

+Title of BIP: Bioanalytical (Tele) Monitoring for Life Sciences – Medicine, Food Control, Environmental Monitoring

General information

Objectives and Description:

The overall goal of the summer school is to expose students to current research developments and the latest technologies in a variety of areas of bioanalytical (tele) monitoring for life sciences – medicine, food control, and environmental monitoring. Students will be encouraged to actively participate in class discussions through lectures by internationally recognised professors. They will also be involved in practical laboratory work from various didactic/research areas, namely biotechnology, microbiology, food technology, and sensory analysis. During these activities, problem-solving, teamwork, discussion and oral communication skills will be strengthened. Students will also benefit from interaction with colleagues from other European universities and make connections that could lead to future professional collaborations. Students will also benefit from the interaction with colleagues from other European universities and making connections that could lead to future professional collaborations.

Students will be awarded 3 ECTS upon fulfilling the summer school requirements (attendance at lectures and laboratory classes, group presentations of laboratory work).

Development of didactic materials in video/audio format will be added to a common platform that will ensure communication between partners and dissemination of activities and information about the summer school.

Methods and outcomes:

The BIP will totalise 75 working hours (45 hours of course and practical laboratory and 30 hours of individual study)

During these activities, problem-solving, teamwork, discussion and oral communication skills will be strengthened.

Individual study - study according to didactic materials/ bibliography and notes, additional documentation using specialised electronic platforms and in the field, etc., preparation of seminars/ laboratories/ projects, assignments, reports, portfolios and essays.

Field of Education: 09 - Health and welfare

Life Sciences – Medicine, Nutrition, Pharmacy, Environmental studies etc.

Target audience / Participants profile:

Students at bachelor, master and doctoral levels in the fields of general medicine, clinical laboratory, nutrition, pharmacy, chemistry, biotechnology and similar.

No of ECTS issued: 3 ECTS

Language of instruction and requirements:

English – min. B2 level

Dates for physical activity: 13-21 September 2024

Location of physical activity: UNITBV premises, Brasov: ICDT laboratories, University Hall, laboratories of the partner faculties.

Dates for virtual component: 09 September 2024

Virtual Component Description: Virtual meeting (4 hours) – to establish the framework of the physical meeting, access to using the didactic materials, setting the students working groups and presentation of participants.

Organizing Board

Receiving/Host university:

Transilvania University of Brasov, Romania

Prof. Dr. Mihaela BADEA, Faculty of Medicine, mihaela.badea@unitbv.ro

Sending/Partner universities:

- P1. Biotechnical Faculty, University of Ljubljana, Ljubljana, Slovenia
- P2. Universidade de Lisboa, Lisbon, Portugal
- P3. Faculty of Health and Sport Sciences, University of Zaragoza, Huesca, Spain
- P4. University of Brescia, Italy
- P5. University of Turin, Italy
- P6. Univ of Beja, Portugal
- P7. University of Pardubice, Rep. Czech
- P8. University of Milan, Italy - under discussion
- P9. Medical Univ of Warsaw, Poland - under discussion
- P10. Ohter UNITA partner universities

In addition, **teaching staff + students from other universities in Romania** will also be involved: Carol Davila University of Medicine and Pharmacy in Bucharest, Romania, Lucian Blaga University from Sibiu

Researchers from different research institutes will be involved:

- Institute of Biology of the Romanian Academy
- INOE Bucharest
- International Center of Biodynamics
- Synevo Romania

Invited specialists/experts and their role in the implementation of the BIP:

- Jean-Louis MARTY - 1- Sensbiotech, Ceret, France; 2- Université de Perpignan, Perpignan Cedex, France - Chairperson and speaker
- Patrizia RESTANI - Università degli Studi di Milano, Italy - Chairperson and speaker
- Chiara DI LORENZO - Università degli Studi di Milano, Italy - Speaker
- Rui SILVA - Universidade de Lisboa, Lisbon, Portugal - Chairperson and speaker

Detailed programme

Planned activities during physical component:

12.09.2024 – arrival of participants.

1st day: 13.09.2024 - opening session, introductory course - general information, course schedule/practical work, (4 hours).

2nd day and 3rd day: 14.09.2024 – 15.09.2024: social activities.

4th day: 16.09.2024 – courses (4h) + practical laboratory (4h)

5th day: 17.09.2024 – courses (4h) + practical laboratory (4h)

6th day: 18.09.2024 – courses (4h) + practical laboratory (4h) - study visit

7th day: 19.09.2024 – courses (4h) + practical laboratory (4h)

8th day: 20.09.2024 – courses (4h) + practical laboratory /examination (3h)

9th day: 21.09.2024 – the course completion ceremony

Application procedure

Students send the applications to their home university.

Home university nominates the students at UNITBV (outgoing@unitbv.ro) by **07 May 2024**.

Up to 3 students from each partner university are welcome.

Facilities provided to participants:

- Free accommodation in university dormitories
- One meal/ day