

# MASTERCLASS IN PRECISION MEDICINE

ARTIFICIAL INTELLIGENCE AND BIG DATA IN DIGESTIVE HEALTHCARE

15TH JANUARY 2024

## Course Directors

Guilherme Macedo, Miguel Mascarenhas Saraiva, João Ferreira

**08:45 Opening remarks :** Guilherme Macedo, Renato Natal, João Ferreira

**9H00 Session 1 :** Basic concepts (Miguel Mascarenhas)

*\*Artificial Intelligence and Gastroenterology: A brave new world*

*\*AI, Big Data and Blockchain: challenges and promises.*

**Discussion:** (Renato Natal, João Fonseca, João Ferreira, Guilherme Macedo)

**9h45 Session 2:** Minimally invasive GI diagnostics (Mod: José Cotter, Marília Cravo)

*1. AI and Capsule endoscopy: unravelling the future. (João Afonso)*

*2. Colon Capsule Endoscopy; AI: Perfect Match for Pan-Endoscopy. (Bruno Rosa)*

*3. Robotic capsule endoscopy: Concept and AI Application. (Helder Cardoso)*

**10h45-Coffee break**

**11h15 Session 3:** Artificial Intelligence in Live Endoscopy (Mod: Susana Lopes, Filipe Vilas Boas, Pedro Pereira)

*4. Upper endoscopy (Rui Gaspar)*

*5. Colonoscopy (Rui Morais)*

*6. Device-assisted enteroscopy: case application (Patricia Andrade)*

*7. Pancreatobiliary application: Cholangioscopy (Mariano Gonzalez)*

*Endoscopic Ultrasound (Tiago Ribeiro)*

**13H00 Lunch**

**14h15 Session 5:** AI beyond Endoscopy (Mod: Miguel M Saraiva, Teresa Freitas)

*8. High-Resolution Anoscopy (Miguel Mascarenhas)*

*9. Inflammatory Bowel Disease (Susana Lopes)*

*10. AI and motility: primetime for Neurogastroenterology (Cecilio Santander)*

*11. Hepatology (Miguel Mascarenhas)*

**16h00 Tour on the Precision Unit** (Pedro Pereira, Mariano Gonzalez, Miguel Mascarenhas)

**16h30 Adjourn**