Physiatrist's Voice

NEWSLETTER DECEMBER 2023

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

In this Issue

PRESIDENT'S MESSAGE

Andrew L. Sherman, MD, MS
President FSPMR

Dr. Andrew Sherman

Back from a successful AAPMR national meeting in New Orleans. Was amazing to see so many participants at the FSPMR cocktail hour. Physiatry in Florida is strong! As we move forward as a state, many key elements came out of the meeting.

First is the concept of collaboration between the top Rehabilitation departments in Florida. High level discussions were seen occurring between multiple state leaders. The overriding theme was that the demand for PM&R services is increasing yearly, beyond the capacity of programs to deliver them. The other theme continues to be how to advance the ideals of the AAPMR Bold to continue to grow the specialty of physiatry within Florida. It does not hurt to have four of the top 50 rehabilitation hospitals in the US in Florida. Finally, was how to leverage the influx of prior national AAPMR and AAP and department chairs into Florida in leadership roles such as Deans of Medical schools.

Balance the optimism with multiple challenges that lie ahead. Inpatient rehabilitation oversight and regulation continues to threaten the access to care the disability population needs. Limits and frank elimination of proven helpful interventional spine procedures such as facet joint intraarticular injection in the elderly by the FL Medicare carrier has occurred and must be fought and overturned. Finally, a projected future undersupply of physiatrists is countered by new PM&R residency programs that have opened throughout the state.

Given the ever-increasing numbers of PM&R trainees, it is heartening to see new learning opportunities coming online. Recently the FSPMR and FSIPP organizations partnered to sponsor the first annual young attending physician/fellow/resident interventional pain hands-on conference outside of Orlando. This was a great success as over 62 attended. For PM&R residents and fel-

lows, transportation and tuition were paid entirely by the FSPMR via your dues payments and funds obtained from industry. This is how FSPMR is putting those dollars to work, giving back to elevate the skills and quality of care delivered by young physiatrists. Any member interested in starting an event that would serve to elevate the knowledge base in any way for physiatrists in Florida please contact FSPMR through Executive Director Lorry Davis, myself, or any member of the board for sponsorship and potentially financial support.

That's all for this quarter! My warmest wishes to all physiatrists in Florida, their families and loved ones in the holiday season. May all your holiday dreams come true and here is hoping for an even better 2024!

Sincerely,

Andrew Sherman, MD, MS

Andrew Sherman, MD, MS

Professor, and Interim Chair,
University of Miami Miller School of Medicine Dept of PM&R

President FSPMR

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AAPM&R Annual Assembly Highlights:

FSPMR's Thursday Night Reception at AAPM&R Annual Assembly, New Orleans

A good time was had by Florida's physiatrists, led by FSPMR President Dr Andrew Sherman.

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AAPM&R Annual Assembly Highlights:

Drs Carolyn Geis, Andrew Sherman, and Kenneth Ngo.

Great interactions and networking at Brooks Rehabilitation's booth.

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FSIPP/FSPMR Hands-on Lab

Nadia Mortezagholi, DO, Arshi Handa, MD, Dennis Hasenhuendl, MD, Hein LINN Thant, MD, Jasmine Sidhu, MD, Puja Shah, DO, Sonia Andreou, MD

"Thank you for the invitation. It was educational, and meeting like-minded individuals was a great experience."

Best Regards,

Jasmine Sidhu, MD

Larkin Community Hospital

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FSIPP/FSPMR Hands-on Lab

More Testimonials:

" I recently had the privilege of attending the FSIPP/FSPMR Hands on Cadaveric Conference on advanced interventional spine procedures, and can testify that this was an enriching experience. The workshop, led by a team of seasoned experts in the field, provided a comprehensive understanding of the latest techniques and technologies. Dr. Paez and the rest of the skilled instructors demonstrated a remarkable depth of knowledge, offering practical insights and sharing their wealth of experience. The hands-on sessions were particularly valuable, allowing participants like myself to perform the procedures in a controlled and supportive environment. As a PGY-4 I encourage the organizers to invite residents and fellows to a similar event in the future so that we can best appreciate the forefront of advancements in spine intervention."

Javier A Santana MD
PGY-4 Physical Medicine and Rehabilitation
Christine E Lynn Rehabilitation Center
Uhealth/Jackson Memorial Health System

"Our residents and fellows from Memorial, Larkin and UMiami had a great time during the event. We had the opportunity to trial new therapies with industry representatives and network with experienced practitioners. We hope it continues next year!"

Andrew Logan MD, Chief Resident
PGY-4, Physical Medicine and Rehabilitation
University of Miami, Miller School of Medicine

"The FSIPP / FSPMR Hands On Cadaver Course was a fantastic opportunity for reviewing spine & musculoskeletal anatomy, as well as practicing procedural skills under expert supervision and guidance. Clinicians, instructors, representatives, and administrative staff at the event were all very approachable and knowledgeable. As a resident physician this was the perfect environment to learn about all of the cutting edge procedures that interventional pain physicians in the community are performing."

Kaitlyn Brunworth MD
PGY-3, Physical Medicine and Rehabilitation
University of Miami, Miller School of Medicine

"I would just like to thank you and all of the wonderful people at FSIPP/FSPMR for coordinating and allowing our residents to attend this wonderful cadaver course. The course was overall fantastic and so fun! The instructors were so helpful, I loved getting to learn these procedures, the relevant anatomy under a low pressure environment. I would gladly return on a yearly basis if this course/opportunity were to return."

Lorenzo Diaz DO
PGY-4, Chief Resident
Physical Medicine and Rehabilitation
University of Miami/JHS

"I am thankful for FSPMR having given me the opportunity to attend. I was able to see a side of PM&R that I did not have exposure to previously. Hopefully you will continue to put together events like this and give myself and future generations of PM&R residents the chance at learning experiences like this. Thank you for all of your time and dedication on my behalf."

Sincerely,
Edward G. Dudley-Robey, MD
PM&R Resident Physician
Larkin Community Hospital, Palm Springs

Other PM&R residency programs that participated have included pictures in their individual program updates in this issue.

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2024—Save the DATES!

April 20, 2024 — Hands-On Lab
South Lake Pain Institute,
Clermont FL

September 19—22, 2024 — FSPMR/FSIPP Annual Conference
Hyatt Regency Orlando
International Drive

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A Member of Both FSPMR and FSIPP?

Lorry S Davis MEd, FSPMR Executive Director

YES! It is now economical and efficacious to belong to both.

FSPMR and FSIPP have developed an agreement that FSPMR members can also become FSIPP members for just an additional $100. And FSIPP members can become FSPMR members for just an additional $100.

Why belong to both? One important reason is there are now numerous physiatrists, FSPMR members, who are also practicing interventional pain. Conversely, there are physiatrists who are FSIPP members, who primarily identify with interventional pain, but who also want to stay in touch with their PM&R roots. And you get two birds with one stone at the annual FSPMR meeting in conjunction with FSIPP.

Another reason is that it helps both organizations' numbers, which has political significance, as well as bearing on influence with current and potential industry supporters.

Lastly, dues are a smaller but important revenue stream for FSPMR and FSIPP. Our societies love members who are supportive, stay current with their membership dues and come to meetings. We also love members who might not make it to meetings but are supportive through their membership dues. We need ALL of you.

For FSPMR members to also become FSIPP members, please go to https://fsipp.org/doctors/join-fsipp/, to the box that says FSPM&R Primary/FSIPP Secondary, $100.

For physiatrists who are FSIPP Primary and would like to be FSPMR Secondary, please go to https://www.fspmr.org/join-renew-payment.html, to the item that says Physiatrist/FSIPP Primary/FSPMR Secondary, $100.

Thank you!

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Executive Director Lorry Davis MEd,
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WORKERS COMPENSATION: PHYSICIAN DISPENSING UPDATE

Marc Gerber MD

Dr. Marc Gerber

This is a legislative update for physicians who dispense medications to workers' compensation patients. As of July 1, 2023, there are some new changes to the current statutes. These changes relate to physician dispensing. Many of the insurance carriers over the past year have been trying to make significant changes to the statutes that would greatly impair our ability to dispense medications to the injured workers we treat. Several months ago, Dr. Mark Rubenstein (FMA Speaker of the House and FSPMR Past President) and I, after becoming aware of these issues, drafted responses from the FSPMR. The Florida Orthopedic Society and the Florida Medical Association also drafted similar responses. The insurance carriers would have liked to see physician dispensing disappear entirely. Luckily, by being proactive and taking a stance with the other physician organizations in Florida, we were able to protect our interests as well as the ability to better treat injured workers. With physician dispensing our patients can get their medications in a timely fashion and there are no excuses that the pharmacy didn't have them, or they didn't have transportation to get them. Some changes were made to the statutes, and they seem fair, but obviously we will need to see how things are handled by the insurance carriers.

Physicians and other recognized practitioners registered to dispense medications pursuant to Section 465.0276, F.S., may dispense medications to the injured worker. Medication is treatment and must be authorized prior to dispensing, pursuant to section 440.13(3)(a), F.S., and must be medically necessary to treat the compensable injury. Briefly summarizing some of the other changes includes a statement that medications may not be disallowed for the sole reason the injured worker has chosen to receive such medication from a practitioner (as opposed to the carrier telling the patient to go to a pharmacy which has been the case in the past). On the flip side, if a practitioner does not request authorization prior to dispensing, or if the medication is not medically necessary, the carrier may deny payment. There is also a new clarification which states that, failure to timely respond to a written request for authorization shall be governed by Section 440.13(3)(d), F.S. That statute states, "A carrier must respond, by telephone or in writing, to a request for authorization from an authorized health care provider by the close of the third business day after receipt of the request. A carrier who fails to respond to a written request for authorization for referral for medical treatment by the close of the third business day after receipt of the request consents to the medical necessity for such treatment. All such requests must be made to the carrier. Notice to the carrier does not include notice to the employer. Subparagraph (e) states that "carriers shall adopt procedures for receiving, reviewing, documenting, and responding to requests for authorization.

For those physicians who are dispensing practitioners, they need to stay on top of issues like this. As of right now, most of the adjusters and carriers I have spoken to don't seem to be aware of these

Workers Comp: Physician Dispensing Update

Marc Gerber ,MD

-continued—

changes. This was a big issue as these statutes confirm our right to treat patients and dispense medications if we so desire. I am not entirely sure how these changes will be incorporated or how the carriers will adopt these policies but at least they protect our interests, the interests that Mark Rubenstein, I, and others fought for. It is important to get on the phone and forge relationships with adjustors and carriers. Explain to them what you are doing and discuss cases with them. Don't abuse dispensing either, because there are plenty of 'bad apples' out there that abuse physician dispensing which prompted the carriers to try and eliminate it in the first place. Be a good physician, do the right thing, and call nurse case managers, adjustors and both plaintiff and defense attorneys when needed. They will get to know you and respect you. Those of our members who are involved in the Work Comp system know what I am talking about. It is a fair system, and it needs good doctors. Learning how to navigate the system is essential and we can help if some of our members have questions. I have been practicing for 26 years and my practice has grown over the years to be very work comp oriented. Don't hesitate to contact me if you have any questions about this issue or any issues pertaining to treating injured workers. I can be reached at mgerber2@cfl.rr.com or my office (407)822-8875.

Statutes and Rules relating to the above issues include:

Florida Statutes

465.0276

440.13(3)(a)(d)(e)

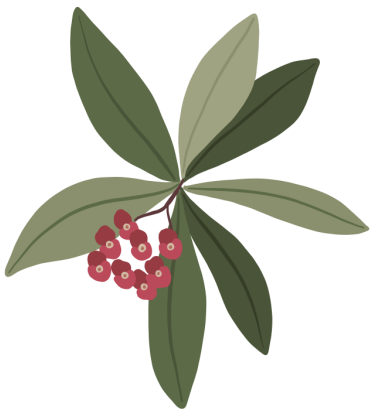
Florida Rules

69L-7.730

69L-7.740

Marc Gerber, MD

Diplomat ABPMR, Subspecialty Board Certification in Pain Medicine



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Mini-Review

Long-Term Consequences of Severe TBI

Craig H Lichtblau[1*], Scott Raffa[2], Kaveh Assadi[3], Christopher Warburton[4], Gabrielle Meli[4], Allyson Gorman[5]

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ABSTRACT

Severe Traumatic Brain Injury (TBI) leads to some extent of disability in all those who suffer from the condition. Impairments span physical, cognitive, emotional, and behavioral domains and significantly affect functioning and quality of life. Lack of consensus on treatment approach poses a challenge to effectively managing these patients as well as to developing accurate prognoses. Nonetheless, optimizing health-related outcomes and minimizing suffering requires that severe TBI patients receive the appropriate type and level of care throughout the duration of their lives.

Keywords: Traumatic brain injury; Neurological consequences; Physical; Glascow coma score; Stress ulcers

INTRODUCTION

Traumatic Brain Injury (TBI), which poses major health and socioeconomic challenges worldwide, occurs when normal brain functioning is disrupted by a bump, jolt, blow, or penetrating wound to the head [1,2]. Accidents, falls, and violence account for the majority of TBIs.

TBI is the primary cause of mortality and disability in young people in high-income countries. In low and middle-income countries, the TBI incidence is rising, largely owing to increases in motor-vehicle use. In most cases, the neurological consequences of brain injury lead to the mortality and morbidity associated with TBI [3-5]. However, other complications, such as those affecting the cardiovascular, respiratory, and immune system can also occur.

Fortunately, about 75% of TBIs are mild and considered concussions [1,2]. Nonetheless, more than 3 in 10 injury-related deaths involve a TBI diagnosis, and it is estimated that more than 5 million U.S. residents are living with TBI-related disabilities. Though mortality rates in patients with severe TBI have decreased by nearly 50% over the past 150 years, those suffering TBI still have at least a 35% chance of dying because of their injuries [6-8]. Furthermore, all of those who survive are considered disabled to some extent [8].

To maximize functioning, avoid complications, and optimize quality of life, it is critical that patients with severe TBI are afforded the proper type and amount of care. Here we review the long-term effects and prognosis of severe TBI, as well as the latest treatment and management strategies.

SEVERE TBI IS ASSOCIATED WITH LONG-LASTING EFFECTS ACROSS SEVERAL DOMAINS OF LIFE

Most people with severe TBI suffer long-term impairments in physical, cognitive, emotional, and behavioral domains [9]. As a result, their social lives and productivity are compromised, adversely affecting quality of life. While much of the literature focuses on the effects of severe TBI in the 5 years following injury, new disabilities arising after that period have also been reported [10-12].

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Physical

People who have suffered severe TBI often have a host of physical injuries, which vary across individuals. However, a common physical complication that arises from TBI is post-traumatic epilepsy [9]. This condition occurs in 20% of TBI survivors and also accounts for 20% of the symptomatic epilepsy that is observed in the general population. Some people experience epilepsy in the week following the injury, whereas others do not suffer seizures until more time has passed [13].

Cognitive

Those who suffer severe TBI are at high risk for cognitive impairments, which are associated with future disability [14]. Approximately 2 out of 3 severe TBI patients continue to suffer cognitive deficits 3 months after their injury [15]. Specifically, the aspects of cognition that tend to be impacted include attention, memory, information processing speed, and executive function [16-19].

Emotional

Emotional disturbances in severe TBI are common and psychiatric conditions often emerge in the year following severe TBI. Most notably, anxiety and depression are prevalent, occurring in roughly one in five and one in three patients, respectively [9,20]. Though substance depression and other mood disorders, as well as substance abuse, fail to improve significantly over time, anxiety disorders are more likely to resolve to some extent.

Behavioral

As the impact of severe TBI on physical, cognitive, and emotional domains of life persist, the resulting behaviors and lack of independence often lead to the breakdown of social relationships, loss of employment, and a reduction in leisure activity participation [21,22]. Critical behaviors like shopping and managing money are often compromised [23]. Unlike some individual symptoms in other domains, the neurobehavioral consequences of severe TBI often do not resolve, and the distress they cause to both patients and caregivers may in fact increase over time [24,25].

A LACK OF CLEAR GUIDANCE COMPLICATES SEVERE TBI TREATMENT

The ultimate goal of treatment for those who have suffered severe TBI is to ensure a meaningful existence with a reasonable quality of life [9]. From a clinical perspective, the most important objectives for achieving these ends initially in the intensive care unit are reducing the influence of secondary brain injury mechanisms following TBI [26].

Ideally, treatment for severe TBI is tailored to each patient, addressing the specific mechanisms of brain damage that are present in the individual [27]. Unfortunately, a paucity of high-quality clinical trial data has led to a lack of evidence-based guidance for treating severe TBI, and wide variability in relevant clinical practice in the U.S. ensues [26]. There is consensus, however, that it is critical to alleviate intracranial pressure and to avoid hypotension and hypoxia in those who have suffered severe TBI [13,26,28,29]. It is also agreed that preventing seizures and venous thromboembolism are important goals for this patient population.

Other treatment approaches are more controversial. For instance, there is contradictory data on the clinical benefit of progesterone in severe TBI patients, with some data suggesting that it may be neuroprotective [30,31]. More research is needed on the potential benefits of induced hypothermia and hyperoxia as well as on decompressive craniectomy [6]. Translational research has also begun identifying biomarker candidates that could aid in the treatment of severe TBI [6,32].

THERE ARE A FEW ESTABLISHED PREDICTORS OF SURVIVAL AND LONG-TERM OUTCOMES

Prognosticating in those with severe TBI can be difficult because of the heterogeneity of the disease, as well as the variations in injury mechanisms and pathologies [33]. Nonetheless, predicting outcomes is important both for clinical practice and planning, as well as for counseling patients and their relatives.

There are several factors that have been shown to predict mortality in those with severe TBI. For example, age, initial Glascow Coma Score (GCS), and general health independent of the TBI are all relevant to patient outcomes [3,34]. Additionally, genetic variations underlying inflammatory responses are predictive of short-term outcomes in severe TBI patients [8].

Because older adults have fewer physiological reserves, they tend to be more susceptible to TBI [26]. In this patient population, systolic blood pressure and the presence of brainstem injury are predictive of poorer outcomes, including increased permanent functional deficits [35].

There are also several established factors that predict morbidity following severe TBI. For instance, while Acute Kidney Injury (AKI) and hypotension in those with low GCS scores do predict mortality, most other non-neurological complications are associated only with morbidity [3]. Similarly, psychiatric symptoms and cognitive functioning at the time of discharge predict risk of long-term unemployment [36,37].

There are predictive models, including one developed in Japan and presented at the 23rd Annual National Neurotrauma Symposium in Washington D.C., that employ these factors, as well as others such as extensive subarachnoid hemorrhage, intracranial pressure, midline shift, and a lack of light reflex. These models have been shown to be valuable for clinical decision making and family counseling [13,38]. One model that incorporates 7 basic factors: Age, motor score, hypotension, hypoxia, pupillary reactivity, traumatic subarachnoid hemorrhage, and computed tomography classification has specifically demonstrated utility in predicting outcomes 6 months following severe TBI [39]. Details of this model and its

use are published in a scientific Journal, Volume 22(10), pages 1025-1039.

COSTLY AND UNPLEASANT COMPLICATIONS ACCUMULATE WITHOUT PROPER CARE

While the immediate aftermath of TBI and the direct costs associated with that care are the focus of much research and attention, the indirect costs that accumulate from long-term consequences of TBI are much larger [10]. In addition, because these consequences and complications unfold over time, they are harder to predict at the time of injury.

In addition to the normal sequalae of severe TBI and the impact on physical activity, mental and cognitive health, and behavior, there are also specific health-related complications that are common in those with severe TBI [13].

Pain

Pain frequently occurs because of mechanical ventilation, endotracheal intubation, surgical interventions, and other procedures. Pain must be properly managed with preventative measures and medication.

Venous thromboembolic events

Severe TBI patients are at high risk for both Deep Vein Thrombosis (DVT) and pulmonary embolism. Without prophylactic measures, the risk is estimated at 20%.

Stress ulcers

Early enteral feeding and prophylaxis with pharmaceuticals can help mitigate the enhanced risk that severe TBI patients face for stress ulcers.

Malnutrition

Malnutrition increases mortality in TBI patients, and those with severe TBI are at risk for malnutrition because of their altered gastrointestinal functioning and the fact that they tend to be in a hypermetabolic, hypercatabolic, and hyperglycemic state.

Stress hyperglycemia

Stress hyperglycemia is associated with poor neurological outcomes and is a common secondary effect of severe TBI.

DISCUSSION

Both preventing and managing these complications can be costly, and costs tend to fall on the patient and their family, compounding caregiver burden that is common in the context of severe TBI [40].

Multidisciplinary teams that properly manage severe TBI patients can help to stave off complications and to intervene rapidly when complications occur. Doing so reduces the harm, patient pain and suffering, and economic hardship that arise with complications. These teams include but are not limited to physiatrists, neurologists, neurosurgeons, respiratory therapists, nurses, and other healthcare practitioners [13].

CONCLUSION

Severe TBI is debilitating and common across the globe. The long-term consequences of the condition adversely affect patients and their caregivers and can be even more costly than the initial care required upon injury. Proper treatment in the intensive care unit as well as for the duration of life after discharge is critical for optimizing health, quality of life, and cost burden associated with severe TBI.

Patients that have suffered severe TBI who are immobile are at increased risk for deep vein thrombosis, pulmonary emboli, urinary tract infection, cellulitis, and osteomyelitis. In addition, due to their brain injury, they are also at great risk for seizures. As a result, these patients require an appropriate amount and level of aid and attendant care (RN, LPN, or LVN) to increase quality of life and decrease morbidity and mortality.

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Physiatrist's Voice
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SEVERE TRAUMATIC BRAIN INJURY

By
Craig H. Lichtblau, M.D.


Dr. Craig H. Lichtblau

Traumatic brain injury is the most common cause of death and disability in young people with an annual financial burden of over 50 million dollars per year in the United States. Traumatic brain injury is defined by both the initial primary injury and the subsequent secondary injuries. Emergency treatment includes ensuring brain perfusion, oxygenation, and preventing even briefer transient episodes of hypotension, hypoxia and hypocapnia.

Cerebral perfusion pressure is a function of intracranial pressure and systemic blood pressure and it must be monitored and maintained. Protocols are devoted towards prevention and treatment of secondary injury after sustaining a severe traumatic brain injury. Long term range morbidity of traumatic brain injury is staggering when one considers the profound and permanent neurologic disabilities and the significant financial and societal impacts.

The United States Department of Defense has estimated over 44,000 traumatic brain injuries sustained during Afghanistan and Iraq conflicts between 2003 and 2007 with an estimated 100 million dollars in direct and purchase care and an additional 10.1 million dollars in prescription drug costs. In the United States, direct medical costs and indirect costs (such as lost productivity) of traumatic brain injury total an estimated 60 billion dollars in 2000.

Falls cause the greatest number of traumatic brain injury related emergency department visits and hospitalizations.

Motor vehicle accidents are the leading cause of traumatic brain injury related mortality, which is the highest in adults aged 20 to 24 years.

The incidence of traumatic brain injury is greatest in children aged 0 to 4 years, adolescents and young adults aged 15 to 24 years and adults aged 65 years and older. Falls cause the majority of traumatic brain injury in young children and older adults.

Child abuse is the leading cause of death from traumatic brain injury in children less than 2 years of age.

Nearly half of patients who die from traumatic brain injury do so in the first 2 hours after injury highlighting the role of emergency clinicians in the initial diagnosis and management.

The pathophysiology of severe traumatic brain injury can be viewed as a two-step process that includes the initial primary injury occurring at impact, which is irreversible and immediately present and the secondary injury that occurs after the initial impact, which evolves as a process.

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Severe Traumatic Brain Injury

Craig Lichtblau, MD

-continued—

The secondary injury is potentially preventable and represents end points per goal directed resuscitation and research despite the lack of a single trial demonstrating an effective single therapy or medication for the treatment of severe traumatic brain injury. It has been shown that compliance with protocols or guidelines emphasize appropriate monitoring and goal directed management of cerebral perfusion pressure (CPP) has resulted in decrease in mortality from 50% to less than 25% in the prehospital and inpatient settings while lowering costs and improving cost effectiveness.

Important Points:

All patients with altered mental status must have point of care blood glucose testing, hypoglycemia and hyperglycemia can cause altered mental status and they are easily reversible with treatment in patients with severe traumatic injury, hyperglycemia or hypoglycemia may worsen neurologic outcomes if it is not urgently addressed.

Over 60% of severe traumatic injuries are complicated by alcohol or drug intoxication which may worsen morbidity. Blood alcohol levels and urine toxicology screens may help prove concomitant intoxication but based on available history and physical examination a patient should be aggressively resuscitated with severe traumatic brain injury.

All patients with a severe traumatic brain injury should be assumed to have a concomitant spine injury until proven otherwise and spinal immobilization should be maintained. A patient with a severe traumatic brain injury will be clinically unreliable and the force of degenerate to severe traumatic brain injury should be assumed to have been transmitted to the spine.

Diffuse axonal injury often has a benign CT appearance and it contributes significantly to the morbidity and mortality of severe traumatic brain injury. Patients with diffuse axonal injury are especially susceptible to secondary injuries from hypotension and hypoxia and should be resuscitated aggressively based on available history and the physical examination.

If the patient does not return to previous neurologic baseline after seizure, be concerned about nonconvulsive status epilepticus or a worsening intracranial process. Repeat a noncontrast head CT and work quickly to arrange electroencephalograph monitoring. The patient should be aggressively treated for potential status epilepticus and other causes of neurological deterioration should be investigated.

Traumatic brain injury is a dynamic process especially in the first 24 hours. These patients should be monitored closely, and the emergency clinician should anticipate deterioration and be prepared to intervene immediately.

Physiatrist's Voice
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Severe Traumatic Brain Injury

Craig Lichtblau, MD

-continued—

Care must be taken to avoid routine or prophylactic hyperventilation. Monitor the respiratory rate especially immediately post intubation when the patient is hand bagged. The resultant vasoconstriction from lowering PAC02 can decrease cervical blood volume and cerebral perfusion pressure worsening secondary to injuries.

Over 60% of patients with severe traumatic brain injury have other occult traumatic injuries. A hemodynamically unstable patient should initially be assumed to be in hemorrhagic shock and the source of bleeding investigated even in a single episode of hypertension can worsen neurologic morbidity and mortality.

Patients with severe traumatic brain injury should be managed with early collaboration with trauma surgery and neurosurgery. Special consideration should be given to managing these patients in a neurologic ICU by neurointensivists or intensivists with experience managing neurologic disorders and secondary injury after a severe traumatic brain injury.

Prevention of hypoxia and hypotension are key in avoiding secondary injuries. Given the data on pretreatment to blunt intracranial pressure elevations prior to intubation, care should be taken to effectively intubate the patient without hypoxia or hypertension even at the expense of a pretreatment agent.

Processes that influence secondary injury (Systemic)

Hypoxia.
Hypotension.
Anemia.
Hyperthermia.
Hypercarbia.
Hypocarbia.
Fluid imbalance.
Sepsis.

Central Nervous System

Hematoma.
Brain edema.
Cytotoxic vasogenic
Brain herniation.
Seizures
Hydrocephalus.
Ischemia.
Infection.

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The Physiatrist Author:
A Q+A with Paulette Smart-Mackey MD

PAULETTE SMART-MACKEY

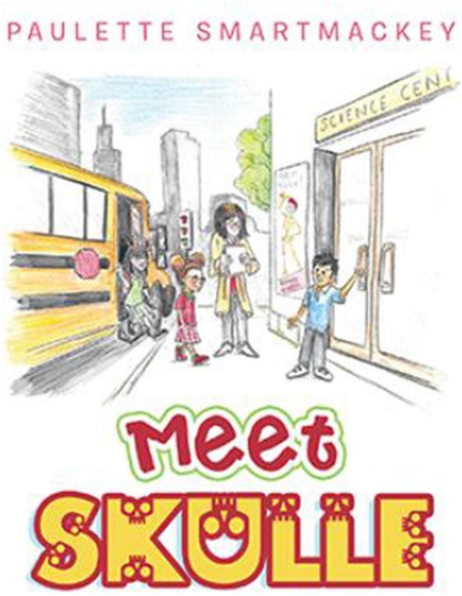
Class of 1988—Pace University

Bachelor of Science in Chemistry

Paulette Smart-Mackey is a physical medicine and rehabilitation physician, transformational coach, and mentor who is passionate about early learning. To this end, she has recently published a book, *Meet Skulle*, which helps children explore their natural curiosity for the science of the human body.

WHAT INSPIRED YOU TO WRITE THIS BOOK AND WHAT DO YOU HOPE YOUR READERS WILL GATHER FROM IT?

When my daughter was in elementary school, she was very curious about science and wanted to learn more about naming the bones in the human body. One day when she was in first grade, she asked me to come to school during a community session to teach her friends what she had already been learning. The administration allowed it, and it became an annual event which lasted through the fourth grade. When the pandemic occurred, my daughter inspired me to author *Meet Skulle*.



It is my hope that readers who are connected to a curious child will garner that learning complex topics can be accomplished at any age. My observations have been that, when children learn something new, their posture is more upright, and their eyes gleam. In them, I see the look of confidence in a future generation of leaders, and I wanted to share this "knowledge with confidence" theme with my readers.

Pursuing a degree in chemistry came from the very analytical person within me who loves math and science, and chemistry seemed to combine these two passions. I knew I wanted to be a doctor from preschool age, and I confirmed my instincts by later volunteering and working in pharmacy stock rooms at area hospitals in order to be in the medical environment. I also engaged with disabled children in group homes and really enjoyed working and caring for people and being in the hospital community. I was inspired to specialize in physical medicine and rehabilitation by my medical school mentor and have found that caring for patients in a team setting, and addressing their medical, social, psychological, and physical needs, to name a few, is a thrill for me. Today, I use my medical platform to coach on health, wellness, and electrodiagnosis, and, recently, write this scientific book for youngsters.-

Read the entire article , BY Antonia Gentile POSTED October 26, 2023

https://www.pace.edu/news/physician-author-qa-paulette-smart-mackey-88 ,
Pace University New York

Physiatrist's Voice
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FSPMR Members/NYC Marathon

Dr. Sandra de Mel and Dr. Timothy Tiu, from the University of Miami, flew to New York City to cover the 52nd NYC Marathon. Assigned as finish line physicians for a race with approximately 50,000 runners, they managed both musculoskeletal and non-musculoskeletal conditions, including exercise associated collapse, hyponatremia, hypothermia, and subungual hematomas.

--
Timothy Tiu, MD, FAAPMR, CAQSM
Assistant Professor
Department of Physical Medicine & Rehabilitation
University of Miami, Miller School of Medicine

Physiatrist's Voice
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Residency Updates

Physiatrist's Voice
NEWSLETTER DECEMBER 2023

University of South Florida PM&R Residency Update

Artish Patel MD , Resident Liaison
Marissa McCarthy, MD, Residency Program Director

Greetings from Tampa!

Artish Patel MD

We have had plenty to celebrate here at USF over the past few months. First, I'd like to congratulate Chief Residents Dr. Matthew Wilhelm and Dr. Kareem Qaisi on successfully matching into Interventional Pain Fellowship here at USF! We look forward to continuing to work with them next year as fellows. Next, I'd like to congratulate current residents, Dr. Reny Ramos (PGY-2) and Dr. Matthew Wilhelm (PGY-4), as well as recent alumnus and current USF Interventional Pain Fellow, Dr. Margret Zorc, on their recent weddings!

Interview season is here and we have enjoyed getting to know many of the competitive applicants applying for PM&R this cycle through medical student rotations and the return of in-person interviews. We're looking forward to finding out who will be joining our residency program next March. Finally, I have included some pictures below of our residents at recent group dinners and didactics.

Happy holidays and best wishes from USF PM&R!

Residents enjoying dinner and learning about career opportunities with Medrina Physiatry.

(Residents pictured above: Dr. Michelle Stombaugh, Dr. Anthony Safadi, Dr. Harry Dobkin, Dr. Daniel Bavender, Dr. Artish Patel, Dr. Matthew Wilhelm, and Dr. Kareem Qaisi)

Physiatrist's Voice
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University of South Florida PM&R Residency Update
Artish Patel MD , Resident Liaison
Marissa McCarthy, MD, Residency Program Director
- continued -

Residents and medical students learning about chemodenervation for spasticity management with representatives from Merz Pharmaceuticals. (Residents pictured above: Dr. Anthony Safadi, Dr. Michelle Stombaugh, Dr. William Mosley, Dr. Harry Dobkin, Dr. Daniel Bavender, Dr. Reny Ramos, Dr. Artish Patel, and Dr. Matthew Wilhelm)

Physiatrist's Voice

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LARKIN COMMUNITY HOSPITAL PM&R RESIDENCY UPDATE
Xiaobin chen DO, Liaison
Jose J. Diaz, DO, Residency Program Director

Greetings from the Larkin Community Hospital PMR family!

Xiaobin Chen DO

Firstly, let me express the warmest congratulations to those PGY2s, as you have completed the first half year of the program! How time flies! I hope you're enjoying the journey so far and continue to have an enriching experience ahead!

Keep up the good work!

Wishing everyone a happy holiday season!

Dr. Roshan Santhosh PGY2 presented a case at A SRA NSCLC Pain in October 2023

FSPMR

Physiatrist's Voice

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Larkin Community Hospital PM&R Residency Update

Xiaobin chen DO, Liaison
Jose J. Diaz, DO, Residency Program Director

- continued -

Residents participated in an interventional spine course in Orlando in November.

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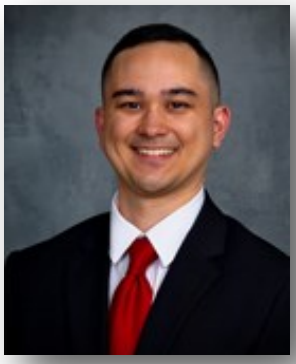
University of Florida PM&R Residency Program
Daniel Kiehl DO Resident Liaison
Andrew H Dubin MD, Program Director

Hello FSPMR Family!



Daniel Kiehl DO

Greetings from hot, warm, and sunny Gainesville, FL! As we head toward the end of the first half of the academic year we would love to share some exciting updates regarding the recent accomplishments and fun we've had this year!

Huge congrats to our PGY-4's Dr. Brownstein and Dr. Patel for recently matching into their top choices for Pain Medicine Fellowship! We are very proud of the accomplishments by our future first class of graduating residents!

Dr. Michael Brownstein

Emory School of Medicine
Pain Medicine
Fellowship: Atlanta, GA

Dr. Shammi Patel

University of Florida
Pain Medicine
Fellowship: Gainesville, FL

Physiatrist's Voice
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University of Florida PM&R Residency Program
Daniel Kiehl DO Resident Liaison
Andrew H Dubin MD, Program Director
-continued-

We are happy to welcome Dr. Cole McCarty to the UF PM&R family! Dr. McCarty completed his residency training at UAB and trained as an Interventional Spine and Musculoskeletal Medicine Fellow with Alabama Ortho Spine and Sports. We are excited to have Dr. McCarty back in Gainesville to join our team!

Enjoying the brews, views, and gators at Swamphead Brewery!

University of Florida PM&R Residency Program
Daniel Kiehl DO Resident Liaison
Andrew H Dubin MD, Program Director
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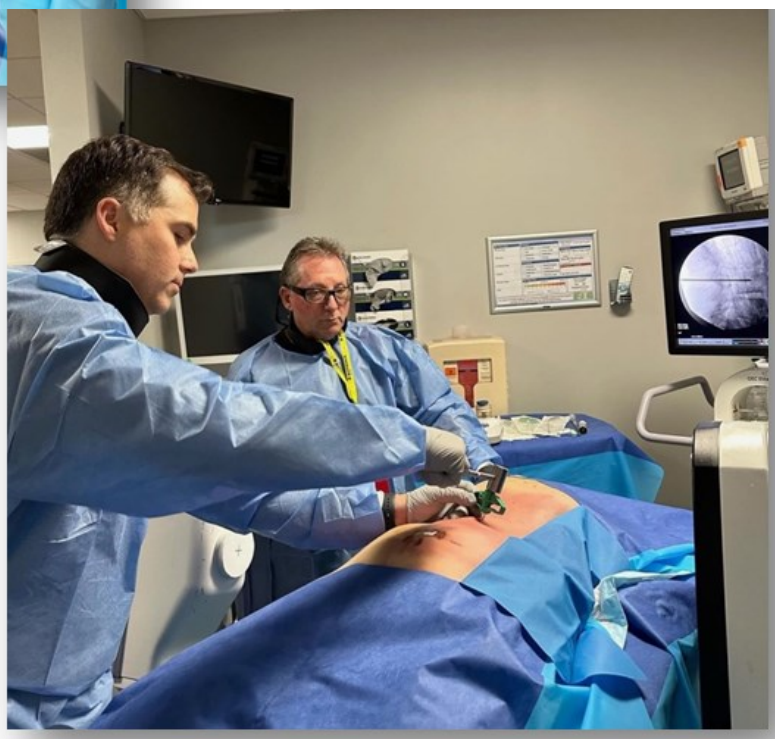

Dr. Shammi Patel (left) and Drs. Zane Thompson (right) and Harold Cordner (right) at the FSIPP/ FSPMR Interventional Pain Workshop!

Physiatrist's Voice
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University of Florida PM&R Residency Program
Daniel Kiehl DO Resident Liaison
Andrew H Dubin MD, Program Director
-continued-

Dr. Kyle Coffey (left) and
Dr. Dave Drozda (Right)
showcasing their procedural skills at
ISPEN's Dysport interactive
Lecture and Lab!

University of Florida PM&R Residency Program
Daniel Kiehl DO Resident Liaison
Andrew H Dubin MD, Program Director
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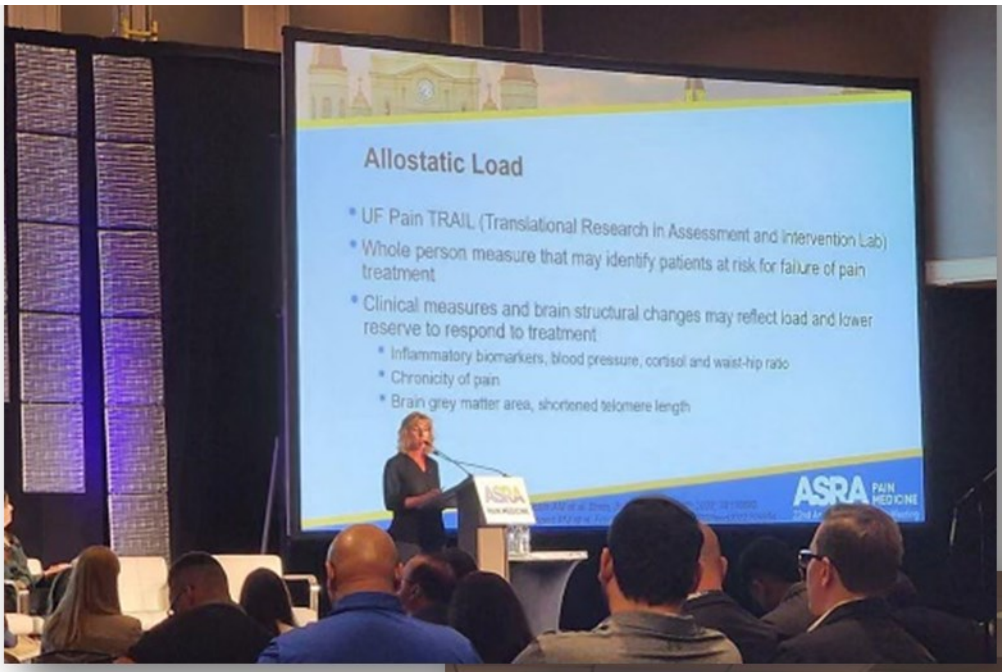

Dr. Rosie Conic (bottom)
and
Dr. Heather Vincent
(top)
presenting at the ASRA
Pain Medicine
conference in
New Orleans!

Wishing the best for all the PM&R applicants this interview season!
Follow us on Instagram @uf_pmr for more updates!
https://www.instagram.com/uf_pmr/

@uf_pm

Physiatrist's Voice
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University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

Kaitlyn Brunworth MD

Greetings, FSPMR!

As we enter the heart of the academic year, University of Miami residents have been enjoying the more temperate weather and taking advantage of ample opportunities for clinical work, learning, research, volunteering, and wellness.

First and foremost we celebrated a successful match season for our senior residents! Drs. Jonathan Presley and Javier Santana matched in Interventional Spine & Musculoskeletal Medicine Fellowship at Vanderbilt University and University of Kansas respectively. Drs. Andrew Logan, Lorenzo Diaz, and Alexa Moreira matched in Pain Medicine Fellowship at University of Miami, University of Southern Florida, and Rush University respectively. We are so proud of all of the hard work and dedication exemplified by the senior residents and the faculty mentors that guided them along the way.

In terms of presentations and conference attendance in the last quarter, Drs. Javier Santana and Alwin David met up with program alumni and presented their work at the North American Spine Society annual conference in Los Angeles. Dr. Robin Mata traveled to New Orleans to present her work at the American Society of Regional Anesthesia and Pain Medicine 22nd Annual Pain Medicine Meeting.

We have also had ample opportunity for unique learning and clinical experiences. Residents took the lead in revamping our hands-on ultrasound curriculum to supplement our clinical learning. We have enjoyed educational visits from neurotoxin and intrathecal baclofen representatives. Dr. Sandra De Mel and faculty physician Dr. Timothy Tiu had a unique opportunity to provide medical coverage for the 52nd annual New York City Marathon where they treated a wide variety of conditions including exercise associated collapse, hypothermia, hyponatremia, and minor acute traumas.

Of course, we can't forget the fantastic opportunity provided by FSIPP-FSPMR! Several of our residents traveled to Clermont, Fl to participate in the FSIPP-FSPMR Hands-On Lab at the South Lake Pain Institute. We had an excellent time learning about all of the cutting edge procedures that local PM&R and interventional pain physicians are performing. We are very grateful for this opportunity.

Finally, the residents continue to take advantage of living in the paradise that is South Florida. Some wellness activities that the residents have been up to outside of work include participation in the Muddy Dash, attending a Miami Heat game, and a residency dog / puppy meetup.

Until next time,

Kaitlyn Brunworth, MD

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

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

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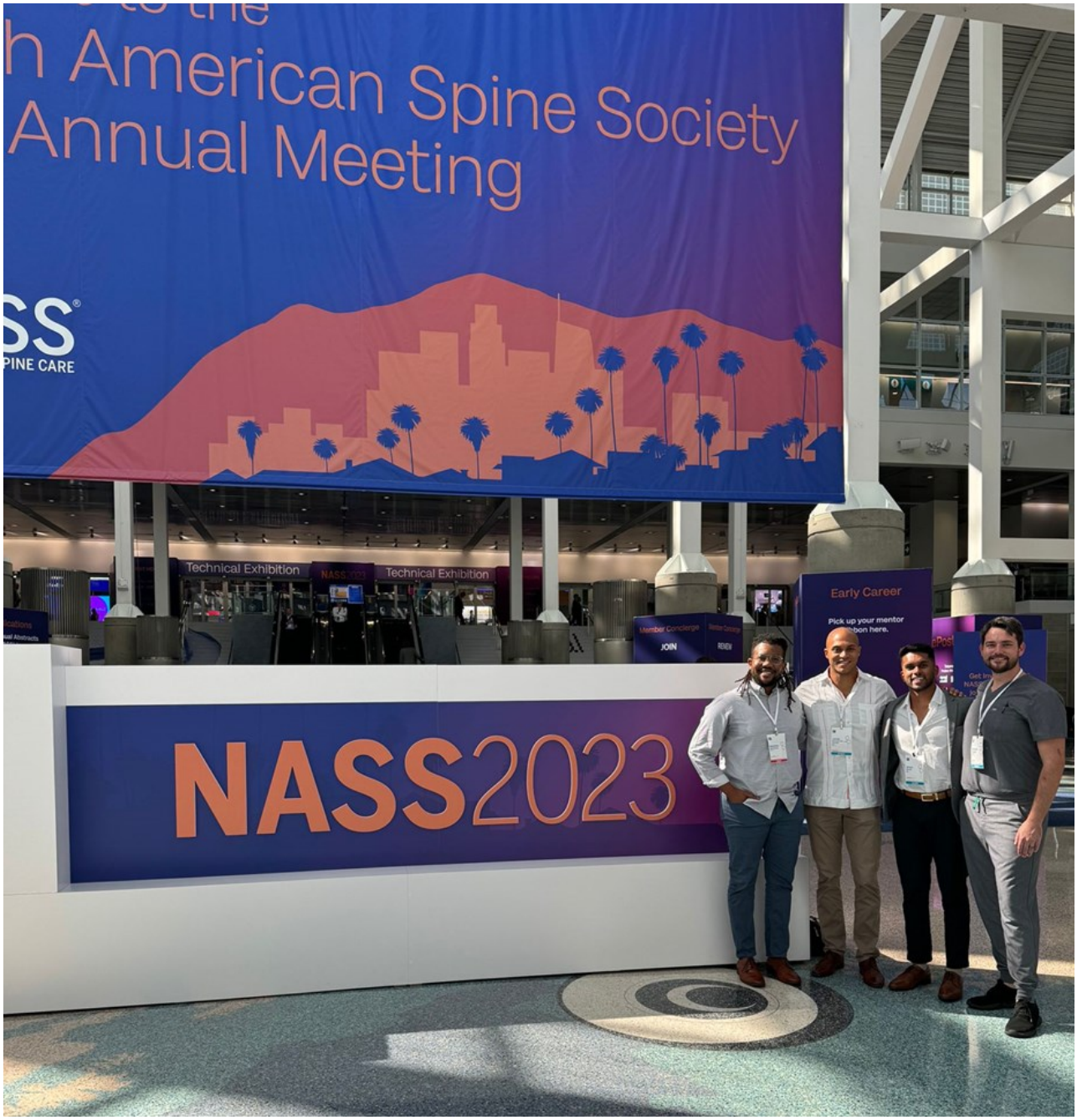

North American Spine Society meeting in Los Angeles. From left to right: Dr. Maja Mzombiwe (Alum), Dr. Javier Santana (PGY-4), Dr. Alwin David (PGY-3), and Dr. Richard Rosales (Alum).

Physiatrist's Voice
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University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

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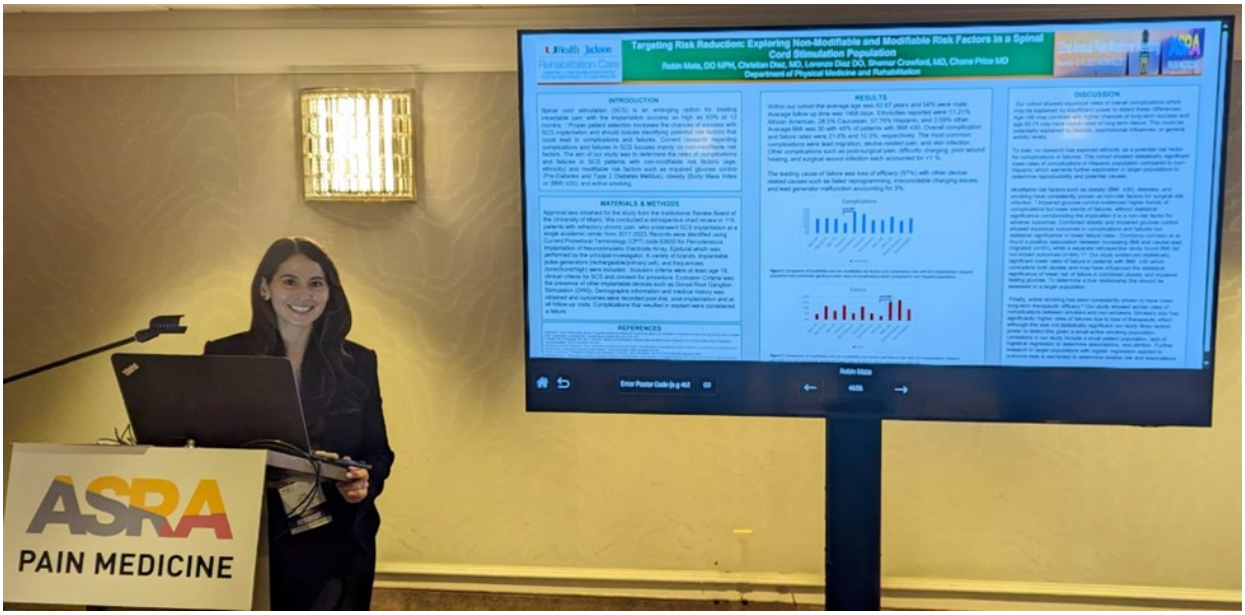

Dr. Robin Mata presenting her research at the American Society of Regional Anesthesia and Pain Medicine 22nd Annual Pain Medicine Meeting

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

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

Chief Resident Dr. Lorenzo Diaz in action at the FSIPP/FSPMR Hands On Cadaver Course

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

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

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FSIPP/FSPMR Hands-On Lab in Clermont, Fl. From left to right: Drs. Mike Appeadu (alum), Azmeer Khamisani, Lorenzo Diaz, Sara Kurtevski, Sandra De Mel, Kaitlyn Brunworth, Scott Daniel, Andrew Logan, Eric Kinkaid-Sharp, Javier Santana

Physiatrist's Voice
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University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

-continued-

Residents attended the Miami Heat game along with some friends and family. Top row residents from left to right: Drs. Lance Recoppa, Mark Williams, Jonathan Presley, Lorenzo Diaz, Mattison Alderman, Ariel Farhi. Middle row residents from left to right: Drs. Lauren Cuenant, Alexa Moreira, Alwin David. Bottom Row residents from left to right: Drs. Azmeer Khamisani, Michael Morgan.

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

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

-continued-

Drs. Felicia Mix, Michael Morgan, Alwin David, Javier Santana raced in the Muddy Dash

Physiatrist's Voice
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University of Miami Miller School of Medicine/Jackson Memorial Hospital PM&R Residency Update

Kaitlyn Brunworth MD, Resident Liaison
Chane Price MD, PM&R Residency Program Director

-continued-

Residency dog / puppy meetup. From left to right: Drs. Felicia Mix, Diana Molinares (Associate Program Director), Michael Morgan, Mark Williams, Kaitlyn Brunworth, Sara Kurtevski, Robin Mata, Lorenzo Diaz, Arielle Farhi, and Matison Alderman (with family members sprinkled in). Featuring our dogs: Kiwi, Lacy, Phillip, Noah, Lazlo, Scooby, and Morgan.

Physiatrist's Voice
NEWSLETTER DECEMBER 2023

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison Jorge Bilbao DO
Jeremy Jacobs DO, Residency Program Director

Hello, FSPM&R family, I hope everyone is doing well! Below we have some very exciting updates we wanted to share with everyone for the December Newsletter.

Jorge Bilbao DO

First, please join me in congratulating all of our PGY-4's for securing their post-residency positions. Dr. Ellen Dzierzak and Dr. Noushad Mamun both matched into Interventional Pain Fellowships at the University of Minnesota and MD Anderson Cancer Center, respectively. As you all may know, Interventional Pain Fellowship is the most competitive PM&R fellowship to match into and our PGY-4's have managed to maintain our program's 100% match rate. Dr. Mandy Hargrove and Dr. Yvette Little have secured positions as inpatient rehabilitation physiatrists in Florida! Dr. Hargrove will be joining Rehabilitation & Electrodiagnostics in Tampa Bay, Florida and Dr. Little will be joining the University of Florida in Gainesville, Florida as an academic physiatrist. We are so proud of all of our PGY-4's and know all of their futures are bright!

In other news, 7 of our current residents are traveling to New Orleans, Louisiana to present their research posters at the AAPM&R 2023 Annual Assembly. Multiple of our attending physicians will also be making the trip out to NOLA to support our residents. We are looking forward to learning from other great physiatrists from around the country.

Lastly, I wanted to share some photos from our most recent wellness day that we spent at an adventure park in South Florida. Even though we had a lot of great go-kart racers, no one got close to beating our PD, Dr. Jacobs, around the track. It is always great to spend some time with our work family outside of the hospital and we are counting down the days for our next wellness day. Happy Holidays!

Memorial Healthcare System

Physiatrist's Voice
NEWSLETTER DECEMBER 2023

Memorial Healthcare System PM&R Residency Program

PM&R Resident Liaison Jorge Bilbao DO
Jeremy Jacobs DO, Residency Program Director
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Physiatrist's Voice
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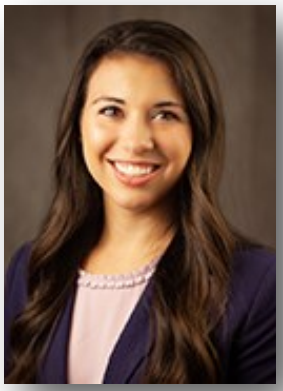
UCF/HCA/West FL Hospital PM&R Residency Program
Zeeshan Haque, MD PGY-2
Susan Belcher MD, Program Director

Greetings from warm and sunny Pensacola!


Megan Craig DO

We settled into the new year nicely and are rolling full steam ahead. Half of our residents have completed the first 3 months of an interventional spine course and the other half are about halfway through. Additionally, we are at the beginning of our comprehensive musculoskeletal ultrasound course with our wonderful Dr. Marisa Terry!

A few of our residents, Drs. Sean O'Leary (PGY-4), Justin Buck (PGY-2), Zachary Lin (PGY-2), and I were at the FSIPP/FSPMR Interventional Course in Clermont in November. We had a blast and want to thank everyone who put it on. It was a great place to learn some new procedures and network with other residents as well.

Interview season is under full swing, and we are loving getting to know this year's applicants! We wish everyone the best of luck in the match cycle this year.

Dr. Wade Wycoff (PGY-3) and Dr. Romil Patel (PGY-3) went to New Orleans to present their poster at AAPM&R. Many other residents and attendings from our program went as well. We enjoyed seeing everyone there!

Happy Thanksgiving and Holidays to all,

Dr. Sean O'Leary and Justin Buck with Dr. Paez at FSIPP/FSPMR

Interventional Spine Course learning ultrasound.

Physiatrist's Voice
NEWSLETTER DECEMBER 2023

Larkin Palm Springs Campus PM&R Residency Program
Shawn Haynes MD, Resident Liaison
Franz Richter MD, Program Director


Shawn Haynes MD

Season's Greetings to all! This year has flown by for us down in south Florida. We have had several developments since our last update.

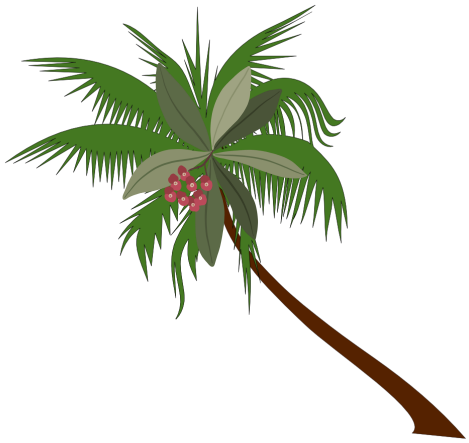
Our program was able to send many residents to participate and learn at the AAPM&R Annual Assembly in New Orleans. Dr. Danielle Simpson, and Dr. Erum Usman participated in the TBI certification course. Dr. Emilian Curia submitted a poster and volunteered during the concussion skills session. And we, Drs. Arshi Handa, Trevor Jackson, Roshani Patel, Ben Kestenbaum, and Neel Jingar also presented posters at the conference.

We have been able to expand our sphere of experience and began working alongside Dr. Eugenio Guevara, a neurologist who specializes in Pain Management. He offers a wide range of diagnostic knowledge as well as exposure to procedures and the opportunity to complete hands on EMG studies. We are happy to have him contributing to the expansion of our program!

PGY-2 resident, Dr. Kim Gaston, is leading a multidisciplinary team devoted towards improving resident physician wellness across all Larkin Hospital Campuses. She is coordinating with our DIO as well as members of our research team in order to facilitate and solidify a cultural step towards improved health of all Larkin members.

I wish you all a safe & happy holiday season!

Shawn Haynes, MD
PGY3 Resident Physician
Larkin Palm Springs Campus PM&R Program



Physiatrist's Voice
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Larkin Palm Springs Campus PM&R Residency Program
Shawn Haynes MD, Resident Liaison
Franz Richter MD, Program Director
-continued-

Physiatrist's Voice
NEWSLETTER DECEMBER 2023

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
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Jonathan Tarrash MD	(561) 496-6622
Colleen Zittel MD	(407) 643-1329

Physiatrist's Voice
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Professional Opportunities

https://www.fspmr.org/job-opportunities

OUTPATIENT PHYSIATRY PRACTICE OPPORTUNITY, ORLANDO, FL AREA

- Ready-made practice with patients waiting for you
- Flexible schedule
- Partnership tract available
- No opioids
- Call – None

Practice Features:

- 4 Board Certified physiatrists treating orthopedic/neurological conditions, brain injury, musculoskeletal injuries, EMG's (brachial plexopathy, But no ALS), spine, and regenerative medicine
- Good doctor and staff retention
- Have marketing staff
- Dedicated EMG rooms
- MRI on-site

If interested, please provide your cv to Linda Farr, Farr Healthcare, Inc., farrhealth@comcast.net, www.farrhealthcare.com, 888-362-7200

For Full Information: Responsibilities, Compensation/ Benefits, Necessary Qualifications, please click here.

The Orlando Health Jewett Orthopedic Institute is seeking a
Board Eligible/Board Certified Physiatrist *(Outpatient only)*
to join our teams located at **our**
new Downtown complex for EMG/NCV procedures, and Electrodiagnostic consultations.

Practice Highlights:

- Thriving physician-led, professionally managed healthcare system.
- Excellent brand recognition, with new patients seeking out Orlando Health for their care.
- Integrated multidisciplinary and subspecialized practice environment.

Jolene Schmidt, CPRP
Physician Recruiter,
Orlando Health Medical Group

Email: Jolene.Schmidt@OrlandoHealth.com

Cell: (904) 557-5855

- Robust operational support and resources in a collaborative work environment.
- Dynamic administration that fosters physician autonomy in clinical decision making and patient outcomes.
- Opportunity for growth and leadership development.
- Opportunity to participate in teaching and academics.
- Opportunity to expand an active research and innovation program.
- Extensive referral base for EMG/NCV procedures, including referrals from orthopedics, primary care, pain management and neurosurgery

For **Role Requirements, Financial Package, Community Information, Institutional Information and Much More, please click here**

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Professional Opportunities

Professional Opportunities are posted FREE on our website as a service to FSPM&R members

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 – 2023 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.

Physiatrist's Voice

NEWSLETTER DECEMBER 2023

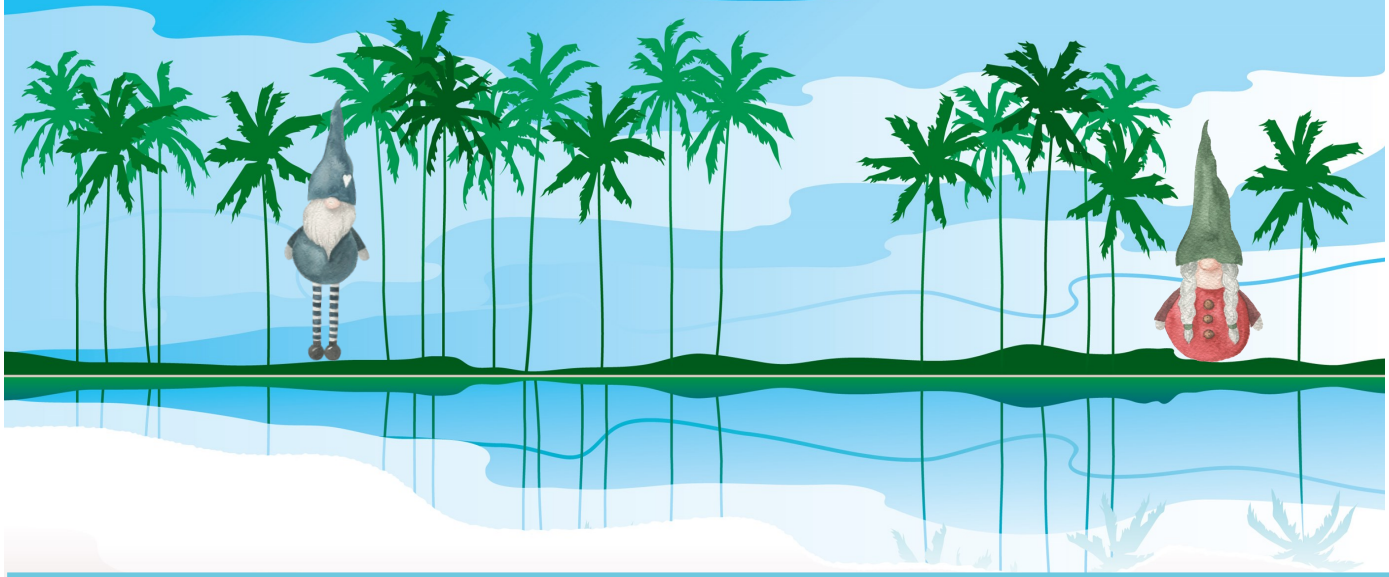
Deadline for our next issue, is February 15th for our March 2024 Newsletter

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.



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