



Workshop

Decompression Sickness: From Water to Space

4 November 2026 | 15:00-18:00

Gdańsk · Invasive Medicine Centre · Kieturakis Auditorium · Medical University of Gdańsk

Held immediately before the 2nd Polish Space Medicine Conference

Organised by the ESA Topical Team on Spaceflight DCS for Exploration Missions

Decompression sickness (DCS) is a concern in diving, aviation and human spaceflight. As space agencies, including the European Space Agency (ESA) and NASA, prepare for longer missions and increasingly complex extravehicular activities, experience gained in diving and hyperbaric medicine may help address some of the challenges of decompression in space. This workshop will bring together researchers from different fields to discuss current knowledge of inert gas kinetics, bubble formation and physiological responses to decompression, with particular emphasis on similarities and differences between underwater, aerospace and space environments.

Topics

- Hazards and risks for space missions
- Physiology in space medicine
- Inert gas elimination and DCS
- Patent foramen ovale (PFO) and the risk of DCS
- Human and animal responses to extreme physical environments

Panel of ESA Topical Team experts

Maybritt Kuypers · Peter David Hodgkinson · Jacek Kot (Chair of the Topical Team) · Costantino Balestra · Michael Pedersen

The workshop ends with an open discussion with the audience. It is open to clinicians, researchers, divers, and anyone interested in diving, hyperbaric and space medicine.