

Resident Scholarly Activity for 2024-2025

Huynh T.J., **Parizadeh D.**, Ahmed A.K., et al. Lateral decubitus dynamic CT myelography with real-time bolus tracking for evaluation of CSF-venous fistulas. AJNR American Journal of Neuroradiology. 2024; 45(1):105–112.

Parizadeh D., Moawad A., Pedersen C. Calcifying Pseudoneoplasm of the Neuraxis Associated with Tuberculosis. Presented at MCMC Research Day 5/2025, Poster presentation at ASSR 2025.

Parizadeh D., Moawad A., Pedersen C. Uncommon Presentation: Mantle Cell Lymphoma Pineal Mass and Leptomeningeal Spread. Poster presentation at ASNR 2025

Parizadeh D., Moawad A., Averbuch A., Pedersen C. Characterizing Errors in Stroke Vascular Territory Classification By A Large Language Model: A Comparative Evaluation Of Structured Vs. Unstructured Prompts. Presented at MCMC Research Day 5/2025.

Parizadeh D. Discovering the Hidden Leak: Advanced Detection and Management of Spontaneous Intracranial Hypotension Secondary to CSF-Venous Fistulas. Poster at ASNR 2025- Certificate of Merit Award.

Parizadeh D. Unveiling the Hidden Leak: Challenges and Innovations in Diagnosing and Treating Spinal CSF Leaks, Oral presentation at ECR 2025- Award for Top Educational Exhibit.

Vasiniotis Kamarinos N., Vogia A., Rotenberg S.E., Brody M.B., Mackey J.E., Teytelboym O.M. Breast MRI for cancer screening. Educational exhibit RSNA 2024.

Gulati V., Brody M. From Cut and Run to Watch and Wait: A Changing Paradigm for the Management of Breast Fibromatosis. Contemporary Diagnostic Radiology, 2025- Accepted for publication.

Dai R., Sorin V., Pooyan A., Gulati V., Zhang M. Breast Implant-Associated Anaplastic Large Cell Lymphoma. RadioGraphics, 2025- Accepted for publication.

Maleki N., Amiruddin R., Moawad A.W., Gulati V., Vollmuth P. et al. Analysis of the MICCAI Brain Tumor Segmentation–Metastases (BraTS-METS) 2025 Lighthouse Challenge: Brain Metastasis Segmentation on Pre-and Post-treatment MRI. ArXiv, 2025.

Gulati V. Maintain Readability Standards for Radiology Reports Translated by Artificial Intelligence- Reply. Journal of the American College of Radiology, 2024

Moawad A.W., Janas A., Baid U., **Gulati V.**, Feltrin F., et al. The Brain Tumor Segmentation (BraTS-METS) Challenge 2023: Brain Metastasis Segmentation on Pre-treatment MRI. ArXiv, 2024.

Gulati V., Brody M. From Cut and Run to Watch and Wait: A Changing Paradigm for the Management of Breast Fibromatosis. Society of Breast Imaging Annual Meeting 2025

Worede F., **Jaber B.**, **Mackey J.**, **McGarry M.** Central Line and Feeding Tube Malposition: A Guide for Junior Residents and Medical Students. Educational exhibit ARRS 2025

Jaber B., **Worede F.**, **Mackey J.** The Mystery of Internal Hernias: What Should the Radiologists Know? Educational exhibit ARRS 2025

Virador G., **Singh R.**, Gupta V., Rao D., Huang J.F., Simon L.V., Sukhwinder J., Sandhu S. A Stroke Imaging Protocol in Patients with a History of Contrast-Induced Anaphylaxis. Current Problems in Diagnostic Radiology. Volume 54, Issue 2, 2025. Pages 143-146, ISSN 0363-0188, <https://doi.org/10.1067/j.cpradiol.2024.12.001>.

Moniz-Garcia D., Zermeno J.R., **Singh R.**, **Virador G.**, Michaelides L., Genel O., Ortega-Ruiz O.R., Vibhute P., Gupta V., Sandhu S., Freeman W.D., Tawk R.G. Anatomical Analysis of Vertebral Arteries in Vertebrobasilar Dolichoectasia: A Multi-Center Study. Clin Neurol Neurosurg. 2024 Dec;247:108635. doi: 10.1016/j.clineuro.2024.108635. Epub 2024 Nov 9. PMID: 39547112.

Singh R.B., Ahmed A.K., **Virador, G.** *et al.* Exploring the role of CT scouts in expediting MRI in acute stroke. *Emerg Radiol* **32**, 41–50 (2025). <https://doi.org/10.1007/s10140-024-02282-6>

Singh R.B., Domingo R.A., Sandhu S.J.S., Ahmed A.K., Rios-Zermeno J., Ramos-Fresnedo A., Pullen M.W., **Virador G.M.**, Perez-Vega C., Martinez Santos J.L., Abello-Vaamonde J.A., Erben Y., Vibhute P., Gupta V., Pirgousis P., Tawk R.G. Radiographic Anatomy of the Common Carotid Artery for Direct Carotid Puncture. World Neurosurg. 2024 Oct;190:e859-e867. doi: 10.1016/j.wneu.2024.08.025. Epub 2024 Aug 8. PMID: 39127373.

Verma N., Kondoor V., **Singh R.**, Ahuja R. Acute RV Failure Management in Pulmonary Embolism. Techniques in Vascular and Interventional Radiology. 2025. In-press. (Review Article)

Singh R., **McGarry M.K.**, **Bonshock R.**, **Feldstein D.**, **Tsai D.** Identifying of Predictors of Immediate Post-Procedural Pain After Uterine Artery Embolization to Develop an ERAS

Checklist for IR Clinics. The International Symposium on Endovascular Therapy. January, 2025. Fort Lauderdale, FL. (Poster presentation).

Singh R., Thapa A., Garcia D, **McGarry M.K.**, **McKenna G.**, Salei A. IR in the Himalayas: Troubleshooting in the IR Suite in Low-Resource Settings. Cardiovascular and Interventional Society of Europe, September 2024. Lisbon, Portugal. (Poster Presentation).

Singh R., Roy S.G., **Moawad A.W.**, **Shalaby M.**, **Kashif M.**, **Chaker S.**, **Pedersen C.** Diagnostic Accuracy of Imaging Modalities in Discitis Osteomyelitis: A Systematic Review and Meta-analysis. Annual Pennsylvania Radiology Society Meeting. September 2024. (Abstract presentation).

International Health Work: Ultrasound- Guided Breast Biopsy Hands-on session for Trainees in collaboration with Trinity Health Mid-Atlantic Radiology Consultants and University of Pennsylvania- Department of Radiology at Dhulikhel Hospital, Kavre, Nepal and Tribhuvan University-Teaching Hospital, Kathmandu, Nepal. November 10-11, 2024.

Eshetu M.A., Goshu D.Y., Kebede M.A, Negate H.M., **Habtezighi A.B.**, Gregory P.M., Wirtu A.T., Gemechu J.M. Patterns and Complications of Congenital Heart Disease in Adolescents and Adults in Ethiopia. J Cardiovasc Dev Dis. 2024 Aug 19;11(8):253. doi: 10.3390/jcdd11080253. PMID: 39195161; PMCID: PMC11354413.

Berhe Habtezighi A., Ghazy S., Bilgin C., Kobeissi H., Kadirvel R., Kallmes D. DWI-Detected Ischemic Lesions After Endovascular Treatment for Cerebral Aneurysms: An Updated Systematic Review and Meta-Analysis. Oral presentation at ARRS 2025.

Berhe Habtezighi A. Case Report of Subacute Combined Degeneration Secondary to Nitric Oxide Abuse. Poster Presentation at Mercy Research week, May 2025.

Nalbant H., Abdelhafez Y.G., Bateni C., Godinez F., Lee S., Zhang M., Qi J., Yuan N., Sen F., **Moawad A.W.**, Elsayes K.M., Link T.M., Guindani M., Nardo L. MRI of atypical lipomatous tumor: does contrast help? A multicenter study. Skeletal Radiology. Accepted.

Maleki N., Amiruddin R., **Moawad A.W.**, Yordanov N., Gkampenis A., Fehringer P., Umeh F., Chukwurah C., Memon F., Petrovic B., Cramer J. Analysis of the MICCAI Brain Tumor Segmentation–Metastases (BraTS-METS) 2025 Lighthouse Challenge: Brain Metastasis Segmentation on Pre-and Post-treatment MRI. arXiv preprint arXiv:2504.12527. 2025 Apr 16.

Barat M., Eltaher M., **Moawad A.W.**, Soyer P., Fuentes D., Golse M., Jouinot A., Ahmed A.A., Shehata M.A., Assié G., Elmohr M.M. A Computed Tomography-Based Score to

Predict Survival in Patients With Adrenocortical Carcinoma: A Proof-of-Concept Study. Canadian Association of Radiologists Journal.:08465371251335170.

Maleki Ny., Amiruddin R., **Moawad A.W.**, Yordanov N., Gkampenis A., Fehringer P., Umeh F., Chukwurah C., Memon F., Petrovic B., Cramer J. Analysis of the MICCAI Brain Tumor Segmentation–Metastases (BraTS-METS) 2025 Lighthouse Challenge: Brain Metastasis Segmentation on Pre-and Post-treatment MRI. arXiv preprint arXiv:2504.12527. 2025 Apr 16.

Spaanderman D.J., Hakkesteegt S.N., Hanff D.F., Schut A.R., Schiphouwer L.M., Vos M., Messiou C., Doran S.J., Jones R.L., Hayes A.J., **Moawad A.W.**, Nardo L. Multi-center external validation of an automated method segmenting and differentiating atypical lipomatous tumors from lipomas using radiomics and deep-learning on MRI. EClinicalMedicine. 2024 Oct 1;76.

Head M.A., Kamel S., Humbert-Vidan L., Kaffey Z., Abusaif A., Fuentes D.T., Wahid K., Dede C., Naser M.A., He R., **Moawad A.W.** Computed tomography radiomics-based cross-sectional detection of mandibular osteoradionecrosis in head and neck cancer survivors. medRxiv. 2024 Sep 12.

Janas A., Gkampenis A., Yordanov N., Fehringer P., Krantchev K., **Moawad A.W.**, Baid U., Link K.E., Velichko Y.S., LaBella D., Kofler F. P10. 02. AA NOVEL APPROACH CONCERNING MEDICAL EDUCATION ON AI AND ML THROUGH THE ASNR MICCAI BRATS 2023 BRAIN METASTASES CHALLENGE. Neuro-Oncology. 2024 Oct;26(Supplement_5):v55-.

Maleki N., Amiruddin R., Yordanov N., Fehringer P., Gkampenis A., **Moawad A.W.**, Manteghinejad A., Petrovic B., Schrickel B., Ikuta I., Thompson G., Krycia M., Aneja S., Aboian M. BraTS 2025 Lighthouse Challenge: Establishing Protocols for Dataset Reference Standards by Neuroradiologists. American Society of Neuroradiology (ASNR) Annual meeting 2025. Philadelphia, Pennsylvania, USA, May 2025.

Amiruddin R., Yordanov N., Maleki N., Janas A., Fehringer P., Gkampenis A., **Moawad A.W.**, Aboian M. A Versatile Approach to Accessible Education: Building a learning community through social media. American Society of Neuroradiology (ASNR) Annual meeting 2025. Philadelphia, Pennsylvania, USA, May 2025.

Amiruddin R., Yordanov N., Maleki N., Janas A., Fehringer P., Gkampenis A., **Moawad A.W.**, BraTS consortium, Aneja S., Bakas S., Aboian M. Using Social Media for Accessible Education for Global Trainee Audiences. Society for Imaging Informatics in Medicine (SIIM) Annual Scientific Meeting. Portland, Oregon. May 2025.

Amiruddin R., Yordanov N., Maleki N., Janas A., Fehringer P., Gkampenis A., **Moawad A.W.**, BraTS consortium, Aneja S., Bakas S., Aboian M. Embracing open science in research: How to do this responsibly: A Roadmap for Radiology. Society for Imaging Informatics in Medicine (SIIM) Annual Scientific Meeting. Portland, Oregon. May 2025.

Amiruddin R., Yordanov N., Maleki N., Janas A., Fehringer P., Gkampenis A., **Moawad A.W.**, BraTS consortium, Aneja S., Bakas S., Aboian M. A Versatile Approach to Accessible Education: Building a learning community through social media. Society of Pediatric imaging (SPR) Annual scientific meeting. Honolulu, Hawaii. April 2025.

Moawad A.W., Janas A., Baid U., Ramakrishnan D., **Teytelboym O.**, Rudie J., Bakas S., Aboian M.S. The brain tumor segmentation (BraTS-METS) challenge 2024 and beyond: brain metastasis segmentation on pre and post-treatment MRI. Radiological Society of North America (RSNA)- 110 Scientific assembly and annual meeting. Chicago, Illinois, USA. November 2024.

Alauddin R., **Moawad A.W.**, Janas A., Baid U., Ramakrishnan D., **Teytelboym O.**, Rudie J., Bakas S., Aboian M.S. The brain tumor segmentation- metastases (BraTS-METS) challenge 2023: Brain metastasis segmentation on pre-treatment MRI. Radiological Society of North America (RSNA)- 110 Scientific assembly and annual meeting. Chicago, Illinois, USA. November 2024.

Maleki N., **Moawad A.W.**, Janas A., Baid U., Ramakrishnan D., **Teytelboym O.**, Rudie J., Bakas S., Aboian M.S. Artificial Intelligence Enabled Standardized And Automated Longitudinal Measurement And Reporting Of Brain Metastasis. Radiological Society of North America (RSNA)- 110 Scientific assembly and annual meeting. Chicago, Illinois, USA. November 2024.

Nalbant H., Hakkesteegt S.N., Spaanderman D.J., Schut A.W., Hanff D., Messiou C., Jones R.L., Hayes A.J., Nardo Lz., Abdelhafez Y.G., **Moawad A.W.**, Elsayes K.M. MRI of atypical lipomatous tumor: does gadolinium help? a multicenter study. Radiological Society of North America (RSNA)- 110 Scientific assembly and annual meeting. Chicago, Illinois, USA. November 2024.

Yordanov N., Maleki N., Amiruddin R., **Moawad A.W.**, Janas A., Fehringer P., Gkampenis A., Bakas S., Aboian M. MICCAI Brain Tumor Segmentation – Metastases (BraTS-METS) 2025 Lighthouse Challenge: competitive environment for the development of robust automatic segmentation algorithms for pre- and post-treatment brain metastases. European Association of Neuro-Oncology (EANO). Glasgow, United Kingdom. October 2024.

Moawad A.W., Janas A., Baid U., Ramakrishnan D., **Teytelboym O.**, Rudie J., Bakas S., Aboian M.S. Technical and administrative challenges for open science; Real life

experience from ASNR-MICCAI-BraTS-METs 2023 segmentation challenge dataset. American society of functional neuro-radiology (ASFNR) Annual meeting. Snowmass, Colorado, USA. August 2024

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Fehringer P., Yordanov N., Maleki N., Amiruddin R., **Moawad A.W.**, Janas A., Gkampenis A., Bakas S., Aboian M. Transforming Medical Education: Project-Based Learning in AI-Driven Radiotherapy Planning. Congress of the German Society of Radiation Oncology (DEGRO). Kassel, Germany. July 2024

Sekaran S., **Worede F.**, Patel H., Brahmakulam F. Nodule Deception: Unraveling Non-Tuberculosis Mycobacterium Infections in Suspicious Lung Lesions: A Case Series. Chest. Volume 166, Issue 4, Supplement, A-1338-1339, October 2024.

Shalaby M., **Teytelboym O.** Discitis-osteomyelitis or Mimics: A Pictorial Review. Educational exhibit. American Society of Spine Radiology. San Diego, CA. February 2025

Shalaby M., **Teytelboym O.** Split Atlas in A Trauma Setting Mimicking Jefferson's Fracture. ACR Case in Point. Published May 2025.

Satwah I., **Shalaby M.**, Rotenberg S. Glycogen-Rich Clear Cell Carcinoma of the Breast. ACR Case in Point. Published October 2024.