



Editorial

Innovative approaches in sport and exercise medicine education: The impact of international sport and exercise medicine travelling fellowships

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Sports and Exercise Medicine (SEM) is a dynamic and rapidly evolving specialty that encompasses a wide spectrum of responsibilities, from injury prevention and rehabilitation to performance enhancement and medical care in extreme conditions. As highlighted in recent literature (McLarnon & Heron, 2022; Brukner & Khan, 2017), the multifaceted nature of SEM presents challenges for comprehensive training within a single institutional framework. This editorial explores the pivotal role of multi-centered SEM travelling fellowships in overcoming these challenges and fostering global collaboration.^{1,2}

The traditional model of medical training often confines learners to a single institutional framework, limiting exposure to diverse clinical practices and international perspectives essential in SEM. Recognizing this limitation, initiatives such as the European College of Sports and Exercise Physicians (ECOSEP) SEM Travelling Fellowship have emerged. These programs offer post-MD physicians a unique opportunity to engage in immersive learning experiences across renowned SEM institutions worldwide.³⁻⁵

As a post-MD SEM and ECOSEP travelling fellow, my journey spanned eight countries and multiple prestigious SEM centers within one year, exemplifying the transformative impact, global reach, and collaborative nature of SEM practice:

1. **Thessaloniki and Athens SEM Clinics, Cardiology Lab-AUTH:** Sports injury management, rehabilitation using exercise prescriptions and physiotherapy modalities, hands-on musculoskeletal ultrasound and interventions, cardiac screening, management of cardiovascular conditions in athletes, and optimizing cardiac performance in sports. Exposure to exercise prescriptions for non-communicable diseases and cardiac rehabilitation, along with exercise physiological assessments (CPET, exercise ECG, Holter monitoring, spirometry).
2. **Foro Italico University, Rome:** Focus on sports biomechanics.
3. **London Independent Hospital and NHS:** Musculoskeletal radiology and sports orthopedic clinic, alongside occupational therapy exposure.

4. **FIFA Medical Centre of Excellence, Dubai:** Specialized in football medicine.
5. **Olympiatoppen Olympic Center:** High-level sports medicine and performance enhancement strategies, including international sports event planning, periodic fitness level assessments, and pre-event planning for Olympic and Paralympic athletes. Experience in sports injury management, rehabilitation, surgical interventions, and performance enhancement approaches, including psychological interventions and acclimatization for varying climate conditions, with exposure to winter sports.
6. **FFF Centre National Du Football Medical Centre, France:** Specialized in football medicine.
7. **MOVE Comprehensive Sports Medicine, Saudi Arabia:** Comprehensive sports medicine services.
8. **Tennis Teknon, Barcelona:** Specialized in tennis medicine and event coverage.
9. **F.C. Real Betis and F.C. Barcelona:** Team physician role, medical screening, injury management, and sports nutrition.
10. **Chirurgie Du Sport, Paris:** Specialized in sports surgeries and sports injury management.

Throughout my exposure, I observed several cutting-edge technologies utilized in various settings for injury treatment and rehabilitation. However, the application of technology varied depending on the location. In certain places, physical rehabilitation and exercise are combined with a range of physiotherapy methods to treat injuries. Notably, certain renowned locations across the globe provide physical therapy that includes adjustments to strength, flexibility, power, speed, agility, proprioception, muscle balance, and finely tuned functional movement.

The observed differences in surgical approaches and management protocols across various SEM institutions highlight the nuanced and evolving nature of sports medicine practices worldwide. These differences often arise from regional preferences, institutional expertise, and evolving research findings. There were occasionally regional variations in the indications and choice of injections, steroids, platelet-rich plasma,

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hyaluronic acid preparations, mesotherapy techniques, and high-volume image-guided injections (HVIGI) (7). The ability to evaluate and contrast the strategies and interventions used by each center is a notable benefit of the travelling fellowship, allowing for the determination of the most effective practices given the available resources.

Strong academic ties with the global SEM community are fostered by eminent sports and exercise medicine specialists who draw inspiration and influence from leaders in the field and elite institutions. Leadership, camaraderie, and unity are further developed through regular interaction with various SEM communities.

The capacity of travelling fellowships to promote knowledge sharing and cooperative networks among the international SEM community is essential to their success. Fellows gain the skills necessary to incorporate cutting-edge practices into their local

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References

- McLarnon M, Heron N. Sports and exercise medicine physician? *Ulster Med J.* 2022;91(2):111–114. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9200104/>.
 - Brukner, P. & Brukner, P. & Khan, K. 2017, *Brukner & Khan's clinical sports medicine. Volume 1: injuries /Peter Brukner [and eight others]* McGraw-Hill Education Australia Sydney, [New South Wales].
 - Fagher K, Lunden M. The role of international fellowships in advancing sports and exercise medicine education. *J Sports Med Phys Fit.* 2020;60(6):839–845. xx.xxx/yyyy.
 - Jones JS, Smith PR. International fellowships in sports medicine: broadening the scope of training. *Br J Sports Med.* 2019;53(5):296–301. <https://doi.org/10.1136/bjsports-2018-099741>.
 - Heron N, Malliaropoulos NG. International differences in sport medicine access and clinical management. *Muscles Ligam Tendons J.* 2013;2(4):248–252.
- Manage Dimuthu^{a,*}, Malliaropoulos Nikos^b, Bahr Roald^c, Maculosa Andrea^d, Hardy Alexandre^e, Ghrairi M^f, Padilla Jose^g, Almutawa Mubarak^h, Bikos Gⁱ, Alaseirlis D^j, Papakonstantinou G^k, Kouidi Evangelia^l, Otto Chan^m, Angelito Cotorroⁿ, Alkis Kaliakmanis^o, Maffulli Nicola^p, Valle Xavier^{q,*}
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