

## Education/Training

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- **UCSF Musculoskeletal Imaging Fellowship** 07/2024 – 06/2025
- **UCSF Diagnostic Radiology Residency** 07/2020 – 06/2024
  - *NIH T32 Research Fellowship in Biomedical Imaging*
- **UCSF Fresno Internal Medicine Residency** 06/2019 – 06/2020
  - Preliminary Internal Medicine Year
- **UCSF School of Medicine** 09/2014 – 05/2019
  - *MD with Distinction in the Clinical and Translational Research Pathway*
- **UCSF Graduate Division** 06/2017 – 06/2018
  - *Certificate in Advanced Training in Clinical Research (ATCR, funded by NIH TL1 TR001871)*
- **California State University Bakersfield** 09/2009 – 05/2013
  - BS Chemistry, *Summa cum laude*

## Peer Reviewed Publications

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1. Manatrakul R, Loeffler M, Bharadwaj UU, et al. Clinical and radiologic outcomes in patients with meniscal root tears. *BMC Musculoskelet Disord.* 2024;25(1):232. Published 2024 Mar 23. doi:10.1186/s12891-024-07359-4
2. McGill KC, **Baal JD**, Bucknor MD. Update on musculoskeletal applications of magnetic resonance-guided focused ultrasound. *Skeletal Radiol.* Published online February 16, 2024. doi:10.1007/s00256-024-04620-8
3. **Baal JD**, Yoon D, Patel RP, Chin CT, Shah VN. Advanced Imaging of the Peripheral Nerves, From the *AJR* "How We Do It" Special Series. *AJR Am J Roentgenol.* Published online February 14, 2024. doi:10.2214/AJR.24.30826
4. Dux DM, **Baal JD**, Bitton R, et al. MR-guided focused ultrasound therapy of extra-abdominal desmoid tumors: a multicenter retrospective study of 105 patients. *Eur Radiol.* 2024;34(2):1137-1145.
5. **Baal JD**, Cecil KL, Patel R, O'Brien M, McGill K, Link TM. Imaging of overuse injuries of the hip. *Radiol Clin North Am.* 2023;61(2):191-201.
6. Chen WC, Lafreniere M, Phuong C, Liu SJ, **Baal JD**, Lometti M, Morin O, et al. Resection with intraoperative cesium-131 brachytherapy as salvage therapy for recurrent brain tumors. *J Neurosurg.* 2022 Jan 21:1-7.
7. Bucknor MD, **Baal JD**, McGill KC, Infosino A, Link TM. Musculoskeletal Applications of Magnetic Resonance-Guided Focused Ultrasound. *Semin Musculoskelet Radiol.* 2021 Dec;25(6):725-734.
8. **Baal JD**, Chen WC, Baal U, Wagle S, Baal JH, Link TM, Bucknor MD. Efficacy and safety of magnetic resonance-guided focused ultrasound for the treatment of painful bone metastases: a systematic review and meta-analysis. *Skeletal Radiol.* 2021 Dec;50(12):2459-2469.
9. Chen WC, Baal UH, **Baal JD**, Pai JS, Boreta L, Braunstein SE, Raleigh DR. Efficacy and Safety of Stereotactic Radiosurgery for Brainstem Metastases: A Systematic Review and Meta-analysis. *JAMA Oncol.* 2021 Jul 1;7(7):1033-1040.
10. Pan S, **Baal JD**, Chen WC, et al. Image-guided percutaneous ablation of adrenal metastases: a meta-analysis of efficacy and safety. *J Vasc Interv Radiol.* 2021;32(4):527-535.e1.
11. Kanthawang T, Lee A, **Baal JD**, Joseph GB, Vail T, Link TM, Patel R. Predicting outcomes in patients undergoing intra-articular corticosteroid hip injections. *Skeletal Radiol.* 2021 Jul;50(7):1347-1357.
12. Ashmeik W, **Baal JD**, Foreman SC, Joseph GB, Bahroos E, Han M, Krug R, Link TM. Investigating the Association of Metabolic Biomarkers with Knee Cartilage Composition and Structural Abnormalities using MRI: A pilot study. *Cartilage.* August 2020.
13. Pan S, Chen WC, **Baal JD**, Sugrue LP. Neuroradiological findings in mild and severe COVID-19 infection. *Academic Radiology.* August 2020.
14. Chen WC, **Baal JD**, Baal U, et al. Stereotactic Body Radiation Therapy of Adrenal Metastases: A Pooled Meta-Analysis and Systematic Review of 39 Studies with 1006 Patients. *Int J Radiat Oncol Biol Phys.* January 2020.
15. Foreman SC, Ashmeik W, **Baal JD**, et al. Patients with Type 2 Diabetes Exhibit a More Mineralized Deep Cartilage Layer Compared with Nondiabetic Controls: A Pilot Study. *Cartilage.* August 2019.
16. **Baal JD**, Chen WC, Solomon DA, Pai JS, Lucas CH, Hara JH, Oberheim Bush NE, McDermott MW, Raleigh DR\*\*, Villanueva-Meyer JE\*\*. Preoperative MR imaging to differentiate chordoid meningiomas from other meningioma histologic subtypes. *American Journal of Neuroradiology.* February 2019.
17. **Baal JD**, Pai JS, Chen WC, Joseph GB, O'Donnell RJ, Link TM. Factors Associated with Osteoid Osteoma

- Recurrence after CT-Guided Radiofrequency Ablation. *J Vasc Interv Radiol*. 2019;30(5):744-751.
18. Lauer A, **Baal JD**, Mendes SD, et al. Valley Fever on the Rise-Searching for Microbial Antagonists to the Fungal Pathogen. *Microorganisms*. 2019;7(2).
  19. **Baal JD**, Horvai AE, Link TM. Progression of dialysis-related amyloidoma towards pathologic fracture. *Skeletal Radiol*. 2019;48(2):301-306.
  20. Chen WC, Magill ST, Englot DJ, **Baal JD**, Wagle S, Rick JW, McDermott MW. Factors Associated with Pre- and Postoperative Seizures in 1033 Patients Undergoing Supratentorial Meningioma Resection. *Neurosurgery*. 2017.
    - *Awarded 2017-2018 "Tumor Paper of the Year" by the Congress of Neurological Surgeons*
  21. Lauer A, Talamantes J, Castañón olivares LR, Medina LJ, **Baal JD**, Casimiro K, Shroff N, Emery KW. Combining forces--the use of Landsat TM satellite imagery, soil parameter information, and multiplex PCR to detect *Coccidioides immitis* growth sites in Kern County, California. *PLoS ONE*. 2014.
  22. Walsh P, Thornton J, Asato J, Walker N, McCoy G, **Baal J**, Baal J, Mendoza N, Banimahd F. Approaches to describing inter-rater reliability of the overall clinical appearance of febrile infants and toddlers in the emergency department. *PeerJ*. 2014.
  23. Lauer A, **Baal JDH**, Baal JCH, Verma M, Chen JM. 2011. Detection of *Coccidioides immitis* in Kern County, CA, by multiplex PCR. *Mycologia*. July 2011.

#### SUBMITTED MANUSCRIPTS:

**Baal JD**, Ghimire P, Wagle S, Lewis M, Yoon D, Biswal S. Clinical Impact of Peripheral Pain Generator Identification with Sigma-1 Receptor PET/MRI in Complex Regional Pain Syndrome: A Prospective Trial. *Submitted to PAIN on May 2024*.

#### Book Chapters

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1. Kim YJ, **Baal JD**, Lowery B, Conrad MB (2023). Closure of Pulmonary Arteriovenous Fistulae. In: Mahadevan, V.S. (eds) *Interventions in Adult Congenital Heart Disease*. Springer, Cham.

#### Abstracts/Posters/Presentations

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1. **Baal JD**, Ghimire P, Wagle S, Lewis M, Yoon D, Biswal S. Clinical Impact of Sigma-1 Receptor PET/MRI on Complex Regional Pain Syndrome Management. Oral presentation at: Society of Nuclear Medicine and Molecular Imaging annual meeting; June 2024; Toronto, Canada.
2. **Baal JD**, Ghimire P, Wagle S, Lewis M, Yoon D, Biswal S. Prospective Trial Assessing the Impact of Sigma-1 Receptor PET/MRI on the Management of Complex Regional Pain Syndrome. Presentation at: European Congress of Radiology; February 2024; Vienna, Austria.
3. Dux D, **Baal JD**, Bitton R, et al. A 10-year multi-center experience of MR-guided high intensity focused ultrasound (MRgFUS) in 105 patients with extra-abdominal desmoid tumors. Oral presentation at: International Symposium on Focused Ultrasound. 2022 October; Virtual symposium.
4. Chen WC, **Baal JD**, Lin H, Upadhya T, et al. Abdominal Aorto-Iliac Calcification Burden Assessment Using Deep Convolutional Neural Networks for Prediction of Cardiovascular Risk Among Prostate Cancer Patients Undergoing Stereotactic Body Radiotherapy (SBRT). Oral presentation at ASTRO annual meeting; Oct 2022; San Antonio, TX.
5. Lin H, Chen WC, **Baal JD**, Upadhya T, et al. Building Deep Convolutional Neural Networks for Abdominal Aorta-iliac Calcification Assessment and Cardiovascular Risk Prediction of Prostate Stereotactic Radiotherapy (SBRT) Patients. Poster presentation at AAPM Annual Meeting; July 2022; Washington, DC.
6. **Baal JD**, Cha S. Imaging features of Balamuthia Amebic Encephalitis. Educational Exhibit at ASNR Annual Meeting. May 2022; New York, NY.
7. Pan S, Chen WC, **Baal JD**, Sugrue L. Neuroradiological findings in mild and severe COVID-19 infection. Poster presentation at: ARRS Annual Meeting. April 2021; Virtual symposium.
8. **Baal JD**, Chen WC, Baal U, Wagle S, et al. Magnetic Resonance-guided Focused Ultrasound for Painful Bone Metastases: A pooled meta-analysis of 33 studies with 1082 patients. Oral presentation at: International Symposium on Focused Ultrasound. 2020 November 8 – 13; Virtual symposium.
9. Chen WC, **Baal JD**, Baal U, et al. Stereotactic Body Radiation Therapy of Adrenal Metastases: a pooled meta-analysis of with 1006 Patients. Accepted to ARS. May 2020; Scottsdale, AZ.
10. Ashmeik W, **Baal JD**, Foreman S, Joseph GB, Bahroos E, Krug R, Hung M, Link TM. Investigating the association of serum lipid biomarkers with biochemical cartilage composition using quantitative MRI – a pilot study. Poster presentation at: OARSI; April 2019; Toronto, CAN.
11. Foreman SC, Ashmeik W, **Baal JD**, et al. Patients with Type 2 Diabetes Exhibit a More Mineralized Deep Cartilage Layer Compared with Nondiabetic Controls: A Pilot Study. Poster presentation at: OARSI; April 2019; Toronto, CAN.

12. Chen WC, Lucas C, **Baal JD**, Magill ST, Wu A, Hara JH, Morin O, Gopinath C, Braunstein SE, Oberheim Bush NA, McDermott MW, Perry A, Solomon D, Villanueva-Meyer JE, Raleigh DR. "Radiologic features are prognostic for clinical outcomes of chordoid meningioma." Accepted to SNO; 2018 November 15-18; New Orleans, LA.
13. **Baal JD**, Neumann J, Guimaraes JB, Joseph GB, Nevitt MN, McCulloch CE, Link TM, Heilmeier U. "Structural Abnormalities on Knee MRI Associated with Normal Aging over 6 Years: Data from the Osteoarthritis Initiative." Poster presentation at: RSNA; 2018 November 25-30; Chicago, IL.
14. **Baal JD**, Westphalen AC. MR Spectroscopic Imaging of Prostate Cancer. SAR DFP Teaching Case; August 2018; [https://cdn.ymaws.com/www.abdominalradiology.org/resource/resmgr/edu\\_dfpprostate/pdfpteachingfiles/PTC.08272018.pdf](https://cdn.ymaws.com/www.abdominalradiology.org/resource/resmgr/edu_dfpprostate/pdfpteachingfiles/PTC.08272018.pdf)
15. **Baal JD**, Pai JS, Chen WC, Joseph GB, Link TM. "CT-guided Radiofrequency Ablation of Osteoid Osteomas: Factors associated with therapeutic outcome." Poster presentation at: ESSR Congress; 2018 June 13 – 16; Amsterdam, Netherlands.
16. **Baal JD**, Foreman S, Joseph GB, Link TM. "Investigating the Association Between Type 2 Diabetes and Early Knee Cartilage Degeneration via Quantitative MRI – A Pilot Study on the Metabolic Subtype of Osteoarthritis."
  - a. Poster presentation: Translational Science; 2018 April 19 – 21; Washington D.C.
  - b. Poster presentation: UCSF Pathways to Discovery Inquiry Symposium; 2018 May 2; San Francisco, CA.
17. **Baal JD**, Neumann J, Joseph GB, Lorenzo A, Tang K, Nevitt MN, McCulloch CE, Link TM, Heilmeier U. "In vivo Assessment of Normal Knee Cartilage Aging in Humans via T2 MRI Relaxation Time Quantification – A 6-Year Longitudinal Study from the Osteoarthritis Initiative." Poster presentation at: OARSI; 2018 April 26 -29; Liverpool, UK.
18. **Baal JD**, Neumann J, Lorenzo A, Tang K, Nevitt MN, McCulloch CE, Link TM, Heileier U. "In vivo Assessment of Normal Knee Cartilage Aging in Humans via T2 MRI Relaxation Time Quantification – A 6-Year Longitudinal Study from the Osteoarthritis Initiative." Poster presented at: UCSF Beyond Boundaries Symposium; 2017 September 12 – 13; San Francisco, CA.
19. Kluijfhout WP, **Baal JD**, Beninato T, Drake FT, Wagle S, Shen WT, Suh I, Duh QY, Gosnell JE. "CEA should not routinely be used for detection of a first recurrence in patients with MTC." Poster presented at: American Association of Endocrine Surgeons; 2016 April 10 – 12; Baltimore, MD.
20. **Baal JD**, Kluijfhout WP, Wagle S, Duh QY, Gosnell JE. "Optimal Biochemical Surveillance for Patients with Medullary Thyroid Cancer." Poster presented at: UCSF RAPTr Student Research Symposium; 2016 January 29; San Francisco, CA.
21. **Baal JD**, Guibert G, Lauer A. "Searching for microbial antagonists to *Coccidioides immitis*, the Valley Fever fungus." Oral presentation at: Annual Coccidioidomycosis Study Group; 2013 April 6; Pasadena, CA.

#### SUBMITTED ABSTRACTS:

Han M, Wang P, **Baal JD**, Fung MM, et al. Clinical Utility of Deep-Learning Reconstructed Zero Echo Time MRI for Assessing Cervical Spine Degeneration in Comparison to CT. *Submitted to RSNA on May 2024.*

### Editorial Service

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- Consultant reviewer – *Journal of Vascular and Interventional Radiology*

### Teaching/Mentorship Experience

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- UCSF Radiology Core Curriculum Committee 12/2022 – 06/2023
  - Committee that organized lectures and curriculum to help senior UCSF radiology residents prepare for the ABR Core examination.
- Future Physicians Mentorship Program, Co-Founder and Coordinator 05/2017 – 05/2019
  - An educational outreach program aimed at providing academic guidance, mentorship and networking opportunities for pre-medical undergraduate students in various universities that lack access to medical students/medical schools.
- Quiziology App 11/2017 – 05/2019
  - Helped develop a medical imaging based quiz application that is designed to help medical professionals and/or students learn anatomical structures on cross-sectional imaging.  
App: <https://itunes.apple.com/us/app/quiziology/id1293241164?mt=8>
- UCSF Pre-Health Undergraduate Program (PUP) Mentor 06/2017 – 08/2017

- Mentored underrepresented pre-health students on the basics of clinical/translational research
- Kaiser Medical Scholars Program, Mentor 08/2016 – 09/2016
  - Taught students at Jesse Bethel High School (Vallejo, CA) about basic medical topics and provided mentorship regarding the pre-medical journey.

## **Health-Related Professional Leadership & Service**

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- Mabuhay Health Center, Volunteer 11/2014 – 02/2016
  - Saw patients as a medical student in a volunteer-run free clinic serving the urban underserved Filipino community of San Francisco's South of Market (SoMa) district.
- Summer Medical & Dental Enrichment Program (SMDEP) 06/2010 – 08/2010
  - Spent a summer at the David Geffen School of Medicine at UCLA to cultivate a better understanding of the country's current health disparities.

## **Awards & Scholarships**

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- 2024 SNMMI Correlative Imaging Council Walter Wolf Young Investigator Award
- 2023 – 2024 NIH T32 Grant (*Grant Number 2T32EB001631-19*)
  - Funded year-long research fellowship in radiology & biomedical imaging.
- 2021 Society of Skeletal Radiology Scholar
- 2018 RSNA Student Travel Award
- 2018 UCSF Pathways Travel Award
- 2018 UCSF Graduate Division Travel Award
- 2017 – 2018 UCSF School of Medicine Year-long Research Grant
  - Funded year-long research with bi-monthly works in progress meetings, journal clubs and formal poster and oral presentations at annual institutional symposium.
- 2017 – 2018 NIH TL1 Grant (*Grant Number TL1 TR001871*)
  - Funded the year-long Advanced Training in Clinical Research (ATCR) program – A rigorous curriculum that encompasses epidemiology, biostatistics and research methods.
- 2016 Philippine Medical Society of Northern California Scholarship
- 2015 UCSF Dean's Summer Research Fellowship

## **Professional Associations**

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- Radiological Society of North America 09/2015 – Present
- American Roentgen Ray Society 01/2018 – Present
- American College of Radiology 01/2018 – Present

## **Interests, Hobbies & Skills**

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- Fluent in Two Filipino Dialects (Tagalog & Bicolano)
- Proficient with STATA
- Basketball