Introduction to the MEDDLE video tutorials

Tutorial: The Introduction to the video tutorials can be found on the MEDDLE for Multiple Drivers Research YouTube channel.

Speakers: Philip Boyd, Institute for Marine and Antarctic Studies, University of Tasmania, Australia

Sinead Collins, University of Edinburgh, UK

Dave Hutchins, University of Southern California, USA

Kunshan Gao, Xiamen University, China

Jorge Navarro, Universidad Austral, Chile

Christina McGraw, University of Otago, New Zealand

Jon Havenhand, University of Gothenburg, Sweden

Video: Christina McGraw, University of Otago, New Zealand

Transcripts: Rebecca Zitoun, University of Otago, New Zealand

Resources: The complete resources for the *Best Practice Guide for Multiple Drivers Marine Research* are available on the MEDDLE website.

A growing body of evidence from ocean observatories is showing simultaneous changes in life-sustaining properties such as nutrients, temperature, carbon dioxide, and oxygen. [Philip Boyd]

A major challenge is to determine the cumulative effects of interactive and widespread changes to marine organisms, communities and ecosystems. [Sinead Collins]

This challenge is multifaceted. And as a research community, we need to develop a new generation of methodology. [Dave Hutchins]

We have come together to develop [resources](#) to help you tackle these problems. You will find links to each resource in the video description below. [Kunshan Gao]

The guide book introduces the challenges when predicting the future ocean using perturbation experiments. The web-based [decision support tool](#) will help you identify relevant drivers and design your experiment. The [MEDDLE software](#) allows you to test your design and statistical analysis by simulating data from 1, 2 or 3 driver experiments. The Video tutorials provide in-depth information about some of the more challenging aspects of multi-driver experiments. [Jorge Navarro]

We suggest you watch the [introductory videos](#) to learn how to identify relevant drivers and design an experiment that will actually answer your question. Next watch the [themed videos](#) to fill in knowledge gaps. [Christina McGraw]

Multiple driver experiments are challenging and these resources are designed to help you. Go hard and good luck! [Jon Havenhand]