.** *The Journal of surgical research*
Gingrich, A. A., Elias, A., Michael Lee, C. Y., Nakache, Y. N., Li, C. S., Shah, D. R., Boutin, R. D., Canter, R. J.
2017; 208: 26-32
- **Influence of IV Contrast Administration on CT Measures of Muscle and Bone Attenuation: Implications for Sarcopenia and Osteoporosis Evaluation.** *AJR. American journal of roentgenology*
Boutin, R. D., Kaptuch, J. M., Bateni, C. P., Chalfant, J. S., Yao, L.
2016; 207 (5): 1046-1054
- **Conservative management of desmoid tumors is safe and effective.** *journal of surgical research*
Park, J. S., Nakache, Y., Katz, J., Boutin, R. D., Steffner, R. J., Monjazebe, A. M., Canter, R. J.
2016; 205 (1): 115-120
- **MRI findings of serous atrophy of bone marrow and associated complications** *EUROPEAN RADIOLOGY*
Boutin, R. D., White, L. M., Laor, T., Spitz, D. J., Lopez-Ben, R. R., Stevens, K. J., Bredella, M. A.
2015; 25 (9): 2771-2778
- **Sarcopenia: Current Concepts and Imaging Implications.** *AJR. American journal of roentgenology*
Boutin, R. D., Yao, L., Canter, R. J., Lenchik, L.
2015; 205 (3): W255-66

- **The Notch of Harty (Pseudodeflect of the Tibial Plafond): Frequency and Characteristic Findings at MRI of the Ankle.** *AJR. American journal of roentgenology*
Boutin, R. D., Chang, J., Bateni, C., Giza, E., Wisner, E. R., Yao, L.
2015; 205 (2): 358-63
- **Magnetic resonance imaging of the postoperative meniscus: resection, repair, and replacement.** *Magnetic resonance imaging clinics of North America*
Boutin, R. D., Fritz, R. C., Marder, R. A.
2014; 22 (4): 517-55
- **Axial scan orientation and the tibial tubercle-trochlear groove distance: error analysis and correction.** *AJR. American journal of roentgenology*
Yao, L., Gai, N., Boutin, R. D.
2014; 202 (6): 1291-6
- **Erdheim-Chester disease: an unusual presentation of an uncommon disease.** *Skeletal radiology*
Bindra, J., Lam, A., Lamba, R., VanNess, M., Boutin, R. D.
2014; 43 (6): 835-40
- **Phase I trial of neoadjuvant conformal radiotherapy plus sorafenib for patients with locally advanced soft tissue sarcoma of the extremity.** *Annals of surgical oncology*
Canter, R. J., Borys, D., Olusanya, A., Li, C. S., Lee, L. Y., Boutin, R. D., Christensen, S. D., Tamurian, R. M., Monjazebe, A. M.
2014; 21 (5): 1616-23
- **Real-time magnetic resonance imaging (MRI) during active wrist motion--initial observations.** *PloS one*
Boutin, R. D., Buonocore, M. H., Immerman, I., Ashwell, Z., Sonico, G. J., Szabo, R. M., Chaudhari, A. J.
2013; 8 (12): e84004
- **MRI of snow skiing and snowboarding injuries.** *Seminars in musculoskeletal radiology*
Boutin, R. D., Fritz, R. C.
2005; 9 (4): 360-78
- **Presumptive subarticular stress reactions of the knee: MRI detection and association with meniscal tear patterns.** *Skeletal radiology*
Yao, L., Stanczak, J., Boutin, R. D.
2004; 33 (5): 260-4
- **MR imaging of sports-related hip disorders.** *Magnetic resonance imaging clinics of North America*
Boutin, R. D., Newman, J. S.
2003; 11 (2): 255-81
- **MR imaging features of osteochondritis dissecans of the femoral sulcus.** *AJR. American journal of roentgenology*
Boutin, R. D., Januario, J. A., Newberg, A. H., Gundry, C. R., Newman, J. S.
2003; 180 (3): 641-5
- **Spinous process fractures associated with Baastrup disease.** *Clinical imaging*
Pinto, P. S., Boutin, R. D., Resnick, D.
2002; 28 (3): 219-22
- **Imaging of sports-related muscle injuries.** *Radiologic clinics of North America*
Boutin, R. D., Fritz, R. C., Steinbach, L. S.
2002; 40 (2): 333-62, vii
- **Postoperative magnetic resonance imaging of articular cartilage repair.** *Seminars in musculoskeletal radiology*
Alparslan, L., Winalski, C. S., Boutin, R. D., Minas, T.
2001; 5 (4): 345-63
- **Magnetic resonance imaging of the peripheral nervous system.** *Physical medicine and rehabilitation clinics of North America*
Fritz, R. C., Boutin, R. D.
2001; 12 (2): 399-432
- **Shell osteochondral allografts of the knee: comparison of mr imaging findings and immunologic responses.** *Radiology*
Sirlin, C. B., Brossmann, J., Boutin, R. D., Pathria, M. N., Convery, F. R., Bugbee, W., Deutsch, R., Lebeck, L. K., Resnick, D.

2001; 219 (1): 35-43

- **Protocol issues for delayed Gd(DTPA)(2-)-enhanced MRI (dGEMRIC) for clinical evaluation of articular cartilage.** *Magnetic resonance in medicine*
Burststein, D., Velyvis, J., Scott, K. T., Stock, K. W., Kim, Y. J., Jaramillo, D., Boutin, R. D., Gray, M. L.
2001; 45 (1): 36-41
- **Polydioxanone biodegradable pins in the knee: MR imaging.** *AJR. American journal of roentgenology*
Sirlin, C. B., Boutin, R. D., Brossmann, J., Pathria, M. N., Convery, F. R., Bugbee, W., Resnick, D.
2001; 176 (1): 83-90
- **Pulley system in the fingers: normal anatomy and simulated lesions in cadavers at MR imaging, CT, and US with and without contrast material distention of the tendon sheath.** *Radiology*
Hauger, O., Chung, C. B., Lektrakul, N., Botte, M. J., Trudell, D., Boutin, R. D., Resnick, D.
2000; 217 (1): 201-12
- **Characterization of the "red zone" of knee meniscus: MR imaging and histologic correlation.** *Radiology*
Hauger, O., Frank, L. R., Boutin, R. D., Lektrakul, N., Chung, C. B., Haghighi, P., Resnick, D.
2000; 217 (1): 193-200
- **MR imaging of degenerative diseases in the cervical spine.** *Magnetic resonance imaging clinics of North America*
Boutin, R. D., Steinbach, L. S., Finnesey, K.
2000; 8 (3): 471-90
- **Calcium pyrophosphate dihydrate crystal deposition in and around the atlantoaxial joint: association with type 2 odontoid fractures in nine patients.** *Radiology*
Kakitsubata, Y., Boutin, R. D., Theodorou, D. J., Kerr, R. M., Steinbach, L. S., Chan, K. K., Pathria, M. N., Haghighi, P., Resnick, D.
2000; 216 (1): 213-9
- **Stress fractures of the lateral metatarsal bones in metatarsus adductus foot deformity: a previously unrecognized association.** *Skeletal radiology*
Theodorou, D. J., Theodorou, S. J., Boutin, R. D., Chung, C., Fliszar, E., Kakitsubata, Y., Resnick, D.
1999; 28 (12): 679-84
- **Evaluation of the postoperative meniscus of the knee: a study comparing conventional arthrography, conventional MR imaging, MR arthrography with iodinated contrast material, and MR arthrography with gadolinium-based contrast material** *SKELETAL RADIOLOGY*
Sciulli, R. L., Boutin, R. D., Brown, R. R., Nguyen, K. D., Muhle, C., Lektrakul, N., Pathria, M. N., Pedowitz, R., Resnick, D.
1999; 28 (9): 508-514
- **Iliotibial band friction syndrome: MR imaging findings in 16 patients and MR arthrographic study of six cadaveric knees** *RADIOLOGY*
Muhle, C., Ahn, J. M., Yeh, L. R., Bergman, G. A., Boutin, R. D., Schweitzer, M., Jacobson, J. A., Haghighi, P., Trudell, D. J., Resnick, D.
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PRESENTATIONS

- Knee MRI: Misses that Matter - National Diagnostic Imaging Symposium (12/5/2021 - 12/5/2021)
- Opportunistic Assessment of Biological Aging: Comparing 2D vs. 3D Metrics for Muscle and Adipose Tissue - RSNA 2021
- Elbow MRI: Pearls and Pitfalls - RSNA 2021 (12/2/2021 - 12/2/2021)
- RSNA Image Interpretation Session - Arie Crown Theater - Radiological Society of North America (December 1, 2019)
- Linscheid-Dobyns Excellence in Wrist Instructional Course: Advanced Imaging Role in Decision Making - American Society for Surgery of the Hand (9/30/2021)
- Displaced Flap Tears of the TFCC Diagnosed by Prospective Study of 3,411 Wrist MRI Exams: Prevalence, Flap Location, and the "Comma Sign" - Society of Skeletal Radiology (3/13/2021 - 3/17/2021)
- ACR Accreditation Results Using CT Phantoms: Implications for Opportunistic CT Screening of Sarcopenia, Adiposity, and Emphysema - American Roentgen Ray Society (ARRS) (4/18/2021 - 4/22/2021)
- The ABCs of qCT: Transforming the Everyday Practice of Radiology - UCLA Department of Radiology Grand Rounds (May 14, 2020)
- Musculoskeletal MRI: Research and Clinical Applications - International Congress on Magnetic Resonance (March 27, 2020)
- Advanced Muscle Imaging: State of the Art - Radiological Society of North America (December 1, 2019)
- Role of Body Composition Imaging in Healthy Aging - Radiological Society of North America (12/6/2019)
- ACR Database Evaluation of 67,392 Accreditation Examinations: Implications for Opportunistic CT Diagnosis of Osteoporosis - Radiological Society of North America (December 2, 2019)
- MRI of the Wrist; MRI of the Elbow - IDKD South America (10/31/2019 - 11/3/2019)
- Soft-tissue Masses: Practical Pearls & Pitfalls - National Diagnostic Imaging Symposium (12/5/2021 - 12/5/2021)
- MRI of the Pelvis and Groin - IDKD Davos (3/27/2022 - 3/31/2022)