

CONSORTIUM

BioS

DIGITAL SKILLS ON COMPUTATIONAL BIOLOGY FOR HEALTH PROFESSIONALS



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<https://www.bgu-murnau.de/>



Bioinformatics Barcelona Association (BIB)
Spain
www.bioinformaticsbarcelona.eu/



Epralima_Escola Profissional do Alto Lima,
C.I.P.R.L - Portugal
www.epralima.com/epralima/



European Medical Association (EMA)
Belgium
www.emanet.org



European Recreation and Health Valley
(EUREHVA) - Germany
www.eurehva.com/



e-NIOS Applications Idiotiki Kefalaiochiki
Etaireia (e-NIOS) - Greece
<https://e-nios.come-n>



For SRL - Italy
www.forsas.it/



German Oncology Centre (GOC) - Cyprus
<https://goc.com.cy>



HiDucator Ltd (HiDucator) - Finland
<https://www.hiducator.com/>



Olympic Training and Consulting Ltd - Greece
www.olympiakokek.gr/



Skybridge Partners (Skybridge) - Greece
www.sbp.gr



Steinbeis-Hochschule Berlin (SHB) - Germany
<https://www.steinbeis.de/>



University of Patras (UPAT) - Greece
www.upatras.gr/en



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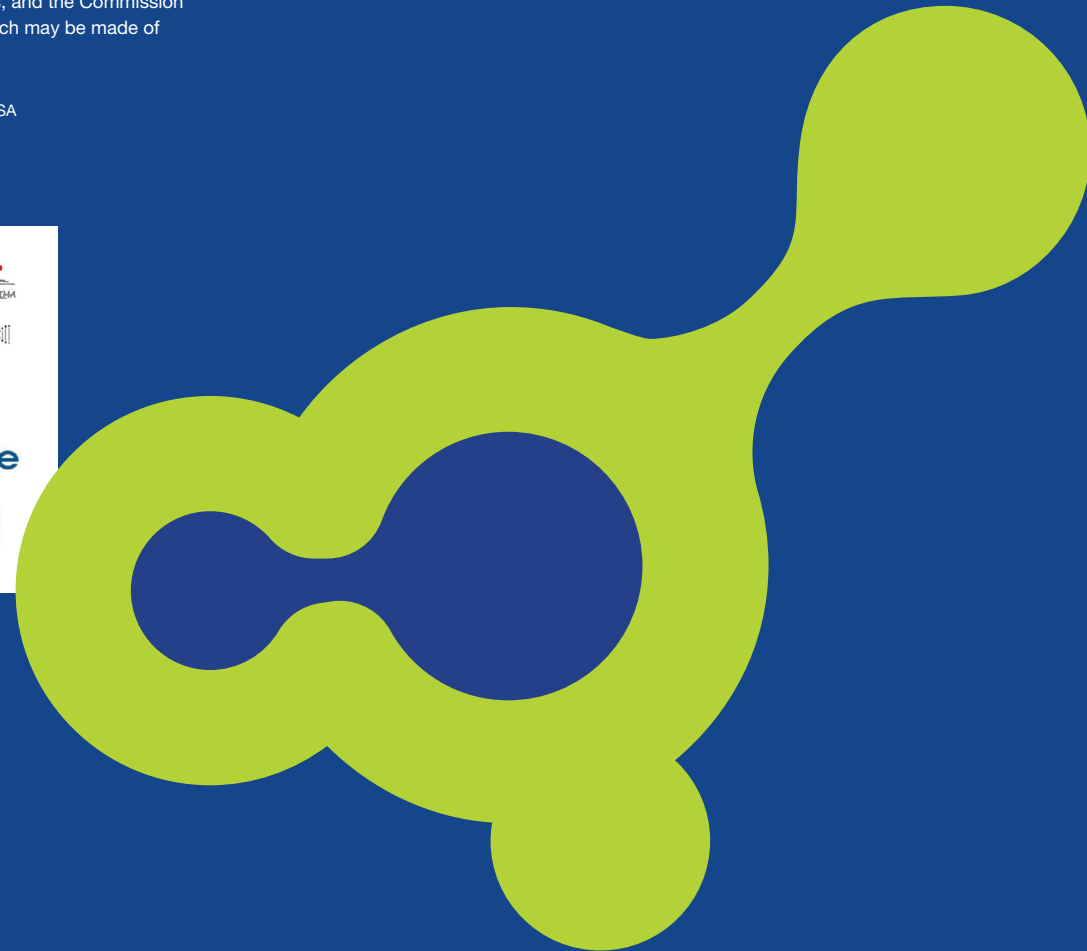


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Get information on : www.bios-project.eu

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WHAT DOES THE PROJECT OFFER ?

BioS provides medical doctors with knowledge, skills and competencies, which will allow them to tackle effectively concurrent challenges in EU healthcare systems, services, and policies, in benefit of the health of EU citizens.

The BioS project aims at advancing the skills of European medical doctors through the design, development and delivery of new modular vocational curricula on Digital Skills on Computational Biology, as well as transversal skills, straightforwardly responding to the skills gaps identified by existing research evidence.

Modules curricula

- 1) Basic introductory material about bioinformatics methods, tools, and resources relevant for the medical practice.
- 2) Computational statistics skills for clinical doctors, focusing on the correct interpretation of biomedical data and basic knowledge on the use of appropriate methods to assess statistical significance
- 3) Dedicated module will demonstrate how to use commercial personalised genomics services in patient care. These services are already available worldwide and medical professionals should utilize their services in practice. For that, knowledge and skills from the first two modules are turned to practical applications using real life examples. In this module information and training on how to interpret disease risk and which are the optimal genomic studies for each situation is also provided.
- 3) The final module is dedicated to communication and ethical relevances of these new methodologies for health practitioners. Since personalized genomics and other bioinformatics services are known to handle sensitive information about patients, it is very important that proper communication and attention is paid to these aspects. The module also includes training activities on genetic counseling, risk management and decision making.

WHICH ARE THE PROJECT KEY FEATURES ?

Making lifelong learning and mobility a reality

The BioS project will equip medical doctors with knowledge, skills and competences that can be immediately applied in clinical environment and will allow them to tackle effectively concurrent challenges in the EU healthcare systems, services, and policies, in benefit of the health of EU citizens. Specific objectives of the BioS project are:

Innovation

- a) To design and deliver a training programme on a highly innovative field as the field of Computational Biology thus contributing to personalization of predictions, earlier diagnosis, better treatments, and improved decision support for clinicians
- b) To design and deliver a flexible training programme that will develop coherent teaching methodologies and tools tailored to the needs of the target group, including hands-on experience

Impact

- a) To involve all stakeholders for exploiting the VET (Vocational education and training) potential in cutting-edge subjects for creating growth and jobs in the Healthcare sector,
- b) To enhance the use of Bioinformatics by medical doctors in clinical environments,
- c) To promote the application of EQUAVET (European Quality strategies in Vocational Education and training) and EQF/ECVET (European qualifications framework/European Credit system for Vocational Education and Training) frameworks that ensure both quality and better transferability of the project's results.

Sustainability

- a) To create a lasting partnership of all types of stakeholders that will monitor and adjust to changes in the sector's needs,
- b) To facilitate transnational mobility between the sectors' stakeholders,
- c) To provide transversal skills as well as career guidance, career management skills and access to the labour market, thus improving their long-term employability.

WHAT ARE BIOS KEY ACTIVITIES ?

1. Develop innovative modular curricula that integrate the latest advancements in Computational Biology for the Healthcare sector and transversal skills that can be immediately applied by medical doctors in clinical context.
2. Develop the aforementioned modular curricula according to the EQF/ECVET (European qualifications framework/ European Credit system for Vocational Education and Training) framework
3. Develop a virtual learning environment to bring together medical doctors, bioinformatics experts, educators and researchers, as well as policy-makers from across Europe. The platform is going to be developed as a "virtual world" that enables users to interact with each other. In this platform, users can exchange experiences and follow virtual lessons.
4. Deliver the BioS training programme as a VOOO (Vocational Open Online Course) underpinned by EQUAVET (European Quality strategies in Vocational Education and training)
5. Provide participants with hands-on experience through work-based learning periods
6. Produce Policy Briefs and Recommendations to contribute to relevant national and EU policy agenda
7. Disseminate the project outcomes giving emphasis in creating exploitation plans for continuing the project work after the end of the project's funding period.

WHO MAY BENEFIT FROM THE PROJECT ?

- Healthcare professionals and Medical doctors (Medical doctors are the basic target group of the BioS project and the major end-users of the project results),
- Vocational education and training (VET) sector,
- Researchers and Universities,
- Policy makers,
- Individual patients,
- Patients' families,
- Patients' associations (indirect target group)

