



Boğaziçi University and Horizon Europe: Excellence, Innovation and Collaboration

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Historical Legacy: Founded in 1863 as Robert College, Boğaziçi University has been a public research university since 1971.

Rigorous Education: Boğaziçi offers challenging programs that build critical thinking and expertise.

Top Students: As one of Turkey's most selective universities, Boğaziçi attracts top students.

Global Exchanges: Boğaziçi offers exchange programs with many countries, including Canada, enriching its global reach.



HORIZON EUROPE

BOĞAZIÇI UNIVERSITY
An Overview of Some Ongoing
Projects

Sustainable, Secure and Competitive Energy Through Scaling Up Advanced Biofuel Generation (Susteps)



Partners:

- TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU - *Coordinator*
- FORSCHUNGSZENTRUM JULICH GMBH
- **BOĞAZIÇI UNIVERSITY**
- ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT D'INNOVATIONS ET DE TECHNOLOGIES POUR LA PROTECTION DEL'HERITAGE ENVIRONNEMENTAL, SOCIAL
- SYDDANSK UNIVERSITET
- KETJEN NETHERLANDS BV
- ERINN INNOVATION LIMITED
- NSTITUT DE RECHERCHES EN ENERGIE SOLAIRE ET ENERGIES NOUVELLES
- PAUL SCHERRER INSTITUT
- UNİVERSITY OF CALGARY
- UNIVERSIDADE FEDERAL DE ITAJUBA

Call: HORIZON-CL5-2022-D3-03-02 - Best international practice for scaling up sustainable biofuels

Start Date: 1 September 2023

End Date: 31 August 2027

Total Budget: € 2 .995.36,25

Based on international collaboration, SUSTEPS will build a more efficient, less costly CO₂-to-biofuels process, identifying systemic constraints, opportunities and solutions for scaling up the value chain of algae-based sustainable biofuels which will support the development of best practices and concepts along the entire value chain and accelerate the scale-up of sustainable biofuels worldwide.

Understanding the Language of Life: Identifying and Characterizing the Language Units in Protein Sequences (LifeLU)

Partner: BOĞAZIÇI UNIVERSITY –
Coordinator

Call: ERC-2022-COG - ERC
CONSOLIDATOR GRANTS

Start Date: 1 November 2023

End Date: 31 October 2028

Total Budget: € 1.982.800,00

Aims:

- Develop innovative methods to determine the language units (i.e. the vocabulary) of the language of life;
- Identify the characteristics of this language as well as its variability among species;
- Develop novel methods to identify and characterize the functions of the language units.

This research will lay the foundation for a new field of research, molecular language understanding, which aims to develop methods for understanding the messages encoded in molecular sequences. The ultimate goal of this project is to decipher the language of life, which will lead to groundbreaking consequences for understanding life and health, and will shed light to the development of novel prevention, diagnosis, and treatment strategies for diseases.

European University of Brain and Technology ([NeurotechEU](#))



Partners:

- STICHTING RADBOUD UNIVERSITEIT -
Coordinator
- **BOĞAZIÇI UNIVERSITY**
- HASKOLINN I REYKJAVIK EHF
- UNIVERSITATEA DE MEDICINA SI FARMACIE
IULIU HATIEGANU CLUJ-NAPOCA
- UNIVERSIDAD MIGUEL HERNANDEZ DE ELCHE
- UNIVERSITE DE LILLE
- RHEINISCHE FRIEDRICH-WILHELMS-
UNIVERSITAT BONN
- KAROLINSKA INSTITUTET

Call: Key Action: Partnerships for cooperation and exchanges of practices
Action Type: European Universities

Start Date: 1 November 2023

End Date: 31 October 2027

Total Budget: € 14,281,219

The European University Alliance of Brain and Technology, NeurotechEU, envisions Neurotechnology as the next step in the deep tech revolution, or technology from the brain, for the brain, and with the brain. The program's thematic focus is arranged along 8 dimensions providing strategic bridges between various disciplines, including neuroscience, medicine, engineering, artificial intelligence, cognitive science, robotics, social sciences, and the humanities.

TACTIX - Twinning Approach for Computational MRI Technology and Innovation EXcellence in Türkiye

tactix.bogazici.edu.tr

PI: Prof. Dr. Esin Öztürk Işık

Institute of Biomedical Engineering
Boğaziçi University

TACTIX



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- ‘TACTIX - Twinning Approach for Computational MRI Technology and Innovation EXcellence in Türkiye’ is a HORIZON Europe Twinning Project funded by the European Union under grant #101159624.
 - **Project Start:** 1 June 2024
 - **Duration:** 36 months
 - **Budget:** € 1,491,029
- TACTIX aims to enhance the scientific excellence and innovation capacity of **Bogaziçi University** (PI: Prof. Dr. Esin Öztürk Işık) in the field of **computational magnetic resonance imaging (MRI)** through a collaboration with two leading European institutions; **Fraunhofer-MEVIS** (PI: Prof. Dr. Matthias Guenther) and the **Amsterdam University Medical Center (AUMC)** (PI: Prof. Dr. Frederik Barkhof).



HORIZON-WIDERA-2023-ACCESS-02-01 Twinning Bottom Up Grant
Call closed on Sept 28th, 2023, and the results were out on February 1st, 2024

Enhanced R&I Systems: Improving research and innovation across the EU by disseminating best practices faster and supporting geographic diversity.

Building Capacities: Increasing R&I capacities in Widening countries through national and regional reforms, contributing to a pan-European innovation ecosystem.

Capacity and Teaming: Developing management skills and establish or modernize centers of excellence through strategic partnerships and securing complementary investments.

Complementary Actions: Focusing on innovation and linking academia, business, government, and society.

Aim of the Project

- The **main aim** of the TACTIX project is to boost Bogazici University's (BU) research profile and excellence in **computational MRI** at all levels of seniority through methodological knowledge transfer and capacity building in cooperation with two leading EU institutes, Fraunhofer MEVIS and AUMC, and **establish a research excellence ecosystem in computational MRI in Türkiye.**
- Moreover, TACTIX will work on boosting BU's general research management skills to increase its global competitiveness.
- To further develop scientific excellence for BU in computational MRI, TACTIX will carry out a research project on MS patients to develop the novel BBB-ASL MRI technique into an early imaging biomarker of MS lesion activity.

