

2024 -2025 Key Presentations

Conference Posters, Presentations

1. Helbig S, Bockenek W, Kurtz J. The "x" factor: a case report of spinal xanthomatosis leading to spastic paraparesis. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
2. DesRochers J, Crawford K, Shumaker Z. When anticholinergics add up: carbamazepine-induced toxicity in an adult with Neuromyelitis Optica Spectrum Disorder (NMOSD). Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
3. Khan MS, Darji N, Hirsch M, Brush N. Lorazepam unlocked: Breaking the chains of catatonia on a patient living with TBI. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
4. Ferry H, Desai S, Sidwell A. unveiling the unexpected: Amantadine-induced myoclonus in a chronic hypoxic-ischemic brain injury. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
5. Paul O, Patel B, Cignetti N. Never too rare to rehab: CNS hemangiopericytoma. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
6. Brown A, Mitchell C, Pham C. Biting back at pain: Incobotulinumtoxin-a injections for the management of first bite syndrome. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
7. Ward H, Tsai T, Powell T. From intestine to limb: Peripheral compartment syndrome as a sequela of stool impaction. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
8. Shafau S, Pugh T, Rothermel E. Enhancing function in a neurofibromatosis type 1 patient with treatment refractory malignant peripheral nerve sheath tumor: the benefit of intensive cancer rehabilitation. Annual Meeting of the Association of Academic Physiatrists, Phoenix, Arizona, February 25 - March 1, 2025. Poster.
9. Powell T, Shumaker Z, Ortiz M. The nefarious fatigue: Neuromuscular disease masquerading as cervical myelopathy. AAPM&R Annual Assembly, San Diego, CA, November 6-10, 2024. Symposium.
10. Hine RY, Westhoff O, Pugh TM. Implementations of the functional assessment of cancer therapy – General for health-related quality of life monitoring at an inpatient rehabilitation hospital. Annual Meeting of the American Congress of Rehabilitation Medicine, Dallas, TX. October 30th to November 2nd, 2024. Symposium.

11. Hartman AB, Carpenito E, Pugh TM. Supporting the cancer caregiver: Development of a cancer caregiver support group at an inpatient rehabilitation facility. Annual Meeting of the American Congress of Rehabilitation Medicine, Dallas, TX. October 30th to November 2nd, 2024. Symposium.
12. Mitchell C, Tennison JM, Fu JB. Venous thromboembolism prevention for patients with non-traumatic spinal cord injury due to cancer. Annual Meeting of the American Congress of Rehabilitation Medicine, Dallas, TX. October 30th to November 2nd, 2024. Symposium.
13. Carver KA, Fitz-Maurice S, Desai SA, Noronha K. Comprehensive interdisciplinary orientation strategies for brain injury management in inpatient rehabilitation. Annual Meeting of the American Congress of Rehabilitation Medicine, Dallas, TX. October 30th to November 2nd, 2024. Symposium.
14. Sewell KL, Zangotsis V, Cruise D, Desai SA. Maximizing neurological recovery and patient outcomes: Integrating exercise physiologists into acute rehabilitation. Annual Meeting of the American Congress of Rehabilitation Medicine, Dallas, TX. October 30th to November 2nd, 2024. Symposium.
15. Sewell KL, Darji N, Hammack K, Spech CE. Head vs heart: Applying intensity-driven neuroplasticity principles in patients with anoxic brain injury and high cardiac risk factors. Annual Meeting of the American Congress of Rehabilitation Medicine, Nov 2, 2024, Dallas, TX. Symposium.
16. Downer B, Pugh TM, Heyn PC. Finding meaning in a career in rehabilitation medicine: Perspectives for mid-career professionals. Annual Meeting of the American Congress of Rehabilitation Medicine, Nov 3, 2024, Dallas, TX. Symposium.
17. Raj V, LaBarbera J, Carolan T, Griffin A. Medical rehabilitation patient perspective. Annual Medical Rehabilitation Education Conference and Expo of the American Medical Rehabilitation Providers Association. October 28, 2024, Miami, FL, Oral Presentation.
18. Comeaux D. Emergency Department communication tool for readmissions prevention. American Medical Rehabilitation Providers Association (AMRPA) Fall Conference, Miami, FL, October 27-30, 2024. Poster presentation.
19. Darji, N, Sewell KL, Desai SA. Enhancing functional outcomes in spasticity management: A case series on interdisciplinary approaches using phenol neurolysis and serial casting. Spasticity X – International Spasticity Symposium. Houston, TX, October 24-25th, 2024. Poster.
20. Werts, K. Weeks, E. Treating the whole patient: Physical therapy bridging the hole in the wound care interdisciplinary team. APTA NC Fall Conference. October 11, 2024. High Point, NC. Platform presentation.
21. Raj VS. Cancer rehabilitation: An opportunity for global intervention. Oral Presentation. 18th World Congress of the International Society of Physical and Rehabilitation Medicine. June 1, 2024, Sydney, Australia.

22. Raj V, Leibbrnd B, Faux S, Ikramuddin F, Song K, Ng A, Tennison J, Rathore F, Correa A, Chan L, Fediw M, Hu M, Pinto M. 7th Annual Workshop on Global Approaches to the Rehabilitation of Cancer Patients, ISPRM, June 1, 2024, pre-congress workshop.

2024 -2025 Key Publications

1. Zhang B, Darji N, Giacino JT. Definitions, diagnostic criteria, and clinical assessment scales in disorders of consciousness. *Handb Clin Neurol.* 2025; 207:1-13. doi: 10.1016/B978-0-443-13408-1.00011-7. PMID: 39986716.
2. Wilcox DS, Howard AT, Mennemeier MS, Rainey J, Yates C, Allen M, Phelan KD. Ultrasonographic determination of bifurcation site of the tibial nerve at the tarsal tunnel. *WFUMB Ultrasound Open.* December 2025;3(2):100090.

<https://doi.org/10.1016/j.wfumbo.2025.100090> Accepted 3 July 2025, Available online 7 July 2025, Version of Record 18 July 2025.
3. Saver JL, Duncan PM; Stein J, Cramer SC, Fox EJ, Zorowitz RD, Billinger SA, Eickmeyer SM, Kirshblum SC, Androwis GJ, Edwards J, Savitz SI, Koch S, Shall MB, Black-Schaffer RM, Bonato P, Cuccurullo SJ, Barcikowski J, Cao N, Bornstein NM. Electromagnetic stimulation to reduce disability after ischemic stroke, The EMAGINE randomized clinical trial. *JAMA Network Open.* October 17, 2025. Doi: 10.1001/jamanetworkopen.2025.37880.
4. Ajewole L, Ballard S, Comeaux D, Cunningham M, Hartge M, Trotter E. Assessing static air device in mitigating pressure injuries: An Observation Retrospective Study. *Rehabil Nurs.* 2025 Oct 2. doi: 10.1097/RNJ.0000000000000515. Epub ahead of print. PMID: 41037479.
5. McClintock A, Michunovich A, Ference E, Bruce J, Kult J, Nguyen V, Hirsch MA, Levesque J, Desai SA. The resilient resident: A resiliency curriculum on physical medicine and rehabilitation resident burnout. *International Journal of Medical Students.* Accepted for publication October 2, 2025.
6. Harvey RL, Smith R, Bathula R, Everton L, Rup N, Saver J, Martin-Harris B, Dziewas R, Mistry S, Hamdy S, Bath P. Pharyngeal electrical stimulation to treat dysphagia in acute stroke: learnings from cases in the PhEED clinical trial. *J Rehabil Med.* 2025 Sep 5;57: jrm43538. doi: 10.2340/jrm. v57.43538. PMID: 40908833; PMCID: PMC12427991.
7. Carver K, Noronha K. Fall prevention in elderly adults with TBI. *Topics in Geriatric Rehabilitation.*
8. Hirsch MA, Dalgas U, van Wegen EEH. Editorial: Entering a new era in exercise and neuroplasticity in Parkinson disease. *Front. Neurol.* 2025; 16:1587715. doi: 10.3389/fneur.2025.1587715. PMID: 40196862
9. Gravesteijn AS, Rietberg MB, de Groot V, Hirsch MA, Vanbellinghen T, Jaspers RT, Vriend C, van de Berg WDJ, van den Heuvel OA, van Wegen EEH, On Behalf of the HersenFIT Consortium. HIITing anxiety and depression in Parkinson's disease and multiple sclerosis-A study protocol of a transdiagnostic

randomized controlled trial (HersenFIT). *Brain Sci.* 2025 Aug 29;15(9):945. doi: 10.3390/brainsci15090945. PMID: 41008305; PMCID: PMC12468372.

10. Darji N, Zhang B, Goldstein R, Shih SL, Iaccarino MA, Schneider JC, Zafonte R. Geographic variation in inpatient rehabilitation outcomes after traumatic brain injury. *J Head Trauma Rehabil.* 2025 Jul-Aug 01;40(4): E292-E299. doi: 10.1097/HTR.0000000000001033. Epub 2025 Jan 3. PMID: 39750287.
11. Raj VS, Patel BD, Mullan S, Hine R, Mack PP, Pugh T. The role of rehabilitation for women with cancer. *Phys Med Rehabil Clin N Am.* 2025 May;36(2):253-266. doi: 10.1016/j.pmr.2024.11.007. Epub 2025 Feb 21. PMID: 40210360.
12. Heyn PC, Terhune EA, Godha K, Hirsch MA. Protecting your health and brain against climate change: An information page for older adults. *Arch Phys Med Rehabil.* 2025 May;106(5):813-816. doi: 10.1016/j.apmr.2025.01.418. Epub 2025 Feb 5. PMID: 39918531; PMCID: PMC12048262.
13. Nguyen L, Hirsch M. Collaborative institutional training initiative (CITI): Student experience. *Int J Med Stud.* 2025;13(1):97-99. <https://doi.org/10.5195/ijms.2025.2730>.
14. Saver J, Duncan PW, Stein J, Cramer SC, Fox EJ, Zorowitz RD, Billinger SA, Eickmeyer SM, Kirshblum SC, Androwis GJ, Edwards J, Savitz S, Koch S, Shall M, Black-Schaffer RM, Bonato P, Cuccurullo S, Barcikowski J, Cao N, Bornstein NM. Ai-driven electromagnetic field therapy to reduce global disability in patients with subacute ischaemic stroke: Primary results of EMAGINE 1 trial. *The Lancet.* Available at SSRN: <https://ssrn.com/abstract=4964510> or https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4964510 Posted 26 Sept 2024.
15. Hammond FM, Zafonte RD, Sherer M, Bell KR, Bogner J, Malec JF, Tang Q, Jang JH. Assessing the benefits and risks of amantadine for irritability and aggression after traumatic brain injury. *PM R.* 2024 Jul;16(7):661-668. doi: 10.1002/pmrj.13122. Epub 2024 Feb 20. PMID: 38145314.
16. Hogue LL, Kennelly M. The ideal neurogenic bladder management team. *Urol Clin North Am.* 2024 May;51(2):297-303. doi: 10.1016/j.ucl.2024.02.006. Epub 2024 Mar 11. PMID: 38609201.
17. van Wegen EEH, van Balkom TD, Hirsch MA, Rutten S, van den Heuvel O. Non-pharmacological interventions for depression and anxiety in Parkinson's disease. *J Parkinsons Dis.* 2024 Apr 6 14(s1): S135-S146. doi: 10.3233/JPD-230228. PMID: 38607762.
18. Philippou E, Hirsch MA, Heyn PC, van Wegen EEH, Darwish H. Vitamin D and brain health in Alzheimer and Parkinson disease. *Arch Phys Med Rehabil.* 2024 Apr;105(4):809-812. doi: 10.1016/j.apmr.2023.10.023. Epub 2024 Jan 6. PMID: 38189701.
19. Moon S, Kletzel SL, Santos FH, Devos H, Foster ER, Goldman JG, Hirsch MA, Leroi I, Walker S, York MK. A patient's guide to memory changes in Parkinson disease. *Arch Phys Med Rehabil.* 2024 Mar;105(3):615-619. doi: 10.1016/j.apmr.2023.01.027. Epub 2023 May 31. PMID: 37256244.
20. Crinion M, Ball AM, Agnone M. Return-to-play decision-making following ankle injury: A comprehensive case analysis of the functional hop test. *Explor Musculoskeletal Dis.* March 2024;2(2):75–81. <https://doi.org/10.37349/emd.2024.00036>.

21. Alfano CM, Pugh TM, Tortorella B, Jacob RA, Mitchell CH, Raj VS. Roadmap for connecting cancer rehabilitation with survivorship to improve patient outcomes and clinical efficiency. *Am J Phys Med Rehabil*. 2024 Mar 1;103(3S Suppl 1): S10-S15. PMID: 38364024.
22. Awad LN, Jayaraman A, Nolan KJ, Lewek MD, Bonato P, Newman M, Putrino D, Raghaven P, Pohlig RT, Harris BA, Parker DA, Taylor SR. Efficacy and safety of using auditory-motor entrainment to improve walking after stroke: a multi-site randomized controlled trial of InTandem. *Nature Communications*. 8 Feb 2024;15(1):1081. PMID: 38332008.
23. Kaagman D, Wegen EEH, Cignetti N, Rothermel E, Vanbellinghen T, Hirsch MA. Effects and mechanisms of exercise on brain-derived neurotrophic factor (BDNF) levels and clinical
24. Goldman JG, Volpe D, Ellis TD, Hirsch MA, Johnson J, Wood J, Aragon AN, Biundo R, DiRocco A, Kasman GS, Iansek R, Miyasaki J, McConvey VM, Munneke M, Pinto S, St. Clair KA, Toledo S, York MK, Todaro R, Yarab N, Wallock K. Delivering multidisciplinary rehabilitation care in Parkinson's disease: An international consensus statement. *Journal of Parkinson's Disease*. 2024 January 24;14(1):135-166. PMID: 38277303.
25. van Wegen EEH, Rietberg MB, Vanbellinghen T, Hirsch MA. Physical rehabilitation of patients with Parkinson's disease. In: Wolters ECh, Baumann CR, eds. *International Compendium of Movement Disorders*. Cambridge University Press; 2025:238-251.

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