





# **ACCOBAMS Course for Highly Qualified**

## Marine Mammals Observers (MMO)

### Passive Acoustic Monitoring operators (PAM)

Ischia Island, Italy



16-21 May 2023

## Program

# 16<sup>h</sup> May 2023

- 09.00 09.15 Welcome from the Organizational Committee
- 09.15 09.45 The MMO PAM certificate of ACCOBAMS.

Barbara Mussi

- 09.45 11.00 Introduction to underwater acoustics. What is sound? *Claudio Fossati*
- 11.00 11.30 Coffee break
- 11.30 13.00 Introduction to underwater acoustics. Seismic wave.

Claudio Fossati

- 13.00 15.00 Lunch
- 15.00 16.30 Introduction to existing regulations and ACCOBAMS guidelines. Barbara Mussi
- 16.30 17.00 Coffee break
- 17.00 18.30 Introduction to marine mammals and acoustic. Cetaceans' biology and distribution in the ACCOBAMS area.

Barbara Mussi







17<sup>th</sup> May 2023

09.00 – 11.00 Introduction to marine mammals and acoustic. Cetacean vocalizations and hearings

Gianni Pavan

- 11.00 11.30 Coffee break
- 11.30 13.00 Introduction to human activities generating impulsive noise. *Gianni Pavan*
- 13.00 15.00 Lunch
- 15.00 16.30 Introduction to the role of MMO/PAM operators. Pre-survey phase, survey phase, Post-survey phase.

Patrick Lyne

- 16.30 17.00 Coffee break
- 17.00 18.30 Introduction to the role of MMO/PAM operators. Cetacean detection, communication with the crew, data entry.

Patrick Lyne

#### 18<sup>th</sup> May 2023

09.00 –11.30 Introduction to the Life style onboard.

Patrick Lyne

- 11.30 11.30 Coffee break
- 11.30 13.00 Introduction to the role of MMO/PAM operators. Acoustic detection and species identification.

Giovanni Caltavuturo

- 13.00 15.00 Lunch
- 15.00 16.30 Introduction to the role of MMO/PAM operators. Pam on fixed station and seismic vessels.

Giovanni Caltavuturo

- **16.30 17.00** Coffee break
- 17.00 18.30 Introduction to Geographic Information System (GIS) to map the acoustic and visual sightings.

Barbara Mussi







#### 19<sup>th</sup> May 2023

- 09.00 –11.30 Using Pamguard for survey. Patrick Lyne, Barbara Mussi
- 11.30 11.30 Coffee break
- 11.30 13.00 Setting and configuration of Pamguard software (Navigation and Sightings). Patrick Lyne, Barbara Mussi
- 13.00 15.00 Lunch
- 15.00 –16.30 Setting and configuration of Pamguard software (Species Identification). Patrick Lyne, Barbara Mussi
- 16.30 17.00 Coffee break
- 17.00 –18.30Hands-on training with PAMGUARD-Tips and troubleshooting.Patrick Lyne, Barbara Mussi

### 20th May 2023

09.00 – 17.30 Practice at sea (Instruments, handling, set-up, HW and SW, data logging)

## 21<sup>st</sup> May 2023

### 09.00 – 15.00 Practice at sea (Instruments, handling, set-up, HW and SW, data logging)

15.00 – 18.00 Evaluation test

### Con la collaborazione tecnica di

