Physiatrist's Voice

NEWSLETTER June 2025

Enhancing Health And Function Through Education And Research In The Field Of Physical Medicine And Rehabilitation

In this Issue

PRESIDENT'S MESSAGE
Diana Hussain MD
President FSPMR

Diana A. Hussain, M.D.

Dear Colleagues,

It's with great excitement that I invite you to explore the newly released agenda for our 2025 FSIPP–FSPMR Annual Conference, taking place September 4–7 at the Hyatt Regency Orlando. As always, this meeting stands as the premier educational and networking event for physicians in pain management, physical medicine & rehabilitation, and regenerative medicine throughout Florida.

➡️ Click here to view the full agenda

This year's program delivers a powerful combination of cutting-edge science, practical pearls, and leadership development — all within a collaborative, multidisciplinary environment.

🔹 **Spotlight on PMR Sessions**

We are proud to feature a strong lineup of PMR-focused sessions designed to empower and inform physiatrists at all stages of their careers:

- "Spasticity and Neuromodulation" – Keynote Presentation Dr. Cynthia Ivanhoe, a pioneer in neurorehabilitation and spasticity management, will explore the evolving role of neuromodulation in treating upper and lower motor neuron disorders.
- "Setting Up for Success: What New Physiatrists Must Know About Contracts & Practice Moves, "Greg Chaires, Esq. will walk attendees through the legal and strategic essentials for early-career physiatrists considering private practice, hospital employment, or academic roles.
- "Treatment of Concussions & Injured Player on the Field: Current Guidelines, "Dr. Ronald Tolchin will offer an evidence-based update on concussion protocols, sideline care, and safe return-to-play strategies, essential for those involved in sports medicine or athlete care.

These are just a few of the many outstanding sessions on the agenda, which

also includes:

- Regenerative medicine updates on biologics, stem cells, and exosomes
- AI integration in interventional pain workflows
- Minimally invasive spine and SI joint procedures
- Practice management essentials, from ASC ownership to Medicare audits
- Burnout, communication, and leadership development

And of course, don't miss our signature Casino Night FUNdraiser on Friday evening — an enjoyable, family-friendly celebration open to all attendees and sponsors!

Why FSPMR Matters

While the content is a major draw, what truly empowers our specialty is your voice and your participation. FSPMR exists to ensure physiatrists are not only part of the conversation — but leading it.

Through our presence in FSIPP and allied societies, we:

- Advocate for the unique role of physiatrists in pain and rehab
- Support early-career mentorship and leadership pathways
- Create CME offerings that are actually relevant to our daily practice
- Influence policy, reimbursement, and scope of practice
- Build a thriving professional community

Your involvement — whether attending the meeting, joining a committee, or simply staying engaged — makes a meaningful difference.

Looking Ahead

I want to personally thank the FSPMR board and all our volunteers who work tirelessly to keep our voice strong and our mission advancing. I also encourage every member to use this meeting as a time to reconnect, learn, and get inspired about what we can achieve — together.

We are more than a specialty. We are a movement.
And I can't wait to see you in Orlando this September.

Warm regards,
Diana Hussain, M.D.
President, FSPMR

Physiatrist's Voice
NEWSLETTER June 2025

FSPMR/FSIPP Annual Conference Sept 4—7, 2025

Click the below image to find all the details and registration links.

ABSTRACTS NOW OPEN:
DEADLINE JULY 11, 2025

September 4 - 7, 2025

FSPMR/FSIPP Conference

Abstracts/Posters

Call for Abstracts **OPEN**
Deadline: July 11, 2025

2025 Conference Registration

now OPEN

Physiatrist's Voice
NEWSLETTER June 2025

Saturday September 6, 2025
Agenda—sneak peak

FSPMR/FSIPP Annual Meeting

Saturday FSPMR Breakout Program

Agenda At-A-Glance

8:00 am – 8:05 am **Welcome & Introductions: Program Chair Marc Gerber, MD**

8:05 am – 9:20 am **Resident Presentations (4 presentations) Expert Panel: Diana Hussain, MD; Craig Lichtblau, MD; Andrew Sherman, MD; Ali Mostoufi MD**

- 8:05 am – 8:20 am **Successful Treatment of Post-Stroke Dysphagia in a Patient w Moya-Moya Disease Using Neuromuscular Electrical Stimulation (NMES)**
  Arian Khoshgowari, DO, MPH & Keith Myers, MD
  -Broward Health
- 8:20 am – 8:35 am **Diagnosis and Treatment of Mal de Debarquement Syndrome (MdDS)**
  Hamaad Khan, DO
  -Mayo Clinic Florida / Brooks Rehabilitation
- 8:35 am – 8:50 am **An Eye-Opening Case: Atypical Presentation of Anti-GQ1B Syndrome**
  Reny Ramos, DO & Daniel Bavender, DO
  -University of South Florida
- 8: 50 am – 9:05 am **Not So Elective: Cranioplasty as a Therapeutic Necessity in Neurorehabilitation**
  Matison Alderman, MD & Jonathan Paul, MD
  -University of Miami
- 9:05 am – 9:20 am **Q&A**

9:20 am – 10:05 am **Setting Up for Success: What New & Experienced Physiatrists Must Know About Contracts & Practice Moves**
Greg Chaires, Esq

10:05 am – 10:20 am **Q&A**

10:20 am – 10:50 am **Break with Exhibitors**

10:50 am– 11:15 am **Ulnar Collateral Ligament: Prevention and Non-operative Treatment in the Throwing Athlete**
Jason Zaremski, MD

11:15 am – 11:50 am **KEYNOTE: Spasticity and Neuromodulation: Current & Future Treatment Options & Outcomes**
Cynthnia Ivanhoe, MD

11:50 am – 12:00 pm **Q&A**

12:00 pm – 1:00 pm **Lunch**

Physiatrist's Voice
NEWSLETTER June 2025

FSPMR/FSIPP Annual Meeting
Saturday, September 6, 2025
FSPMR Breakout Program
Agenda At-A-Glance
- continued -

1:00 pm – 1:25 pm **Pain Emergencies vs Pain Urgencies**
Andrew Dubin, MD

1:25 pm – 1:50 pm **Workers Comp & Personal Injury: The Good, The Bad and The Ugly**
Marc Gerber, MD

:50 pm – 2:20 pm **Rehabilitation Innovation & Technology**
Kenneth Ngo, MD

2:20 pm – 2:45 pm **Concussion Experiences from an NFL Sideline Physician**
Ronald Tolchin, MD

2:45 pm – 3:15 pm **Break with Exhibitors**

3:15 pm – 4:30 pm **Resident Presentations (4 presentations) Expert Panel: Diana Hussain, MD; Craig Lichtblau, MD; Andrew Sherman, MD; is Ali Mostoufi MD**

- 3:15 pm -3:30 pm **The Silent Muscle with a Loud Consequence: Plantaris Rupture Complicated by PE**
  Eleazar Fariscal, DO & Nicholas White, MD
  -University of Florida
- 3:30 pm – 3:45 pm **Unveiling Neurogenic Thoracic Outlet Syndrome: A Case of Cervical Ribs and Post-Operative Complications**
  De'Jon Parker, DO & Puja Shah, DO
  -Larkin Community Hospital
- 3:45 pm – 4:00 pm **Para-Infectious Longitudinally Extensive Transverse Myelitis from Varicella-Zoster Virus: A Rare Case with Rehabilitation Insights**
  Kristina Ledbetter, DO & Roberto Cordero, DO
  -UCF/HCA FL West Hospital
- 4:00 pm – 4:15 pm **A Case of Refractory Cervicalgia**
  John Paul Mauriello, DO & Eduardo Acevedo, MD
  -Memorial Healthcare

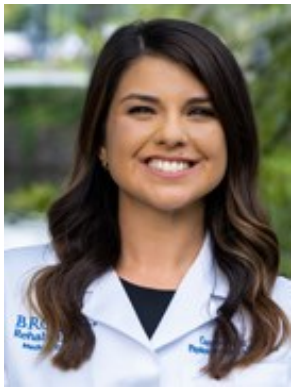
4:15 pm - 4:30 pm **Q&A**

4:30 pm – 4:50 pm **Resident Awards**

5:30 pm – 8:00pm **Annual Meeting & Hall of Fame Recognition Dinner**

Physiatrist's Voice
NEWSLETTER June 2025

SHOUTOUT to FSPMR's SOCIAL MEDIA!



Cassandra List MD

Anyone feeling consumed by social media and the news these days? Well, take a break and visit OUR pages on Facebook and LinkedIN! FSPMR is **c**ommitted to creating a space where professionals can connect, share, and grow, but we need your help! We want to hear from YOU! Stop by our Facebook page or LinkedIn and say hello!

Whether you're looking for insights, collaboration opportunities, or just want to interact with others across the state, our pages are the perfect place to start. We want to grow our platform, our voice, and our connection, especially in a time where many are feeling divided. We want to hear about the issues that are important to you! So stop by and let us know! Here are some suggestions to get you started:

- Going to a conference? Let us know, and see who else is going!
- Share your latest achievements in PM&R, and tag us to show off your hard work!
- Share pictures of events you're attending, we LOVE pictures!
- Share relevant news, updates, or trends within the PM&R field that others can learn from and discuss!
- Raise awareness for important PM&R causes, patient access to care, or policy changes affecting the field
- Let us know PM&R topics you would like to see covered in our upcoming events, newsletters, or posts
- PM&R job opening? Yes, please! You never know who is looking to make a move…
- Just passing through? Take a second to "like" or comment on a post

And, of course, don't forget to tag us in your own social media posts

#FSPMR2025 and #FSPMR

OPEN ACCESS Freely available online

International Journal of Physical Medicine & Rehabilitation

Expert Review

Understanding Arthrogryposis

Craig H. Lichtblau[1*], Jaroslaw Michal Deszczynski[2], David Feldman[3], Gabrielle Meli[4], Christopher Warburton[4]

[1]Medical Director, Osseointegration Program, Physical Medicine and Rehabilitation Consultant to the Paley Orthopedic and Spine Institute at St. Mary's Medical Center, West Palm Beach, FL, USA, Consultant to Children's Medical Services for the State of Florida [2]Department of Orthopaedics and Rehabilitation, Medical Dentistry Faculty, Medical University of Warsaw [3]Associate Director of the Paley Orthopedic and Spine Institute [4]University of Miami Miller School of Medicine, Miami, FL, USA

ABSTRACT

Arthrogryposis, or Arthrogryposis Multiplex Congenita (AMC) is characterized by congenital joint contractures that are associated with lack of fetal movement. This review details the condition and provides an update on how arthrogryposis is managed throughout the lifetime. Common clinical manifestations, the forms of arthrogryposis interventions and coordinated care are covered.

Keywords: Arthrogryposis, Physical medicine, Rehabilitation

INTRODUCTION

Arthrogryposis, also referred to as Arthrogryposis Multiplex Congenita (AMC), is a condition often diagnosed intrauterine by noting fetal akinesia, lack of fetal movement. The etiology may be varied and may or may not have a genetic component. In the non-genetic forms, there may be a vascular insufficiency in the embryo or fetus leading to failure of formation or development of muscles, connective tissue, or even bone [1,2]. The condition is characterized by two or more congenital joint contractures, which restricts joint movement and often leads to deformity.

Arthrogryposis occurs in an estimated 1 in 3,000 live births, though the specific prevalence varies by type [3]. Arthrogryposis is non-progressive and usually improves with appropriate care and management [4]. Clinical practice guidelines for arthrogryposis have not been formally established. Barriers to streamlined guidance include an inconsistency in the phenotypic expression of the condition, variability of the causative gene, natural history, and outcomes associated with arthrogryposis [3,5,6]. Here, we review the details of the condition and provide the latest information on how the condition is managed throughout the lifetime.

Arthrogryposis is a clinical finding that presents with a variety of manifestations

Arthrogryposis is a characteristic of more than 300 different disorders and is thus a clinical finding rather than a specific diagnosis [3,7]. As isolated congenital contractures may not indicate arthrogryposis, multiple contractures at birth are required for a clinical finding of arthrogryposis [3]. The joints most likely to be affected are major joints such as the hands, wrists, elbows, shoulders, hips, feet, and knees [8].

Genetic causes may be identified *via* genetic testing such as whole exome sequencing, which may help in predicting prognosis [9]. Distal Arthrogryposis is arthrogryposis that mainly involves the hands and feet and is almost always a genetic abnormality. More than twelve types of distal arthrogryposes have been described based on the clinical findings and genetic abnormality.

Arthrogryposis of the AMC type is now thought of as an aborted identical twin. There are many examples of identical twins in which one of the children has AMC and the other is uninvolved. This may relate to the affected twin having a vascular insufficiency during development.

Correspondence to: Craig H. Lichtblau, Medical Director, Osseointegration Program, Physical Medicine and Rehabilitation Consultant to the Paley Orthopedic and Spine Institute at St. Mary's Medical Center, West Palm Beach, FL, USA, Consultant to Children's Medical Services for the State of Florida, E-mail: c.lichtblau@chlmd.com

Received: 18-Feb-2025, Manuscript No. JPMR-25-37005; **Editor assigned:** 20-Feb-2025, PreQC No. JPMR-25-37005 (PQ); **Reviewed:** 03-Mar-2025, QC No. JPMR-25-37005; **Revised:** 10-Mar-2025, Manuscript No. JPMR-25-37005 (R); **Published:** 17-Mar-2025, DOI: 10.35248/2329-9096.24.13.754

Citation: Lichtblau CH, Deszczynski J, Feldman D, Meli G, Warburton C (2025). Understanding Arthrogryposis. Int J Phys Med Rehabil. 13:754.

Common manifestations of arthrogryposis occur when joints become deformed and include talipes equinovarus (clubfoot), vertical talus, severe flexion contractures of the knees and knees fixed in full extension and unable to bend. Patients also may have or develop spine-related complications including tethered spinal cord, scoliosis, kyphosis or lordosis. In rare cases, patients may suffer sensory challenges, including impaired proprioception, which affects coordination and balance [11].

Severe cases of arthrogryposis may involve respiratory challenges when there are deformities of the thorax that lead to restrictive lung disease [11]. When this occurs, often as a result of thin ribs, babies may need assistance with breathing and feeding upon birth [2,12]. Prognosis in these cases is often poor [12]. Respiratory failure more often occurs in neurogenic forms of arthrogryposis [13].

Anxiety and low self-esteem are also common manifestations in patients with arthrogryposis, but on average, levels of anxiety and depression mirror those of the general population [11,14]. For both children and adults, psychosocial outcomes have been shown to be comparable to those of the general population [15].

Intervention for arthrogryposis should start early and often lasts throughout the lifespan

Early intervention is critical in arthrogryposis, to facilitate adaptation and optimize outcomes. Cesarean section is recommended for this population so not to fracture the long bones upon delivery. The child will often look most affected right after birth. Immediately after birth, physical therapy and orthotics should be utilized to teach the family and caregivers how to handle the child. There is most often no reason to start casting the child in the hospital as the parents should bond with their newborn. Joint mobility is often improved with a combination of physical therapy and splinting, which can also prevent contractures from worsening [16].

Other than the initial tendon releases for the feet, physical and occupational therapy is the primary treatment in the first 18 months of the child's life. In cases with severe deformity and where daily functioning is adversely affected, orthopedic surgery may be necessary to release and reconstruct joints, usually between 18-36 months of age.

For instance, casting and bracing through the Ponseti method is relatively effective for correcting clubfoot deformities [10]. One 2024 study found that the Ponseti method led to improvements in about 1 in 4 arthrogrypotic patients without the need for major surgery [17]. To promote functioning and improve performance of daily activities, assistive devices and custom adaptations are also often employed [18].

Coordinated comprehensive care is necessary to enhance quality of life by improving mobility, autonomy and social integration [8]. Effective multidisciplinary approaches include orthopedists, physical therapists, geneticists, and other specialists such as physiatrists. These teams of experts often help to manage those with arthrogryposis throughout their lives to maintain joint range and muscle strength across all developmental stages [19]. Psychological support is also often incorporated into multidisciplinary care for children to improve self-esteem and facilitate healthy social relationships [20].

Characteristics of arthrogryposis and appropriate intervention depend on the specific disorder

Arthrogryposis has been classified into various types that more precisely define the disorder and inform tailored treatment that best aligns with underlying causes and prognostic factors.

Amyoplasia: Amyoplasia is sporadic and characterized by symmetrical contractures and underdevelopment of muscles that become replaced by fatty or fibrous tissue. This form occurs more frequently than other forms of the condition, making up 40% of arthrogryposis cases [3,21,22]. In this condition, contractures are often severe, and muscle mass and strength are significantly reduced, particularly in the limbs.

Patients with amyoplasia tend to have shoulders that are adducted and internally rotated as well as extended elbows, flexed and wrists deviated ulnarly, stiff fingers, and thumbs facing the palms [3]. Other common observations in these patients are dislocated hips, fixed flexed or extended knees, severe equinovarus contractures in the feet, and a midfacial hemangioma. Both symmetric and asymmetric involvement of the limbs have been reported in these patients [5]. Bowel atresia and gastroschisis have been observed in these patients as well. Fortunately, intelligence does not appear to be affected in these patients [23–25].

Treatment for patients with amyoplasia aims to mobilize joints, enhance strength, and improve physical functioning and daily living, including adapting movement patterns that facilitate walking [3]. Approximately 80% of patients with amyoplasia continue to receive therapy for their condition into their teenage years [5].

Surgery serves to improve deformities and physical restriction in those with arthrogryposis [23–26]. According to one case series, surgeries on the feet were by far the most common (76%), with surgeries on knees (39%) and elbows (24%) also relatively common. Surgeries also occurred in the hips (18%), wrists (16%), hands (8%), and spine (5%) [6]. Surgery is not commonly needed for shoulder contractures with external rotational osteotomy of the humerus being common. Posterior capsulotomy, with ulna nerve transposition, may be performed at the elbow with tricep lengthening in cases where patients cannot reach their hand to their mouth [27–29].

Neurogenic and genetic forms: Some arthrogryposis occurs due to neurological impairments in either the central nervous system or peripheral nervous system, which are the catalysts for the fetal movement observed in the condition [31]. Some forms also have specific underlying genetic causes, which often involve mutations across multiple genes [32]. Treatment for neurogenic forms focus on physical therapy and correcting orthopedic challenges, whereas precision medicine is used for genetic forms.

Distal arthrogryposes: The less common form of arthrogryposis is distal arthrogryposis, which affects distal regions of limbs, hands, and feet [3,22]. The congenital contractures that occur in

distal arthrogryposis are not due to a neurological or muscle disorders [33]. There are more than ten subtypes of distal arthrogryposis that have been described, but consistent amongst all subtypes are the pattern of involvement of the hands and feet and sparing of proximal joints [33–35].

For a distal arthrogryposis classification, an individual must present with two major clinical criteria or one major clinical criterion in cases where a family member has arthrogryposis [3]. For the upper limb, these clinical criteria include camptodactyly or psueocamptodactyly, absent or hypoplastic flexion creases, ulnar deviation at the wrist, and overriding fingers. For the lower limb, talipes equinovarus, vertical talus, calcaneovalgus deformities, and metatarsus varus are major clinical criteria.

Specific characteristics of some subtypes are as follows

Distal Arthrogryposis type I (DA1): DA1 is characterized by clubfoot and camptodactyly, and absence or hypoplastic flexion creases are often observed. The pattern of joint involvement is consistent in DA1, though severity varies significantly [3,34-40].

Distal Arthrogryposis type II (DA2): DA2 often presents like DA1 but with nasolabial folds that are more prominent and smaller mouths. DA2 encompasses both Freeman-Sheldon syndrome and Sheldon-Hall syndrome, the latter of which is thought to be the most common form of distal arthrogryposis.

Distal Arthrogryposis types III, IV, and VI (DA3, DA4, and DA6): DA3, also known as Gordon syndrome, DA4, and DA6 are quite rare and characterized by short stature and a cleft palate.

Distal Arthrogryposis type V (DA5): DA5 often involves ocular abnormalities, including ptosis or strabismus. Patients with DA5 have also been reported to suffer from restrictive lung disease that results in pulmonary hypertension.

Distal Arthrogryposis type VII (DA7): DA7, or trismus-pseudocamptodactyly syndrome, is uncommon. Trismus, meaning the inability to fully open the mouth, is a key feature of DA7. Short stature and shortened hamstring muscles are also common, though clinical presentation varies in DA7.

In distal arthrogryposis, treatment focuses on fine motor function and correcting deformities and is less aggressive than interventions for amyoplasia [41]. Emphasis is placed on passive stretching and serial casting.

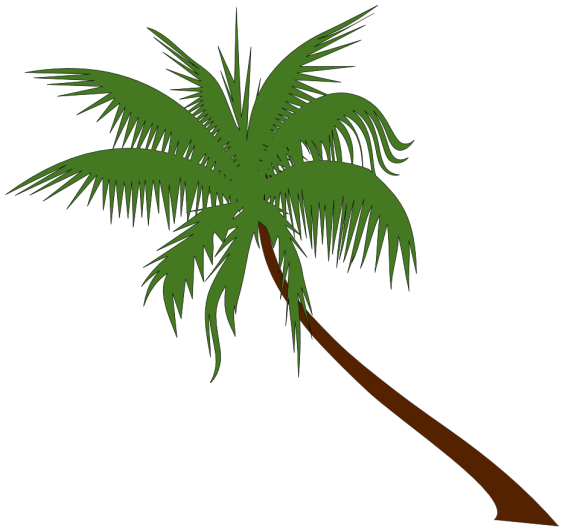
CONCLUSION

Arthrogryposis is a complex condition with a range of clinical manifestations and prognoses. Ongoing multidisciplinary intervention is critical for improving outcomes in patients with arthrogryposis and for customizing treatment approaches based on the type of arthrogryposis present and its severity. Early intervention tends to improve outcomes, and several different interventions conducted throughout the lifespan may help to enhance mobility and optimize quality of life.

REFERENCES

1. Hall JG. Arthrogryposis multiplex congenita: Etiology, genetics, classification, diagnostic approach, and general aspects. J Pediatr Orthop B. 1997;6(3):159-166.
2. Langston S, Chu A. Arthrogryposis multiplex congenita. Pediatr Ann. 2020;49(7):299-304.
3. Bamshad M, Van Heest AE, Pleasure D. Arthrogryposis: A review and update. J Bone Joint Surg Am. 2009;91:40-46.
4. Dahan-Oliel N, Cachecho S, Barnes D, Bedard T, Davison AM, Dieterich K, et al. International multidisciplinary collaboration toward an annotated definition of arthrogryposis multiplex congenita. Am J Med Genet C Semin Med Genet. 2019;181(3):288-299.
5. Vanpaemel L, Schoenmakers M, van Nesselrooij B, Pruijs H, Helders P. Multiple congenital contractures. J Pediatr Orthop B. 1997;6(3):172-178.
6. Sells JM, Jaffe KM, Hall JG. Amyoplasia, the most common type of arthrogryposis: The potential for good outcome. Pediatrics. 1996;97(2):225-231.
7. Hall JG, Reed SD, Greene G. The distal arthrogryposes: Delineation of new entities–review and nosologic discussion. Am J Med Genet. 1982;11(2):185-239.
8. Kowalczyk B, Felus J. Arthrogryposis: An update on clinical aspects, etiology, and treatment strategies. Arch Med Sci. 2016;12(1):10-24.
9. Rink BD. Arthrogryposis: A review and approach to prenatal diagnosis. Obstetrical & gynecological survey. 2011;66(6):369-377.
10. Ayadi K, Trigui M, Abid A, Cheniour A, Zribi M, Keskes H. Arthrogryposis: Clinical manifestations and management. Arch Pediatr. 2015;22(8):830-839.
11. Dai S, Dieterich K, Jaeger M, Wuyam B, Jouk PS, Perennou D. Disability in adults with arthrogryposis is severe, partly invisible, and varies by genotype. Neurology. 2018;90(18):1596-1604.
12. Bianchi DW, Van Marter LJ. An approach to ventilator-dependent neonates with arthrogryposis. Pediatrics. 1994;94(5):682-686.
13. Millichap JG. Spinal Muscular Atrophy and Arthrogryposis. Pediatric Neurology Briefs. 1997;11(10).
14. Wall LB, Vuillerman C, Miller PE, Bae DS, Goldfarb CA. Patient-reported outcomes in arthrogryposis. J Pediatr Orthop. 2020;40(7):357-360.
15. Cachecho S, Boruff J, Wong T, Lacombe F, Dahan-Oliel N. Psychosocial wellbeing among children and adults with arthrogryposis: A scoping review. Health Qual Life Outcomes. 2021;19:1-8.
16. Thompson GH, Bilenker RM. Comprehensive management of arthrogryposis multiplex congenita. Clin Orthop Relat Res. 1985;194:6-14.
17. Berger N, Forkl H, Heimkes B, Frimberger V, Wagner F, Hildebrand F, et al. Midterm clinical and radiological outcomes of arthrogryposis-associated clubfoot treated with the Ponseti method: A retrospective observational study and comprehensive literature review. J Orthop Surg Res. 2024;19(1):595.
18. Munawaroh N, Putri RL. Case Report Arthrogryposis Multiplex Congenita (AMC): Functional Improvement of a Seven-Year-Old Girl after 3 Years of Physical Medical Rehabilitation Intervention. SPMRJ. 2023;5:(1):32-36.
19. Wagner LV, Cherry JS, Sawatzky BJ, Fąfara A, Elfassy C, Eriksson M, et al. Rehabilitation across the lifespan for individuals with arthrogryposis. Am J Med Genet C Semin Med Genet. 2019;181(3):385-392.
20. Ayadi K, Trigui M, Abid A, Cheniour A, Zribi M, Keskes H. Arthrogryposis: Clinical manifestations and management. Arch Pediatr. 2015;22(8):830-839.
21. Bernstein RM. Arthrogryposis and amyoplasia. J Am Acad Orthop Surg. 2002;10(6):417-424.
22. Kimber E. AMC: Amyoplasia and distal arthrogryposis. J Child Orthop. 2015;9(6):427-432.
23. Bennett JB, Hansen PE, Granberry WM, Cain TE. Surgical management of arthrogryposis in the upper extremity. J Pediatr Orthop. 1985;5(3):281-286.

24. WILLIAMS PF. Management of upper limb problems in arthrogryposis. Clin Orthop Relat Res. 1985;194:60-67.
25. Ezaki M. Treatment of the upper limb in the child with arthrogryposis. Hand Clin. 2000;16(4):703-711.
26. Hall JG, Reed SD, McGillivray BC, Herrmann J, Partington MW, Schinzel A, et al. Part II. Amyoplasia: twinning in amyoplasia--a specific type of arthrogryposis with an apparent excess of discordantly affected identical twins. Am J Med Genet. 1983;15(4):591-599.
27. Bennett JB, Hansen PE, Granberry WM, Cain TE. Surgical management of arthrogryposis in the upper extremity. J Pediatr Orthop. 1985;5(3):281-286.
28. Ezaki M. Treatment of the upper limb in the child with arthrogryposis. Hand Clin. 2000;16(4):703-711.
29. WILLIAMS PF. Management of upper limb problems in arthrogryposis. Clin Orthop Relat Res. 1985;194:60-67.
30. Hall JG, Reed SD, Driscoll EP, Opitz JM. Part I. Amyoplasia: A common, sporadic condition with congenital contractures. Am J Med Genet. 1983;15(4):571-590.
31. Hall JG. Arthrogryposis (multiple congenital contractures): Diagnostic approach to etiology, classification, genetics, and general principles. Eur J Med Genet. 2014;57(8):464-472.
32. Bayram Y, Karaca E, Akdemir ZC, Yilmaz EO, Tayfun GA, Aydin H, et al. Molecular etiology of arthrogryposis in multiple families of mostly Turkish origin. J Clin Invest. 2016;126(2):762-778.
33. Bamshad M, Jorde LB, Carey JC. A revised and extended classification of the distal arthrogryposes. Am J Med Genet. 1996;65(4):277-281.
34. Krakowiak PA, Bohnsack JF, Carey JC, Bamshad M. Clinical analysis of a variant of Freeman-Sheldon syndrome (DA2B). Am J Med Genet. 1998;76(1):93-98.
35. Stevenson DA, Carey JC, Palumbos J, Rutherford A, Dolcourt J, Bamshad MJ. Clinical characteristics and natural history of Freeman-Sheldon syndrome. Pediatrics. 2006;117(3):754-762.
36. Williams MS, Elliott CG, Bamshad MJ. Pulmonary disease is a component of distal arthrogryposis type 5. Am J Med Genet A. 2007;143(7):752-756.
37. Klemp P, Hall JG. Dominant distal arthrogryposis in a Maori family with marked variability of expression. Am J Med Genet. 1995;55(4):414-419.
38. Freeman EA, Sheldon JH. Cranio-carpo-tarsal dystrophy. Arch Dis Child. 1938;13(75):277.
39. Pallotta R, Ehresmann T, Fusilli P. Occurrence of Dandy-Walker anomaly in a familial case of distal arthogryposis type IIB. Am J Med Genet. 2000;95(5):477-481.
40. Pallotta R, Ehresmann T, Fusilli P. Ocular findings in distal arthrogryposis. Ophthalmic Genet. 2001;22(2):125-130.
41. Griffet J, Dieterich K, Bourg V, Bourgeois E. Amyoplasia and distal arthrogryposis. Orthop Traumatol Surg Res. 2021;107(1):102781.



Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma

By Craig Lichtblau, M.D.

Ewing sarcoma is a malignant tumor that usually begins growing in a bone. It occurs primarily in children and young adults, often appearing during the teen years.

Although Ewing sarcoma can develop in any bone, it usually affects the long bones, such as the femur, tibia, and humerus. The bones of the pelvis are also often affected. Occasionally, the tumor begins in the muscles and soft tissues, also known as extraosseous Ewing sarcoma.

Ewing sarcoma can metastasize to other parts of the body, such as the lungs, bone marrow, and other soft tissues.

When compared with other cancers, malignant bone tumors like Ewing sarcoma are rare. Of these rare bone tumors, Ewing sarcoma is the second most common among children and young adults. According to data on children younger than 15 years old, approximately 1.7 children out of 1 million develop the disease.

There are four types of cancer, referred to as the Ewing Family of Tumor, which include: Ewing sarcoma of bone, Ewing sarcoma of soft tissue, Primitive neuroectodermal tumor (PNET), which may occur in both bone and soft tissue, and Askin's tumor, a PNET that occurs in the bones of the chest.

Causes

There is no known cause of Ewing sarcoma.

Most cancers are known to arise from a certain kind of tissue or organ. For example, breast cancer arises from breast cells. In the case of Ewing sarcoma, it is not known the exact type of cell where the cancer starts.

What is known is that the cancer forms when changes occur in a cell's chromosomes. In Ewing sarcoma cells, the genetic material in chromosomes #11 and #22 is mismatched. This genetic abnormality is not inherited from a child's parents but occurs after the child is born.

It is not understood why this abnormality occurs. The risk factors that make one child more susceptible than another is not known. The tumor does not develop as a result of any dietary, social, or behavioral habits. There are no known ways to prevent the disease.

Signs & Symptoms

In some cases, the first symptom of Ewing sarcoma is the presence of a mass or lump, which may feel soft and warm, in the arms, legs, chest, or pelvis. There is usually pain and possibly swelling at the site of the tumor. The tumor may be present for many months before it becomes large enough to

Ewing Sarcoma
by Craig H. Lichtblau, M.D.
-continued-

cause pain and swelling. Fever occurring for no known reason.

Although injuries are not a known cause, an injury may draw attention to a tumor. For example, a bone weakened by a tumor may break after a minor injury or for no known reason.

Imaging Tests

X-rays, magnetic resonance imaging scans, computerized tomography scans, and bone scans help identify the tumor. To confirm that the tumor seen in imaging studies, bone marrow aspiration and an incisional or needle biopsy are performed. A complete blood count and blood chemistry studies may also be performed. Ewing sarcoma tumors are sometimes called small blue cell (round cell) tumors.

Staging

Once the tumor is identified as Ewing sarcoma, it will have to be staged. This is done with blood tests, CT scan of the lungs, bone scans, and bone marrow biopsies.

The primary site can be determined as well as the metastatic sites by sophisticated radiologic films. The biopsy is done to confirm Ewing sarcoma.

Undifferentiated small, round cell sarcoma

Undifferentiated small, round cell sarcoma may also form in the bone or soft tissue. Undifferentiated small, round cell sarcoma usually forms in the bones or the muscles that are attached to the bones.

There are five types of undifferentiated small, round cell sarcoma that are treated like Ewing sarcoma.

1. **Undifferentiated small, round cell sarcoma with *BCOR* rearrangements.**
   This type of bone tumor usually forms in the pelvis, arms, or legs. It may spread to other parts of the body. This type of bone tumor is more common in children younger than 18 years of age. In this type of round cell sarcoma, the *BCOR* gene is joined to the *CCNB3* gene or to other genes. To diagnose this small round cell sarcoma, the tumor cells are checked for these gene changes.

2. **Undifferentiated small round cell sarcoma with *CIC::DUX4* rearrangements.**
   This type of soft tissue tumor usually forms in the trunk, arms, or legs. It is most common in males and in young adults between 21 and 40 years of age. In this type of small round cell sarcoma, the *CIC* gene is joined to the *DUX4* gene. To diagnose this small round cell sarcoma, the tumor cells are checked for this gene change.

Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma
by Craig H. Lichtblau, M.D.
-continued-

3. **Undifferentiated small round cell sarcoma with *CIC::NUTM1* rearrangements.**
   This type of soft tissue tumor usually forms in the central nervous system, but it can also form in the trunk. It is most common in younger patients.

4. **Undifferentiated small round cell sarcoma with *EWSR1::NFATC2* and *FUS::NFATC2* rearrangements**
   This type of soft tissue tumor may be a benign cyst or a malignant cancer. It usually forms in the arms and legs. The malignant tumor is more common in males and in adults.

5. **Undifferentiated small round cell sarcoma with *EWSR1::PATZ1* fusions.**
   This type of soft tissue tumor usually forms in the trunk and is more common in adults.

A genetic condition may increase the risk of Ewing sarcoma and other sarcomas. Anything that increases a person's chance of getting a disease is called a risk factor. Not every child with one or more of these risk factors will develop Ewing sarcoma or other sarcomas, and they can develop in some children who don't have any known risk factors. Children with Fanconi anemia may be at increased risk for Ewing sarcoma.

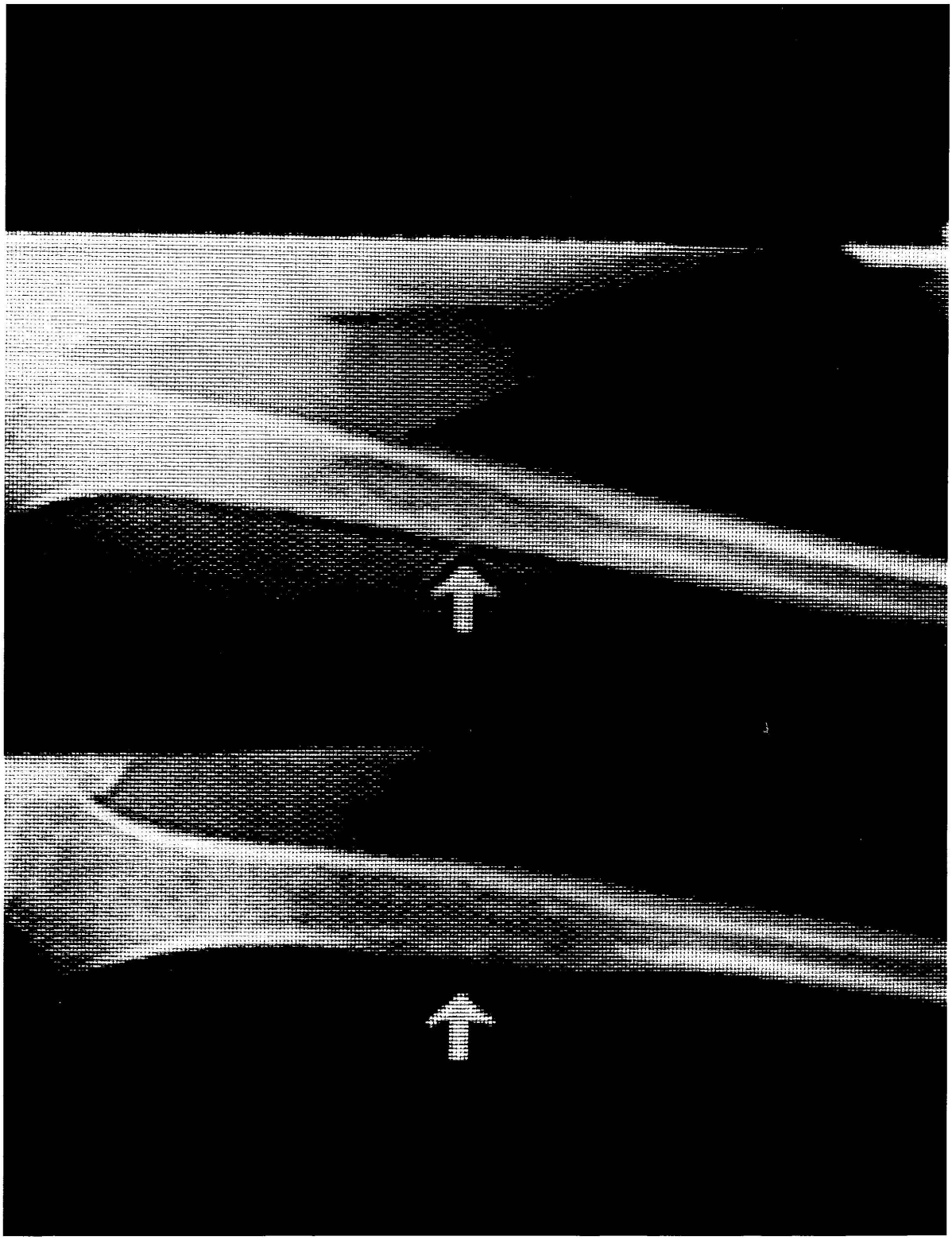
Treatment

1. Chemotherapy.
2. Radiation.
3. Surgery.
4. High-dose chemotherapy with stem cell rescue.

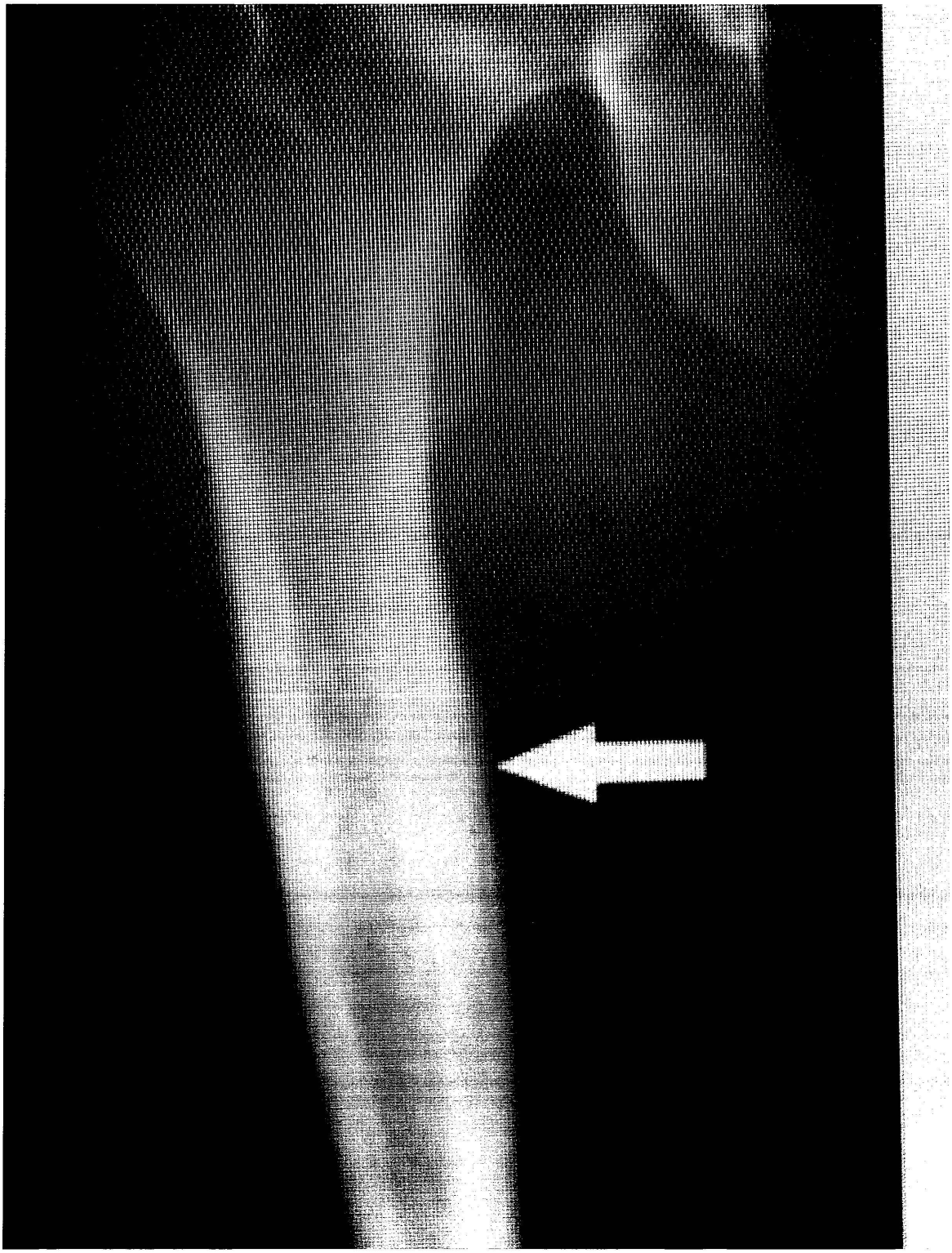
New types of treatment are being tested, which include immunotherapy (CAR T-Cell therapy). This treatment changes the patient's T-cells so that they will attack certain proteins on the surface of the cancer cells. T-cells are taken from the patient and special receptors are added to their surface in the laboratory. The changed cells are called chimeric antigen receptors (CARs T-cells). The CAR T-cells are grown in the laboratory and then given to the patient through infusion. The CAR T-cells multiple in the patient's blood and attack cancer cells.

Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma by Craig H. Lichtblau, M.D. - continued-



Ewing Sarcoma by Craig H. Lichtblau, M.D. - continued-

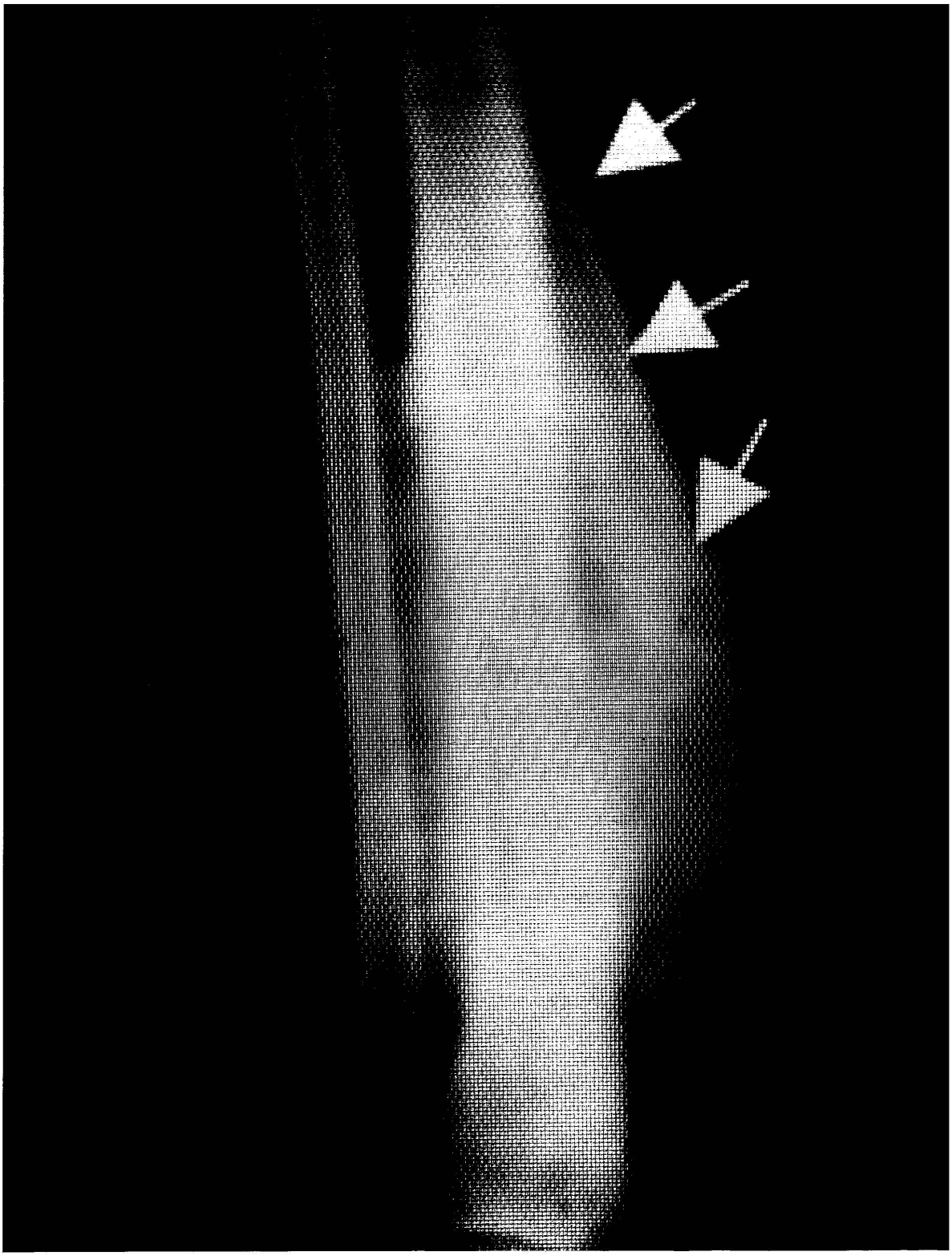


Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma by Craig H. Lichtblau, M.D. - continued-

Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma by Craig H. Lichtblau, M.D. - continued-



Physiatrist's Voice
NEWSLETTER June 2025

Ewing Sarcoma by Craig H. Lichtblau, M.D. - continued-

Physiatrist's Voice
NEWSLETTER June 2025

Brooks Rehabilitation Enhances Upper Extremity SCI Treatment with Novel Transcutaneous Spinal Cord Stimulation Device

By Brian Higdon, MD

Colleagues,

I am happy to share exciting news regarding a significant advancement in Brooks Rehabilitation's capabilities for treating individuals with spinal cord injury (SCI). We recently acquired a novel transcutaneous spinal cord stimulation device designed to improve hand and arm function in patients with chronic incomplete quadriplegia. This device received de novo FDA clearance in December 2024, based on evidence gathered in the Up-LIFT trial and published in Nature Medicine last year.

Impaired upper extremity function profoundly impacts functional independence and quality of life and is often a patient's highest priority when it comes to their rehabilitation. While significant strides have been made in SCI rehabilitation, restoring meaningful hand and arm control remains a critical challenge, particularly in the chronic phase of injury. The device is a promising new modality to address this unmet need.

The Science Behind Transcutaneous Spinal Cord Stimulation

Transcutaneous spinal cord stimulation (tSCS) is a non-invasive neuromodulation technique that involves delivering electrical currents through electrodes placed on the skin over the spinal cord, typically targeting the cervical region for upper extremity function. The underlying principle is that this stimulation can modulate the excitability of spinal neural circuits below the level of injury. tSCS is hypothesized to "awaken" dormant pathways, amplify residual descending commands and promote neuroplasticity, ultimately enhancing volitional motor control when paired with task-specific training.

The field of tSCS for SCI rehabilitation has been developing over decades of research into spinal cord stimulation, both epidural and transcutaneous. Studies investigating tSCS for upper extremity function have demonstrated remarkable results. Research performed at multiple research centers using a variety of stimulation parameters have shown that targeted tSCS can lead to improvements in hand strength, dexterity, range of motion and performance on functional tasks in individuals with chronic incomplete quadriplegia. Patients demonstrated gains during stimulation sessions combined with therapy and, encouragingly, sustained improvements even after stimulation, suggesting neuroplastic changes.

The newly approved tSCS device is designed specifically for targeted upper extremity application. Its development is based on positive findings from the broader tSCS research landscape. The Up-LIFT study was a prospective, single-arm, multicenter, open-label trial. Initially, therapy was provided without the device, showing a plateau in outcome measures. Subsequently, improvements were seen over three months of therapy with the device, with statistically significant improvements in strength (ISNCSCI-UEMS), function (GRASSP) and sensation (ISNCSCI-TSS).

Brooks Rehabilitation Enhances Upper Extremity SCI Treatment with Novel Transcutaneous Spinal Cord Stimulation Device
by Brian Higdon, MD
- continued -

Implementation at Brooks

This initiative is being led by the Brooks Center for Innovation, reflecting our dedication to exploring and integrating novel therapeutic technologies. This new device will be used within our state-of-the-art Neuro Recovery Center (NRC). Our NRC therapists will be trained to incorporate tSCS treatment into therapy sessions for eligible patients with chronic incomplete quadriplegia, aiming to maximize functional gains in hand and arm use.

Generous Contributions

We are grateful that this acquisition was made possible through the generosity of four donors to the Brooks Foundation. Their commitment to advancing patient care allows us to bring this innovative technology directly to individuals who stand to benefit most.

Sincerely,

Brian Higdon, MD
Associate SCI Medical Director, Brooks Rehabilitation

References:

- Moritz C, Field-Fote EC, Tefertiller C, et al. Non-invasive spinal cord electrical stimulation for arm and hand function in chronic tetraplegia: a safety and efficacy trial. *Nat Med*. 2024;30(5):1276-1283. doi:10.1038/s41591-024-02940-9
- Gelenitis K, Santamaria A, Pradarelli J, et al. Non-invasive Transcutaneous Spinal Cord Stimulation Programming Recommendations for the Treatment of Upper Extremity Impairment in Tetraplegia. *Neuromodulation*. 2025;28(1):162-173. doi:10.1016/j.neurom.2024.05.005
- Singh G, Sharma P, Forrest G, Harkema S, Behrman A, Gerasimenko Y. Spinal Cord Transcutaneous Stimulation in Cervical Spinal Cord Injury: A Review Examining Upper Extremity Neuromotor Control, Recovery Mechanisms, and Future Directions. *J Neurotrauma*. 2024;41(17-18):2056-2074. doi:10.1089/neu.2023.0438
- Christopher & Dana Reeve Foundation. Webinar: Empowering Independence: ONWARD ARC-EX System granted US market authorization by FDA. YouTube. Published January 9, 2025. Accessed May 1, 2025. http://www.youtube.com/watch?v=yGzvwYjH8qg

https://brooksrehab.org/innovation/

https://brooksrehab.org/locations/neuro-recovery-center-brooks-rehabilitation/

Physiatrist's Voice
NEWSLETTER June 2025

Residency Updates

- USF
- Larkin Community Hospital
- UFlorida
- UMiami
- Broward Health
- Memorial Health

Physiatrist's Voice

NEWSLETTER June 2025

University of South Florida PM&R Residency Update
Reny Ramos MD , Incoming Resident Liaison
Marissa McCarthy, MD, Residency Program Director

Artish Patel MD
Outgoing Resident Liaison

Greetings from Tampa!

I'm thrilled to announce and congratulate our incoming PGY-1 residents: Dr. Vikhram Balagee, Dr. Malak Ibrahim, Dr. Zachary Levine, and Dr. Tristan Tinney. Congratulations are also in order for my fellow Chief Residents as we near the completion of our residency! Looking ahead, Dr. William Mosley will be staying with USF for his interventional pain fellowship. Dr. Anthony Safadi will be joining Medrina in Gainesville, focusing on acute IPR and SNFs. And I'll be staying in the Tampa area, joining Rehabilitation & Electrodiagnostics across acute IPR, SNF, and ALF settings.

Looking ahead, we are excited to have strong representation at the ASIPP conference in Orlando. Our residents are eager to connect and network with pain physicians from across the nation. Lastly, I want to express my sincere appreciation for the opportunity to serve as the USF resident liaison to FSPMR. My successor, Dr. Daniel Bavender, is looking forward to continuing to provide you with updates from our program.

Thank you,

PHYSICAL MEDICINE AND REHABILITATION RESIDENCY PROGRAM

CLASS OF 2029

Malak Ibrahim, M.D.
FIU Herbert Wertheim College of Medicine

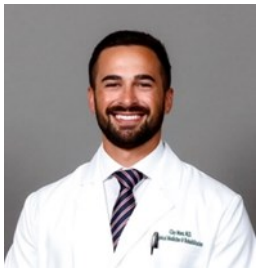
Zachary Levine, M.D.
Chicago Medical School, Rosalind Franklin University of Medicine & Science

Tristan Tinney, D.O.
Lake Erie College of Osteopathic Medicine

Vikhram Balagee, D.O.
Edward Via College of Osteopathic Medicine

USF Health
Morsani College of Medicine

Physiatrist's Voice
NEWSLETTER June 2025



Rehabilitation to Performance: PM&R's Role in Return-to-Play Decision-Making

Clayton Moss, MD
PGY2, USF PM&R

Injury recovery doesn't end when pain resolves, it ends when an athlete is functionally and psychologically ready to perform. PM&R physicians are uniquely trained to bridge the gap between rehabilitation and return-to-play (RTP), using objective data, movement analysis, and a systems-level view to reduce reinjury risk and optimize performance.

Neuromuscular Symmetry: Standard hop distance tests can miss critical asymmetries—ACL-reconstructed athletes often show near-equal jump distance (~97%) but only ~69% symmetry in joint work.[1] Force-plate data and Y-Balance tests reveal deficits linked to injury risk, emphasizing the need to go beyond surface metrics.[2]

Strength Restoration: Quadriceps strength symmetry ≥90% is strongly associated with lower reinjury risk.[3] Athletes failing strength or isokinetic benchmarks had up to 4× higher re-tear rates.[4] PM&R physicians should insist on objective strength testing before clearance—only ~26% of young athletes meet full criteria when tested.[5]

Movement Quality: Biomechanical faults like knee valgus, stiff landings, or early heel rise predict injury and reinjury.[6] Even in athletes who pass strength tests, poor cutting or landing form (e.g., valgus collapse) increases ACL re-tear risk ~4.6×.[7] PM&R must include movement analysis as a formal RTP criterion.

Sport-Specific Conditioning: RTP decisions should simulate game demands—fatigue, reactive agility, and deceleration.[8] Studies show neuromuscular programs that train cutting and landing reduce ACL injury risk by ~67%.[9] PM&R-guided rehab should mirror these conditions, blending safety with performance restoration.

Psychological Readiness: Fear of reinjury remains the top reason athletes don't return.[10] Tools like the ACL-RSI help quantify confidence, and scores ≥60 at 6 months predict better RTP rates at 2 years.[11] PM&R-led RTP protocols should include psychological metrics alongside physical benchmarks.[12]

Conclusion:

Passing time-based or isolated strength tests isn't enough. True return-to-play requires layered clearance: objective strength, clean movement, sport readiness, and mental confidence. PM&R physicians are trained to synthesize these elements—ensuring not just safe return, but sustainable, high-level performance.

References:

1. Schmitt, Laura C., et al. Strength asymmetry and landing mechanics at return to sport after ACL reconstruction. Medicine & Science in Sports & Exercise, vol. 47, no. 7, 2015, pp. 1426–1432.

2. Nawasreh, Zakariya H., et al. Dynamic balance deficits are associated with noncontact lower extremity injury in collegiate athletes. Journal of Orthopaedic & Sports Physical Therapy, vol. 45, no. 9, 2015, pp. 664–673.

3. Grindem, Hege, et al. Simple decision rules can reduce reinjury risk by 84% after ACL reconstruction: the Delaware-Oslo ACL cohort study. British Journal of Sports Medicine, vol. 50, no. 13, 2016, pp. 804–808.

4. Kyritsis, Polyvios, et al. Likelihood of ACL graft rupture: not meeting six clinical discharge criteria before return to sport is associated with a four times greater risk of rupture. British Journal of Sports Medicine, vol. 50, no. 15, 2016, pp. 946–951.

5. Logerstedt, David, et al. Self-reported knee function can identify athletes who fail return-to-activity criteria up to 1 year after ACL reconstruction. Journal of Orthopaedic & Sports Physical Therapy, vol. 42, no. 12, 2012, pp. 919–928.

Rehabilitation to Performance:
PM&R's Role in Return-to-Play Decision-Making
- continued -

6. Paterno, Mark V., et al. Biomechanical measures during landing and postural stability predict second anterior cruciate ligament injury after ACL reconstruction and return to sport. The American Journal of Sports Medicine, vol. 38, no. 10, 2010, pp. 1968–1978.

7. Dingenen, Bart, et al. Predictors of second ACL injury after ACL reconstruction and return to sport: a systematic review. Sports Medicine, vol. 49, no. 5, 2019, pp. 853–867.

8. Myer, Gregory D., et al. The incidence of anterior cruciate ligament tears in high school athletes and the association with sprinting and cutting tasks. Sports Health, vol. 3, no. 3, 2011, pp. 243–250.

9. van Melick, Nicky, et al. Evidence-based clinical practice update: practice guidelines for anterior cruciate ligament rehabilitation based on a systematic review and multidisciplinary consensus. British Journal of Sports Medicine, vol. 50, no. 24, 2016, pp. 1506–1515.

10. Ardern, Clare L., et al. Fear of re-injury in people who have returned to sport following anterior cruciate ligament reconstruction surgery. Journal of Science and Medicine in Sport, vol. 15, no. 6, 2012, pp. 488–495.

11. Webster, Kate E., et al. The ACL return to sport after injury scale (ACL-RSI): a psychometric analysis. Journal of Science and Medicine in Sport, vol. 11, no. 6, 2008, pp. 439–445.

Filbay, Stephanie R., et al. The psychological impact of returning to sport following anterior cruciate ligament reconstruction. British Journal of Sports Medicine, vol. 50, no. 4, 2016, pp. 238–244.

Physiatrist's Voice
NEWSLETTER June 2025

Larkin Community Hospital South Miami PM&R Residency Update
Resident Liaisons Hein Linn Thant, MD and Puja C. Shah, DO
Residency Program Director Jose J. Diaz, DO

Hello FSPMR Family,

To all of our incoming newly matched residents - we are excited for the growth of our field and family. We celebrate you. Welcome to the best specialty!

Hein Linn Thant, MD

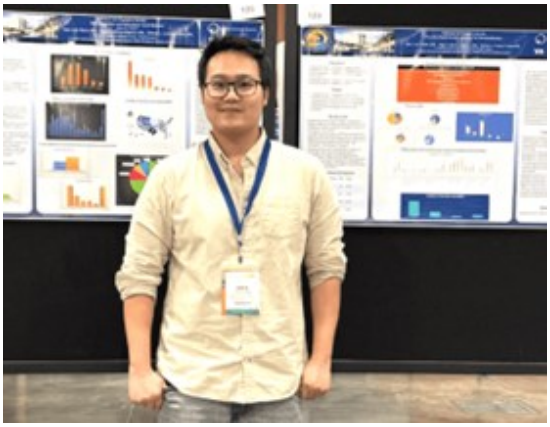
Puja C. Shah, DO

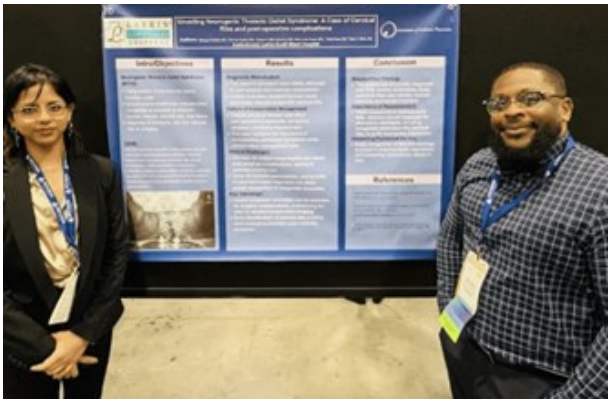
Highlights from our Prosthetic & Orthotic rotation at Hanger Clinic - we are grateful for the hands-on learning experience with our Prosthetist, William, and the opportunity to enhance patient mobility and quality of life.

Physiatrist's Voice
NEWSLETTER June 2025

Larkin Community Hospital South Miami PM&R Residency Update
Resident Liaisons Hein Linn Thant, MD and Puja C. Shah, DO
Residency Program Director Jose J. Diaz, DO
-continued -

Teamwork in action! On the right, Dr. Paxton Brady alongside our alumna and medical director Dr. Colleen Neubert at St. Catherine's West Rehabilitation Hospital. On the left Dr. Ghazaleh Ebrahimi is having fun on the Neurorehab service under the leadership of Dr. Michael Wilson with a few of our co-resident's from our sister program. Grateful for the mentorship and collaborative spirit that shapes our training every day!

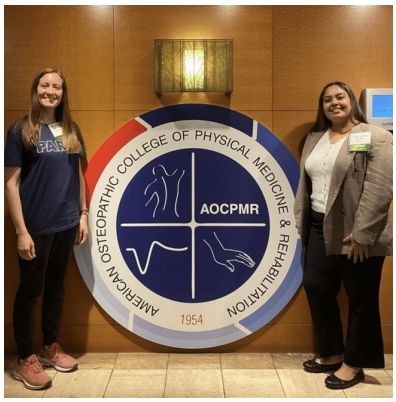




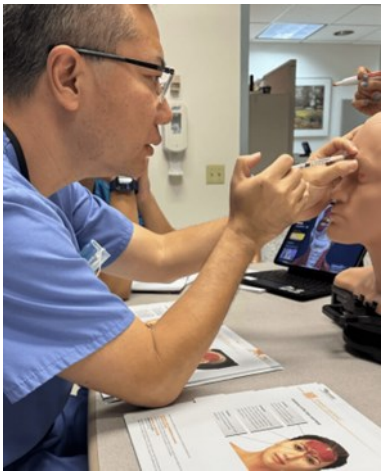
Our residents Drs. De'Jon Parker, Bhargavi Madhu, Hein Linn Thant, and Jasmine Sidhu had an incredible time in Phoenix, Arizona, at the AAP conference! They had the opportunity to learn, showcase their research, and connect with fellow professionals. From exploring driverless cars to scenic hikes, it was an unforgettable experience!

Physiatrist's Voice
NEWSLETTER June 2025

Larkin Community Hospital South Miami PM&R Residency Update
Resident Liaisons Hein Linn Thant, MD and Puja C. Shah, DO
Residency Program Director Jose J. Diaz, DO
-continued -



We had an incredible time in Seattle at the AOCPMR Annual Meeting! Dr. Puja Shah was honored to give a keynote speech on leadership development in PM&R, while Dr. Chris Keener presented a fascinating case on spinal epidural lipomatosis. We loved linking up and learning from alumna Dr. Eileen Slavin who is now practicing at the Cleveland Clinic. Grateful for the opportunity to connect with colleagues and mentors from across the country. The future of Physiatry is bright!



Larkin Hospital South Miami

Physiatrist's Voice
NEWSLETTER June 2025

Larkin Community Hospital South Miami PM&R Residency Update
Resident Liaisons Hein Linn Thant, MD and Puja C. Shah, DO
Residency Program Director Jose J. Diaz, DO
-continued -



Some of our awesome PGY-4's on their EMG rotation at the VA! Learning EMG and nerve conduction studies is essential for PM&R residents and physicians because it sharpens diagnostic skills, enhances understanding of neuromuscular disorders, and directly impacts patient care decisions. It's especially valuable that we get to do this rotation at the VA hospital, where we see a wide range of complex cases and gain hands-on experience under skilled mentors—making it one of the most rewarding and educational parts of our training. In addition, we gain Botox treatment exposure!

Lastly, we are proud to announce and celebrate our new Chief Residents for the upcoming year. Your dedication, leadership, and passion will continue to move our program forward. Let's continue to uplift and inspire to achieve excellence together!

Best,

Puja C. Shah, DO and Hein Linn Thant, MD

Resident Liaisons Larkin Community Hospital South Miami PM&R Residency Department

Physiatrist's Voice

NEWSLETTER June 2025

University of Florida PM&R Residency Program
Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director

Hello FSPMR Family!

Greetings from warm, hot, and sunny Gainesville, FL, (AKA The Swamp)!

Congrats to all recently matched PM&R applicants!! As we head into the end of the academic year, we would love to share our recent accomplishments and fun we have had!

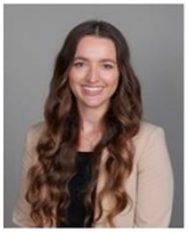
Eleazar Fariscal DO

Congratulations to our newly matched residents starting in 2026! We are all excited to have you join us!

Welcome UF PM&R Class of 2029!

Mary DesRosiers, MD
Florida International University Herbert Wertheim College of Medicine

Ravi Shah, DO
Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine



Lauren Taylor, DO
Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine

Sarah Sabol, MD
Georgetown American University School of Medicine

Dr. Danny Kiehl, PGY-3 is this year's recipient of the *PM&R Outstanding Resident Educator Award* which is sponsored by the UF COM Society of Teaching Scholars.

Dr. Kiehl attended the awards ceremony with our Program Director, Dr. Estores.

The award was presented by our DIO, Dr. Murphy.

Well done Danny!

Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director
- continued -

UF Department of Physical Medicine & Rehabilitation
COLLEGE of MEDICINE

UFHealth
UNIVERSITY OF FLORIDA HEALTH

CONGRATULATIONS!

To our esteemed graduating senior residents, heartfelt congratulations on reaching this significant milestone. Your dedication and contributions have truly enriched our program, and we are immensely proud of all you have achieved. As you embark on your future paths, we extend our warmest wishes for success and fulfillment in all your endeavors.

This year, all of our graduating senior residents will be pursuing fellowship training at the following programs.

- **Dr. Rosalynn Conic** – Pain Medicine Fellowship, Mayo Clinic Jacksonville
- **Dr. David Drozda** – Sports Medicine Fellowship, Summa Health
- **Dr. Kailash Pendem** - Neuromuscular Fellowship, Wake Forest University
- **Dr. Zane Thompson -** Pain Medicine Fellowship, University of Florida




UFHealth
REHAB HOSPITAL
IN AFFILIATION WITH SELECT MEDICAL

Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director
- continued -

Dr. Conic attended the AAPM&R Spring Board of Governors meeting held in Santa Fe, NM

Physiatrist's Voice

NEWSLETTER June 2025

Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director

- continued -

UF College of Medicine
Department of Physical Medicine and Rehabilitation
UNIVERSITY *of* FLORIDA

It is a special honor for Gainesville, FL to host both a national and a world-class sporting event!

This year, University of Florida residents, under the guidance of our medical director Dr. Jason Zaremski, provided sports medicine medical coverage for the USATF Masters Indoor Track Championships and the World Masters Indoor Championships. The latter event involved over eight days of coverage across multiple venues for nearly 4,000 athletes representing 98 countries!

We also proudly recognize Dr. Cole Verble, a PGY-2 resident, who competed pole vault in the national event and achieved first place in his age group. Amazing work, team!

USATF MASTERS

Physiatrist's Voice
NEWSLETTER June 2025

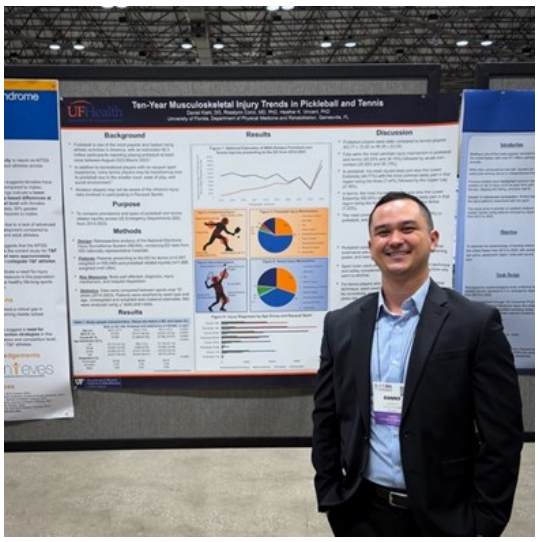
University of Florida PM&R Residency Program
Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director
- continued -

Dr. Rosalynn Conic PGY-4, faculty member Dr. Paula Ackerman, Program Chair Dr. Andrew Dubin, APD Dr. Cole McCarty and Program Coordinator DeVonte Dennison attended the Association of Academic Physiatrists national meeting, Physiatry '25, held in Phoenix, AZ.

Together, they represented the University of Florida at the Job and Residency Fair.

Association of Academic Physiatrists

UF College of Medicine
Department of Physical Medicine and Rehabilitation
UNIVERSITY of FLORIDA



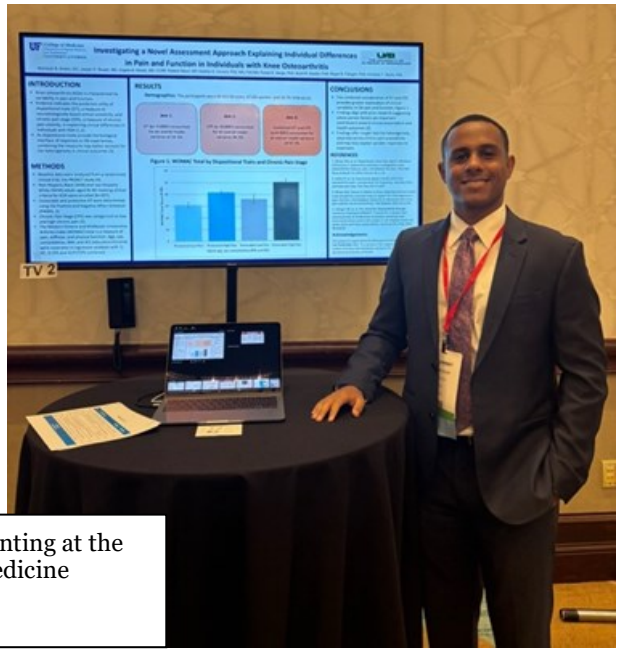
Dr. Danny Kiehl presenting his poster at the American Medical Society for Sports Medicine annual conference in Kansas City, MO.

AMSSM
AMERICAN MEDICAL SOCIETY FOR SPORTS MEDICINE

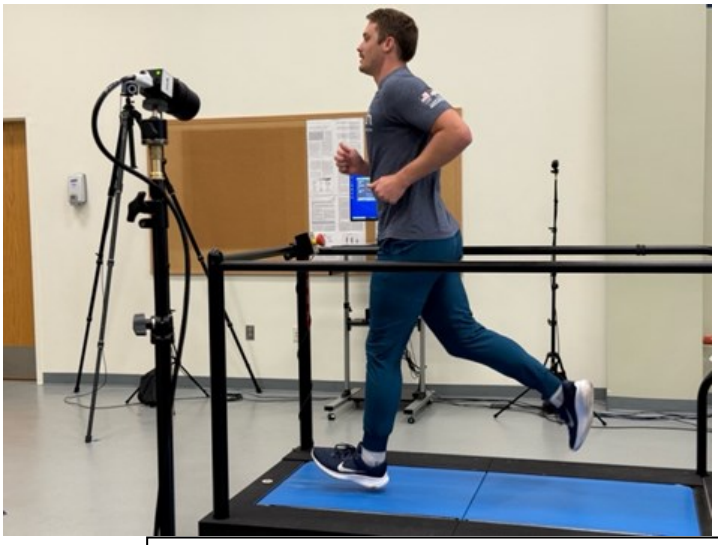
UF Department of Physical Medicine & Rehabilitation
COLLEGE of MEDICINE

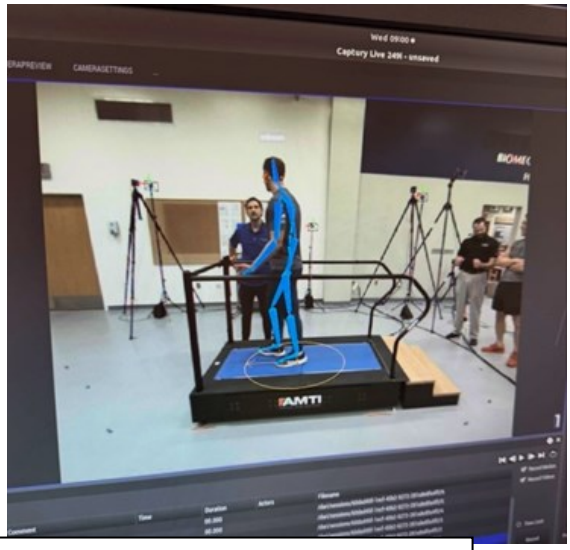
Physiatrist's Voice
NEWSLETTER June 2025

University of Florida PM&R Residency Program
Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director
- continued -



Dr. Abenezer Amare presenting at the American Academy of Pain Medicine conference in Austin, Texas.





Dr. Cole Verble during didactics demonstrating his running mechanics at our UF Health Sports Performance Center. Our system used AI assisted tracking of his joint kinematics and motion analysis.

University of Florida PM&R Residency Program
Eleazar Fariscal DO Resident Liaison
Irene Estores MD, Program Director, and
Jason Zaremski MD, Assistant Program Director
- continued -

Our residents with continued smiles and learning at our fantastic 2nd annual anatomy lab.

UF College of Medicine
Department of Physical Medicine and Rehabilitation
UNIVERSITY *of* FLORIDA

Follow us on Instagram @uf_pmr for more updates and content!

https://www.instagram.com/uf_pmr/

@UF_PMR

@uf_pmr

Physiatrist's Voice
NEWSLETTER June 2025

Blue Zones: An Overview of How to Live Better, Longer

Ravi C. Shah, DO and Puja C. Shah, DO


Ravi Chetan Shah DO


Puja C. Shah,

Blue Zones are regions where people live significantly longer and healthier lives than the global average. These areas were first identified by Dan Buettner and his team, who studied places with high concentrations of centenarians (people living to 100 years or more). The five primary Blue Zones include:

1. **Okinawa, Japan**
2. **Sardinia, Italy**
3. **Nicoya Peninsula, Costa Rica**
4. **Ikaria, Greece**
5. **Loma Linda, California (particularly among Seventh-day Adventists)**

Each of these regions shares certain lifestyle characteristics that contribute to their residents' exceptional longevity and quality of life. Not only have these practices proven to be successful in the original Blue Zones, but their adoption in new settings has facilitated the expansion of Blue Zones beyond the five primary areas. These characteristics are primarily related to diet, physical activity, social connections, and overall life philosophy.

Data-Backed Studies on Blue Zones

Numerous studies have investigated the factors contributing to the longevity seen in Blue Zones:

Dietary Patterns: Research shows that diets in Blue Zones are predominantly plant-based, rich in vegetables, fruits, legumes, and whole grains. For example, studies on the Okinawan diet reveal that it is high in sweet potatoes, tofu, and green leafy vegetables, with a minimal intake of meat and dairy. This diet is linked to reduced risks of heart disease and cancer.

Physical Activity: A study published in *The American Journal of Lifestyle Medicine* found that moderate, regular physical activity is a common trait in Blue Zones. This activity is often integrated into daily life, such as walking, gardening, or manual labor, rather than structured exercise routines.

Blue Zones: An Overview of How to Live Better, Longer
- continued -

Social Connections: Strong social ties and community support are crucial for longevity. Research in *PLOS Medicine* found that social integration significantly reduces mortality rates. In Sardinia and Okinawa, tight-knit communities and multi-generational living are common, fostering a sense of purpose and belonging.

Stress Reduction and Life Philosophy: Blue Zone inhabitants tend to practice stress-reducing habits, such as taking naps (siestas), meditating, or engaging in spiritual practices. A study in *Psychosomatic Medicine* linked stress reduction to lower inflammation levels and improved cardiovascular health .

Purposeful Living: Having a sense of purpose is another key factor. The Japanese concept of "ikigai" (a reason for living) and the Costa Rican notion of "plan de vida" (life plan) are associated with longer life expectancy. Research published in *The Lancet* has demonstrated that people with a strong sense of purpose have lower risks of death from all causes.

Incorporating Blue Zone Methods into Modern Life

To incorporate the methods used in Blue Zones to enhance overall quality and longevity of life, consider the following strategies:

Adopt a Plant-Based Diet: Emphasize whole, unprocessed foods, with a focus on plant-based options. Incorporate beans, nuts, seeds, fruits, and vegetables into your meals, while limiting red meat, processed foods, and sugar.

Move Naturally: Engage in regular physical activity that is part of your daily routine. This could include walking or biking instead of driving, gardening, or taking the stairs instead of the elevator. Aim for consistent movement rather than sporadic intense exercise.

Cultivate Strong Social Networks: Prioritize relationships with family, friends, and pets. Regularly spend time with loved ones, and engage in community activities or volunteer work. Building a strong support system can improve mental health and overall well-being.

Practice Stress Management: Incorporate daily stress-reducing practices such as mindfulness, meditation, or prayer. Find time for relaxation, whether through hobbies, naps, or spending time in nature.

Find Purpose: Reflect on what gives your life meaning and direction. This could be through work, family, hobbies, or community service. Setting long-term goals and pursuing passions can contribute to a longer, healthier life.

Get Enough Sleep: Prioritize sleep as part of a healthy lifestyle. Aim for 7-8 hours of quality sleep per night, and consider napping if your schedule allows, as seen in many Blue Zones.

Physiatrist's Voice
NEWSLETTER June 2025

Blue Zones: An Overview of How to Live Better, Longer
- continued -

Conclusion

Blue Zones offer valuable insights into how lifestyle choices impact longevity and quality of life. By adopting
plant-based diets, staying active, fostering social connections, managing stress, and living with purpose, individuals can potentially enhance their own life expectancy and overall well-being. Incorporating these practices into modern life may help mitigate the risks of chronic diseases and promote healthier aging.

Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

Lance Reccoppa MD

Dear FSPM&R,

We hope everyone is doing well! We wanted to share some updates from our PM&R department over the past few months. Our program has been well-represented at various conferences across the country this spring. We had a great turnout from our attendings and residents at the annual AAP 2025 Assembly in Phoenix, AZ. We were also grateful to see a few of our FSPM&R colleagues there! Additionally, four of our residents attended the American Academy of Pain Medicine Conference in Austin, TX. Our residents and sports medicine attending also participated in the American Medical Society for Sports Medicine Conference in Kansas City.

While many of our residents were attending conferences, we still made time to enjoy the outdoors in Miami. Our wellness committee hosted a Doggy Beach Day at Miami Beach, which had a great turnout; the dogs certainly enjoyed themselves! In March, our residents and faculty participated in the annual Gater-Aid Walk N Roll Challenge at Bill Baggs State Park in Key Biscayne to honor Dr. Gater's legacy and to advance spinal cord injury care and research.

Our program has been busy with research over the last few months. We recently held our annual Quality Improvement Project Day, during which all of our PGY4s and Fellows presented their individual QI projects in front of the department and on Zoom. Everyone delivered excellent presentations, showcasing the hard work they put into making improvements. We appreciate all of the attendings who provided mentorship for these projects!

At UM PM&R, we remain active on social media! Recently, Dr. Nareka Trewick and Dr. Daniel Wang joined the Social Media Team; congratulations to them! If you haven't already, follow us on Instagram! Additionally, we would like to congratulate all of the newly matched incoming PM&R residents. We are very excited to welcome the eight newest resident doctors to our team and cannot wait to meet them in person and work with them! We look forward to seeing our FSPM&R colleagues at the FSPM&R conference in September!

All the best,
Lance Reccoppa, MD, PGY-3
FSPMR Liason for University of Miami/Jackson Health System PMR Program

Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

- continued -

Some of our residents and faculty at the Annual AAP Assembly in Phoenix!
From left to right: Dr. Ali Mostoufi (Attending), Dr. Dylan Wood (Resident), Dr. Lance Reccoppa (Resident), Dr. Mark Williams (Resident), Dr. Sona Chowdhary (Resident), Dr. Reid McCullough (Resident), Coretha Davis (Program Coordinator), Dr. Nazia Hossain (Resident), Dr. Sandra De Mel (Resident), Dr. Michael Morgan (Resident), Dr, Sean Goldman (Resident), Dr. Gemayaret Alvarez (Attending), Dr. Shemar Crawford (Resident), Dr. Diana Molinares (Program Director)

Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

- continued -

Some of our residents at the American Academy of Pain Medicine Conference in Austin, TX. From left to right: Dr. Shemar Crawford, Dr. Daniel Wang, Dr. Nareka Trewick, and Dr. Jeremy Jueng.

Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

- continued -

Here are some of residents, attending, and alumni at the American Medical Society for Sports Medicine Conference in Kansas City. From left to right: Dr. Timothy Tiu (Attending), Dr. Scott Klass (Alumni), Dr. Sean Goldman (Resident), Dr. Azmeer Khamisani (Resident)

Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

The annual Gater-Aid Walk N Roll Challenge at Bill Baggs State Park in Key Biscayne

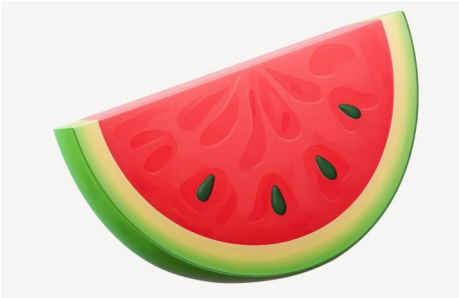
Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

- continued -

Our wonderful PGY4 residents and fellows who presented at our annual Quality Improvement Project Day! From left to right: Dr. Michael Morgan (Resident), Dr. Sona Chowdhary (Resident), Dr. Sara Kurtevski (Resident), Dr. Robin Mata (Resident), Dr. Kaitlyn Brunworth (Resident), Dr. Zeeshan Haque (Fellow), Dr. Sandra De Mel (Resident), Dr. Mariana Huerter (Fellow), Dr. Vitto Costantino (Resident), Dr. Alwin David (Resident).



Physiatrist's Voice
NEWSLETTER June 2025

University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Lance Reccoppa MD, Resident Liaison
Diana Molinares MD, PM&R Residency Program Director

- continued -

Our newest members to our social media team!
Welcome Dr. Nareka Trewick and Dr. Daniel Wang

University of Miami - continued -

Congrats and welcome to the UM PM&R Class of 2029!
We cannot wait to meet all of you and work with you!

Physiatrist's Voice
NEWSLETTER June 2025

Broward Health PM&R Residency Update
Arian Khoshgowari DO , Resident Liaison
Meilani Mapa MD Residency Program Director
APD - Minh Quan Le

Greetings FSPM&R

It has been an exciting past few months that we can't wait to share with you all. Two of our current residents, Dan Harper and Arian Khoshgowari, had a wonderful time presenting their yearlong Quality Improvement project at a Broward Health Medical Center's yearly Choosing Wisely competition alongside other Broward residency and fellowship programs.

Arian Khoshgowari DO

Pictured from L to R: PGY2's Dan Harper, Arian Khoshgowari, and Program Director Dr. Mapa holding their first place certificates following the presentation

Dr's Dan Harper and Arian Khoshgowari presenting their QI Results during the Choosing Wisely presentation

Physiatrist's Voice
NEWSLETTER June 2025

Broward Health PM&R Residency Update
Arian Khoshgowari DO , Resident Liaison
Meilani Mapa MD Residency Program Director
- continued -

Broward GME recently held new photo and video shoots for residency programs and fellowships across campus. These new visuals aim to highlight the vibrant learning environment, collaborative culture, and diverse community of trainees and faculty. The new content will be featured on program websites, promotional materials, and recruitment platforms to better reflect the dynamic experience offered at Broward Health Here are a few of the highlights, and make sure to stay tuned in for more!

Pictured from L to R:
Dr's Somaye Younesian (PGY1),
Arian Khoshgowari (PGY2),
Meilani Mapa (PD),
David Yusupov (PGY2),
Dan Harper (PGY2),
Quan Le (APD)

Pictured from L to R:
Dr's Quan Le (APD),
Dan Harper (PGY2),
David Yusupov (PGY2),
Meilani Mapa (PD),
Arian Khoshgowari (PGY2),
Somaye Younesian (PGY1)

Physiatrist's Voice
NEWSLETTER June 2025

Broward Health PM&R Residency Update
Arian Khoshgowari DO , Resident Liaison
Meilani Mapa MD Residency Program Director
- continued -

Pictured from L to R: Dr's Somaye Younesian (PGY1), Meilani Mapa (PD), Dan Harper (PGY2) mid action shot during the Broward GME photoshoot

Dr. David Yuspov (PGY2) pictured mid interview and showing off the Broward GME set

Physiatrist's Voice
NEWSLETTER June 2025

Broward Health PM&R Residency Update
Arian Khoshgowari DO , Resident Liaison
Meilani Mapa MD Residency Program Director
- continued -

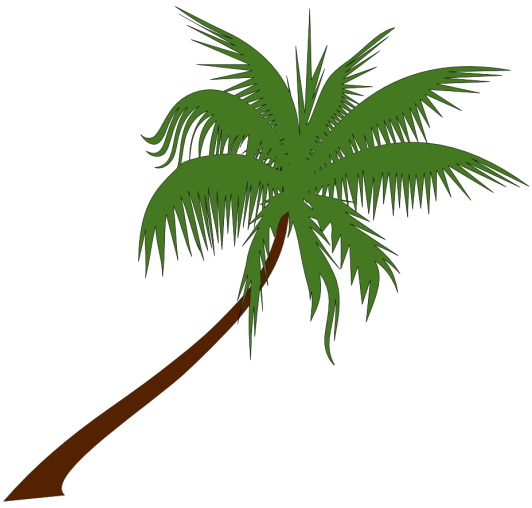
Our residents were able to expand their knowledge by participating in the cadaver lab and reviewed anatomy at Nova Southeastern University College of osteopathic medicine. This interactive session allowed for our residents and visiting medical students to review key structures in detail, reinforce their understanding of functional anatomy, and directly connect anatomical concepts to clinical practice

Pictured from L to R: Dr. Dan Harper (PGY2), Zaynah Shahab (rotating medical student), Dr. Keith Myers (PGY2), Dr. Khoshgowari (PGY2), Dr. Quan Le (APD), and Ravi Shah (rotating medical student)

Physiatrist's Voice
NEWSLETTER June 2025

Broward Health PM&R Residency Update
Arian Khoshgowari DO , Resident Liaison
Meilani Mapa MD Residency Program Director
- continued -

We are thrilled to introduce and warmly welcome our incoming Class of 2029! This talented group of future physiatrists brings a diverse range of experiences, perspectives, and passions to our program. We look forward to working alongside them, learning from their unique insights, and supporting their growth as they embark on their journey in physical medicine and rehabilitation. It's an exciting time for our department as we continue to build a strong, dynamic community dedicated to excellence in patient care, education, and innovation



Physiatrist's Voice
NEWSLETTER June 2025

Memorial Healthcare System PM&R Residency Program

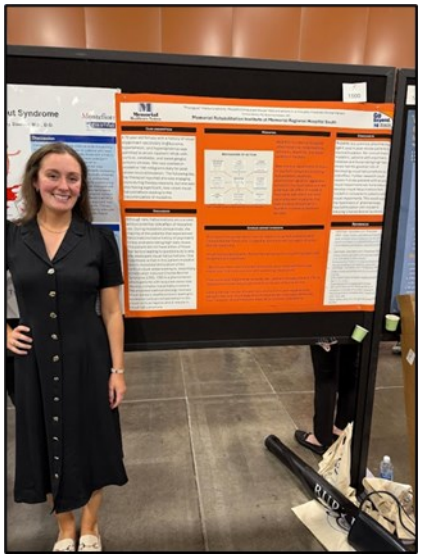
PM&R Resident Liaison John Paul Mauriello DO
Jeremy Jacobs DO, Residency Program Director
- continued -

Hello FSPM&R family!
I hope everyone is doing well. Below we have some very exciting updates from the last several months that we want to share with everyone for the June Newsletter

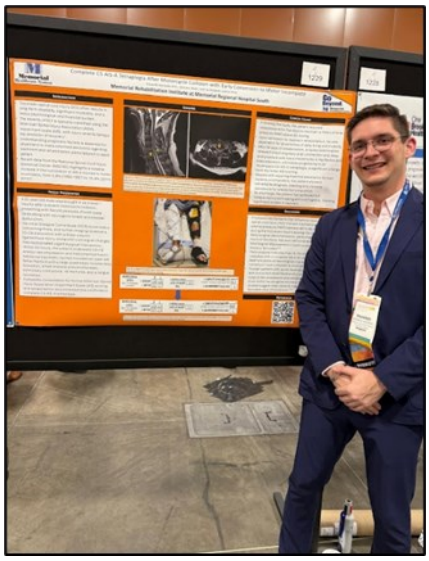
Starting off, this past February several of our residents and attending faculty traveled to Phoenix, Arizona to attend the AAP Conference. We were so happy to connect with our colleagues from all over as well as present several interesting cases. We even had some time to explore Arizona!

John Paul Mauriello DO

PGY-2s Dr. Edstrom and Dr. Hashmi capturing some of Arizona's beautiful landscape



Dr. Adkins PGY-3 presenting at AAP



Dr. Acevedo PGY-2 presenting at AAP

The Memorial Healthcare System PM&R Program representing at AAP!

Memorial Healthcare System

Physiatrist's Voice
NEWSLETTER June 2025

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison John Paul, Mauirello DO
Jeremy Jacobs DO, Residency Program Director
- continued -

This March the torch was passed to our new Chief Residents, Dr. Barbari and Dr. Moturu. Congratulations to both of you and we look forward to your leadership in the upcoming year! And a huge thank you to our outgoing Chief Residents, Dr. Oliveira and Dr. Guzman.

Incoming Chief Residents
Drs. Barbari and Moturu

Our outgoing and graduating
Chief Residents
Drs. Guzman and Oliveira

"March"-ing onwards, we also celebrated our annual resident retreat at Extreme Action Park. The faculty and residents engaged in some "friendly" competition over several events including laser tag, go karts, and mini golf.

The MHS Program having some fun with laser tag at the Resident Retreat

Memorial Healthcare System

Physiatrist's Voice
NEWSLETTER June 2025

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison John Paul, Mauirello DO
Jeremy Jacobs DO, Residency Program Director
- continued -

Our top 3 racers of the day:
#1 Dr. Acevedo, # 2 Dr. Adkins, and
3 Dr. Perez

This March was also the Match Day! We're so excited to welcome the newest members to our PM&R program. Welcome Class of 2029!

Physiatrist's Voice
NEWSLETTER June 2025

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison John Paul, Mauirello DO
Jeremy Jacobs DO, Residency Program Director

- continued -

This April Drs. Edstrom and Triviño along with our sports medicine faculty Dr. Negron attended the AMSSM Annual Meeting and presented their cases while also learning about new research in the field.

Dr. Edstrom PGY-2 and
Dr. Negron presenting at AMSSM

Dr. Triviño PGY-4 and Dr. Negron
presenting at AMSSM

Memorial Healthcare System

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison John Paul, Mauirello DO
Jeremy Jacobs DO, Residency Program Director

- continued -

Dr. Mauriello PGY-2, Dr. Acevedo PGY-2, Dr. Guzman PGY-4, and Dr. Delgado at the Wings for Life World Run

And lastly, this May was the Wings for Life World Run, a unique run that occurs worldwide at the same time to raise awareness for spinal cord injuries (SCI) and funding for SCI research. The Memorial Rehabilitation Institute team that participated this year included our PM&R residents and our associate program director and SCI specialist Dr. Deglado.

The Memorial Rehabilitation Institute altogether supporting SCI

And that's a wrap to our program's updates for this quarter! If you want to stay more up-to-date with our residency program's activities, follow our Instagram page below! As always, we wish that everyone continues to have a great year, and we look forward to hearing your updates and any exciting news!

@MHS_PMR_RESIDENCY

Physiatrist's Voice
NEWSLETTER June 2025

PM&R Pioneers

Craig H Lichtblau MD

We help our early career physiatrists by providing mentors for them. We call our mentors PM&R Pioneers. These mentors are for both practice management and clinical issues. They are listed below and early career members can contact them.

What makes a PM&R Pioneer? They have a minimum of 20 years of experience and want to share their knowledge, training and experience with new FSPMR members.

If you wish to serve in this capacity and you are not yet on the PM&R Pioneers list, please submit your name to Lorry Davis, FSPMR Executive Director, lorry4@earthlink.net. Thank you for your consideration and if you'd like to discuss it further with me before deciding, please contact me at C.Lichtblau@chlmd.com.

Craig Lichtblau MD

Past President Director, FSPMR

Craig Lichtblau MD	(561) 842-3694
Michael Creamer DO	(407) 649-8707
Anthony Dorto MD	(305) 932-4797
Mitchell Freed MD	(407) 898-2924
Matthew Imfeld MD	(407) 352-6121
Jesse Lipnick MD	(352) 224-1813
Thomas Rizzo Jr MD	(904) 953-2735
Mark Rubenstein MD	(561) 296-9991
Andrew Sherman MD	(305) 585-1332
Paulette Smart-Mackey MD	(321)-558-4996
Jonathan Tarrash MD	(561) 496-6622
Colleen Zittel MD	(407) 643-1329

Physiatrist's Voice
NEWSLETTER June 2025

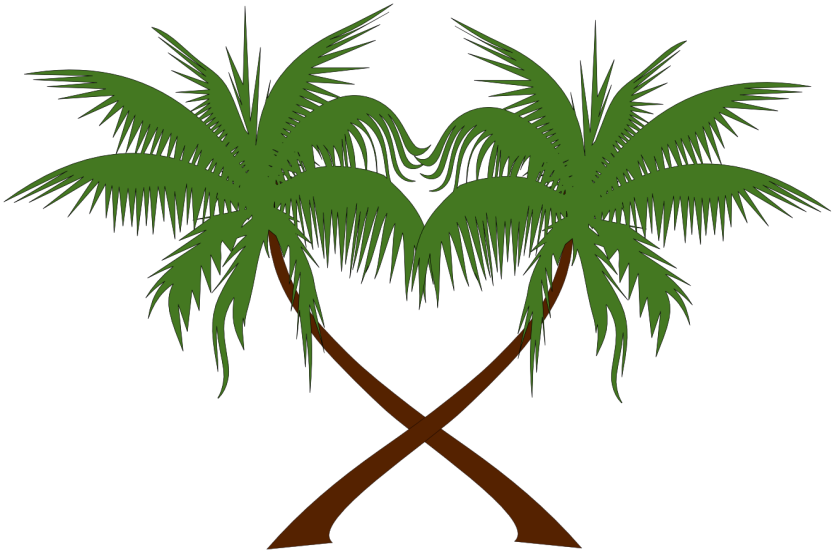
Professional Opportunities

FSPMR will post your Professional Opportunities, whether you are looking to hire or looking for a new opportunity.

This service is FREE to FSPMR Members.

Or you can purchase an Advertisement.

Check out our Advertisement rates:
To post your Professional Opportunity, contact our Executive Director.



Physiatrist's Voice
NEWSLETTER June 2025

Professional Opportunities

Post YOUR Professional Opportunities here

With 3 months of newsletter advertising, your ad will also appear on FSPMR's website for that same 3-month period.

FSPMR – 2025 Advertising sizes:

Full page - $1000
(7.5"w x 10"h)

540 px x 720 px Resolution 72 px/inch
2,250 px x 300 px Resolution 300 px/inch

Half page - $750
Horizontal: 7.5"w x 4.75"h
540 px (w) x 342 px (h) Resolution 72 px/inch
2,250 px (w) x 1425 px Resolution 300 px/inch

Vertical: 4.0"w x 9"h
288 px (w) x 648 px (h) Resolution 72 px/inch
1200 px (w) x 2700 px (h) Resolution 300 px/inch

One third page - $500
Horizontal: 7.5"w x 3"h
540 px (w) x 216 px (h) Resolution 72 px/inch
2250 px (w) x 900 px (h) Resolution 300 px/inch

Vertical: 2.8"w x 9"h
202 px (w) x 648 px (h) Resolution 72 px/inch
840 px (w) x 2700 px (h) Resolution 300 px/inch

File Types Accepted: Adobe PDF (.pdf), or Photoshop (.psd).

ALL FILES Flattened

Also accepted, .tiff and .jpg.

Professional Opportunities are FREE and re-posted as a service to FSPM&R members

Physiatrist's Voice

NEWSLETTER June 2025

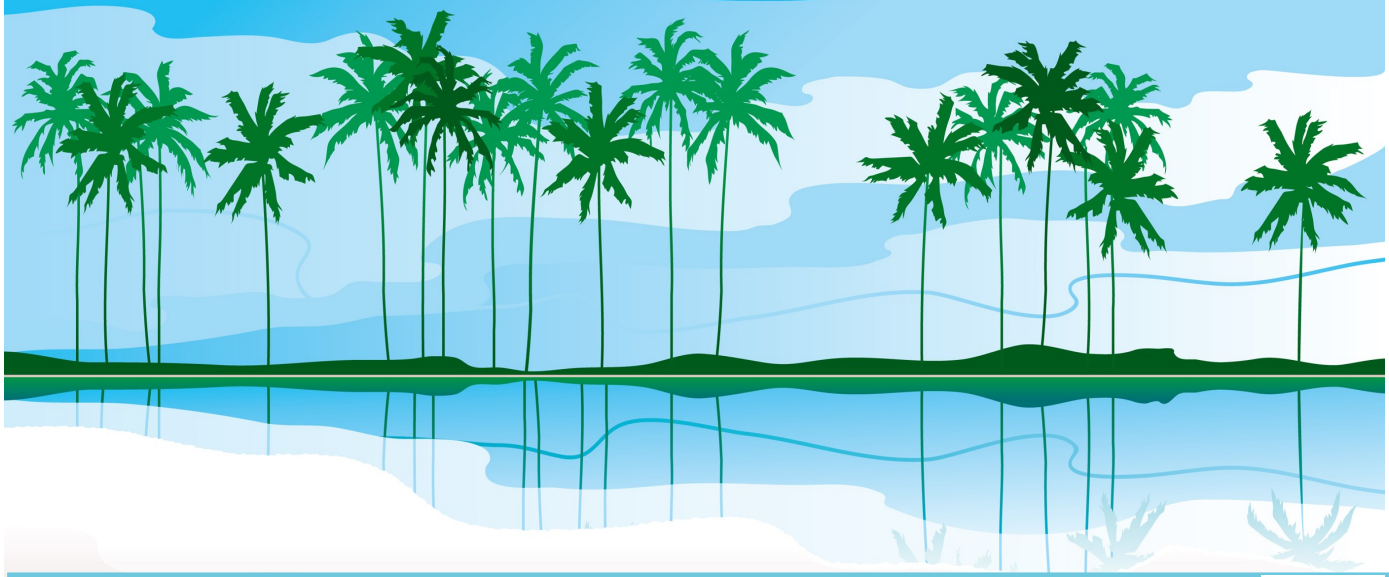
Deadline for our next issue, is August 15th 2025 for our September 2025 Newsletter

Guidelines for your articles are available on the website: FSPMR.org/newsletters Here a few for your convenience;

- **Pictures: should be in .jpg or .gif format. All files must have minimum resolution of 72 dpi. (max. 300) with a image size no larger than: 1500 px x 900 px**
- **Documents should be submitted in electronic format (.docx). If a PDF is to be submitted, each page must be submitted separately.**
- **All articles will be approved by Web site committee editors.**
- **FSPMR will retain full editorial rights to any submissions.**

Newsletter Disclaimer:

Articles in this newsletter are not an endorsement of nor an acceptance by the Florida Society of Physical Medicine and Rehabilitation. They are published as a service to the author for the benefit of members. This is not a scientifically peer reviewed publication.



FSPMR Office: 407-924-6568
Executive Director Tania M. Jones
tjones@meyerresources.com