

ISSSB 2025



II INTERNATIONAL SUMMER SCHOOL ON

SYSTEMS BIOLOGY

**THE SYSTEM BIOLOGY APPROACH TO
DISCOVER MARINE LIFE: FROM A BIG
EYE TO A MICROSCOPIC PICTURE**

External Speakers:

Chris Bowler CNRS-ENS Paris, France

Juan Pascual Anaya University of Malaga, Spain

Klaas Vandepoele Ghent University, Belgium

Ferdinando Boero University of Naples, Italy

Periklis Paganos MBL, Woods Hole, USA

Internal Speakers-SZN:

Luca Ambrosino

Lucia Campese

Domenico D'Alelio

Gerardo Della Sala

Giacinto De Vivo

Giovanna Romano

Monia Teresa Russo

OPEN TO:

Graduate and PhD students, postdocs and
early-career researchers

WHERE:

Stazione Zoologica Anton Dohrn, Villa
Comunale, Napoli

WHEN:

27–30 October 2025

APPLICATION DEADLINE:

Early bird: July 15, 2025

Late: August 31, 2025

Apply through the website:

<https://issb2022.wixsite.com/issystemsbiology25>



WHAT YOU WILL LEARN

Ecosystem-Scale Modeling

Explore large datasets and apply network-thinking to plankton ecology, revealing how species interactions drive ocean function

Omics Workflows

Gain hands-on experience with comparative genomics, functional annotation and meta-omics pipelines to study marine biodiversity and functioning

Evolutionary Genomics & Eco-Evo-Devo

Understand genome and protein evolution along with developmental regulatory program dynamics from single-cell to whole-organisms

Biotech & Synthetic Biology

Learn microalgal transformation and targeted editing, link genomics with metabolomics for natural-product discovery, and perform genome mining in practical lab sessions