



**European Summer School on Industrial  
Biotechnology (ESSIB2018):  
*Marine Biotechnology*  
Naples, 8-12<sup>th</sup> October, 2018**

The European Summer School on Industrial Biotechnology (ESSIB) is organized by the University of Milano-Bicocca (Department of Biotechnology and Biosciences), the University of Stuttgart (Institute of Biochemistry and Technical Biochemistry), and the Universitat Autònoma de Barcelona (Department of Chemical, Biological and Environmental Engineering). ESSIB addresses PhD students and postdocs, preferentially from European laboratories, and will take place every year in a different country and with a different focus. ESSIB is a complete educational program based on lectures, practical laboratory experience, and contacts with companies active in the field.

ESSIB is an intensive one-week course from Monday to Friday. Lectures and laboratory courses will be provided by local and invited speakers.

#### **Course description**

The Marine Biotechnology Summer School will address gaps such as: developing innovative uses of underutilised and waste material from fisheries and aquaculture to achieve zero waste; using biotechnology and information technology to develop smart, efficient, traceable food systems and create synergies between aquaculture and fisheries; unlocking the potential of microbiomes in aquaculture, fisheries, food processing and biotechnology; applying the latest developments in data mining (machine learning, big data) to the Blue Bioeconomy; creating predictive tools to improve the identification and targeting of biodiversity “hot-spots” in the oceans (-omics based technologies); exploring synergies with land-based production in areas such as food and feed processing, biomaterials, chemicals and nutrients and including waste streams from aquatic to terrestrial value chains; improving aquaculture and fisheries by using biotechnology to create innovative feeds, new chemical compounds to be implemented in the pharmaceutical industry.

#### **Major topics:**

1. Biomolecules and pharmaceuticals
2. Biomaterials
3. Bioremediation
4. Use of fishery discards as raw materials
5. Aquaculture
6. Marine litter
7. Reducing, reuse, and recycling to achieve circular economy

#### **Laboratory courses:**

1. From samples to molecules (Institute of Protein Biochemistry)
2. A long experience in marine ecology (Stazione Zoologica Anton Dorn)

#### **Fees and registration**

The policy of this Summer School is to keep fees as low as possible in order to support the participation of young researchers. Fees for this year are still to be determined, but will not exceed 500 €, including accommodation and lunch. A limited number of fellowships will be available to participants without traveling funds. Please inquire by mail.

To apply, please send by **May 31, 2018**

- a CV including current research topics
- a motivation letter
- a supporting letter by your supervisor to

**ESSIB2018@unimib.it**

We will ask you to register and pay for the fees after this deadline.

#### **Organisers and location**

Donatella de Pascale  
Fortunato Palma Esposito  
Institute of Protein Biochemistry - IBP-CNR  
National Research Council of Italy  
Via Pietro Castellino, 111  
80131 Naples, ITALY

**More details at:** <http://www.ESSIB.eu>



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