

## **EUGLOH Summer School on Biomedical Data Processing and Global Aspects of COVID-19**

### **Call**

#### **Opportunity for students and/or researchers – EUGLOH Alliance**

July 6<sup>th</sup> – 10<sup>th</sup> 2020

#### **Scope**

This activity is developed within EUGLOH – European University Alliance for Global Health (<https://www.eugloh.eu/>), a pilot initiative funded by the European Commission under the Erasmus+ Program and composed by 5 European Universities: University of Paris-Saclay, Lund University, University of Szeged, Ludwig-Maximilians-University of Munich and University of Porto.

In the online *EUGLOH Summer School on Biomedical Data Processing and Global Aspects of COVID-19*, training will be provided for participants in the use of modern information technologies for effective research work and for the dissemination of scientific results. The programme also offers an overview of the COVID-19 pandemic, with a special focus on the multidisciplinary research activities at the five participating universities covering all parts of Europe.

#### **Description of the activity**

##### ***What can you learn?***

Participating students and researchers are trained by live streaming or video courses in different topics related to the development of transversal skills:

- (Biomedical) data collection, signal processing and analyses;
- Artificial intelligence and machine learning in:
  - Natural language processing,
  - Biological image analysis,
  - Gene expression analysis;
- Image processing applications;
- From literature knowledge to mechanistic modelling;
- Health data science and management;
- Statistical decision making;
- Dissemination of scientific results.

The school covers global aspects of COVID-19 pandemic, including the medical challenges, models for the virus spread, economic and social consequences:

- Mathematical modelling of the COVID-19 outbreak;
- COVID-19 outbreak: similarities and differences with previous pandemics;
- An economic model of optimal lockdown;
- SARS-CoV-2 and COVID-19: the past, present, and future perspectives;
- Epidemiological aspects:
  - Data collection and interpretation,
  - Population testing and tracing,
  - Conception and design (illustrated through a current German Coronavirus study).

### ***Who is the target audience?***

This activity is oriented towards bachelor, master and PhD students from all study fields of the partner universities of the EUGLOH Alliance. The school is also open for junior and senior scientists of the partner universities. No specific background knowledge is required.

### ***What pedagogical methods/tools are applied?***

Lectures by online video streaming, interactive communication tools, teamwork, networking.

### ***Certification***

EUGLOH Certificate of attendance

4 (four) ECTS for the students attending the school

### ***Programme of the event***

The detailed programme of this Summer School is available in the following link:

<https://www.eugloh.eu/events/eugloh-summer-school-on-biomedical-data-processing>

### **Activity Structure**

This activity will take place between the 6<sup>th</sup> and the 10<sup>th</sup> of July 2020 and will be held online and in English.

### **Selection criteria**

For selection purposes, the following criteria will be applied:

- To be enrolled as a student on the University of Porto, in a study programme (bachelor, master, PhD), or carrying out R&D activity in U.Porto, by the date of the event;
- Min. language level (English);
- Motivation.

### **Work Language**

Considering the transnational nature of the activity, the working language will be English. It is essential that participants have knowledge of the language (advised minimum level B2/C1; please refer to the self-assessment grid (levels of proficiency), as described in [Common European Framework of Reference for Languages](#) (CEFR).

### **Funding**

No tuition fee.

### **Application Procedures**

Students willing to participate must fill in the following **online application form**, in **English**, until the **15<sup>th</sup> of June 2020**: <https://www.eugloh.eu/events/eugloh-summer-school-on-biomedical-data-processing>.

Selection of candidates will be made by a committee, composed by members of the EUGLOH Alliance at the University of Porto.

### **Evaluation and selection process**

The evaluation of applications will consider the above-mentioned criteria. In case of withdrawal, the candidates will be selected from the reserve list.

Selection results will be communicated to all candidates (selected or not), via e-mail.

### **Contacts**

Any matter related to this activity and application submission should be communicated to “Serviço de Investigação e Projetos” at Rectorate, through the following e-mail: [uai@reit.up.pt](mailto:uai@reit.up.pt).