



## **ULTRASOUND IN ANESTHESIOLOGY**

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### **Course information**

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| Code number:        | SC0012                                                                      |
| Title:              | ULTRASOUND IN ANESTHESIOLOGY                                                |
| Faculty:            | Eleni Rafailidou, Anesthesiologist,<br>DEGUM and DGAI Certified             |
| Venue:              | Panorama Hotel<br>Analipseos 26 Panorama,<br>Thessaloniki, PC 55236, Greece |
| Date:               | 28.11.26                                                                    |
| Level of education: | Advanced                                                                    |

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### **Course pre-requisites**

MD Degree from an internationally approved Faculty of Medicine

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## **Course description**

Ultrasound has evolved into an essential and practical tool in modern anesthesiology. From vascular access and regional anesthesia to the assessment of emergency situations, it enables faster, safer and more accurate clinical evaluation. Ultrasound-guided techniques have significantly improved the success rates of medical procedures while simultaneously reducing complications.

This informational seminar places particular emphasis on hand-on approach, aiming to ensure deep understanding of ultrasound skills. Participants will be trained in anesthesiological ultrasound handling, image optimization techniques and identification of key anatomical structures. Practice on simulation models provides a realistic environment for developing fundamental techniques and skills.

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## **Learning objectives**

- Understanding the fundamental principles of ultrasound physics
  - Optimizing image quality and adjusting ultrasound equipment appropriately
  - Understanding the ultrasound anatomy of peripheral nerves, arteries and veins
  - Identifying the normal sonographic appearance of neural and vascular structures, including cross-sectional area and echogenicity
  - Identifying anatomical landmarks and positions used for spatial orientation
  - Becoming familiar with the essential skills required to perform local anesthesia
  - Becoming familiar with the most common blocks, such as axillary, rescue, femoral, adductor, but also with FAST and lung ultrasound protocols
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## **Suggested Course Material**

A.Gray. Atlas of Ultrasound-Guided Regional Anesthesia. Elsevier

A. Hadzic. Hadzic's Peripheral Nerve Blocks and Anatomy for Ultrasound-Guided Regional Anesthesia, Third Edition. McGraw Hill

S. Grant, D.Auyong. Ultrasound Guided Regional Anesthesia. Oxford