

## RESEARCH SUMMARY ACADEMIC YEAR 2023-2024

**July 2023 to June 2024**

**\*Radiology Resident or Fellow**

**^Research Fellow**

**+Faculty**

### **PUBLICATIONS**

Gamero Kubota P, +Molvar C, +Wagner R, +Allam E, +Halama J, +James JR. Implications of lung shunt fraction calculation discrepancy in Yttrium-90 radioembolization treatment from 2D planar vs 3D single photon emission CT imaging. *BJR Case Rep.* 2024 May 28;10(3):uaae016. doi: 10.1093/bjrcr/uaae016. PMID: 38854889; PMCID: PMC11162746.

Bolouri M, Veras P, Gupta S, \*Zayats Y, +Allam E. Combined paraganglioma and IgG4-related retroperitoneal fibrosis. *Radiol Case Rep.* 2024 May 17;19(8):3240-3243. doi: 10.1016/j.radcr.2024.04.065. PMID: 38800075; PMCID: PMC11126874.

^Mosenthal M, Adams W, Cotler S, Ding X, +Borge M, +Malamis A, Lee D, Thomas T, Jawahar A, Amin P, +Molvar C. Locoregional Therapies for Hepatocellular Carcinoma prior to Liver Transplant: Comparative Pathologic Necrosis, Radiologic Response, and Recurrence. *J Vasc Interv Radiol.* 2024 Apr;35(4):506-514. doi: 10.1016/j.jvir.2023.12.009. Epub 2023 Dec 18. PMID: 38123127.

+Allam E, +Lim-Dunham JE, Kui A, +Lomasney L. A curriculum preparing tomorrow's radiology educators: A long-term evaluation of effectiveness. *Journal of Contemporary Medical Education* 2024 April; 14(2):1-7.

Tie X, Shin M, Pirasteh A, +Ibrahim N, Huemann Z, Castellino SM, Kelly KM, Garrett J, Hu J, Cho SY, Bradshaw TJ. Personalized Impression Generation for PET Reports Using Large Language Models. *J Imaging Inform Med.* 2024 Apr;37(2):471-488. doi: 10.1007/s10278-024-00985-3. Epub 2024 Feb 2. PMID: 38308070; PMCID: PMC11031527.

Tie X, Shin M, Pirasteh A, +Ibrahim N, Huemann Z, Castellino SM, Kelly KM, Garrett J, Hu J, Cho SY, Bradshaw TJ. Automatic Personalized Impression Generation for PET Reports Using Large Language Models. *ArXiv [Preprint].* 2023 Oct 17:arXiv:2309.10066v2. Update in: *J Imaging Inform Med.* 2024 Apr;37(2):471-488. doi: 10.1007/s10278-024-00985-3. PMID: 37904738; PMCID: PMC10614982

Ross DH, Gomez K, Harmon G, Mysz ML, +Shea SM, +Goldberg A, Liotta M, Potkul R, Winder A, Lee B, Jackson J, Roeske JC, Small W Jr, Harkenrider MM. Evaluating outcomes and toxicities for a newly implemented MRI-based brachytherapy program for cervical cancer. *Gynecol Oncol.* 2024 Mar 15;183:33-38. doi: 10.1016/j.ygyno.2024.03.003. Online ahead of print. PMID: 38492475.

Patel HD, Halgrimson WR, Sweigert SE, +Shea SM, Turk TMT, Quek ML, Gorbonos A, Flanigan RC, +Goldberg A, Gupta GN. Variability in prostate cancer detection among radiologists and urologists using MRI fusion biopsy. *BJUI Compass.* 2024 Mar;5(2):304-312. doi: 10.1002/bco2.294. eCollection 2024 Mar. PMID: 38371209; PMCID: PMC10869647.

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+Chen JF. Anisotropy of trabecula bone from ultra-distal radius digital X-ray imaging: effects on bone mineral density and age. *Open Journal of Radiology*. 2024; 14:14-23. DOI:10.4236/ojrad.2024.141002.

Solanki AA, Yoo RK, Adams W, Davicioni E, Mysz ML, +Shea S, Gupta GN, Showalter T, Garant A, Hentz C, Farooq A, Baldea K, Small W, Harkenrider MM. F-SHARP: a Phase I/II trial of focal salvage high-dose-rate brachytherapy for Radiorecurrent prostate cancer. *BJU Int*. 2024 Feb;133(2):188-196. doi: 10.1111/bju.16150. Epub 2023 Sep 15. PMID: 37562825.

\*El-Baba RM, Messerly C, Tahawi A, Carter KR. Complications of Anorexia Nervosa. *Applied Radiology*. January/February 2024;. [https://cdn.agilitycms.com/applied-radiology/PDFs/Issues/AR\\_01-24\\_EI-BabaRC.pdf](https://cdn.agilitycms.com/applied-radiology/PDFs/Issues/AR_01-24_EI-BabaRC.pdf)

Huang S, +Chen JF. Anti-interference study on radiographic bone age estimation based on an artificial intelligence Model. *Open Journal of Radiology*. 2023; 13:232-245. DOI:10.4236/ojrad.2023.134024.

\*DiGrazia GN, \*Aktan SL, \*Sechrist EM, Rehn J, Joyce C, +Siddiqui MH. CT Findings in Laryngeal Trauma and the Clinical Implications. *Clin Neuroradiol*. 2023 Dec;33(4):1123-1131. doi: 10.1007/s00062-023-01323-w. Epub 2023 Jul 6. PMID: 37410170.

Kazmer A, \*El-Baba R, Bontosis A, Borys E, +Siddiqui M. Blastomycosis of the Central Nervous System. *Journal of Radiology Case Reports* 2023 Dec; 17(12):39-47. DOI:10.3941/jrcr.v17i12.5167

\*Fang M, Wasilewski G, Kui A, Dwan B, \*Choudhari R, +Alexander A, +Allam E. Heterotopic ossification after severe COVID-19 pneumonia: Radiological findings in the current literature. *J Contemp Med Edu*. 2023 Oct; 13(9):1-10.

Patel N, \*Mullen S, McGowan B, Thomas A, ^Khokhar Z, ^Ploussard B, +Allam E. Utility of the Butterfly iQ ultrasound for resident and medical student education. *J Contemp Med Edu*. 2023 Aug; 13(8):1-4.

+Chen JF, +Bian J, ^Khokhar Z, ^Belal M, +Allam E. Image-based ultrasound speed estimation: phantoms and human livers study. *Open J Radiol*. 2023;13(2):101-112. doi: 10.4236/ojrad.2023.132011.

Napierkowski E, \*Lee J, \*Thapa N, Brown E, Salama Y, +Allam E. Trunnionosis and prosthesis dissociation after total hip arthroplasty. *Radiol Case Rep*. 2024 Jan 20;19(4):1506-1508. doi: 10.1016/j.radcr.2024.01.015. PMID: 38283736; PMCID: PMC10810739.

Hekman L, Napierkowski E, Hartman NC, Ellis JL, +Wagner RW, +Bova, DB, Picken MM, Flanigan RC. Incidental discovery of hepatocellular carcinoma on 18F-PSMA PET CT performed for prostate cancer reassessment. *Case Reports in Surgery*, vol. 2023 (Dec.13, 2023), <https://doi.org/10.1155/2023/1458175>.

Bhatnagar C, ^Xu H, Pasion A, \*Shaikh N, Shekhar M, +Allam E. Migration of the os peroneum: an enigmatic phenomenon explored through radiological perspectives. *Radiol Case*

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Rep. 2023 Nov 27;19(2):675-679. doi: 10.1016/j.radcr.2023.11.005. PMID: 38111565; PMCID: PMC10726338.

Saripalli AL, Lee B, Adams W, Bhandare N, Venkatesulu BP, Yoo RK, Price J, Harmon GA, Block AM, Friedman N, Harkenrider MM, Major EJ, Small W, +Wagner RH, Welsh JS, Solanki AA. Multi-institutional Development and Validation of Contouring Guidelines for Para-aortic Elective Nodal Irradiation in Prostate Cancer Based on Patterns of Involvement on Targeted Molecular Imaging Positron Emission Tomography/Computed Tomography. *International Journal of Radiation Oncology\*Biology\*Physics*, Vol 117; Nov 2023; 630-640. ISSN 0360-3016, <https://doi.org/10.1016/j.ijrobp.2023.05.017>.

Serdysnki KC, Kaplan S, \*Oraham A, \*Mirgati S, Akili F, +Allam E. Trunnionosis in total hip arthroplasty with accompanying amyloidosis and calcium pyrophosphate deposition disease. *Radiol Case Rep*. 2023 Oct 31;19(1):186-189. doi: 10.1016/j.radcr.2023.10.002. PMID: 38028302; PMCID: PMC10630768.

\*Ong CJ, Mourad T, Weiss P, \*Martin R, Palaparty G, +Allam E. Sternal stress fracture presenting as acute chest pain. *Radiol Case Rep*. 2023 Oct 7;18(12):4435-4438. doi: 10.1016/j.radcr.2023.09.029. PMID: 37823050; PMCID: PMC10563007.

Prasad Venkatesulu B, Ness E, Ross D, Saripalli AL, Abood G, Badami A, Cotler S, Dhanarajan A, Knab LM, Lee B, +Molvar C, Sethi A, Small W Jr, Refaat T. MRI-guided Real-time Online Gated Stereotactic Body Radiation Therapy for Liver Tumors. *Am J Clin Oncol*. 2023 Sep 14. doi: 10.1097/COC.0000000000001042. Epub ahead of print. PMID: 37708212.

Veras P, \*Gidley P, Patel NR, Bhatnagar C, \*El-Baba R, +Allam E. Intraprosthetic dislocation of dual-mobility total hip arthroplasty implant. *Radiol Case Rep*. 2023 Aug 30;18(11):3964-3967. doi: 10.1016/j.radcr.2023.08.070. PMID: 37680661; PMCID: PMC10480439.

Kopscik M, Crisman J, +Lomasney L, Smith S, Jadidi S. Sports Hernias: A comprehensive Review for Clinicians. August 2023. *Cureus* 15(8): e43283. doi:10.7759/cureus.43283

Larson M, \*Lovrec P, Sadowski EA, Pirasteh A. PET/MRI in Gynecologic Malignancy. *Radiol Clin North Am*. 2023 Jul;61(4):713-723. doi: 10.1016/j.rcl.2023.02.013. PMID: 37169433.

Kang H, Podgorsak AR, Venkatesulu BP, Saripalli AL, Chou B, Solanki AA, Harkenrider M, +Shea S, Roeske JC, Abuhamad M. Prostate segmentation accuracy using synthetic MRI for high-dose-rate prostate brachytherapy treatment planning. *Phys Med Biol*. 2023 Jul 28;68(15). doi: 10.1088/1361-6560/ace674. PMID: 37433302.

### **ABSTRACTS, POSTER, EXHIBITS AND ELECTRONIC PRESENTATIONS**

Nemr C, +Allam E. Malignant melanoma of the toe. Case study, Radiopaedia.org (Published on 26 Jun 2024) <https://doi.org/10.53347/rID-191018> (**Selected as Upcoming Case of the Day**)

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Shekhar M, Kundu A, +Allam E. Coccidiomycosis of the ischium. Case study, Radiopaedia.org (Published on 9 Jun 2024) <https://doi.org/10.53347/rID-189484>

Kundu A, Shekhar M, +Allam E. Pneumolipohemarthrosis. Case study, Radiopaedia.org (Published on 9 Jun 2024) <https://doi.org/10.53347/rID-190377>

Shekhar M, Kundu A, +Allam E. Blastomycosis of the calcaneus. Case study, Radiopaedia.org (Published on 7 Jun 2024) <https://doi.org/10.53347/rID-189481> **(Selected as Upcoming Case of the Day)**

Illimoottil M, Dwan B, +Allam E. Dropped gallstone. Case study, Radiopaedia.org (Published on 5 Jun 2024) <https://doi.org/10.53347/rID-190177>

Dwan B, +Allam E. Scapular osteochondromas with large scapulothoracic bursitis. Case study, Radiopaedia.org (Published on 27 May 2024) <https://doi.org/10.53347/rID-189966> **(Selected as Upcoming Case of the Day)**

Fernando M, +Allam E. Pudendal nerve MRI (male). Case study, Radiopaedia.org (Published on 16 May 2024) <https://doi.org/10.53347/rID-188742>

Shekhar M, +Allam E. Femoral nerve schwannoma - pelvic. Case study, Radiopaedia.org (Published on 14 May 2024) <https://doi.org/10.53347/rID-188931> **(Selected as Upcoming Case of the Day)**

Kui A, +Allam E. Post-herniorrhaphy neuralgia. Case study, Radiopaedia.org (Published on 6 May 2024) <https://doi.org/10.53347/rID-188652>

Weiss P, Barrington A, Kaplan S, Zhou C, +Allam E. Sternal stress fractures presenting as acute chest pain. Poster presentation at Kenneth Suarez Research Day. Midwestern University, Chicago, IL. May 3, 2024.

Nemr C, ^Patil S, Bellissimo P, +Allam E. Paget's disease of calcaneus. Poster presentation at Kenneth Suarez Research Day. Midwestern University, Chicago, IL. May 3, 2024.

Nemr C, ^Patil S, Shekhar M, Bellissimo P, +Allam E. Amebic liver abscess: CT and MRI findings. Poster presentation at Kenneth Suarez Research Day. Midwestern University, Chicago, IL. May 3, 2024.

Bellissimo P, Syed M, Bhatnagar C, Fernando M, +Allam E. Budd-Chiari Syndrome and DIPS. Poster presentation at Kenneth Suarez Research Day. Midwestern University, Chicago, IL. May 3, 2024.

Chen J, Axtell R, Bolouri M, +Allam E. Insights into ovarian teratomas: Imaging features. Poster presentation at Kenneth Suarez Research Day. Midwestern University, Chicago, IL. May 3, 2024.

Abdullatef R, Boyd A, +Allam E. Brachial plexus birth injury. Case study, Radiopaedia.org (Published on 30 Apr 2024) <https://radiopaedia.org/cases/186470>

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Mansour J, Chan W, +Allam E. Tracheostomy tube cuff over inflation. Case study, Radiopaedia.org (Published on 20 Apr 2024) <https://doi.org/10.53347/rID-187489>

Errampalli E, Kosaraju S, Illimoottil M, McGowan B, Boyd A, +Allam E. Nail-Patella Syndrome. Electronic poster. Society of Pediatric Radiology annual meeting. Miami, FL. Apr 13-15, 2024.

Gupta S, Zhou C, +Allam E. Intraosseus injection with contrast. Case study, Radiopaedia.org (Published on 5 Apr 2024) <https://doi.org/10.53347/rID-186736>

Mustafa J, Barrington A, +Allam E. Multifocal intraosseous hemangiomas. Case study, Radiopaedia.org (Published on 4 Apr 2024) <https://doi.org/10.53347/rID-186414>

Syed M, Bellissimo P, +Allam E. Budd-Chiari syndrome. Case study, Radiopaedia.org (Published on 31 Mar 2024) <https://doi.org/10.53347/rID-185206>

Chen J, Axtell R, +Allam E. Ovarian teratoma. Case study, Radiopaedia.org (Published on 29 Mar 2024) <https://doi.org/10.53347/rID-186429>

Mustafa J, ^Negarestani A, +Allam E. Intravascular papillary endothelial hyperplasia - wrist. Case study, Radiopaedia.org (Published on 27 Mar 2024) <https://doi.org/10.53347/rID-185895>  
**(Selected as Case of the Day for 20 Aug 2024)**

Jatavallabhula K, Arolli X, +Allam E. Orbital extraskeletal mesenchymal chondrosarcoma. Case study, Radiopaedia.org (Published on 27 Mar 2024) <https://doi.org/10.53347/rID-185982>  
**(Selected as Case of the Day for 19 Aug 2024)**

Mustafa J, ^Negarestani A, +Allam E. Schwannoma of the thumb. Case study, Radiopaedia.org (Published on 25 Mar 2024) <https://doi.org/10.53347/rID-185984>

Mustafa J, +Allam E. Tenosynovial giant cell tumor. Case study, Radiopaedia.org (Published on 17 Mar 2024) <https://doi.org/10.53347/rID-185887>

Nemr C, ^Patil S, +Allam E. Paget disease of the calcaneus. Case study, Radiopaedia.org (Published on 10 Mar 2024) <https://doi.org/10.53347/rID-184490> **(Selected as Case of the Day for 28 Jul 2024)**

Kaplan S, Olivieri N, \*Mirgati S, ^Patil S, +Allam E. Amiodarone induced pneumonitis. Electronic presentation at the European Congress of Radiology: Case-Based Diagnosis Training Session - The Road Less Travelled: Tracing Clinical Clues to a Diagnosis. Vienna, Austria. March 3, 2024.

Olivieri N, Kaplan S, \*Raskind A, ^Patil S, +Allam E. Posterior mediastinal neurofibroma. Electronic presentation at the European Congress of Radiology: Case-Based Diagnosis Training Session - The Road Less Travelled: Tracing Clinical Clues to a Diagnosis. Vienna, Austria. March 3, 2024.

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Olivieri N, Kaplan S, \*Shaikh N, ^Xu H, +Allam E. Granulomatosis with polyangiitis. Electronic presentations at the European Congress of Radiology: Case-Based Diagnosis Training Session - The Road Less Travelled: Tracing Clinical Clues to a Diagnosis. Vienna, Austria. March 3, 2024.

Kaplan S, Olivieri N, \*Thapa N, ^Xu H, +Allam E. NOF with NF1. Electronic presentation at the European Congress of Radiology: Case-Based Diagnosis Training Session - The Road Less Travelled: Tracing Clinical Clues to a Diagnosis. Vienna, Austria. March 3, 2024.

Gupta S, +Allam E. Carbon fiber implant in orthopedic oncology. Case study, Radiopaedia.org (Published on 26 Feb 2024) <https://doi.org/10.53347/rID-184226>

^Xu H, +Allam E. Metastatic skull and right orbital masses. Case study, Radiopaedia.org (Published on 22 Feb 2024) <https://doi.org/10.53347/rID-182879>

Bajwa S, \*Sechrist E, +Allam E. Uretersciatic hernia. Case study, Radiopaedia.org (Published on 14 Feb 2024) <https://doi.org/10.53347/rID-182637>

Nemr C, ^Patil S, +Allam E. Amebic liver abscess. Case study, Radiopaedia.org (Published on 14 Feb 2024) <https://doi.org/10.53347/rID-183936>

Illimoottil M, Veras P, +Allam E. Ectopic thoracic kidney. Case study, Radiopaedia.org (Published on 11 Feb 2024) <https://doi.org/10.53347/rID-181326>

^Xu H, +Allam E. Scalp sarcomatoid squamous cell carcinoma. Case study, Radiopaedia.org (Published on 10 Feb 2024) <https://doi.org/10.53347/rID-182873>

^Xu H, +Allam E. Traumatic sciatic neuropathy. Case study, Radiopaedia.org (Published on 3 Feb 2024) <https://doi.org/10.53347/rID-182361>

Gamero P, +Allam E, +Halama J, +Molvar C, +James JR. Can 3D SPECT imaging be an alternative to 2D planar imaging for lung shunt fraction calculations in Y90 radio-embolization? Electronic scientific poster presented at the ACNM – SNMMI Winter Annual Meeting February 1-3, 2024, Orlando, FL.

\*Mirgati S, ^Khokhar Z, ^Patil S, \*Brown M, Jawahar A, +Allam E, +Molvar C, +James JR. Evaluation of hepatocellular carcinoma post-Y90 radio-embolization using MR diffusion weighted imaging and ADC mapping. Presented at the 2024 Cancer Research Day, School of Health Sciences, Loyola University, February 2024, Maywood, IL.

^Patil S, \*Mirgati S, \*Kus J, +Allam E, +Molvar C, +James J. Exploring the utility of MR diffusion imaging and ADC to compare radiation segmentectomy outcomes of HCC using 1st week vs. 2nd week yttrium-90 therasphere vials. Presented at the 2024 Cancer Research Day, School of Health Sciences, Loyola University, February 2024, Maywood, IL.

Gupta S, ^Patil S, +Allam E. Hourglass biceps tendon. Case study, Radiopaedia.org (Published on 30 Jan 2024) <https://doi.org/10.53347/rID-182363>

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Kaplan S, Napierkowski E, +Allam E. Immune mediated necrotizing myopathy (IMNM). Case study, Radiopaedia.org (Published on 27 Jan 2024) <https://doi.org/10.53347/rID-182221>

Kaplan S, Lee C, +Allam E. Impending pathological fracture of tibia. Case study, Radiopaedia.org (Published on 24 Jan 2024) <https://doi.org/10.53347/rID-182074>

Napierkowski E, Lee J, +Allam E. Lower trapezius transfer with Achilles tendon graft tear. Case study, Radiopaedia.org (Published on 21 Dec 2023) <https://doi.org/10.53347/rID-179255>

Mansour J, Jackson K, +Allam E. Entrapped lateral meniscus in tibial plateau fracture. Case study, Radiopaedia.org (Published on 19 Dec 2023) <https://doi.org/10.53347/rID-180381>

\*Oraham A, \*Lee J, +Khayyat NM, +Gabriel MS, +James J. Feasibility of performing SPECT/CT imaging on a CZT scanner to monitor lutetium-177-PSMA-617 therapy. Educational poster presented at the RSNA 109th Scientific Assembly and Annual Meeting, November 26-30, 2023, Chicago, IL

Mustafa J, ^Khokhar Z, Veras P, Pasion A, \*Ong C, ^Belal M, +Allam E. Clinical impact of the results of spine biopsy in patients with suspected discitis-osteomyelitis. Electronic Educational Exhibit at Radiological Society of North America annual meeting. November 26-30, 2023, Chicago, IL.

+James JR, Ringlstein J, Friedman N, Prasad R. Clinical comparison of commercial dosimetry software platforms for Y-90 radio-embolization treatment. Interactive electronic poster presentation at the RSNA 109th Scientific Assembly and Annual Meeting, November 26-30, 2023, Chicago, IL.

^Xu H, Decker T, +Allam E. Isolated spinal cord neurocysticercosis. Case study, Radiopaedia.org (Published on 26 Sep 2023) <https://doi.org/10.53347/rID-176036> (**Selected as Case of the Day for 27 Nov 2023**).

\*Mirgati S, ^Khokhar Z, ^Patil S, \*Mosenthal M, Jawahar A, +Allam E, +Molvar C, +James J. Evaluation of hepatocellular carcinoma post Y-90 radio-embolization using MR Diffusion Weighted Imaging and ADC mapping. Poster presentation at St. Albert's Day research symposium. Loyola University Stritch School of Medicine, October 26, 2023. Maywood, IL.

^Xu H, Kui A, Anwar O, ^Patil S, Barrington A, +Chen J. Phantom-less quantitative CT study of bone mineral density. Poster presentation at St. Albert's Day research symposium. Loyola University Stritch School of Medicine, October 26, 2023. Chicago, IL.

Bhatnagar C, Pasion A, ^Xu H, ^Patil S, Illimoottil M, +Allam E. Diagnostic accuracy of image-guided hip joint aspirations and analysis of predictive parameters. Poster presentation at St. Albert's Day research symposium. Loyola University Stritch School of Medicine, October 26, 2023. Chicago, IL.

Dwan B, \*Mullen S, ^Patil S, ^Xu H, McGowan B, Thomas A, +Allam E. Utility of the Butterfly iQ ultrasound for resident and medical student education. Poster presentation at St. Albert's

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Day research symposium. Loyola University Stritch School of Medicine, October 26, 2023. Chicago, IL.

Pasion A, Bhatnagar C, Mustafa J, ^Xu H, ^Patil S, \*Thapa N, +Allam E. Clinical impact of the results of spine biopsy in patients with suspected discitis-osteomyelitis. Poster presentation at St. Albert's Day research symposium. Loyola University Stritch School of Medicine, October 26, 2023. Chicago, IL.

\*Connor D, \*Anand R, Jawahar A. Pictorial review of the complications unique to laparoscopic and robotic surgeries. Educational exhibit presented at the 2023 Society of Advanced Body Imaging annual meeting. October 7-11, 2023, Dallas, TX.

\*Connor D, Catania R, \*Anand R, +James J, Jawahar A. What radiologists need to know about interrogating of cardiac legacy devices in patients undergoing MRI. Educational exhibit presented at the 2023 Society of Advanced Body Imaging annual meeting. October 7-11, 2023, Dallas, TX.

\*Anand R, \*Connor D, \*Shah L, \*Choudhari R, Jawahar A. Knowing the territory of medical devices within the abdomen and pelvis. Educational exhibit presented at the 2023 Society of Advanced Body Imaging annual meeting. October 7-11, 2023, Dallas, TX.

^Xu H, Ujano D, +Allam E. Traumatic cervical spondyloptosis. Case study, Radiopaedia.org (Published on 11 Sep 2023) <https://doi.org/10.53347/rID-174347>

Gad W, +Allam E. Duverney fractures - bilateral. Case study, Radiopaedia.org (Published on 27 Aug 2023) <https://doi.org/10.53347/rID-173471>

Kui A, +Allam E. Extensor pollicis longus tendon tear (MRI). Case study, Radiopaedia.org (Published on 15 Aug 2023) <https://doi.org/10.53347/rID-173006>

Bolouri M, +Allam E. Thumb Sesamoid Fracture. Case Study, Radiopaedia.org (Published on 28 Jul 2023) <https://doi.org/10.53347/rID-172449>

+Chen JF, +Bian J, ^Khokhar Z, ^Belal M, +Allam E. Image-based ultrasound speed estimation: phantoms and human livers study. Poster presentation at American Association of Physicists in Medicine (AAPM) meeting. George R. Brown Convention Center, July 23-27, 2023, Houston, TX.

^Khokhar Z, \*Brown M, Jawahar A, ^Belal M, +Molvar C, +James JR. Exploring the utility of MR diffusion weighted imaging to determine tumor response to radio-embolization (Y-90) treatment for hepatocellular carcinoma. Interactive poster presentation presented at the 2023 65th AAPM Annual Meeting, July 23-27, 2023, Houston, TX

^Belal M, Gill KG, Swatos DJ, +Halama J, +Wagner R, +James JR. Evaluating variabilities in measuring nuclear medicine scanner sensitivity values: radioisotope source distance and orientation. Electronic scientific poster presented at the 2023 65th AAPM Annual Meeting, July 23-27, 2023, Houston, TX.



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+James JR, +Chen J, +Bian J, +Halama J, Eiseman M. An investigational change into accepting no-accession-number patient data into radiation dose monitoring software. Electronic scientific poster presented at 2023 65th AAPM Annual Meeting, July 23-27, 2023, Houston, TX.

Bui S, Illimoottil M, McGowan B, Zywiciel J, +Allam E. Lauge-Hansen classification system of ankle fractures, Radiopaedia 2023 Virtual Conference (Published on 27 Jul 2023) <https://doi.org/10.53347/rPoster-1682>.

Mustafa J, \*Shah L, Veras P, Dwan B, +Allam E. Brachial plexus: myelinated noodles, Radiopaedia 2023 Virtual Conference (Published on 24 Jul 2023) <https://doi.org/10.53347/rPoster-1633>

Fernando M, +Allam E. Plantar plate tear. Case study, Radiopaedia.org (Published on 6 Jul 2023) <https://doi.org/10.53347/rID-170367>

### ORAL PRESENTATIONS

\*Anand R, \*Kus J, \*Olivieri J, Mustafa J, +Annes A, +Malamis A. +Molvar C, +Borge M. Percutaneous transrenal ureteral embolization using ethylene vinyl alcohol copolymer (onyx) and microvascular plugs: indications, technique, and outcomes. Oral presentation at the Society of Interventional Radiology annual meeting, March 23-27, 2024, Salt Lake City, UT.

\*Kus J, \*Anand R, +James J, +Annes J, +Malamis A, +Molvar C. Radiation Segmentectomy Outcomes of 2nd Week Yttrium-90 Glass Microspheres Vials for Treating HCC. Oral presentation at the Society of Interventional Radiology annual meeting, March 23-27, 2024, Salt Lake City, UT.

Kaske D, Swatosh D, +Halama J, +Wagner R, +James J. Effect of radioisotope distance and orientation on measuring absolute nm scanner sensitivity values for use in quantitative SPECT. Oral presentation at the Annual Spring Meeting of the Central Chapter Society of Nuclear Medicine and Molecular Imaging conference March 9-10, 2024, Columbus, OH.  
**Awarded: 1st prize in the technologist's category**

Boyd A, Illimoottil M, Veras P, \*Zayats Y, +Allam E. Use of ultrasound imaging for early detection of inflammatory arthritis: improving equitability and efficiency. Oral presentation at ACR Medical Student Symposium. Virtual meeting. Jan 27, 2024. **Selected as finalist (among the top 3 in the country).**

\*Boychev G. Focal nodular hyperplasia mimicking cancer recurrence in patients with history of chemotherapy and bone marrow transplant. Poster/Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

\*Gjeluci A, Zywiciel J, Jackson K, ^Xu H, +Allam E. Untangling the brachial plexus. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, Chicago. Jan 18, 2024. **Awarded: Winner of the Neuroradiology category**

## RESEARCH SUMMARY ACADEMIC YEAR 2023-2024

\*Bennis E, \*Shaikh N, Napierkowski E, ^Patil S, +Allam E. Bilateral breast metastases from lung carcinoma. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago. **Awarded Winner of the Breast Imaging category**

\*Zayats Y, Pasion A, Lee C, ^Xu H, +Allam E. Cavitory lung lesions: The hole story. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

\*Mullen S, Bhatnagar C, McGowan B, ^Xu H, +Allam E. Quality and safety parameters before and after implementation of a solo night float system. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

Shim H, Kaplan S, \*Martin R, Lee J, ^Patil S, +Allam E. Measuring the post-radiation risk of pathologic fractures in long bones: Mirels and more. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

\*Raskind A, Kaplan S, McGowan B, ^Patil S, +Allam E. Solving myositis mysteries in musculoskeletal radiology. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

Mustafa J, \*Thapa N, Thomas A, ^Xu H, +Allam E. Clinical impact of CT-guided spine biopsy in patients with suspected discitis-osteomyelitis. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

\*El-Baba R, \*Olivieri J, +Malamis A. Intraprocedural cone-beam ct for complex vertebral body fracture. Oral presentation at Chicago Radiological Society annual abstract competition. Rush University Medical Center, January 18, 2024, Chicago, IL.

\*Oraham A, \*Lee J, +Khayyat NM, +Gabriel MS, +James JR. Feasibility of performing SPECT/CT imaging on a czr scanner to monitor lutetium-177-PSMA-617 therapy. Oral Presentation at the Chicago Radiological Society meeting, January 18, 2024, Chicago, IL **Awarded: 1st prize in NM category**

Gamero P, +Allam E, +Halama J, +Molvar C, +James JR. Can 3D SPECT imaging be an alternative to 2D planar imaging for lung shunt fraction calculations in Y90 radio-embolization? Oral presentation at the Chicago Radiological Society meeting, January 18, 2024, Chicago, IL.

^Patil S. \*Mirgati S, +Allam E, +Molvar C, +James JR. Exploring the utility of MR diffusion imaging and adc to compare radiation segmentectomy outcomes of hcc using 1st week vs. 2nd week yttrium-90 therasphere vials. Oral presentation at the Chicago Radiological Society meeting, January 18, 2024, Chicago, IL

## RESEARCH SUMMARY ACADEMIC YEAR 2023-2024

\*Mirgati S, ^Patil S, ^Khokhar Z, \*Mosenthal M, Jawahar A, +Molvar C, +Allam E, +James JR. Evaluation of hepatocellular carcinoma post-Y90 radio-embolization using MR ADC. Oral presentations at the Chicago Radiological Society meeting, January 18, 2024, Chicago, IL. ALSO Oral presentation at the Radiological Society of North America annual meeting, November 29, 2023, Chicago, 2023.

^Khokhar Z, +Allam E. \*Mosenthal M, \*Mirgati S, Jawahar A, +Molvar C, +James JR. Correlating the utility of MR diffusion weighted imaging with radiology treatment response scores (LR-TR) to determine tumor response to y90- radio-embolization for hepatocellular carcinoma. Oral presentation at the Radiological Society of North America annual meeting, November 29, 2023, Chicago, 2023.

Pasion A, Bhatnagar C, Mustafa J, ^Xu H, ^Patil S, \*Thapa N, +Allam E. Clinical impact of the results of spine biopsy in patients with suspected discitis-osteomyelitis. Virtual presentation at Northeast Regional Vascular and Interventional Radiology Symposium. Brown University, Providence, RI. Nov 4, 2023.

Bhatnagar C, Pasion A, ^Xu H, ^Patil S, Illimoottil M, +Allam E. Diagnostic accuracy of image-guided hip joint aspirations and analysis of predictive parameters. Virtual presentation at Northeast Regional Vascular and Interventional Radiology Symposium. Brown University, Providence, RI. Nov 4, 2023.

Borys D, Baksh N, +Song A, +Allam E. Ewing's sarcoma of the toe. Oral presentation at International Skeletal Society meeting. London, UK. Oct 10, 2023.

Borys D, Baksh N, +Alexander A, +Allam E. Fibrous dysplasia of the rib with secondary solid aneurysmal bone cyst change. Oral presentation at International Skeletal Society meeting, October 10, 2023, London, UK.

\*Anand R, \*Connor D, \*Shah L, \*Choudhari R, Jawahar A. Knowing the territory of the medical devices within the abdomen and pelvis. Oral presentation at the Society of Advanced Body Imaging annual meeting October 7-11, 2023, Dallas, TX.

### **INVITED PROFESSOR and INVITED LECTURER**

+Lim-Dunham JE. Hepato-renal index in ultrasound quantification of liver fat in children. Society for Pediatric Radiology SPR Annual Meeting & Categorical Course, Miami, FL. April 2024

+Lim-Dunham JE. Radiologic features of pediatric thyroid nodules: What pathologists need to know in Pediatric thyroid tumors: A practical update on the classification, molecular diagnostics and management strategies. Educational symposium, Society for Pediatric Pathology Spring Meeting, Baltimore, MD. March 2024

+Alexander A, +Allam E, Guido L, Dux K. MSK Ultrasound Workshop. Invited lecture and

## RESEARCH SUMMARY ACADEMIC YEAR 2023-2024

demonstration. American College of Foot and Ankle Surgeons (ACFAS) annual scientific conference. February 2, 2024, Tampa, FL.

### **DEPARTMENT OF RADIOLOGY RESIDENT GRAND ROUND PRESENTATIONS:**

Oraham, Aaron – Neuroimaging and the Diagnosis of Headache, April 5, 2024

Chaudhry, Hamza – MR Elastography, April 5, 2024

Kus, Joseph – Vertebral Augmentation Techniques, March 11, 2024

Fang, Melissa – Guess Who: Radiopharmaceutical Edition, March 1, 2024

Bennis, Emily – Lumbar Puncture: Overview and Tips, February 2, 2024

Olivieri, John – Percutaneous Thermal Ablation of Osseous Metastases and Cryoablation, February 2, 2024

Connor, Denton – Bone Tumor Risk Stratification, January 29, 2024

Gjeluci, Albert – Calcifications at Digital Breast Tomosynthesis, January 22, 2024

Drammeh, Hamidou – CT Temporal Bone, October 6, 2023

Boychev, George – MRI Evaluation of Breast Implants, October 6, 2023

El-Baba, Rami – Deep Spaces of the Head and Neck, September 1, 2023

Ansari, Owaiz – Renal Transplant Complications, September 1, 2023

Lee, June – Breast MRI, August 4, 2023

Choudhari, Rishabh – Temporal Bone, August 4, 2023

### **GRANTS:**

Gupta G, (PI) +Shea S, (Co-PI). Development of a novel platform for MRI-targeted biopsy and sampling of fresh ex-vivo prostate cancer tissue. Loyola University Chicago Research Funding Committee Pilot Award \$19,965. January 1, 2023 to December 31, 2024.

Patel HD & Gupta G, Investigators; +Ozga T, Co-Investigator. A Prospective Diagnostic Cohort Study to Compare the Accuracy of Renal Mass Biopsy, PEER, and 99mTc-sestamibi SPECT/CT for Patients with Clinically Localized Renal Tumors. Rising Tide Foundation for Clinical Cancer Research. February 2022 to present

## RESEARCH SUMMARY ACADEMIC YEAR 2023-2024

Jawahar A, +Allam E (PI). Preliminary Study Evaluating Anxiety Levels Associated with Different Radiology Resident Educational Models and the Impact on the Training Learning Process. Loyola University York Grant. \$5,000 per year. 2022-Present.

+Lomasney LM, +Lim-Dunham, J, \*Yasin L, +Allam E (PI). The Use of Modern Technology for Improving Ultrasound Education among Early Ultrasound Learners in Loyola University. Loyola University York Grant. \$5,000 per year. 2019-Present.

### **OTHER:**

+Wagner RW. Using Radiation from the inside out to target cancer – Medical Watch WGN-TV, December 5, 2023. Dina Bair, Katharin Czink. [Using radiation from the inside out to target cancer | WGN-TV \(wgntv.com\)](#)

### **Last AY not reported:**

Tiee MS, Golz AG, Kim A, Cohen JB, Summers HD, +Alexander AJ, Lack WD. Sagittal deformity of Garden type I and II geriatric femoral neck fractures is frequently misclassified by lateral radiographs. *OTA Int.* 2023 Apr 18;6(2):e273. doi: 10.1097/OI9.0000000000000273. PMID: 37082231; PMCID: PMC10113109.

\*Gidley P, Patel A, Barkan GA, Jawahar A. An Atypical Presentation of Hepatocellular Carcinoma with Multisite Metastasis following a Curative Liver Transplant. *Indian J Radiol Imaging.* 2023 Apr 10;33(3):420-423. doi: 10.1055/s-0043-1767694. PMID: 37362366; PMCID: PMC10289853.

Martini D, Shukairy MK, Pasquale D, Ziegler A. Idiopathic Facial Vein Aneurysm: A Case Report and Review of the Literature. *Cureus.* 2023 Jan 16;15(1):e33842. doi: 10.7759/cureus.33842. PMID: 36819344; PMCID: PMC9931438.

\*El-Baba RM, Schury MP. Neuroanatomy, Frontal Cortex. 2023 May 29. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan–. PMID: 32119370.

Squires JH, Martinez-Rios C, Davis JC, Dietz KR, Epelman MS, Lai HA, +Lim-Dunham JE, McDaniel JD, Mhlanga JC, Pandit-Taskar N, Parisi MT, Trout AT, Weidman EK, Alazraki AL. Imaging of pediatric thyroid tumors: A COG Diagnostic Imaging Committee/SPR Oncology Committee White Paper. *Pediatr Blood Cancer.* 2023 Jun;70 Suppl 4:e29957. doi: 10.1002/pbc.29957. Epub 2022 Sep 27. PMID: 36165682.