

隨著超音波技術在急診醫療領域中的角色日益關鍵，本次年會超音波專題將聚焦於教育發展、制度建構與臨床應用三大面向。首先，Emergency Ultrasound in the U.S.: Training, Certification, and the Road Ahead 將深入解析美國在急診超音波訓練與認證制度上的演進與未來方向，提供制度建構的重要參考。Echoes of Progress: 台灣急診超音波教育與競賽十年的回聲 將系統性回顧本土推動超音波教育、培育種子教師與舉辦競賽的經驗與成果。臨床應用方面，下肢骨折：神經阻斷術不只是止痛！將探討周邊神經阻斷術在急診疼痛管理中的角色與操作策略；TEE 導引復甦術：從院後走向院前 則前瞻性地討論經食道心臟超音波於高階心肺復甦中的實證應用與前景。期盼透過本專題，促進理論與實務之整合，推動台灣急診超音波教育與臨床應用邁向新階段。



- **Emergency Ultrasound in the U.S.: Training, Certification, and the Road Ahead**

Emergency ultrasound (EUS) has become an essential skill in modern emergency medicine, enabling rapid, bedside diagnostic and procedural support. Over the past two decades, EUS has been formally incorporated into emergency medicine training, with the Accreditation Council for Graduate Medical Education (ACGME) recognizing it as a core milestone for residency programs. Despite these advancements, there remains significant variability in training quality, credentialing practices, and pathways to certification across institutions in the United States.

This session provides a comprehensive overview of the current state of EUS education, including approaches to residency-based training, the role of dedicated ultrasound fellowships, and national guidance from organizations such as ACEP and the American Board of Emergency Medicine (ABEM). The lecture will also address the practical aspects of credentialing and maintaining competency within hospital systems, with a focus on quality assurance processes, documentation standards, and billing practices.

As the field evolves, new challenges and opportunities are emerging. These include debates around third-party certification, integration of artificial intelligence into image acquisition and interpretation, and disparities in access to ultrasound education in community and rural settings. The session will highlight innovative strategies to address these gaps, including remote training models, simulation, and interdisciplinary collaboration.

Looking forward, the road ahead involves not only standardizing educational and clinical practice but also ensuring that emergency ultrasound continues to advance in a way that is accessible, evidence-based, and aligned with the needs of diverse patient populations.

Attendees will gain a clearer understanding of the current and future landscape of EUS training and certification and come away with actionable insights to support their own practice, training programs, or departmental goals.

- **下肢骨折：神經阻斷術不只是止痛！**

Peripheral nerve blocks have long been recognized for their efficacy in managing pain associated with lower limb fractures. Beyond analgesia, these blocks contribute to reduced opioid requirements, facilitating early mobilization and potentially enhancing fracture healing through improved perfusion and attenuated stress responses. The American Academy of Orthopedic Surgeons (AAOS) endorses the integration of peripheral nerve blocks into multimodal pain management protocols for musculoskeletal injuries, highlighting their role in minimizing opioid-related side effects and promoting functional recovery. This presentation delves into the multifaceted benefits of nerve blocks, advocating for their routine incorporation into comprehensive care pathways for trauma patients.



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