EU grant awarded to IMBB-Biosensors lab

Biosensors lab has been recently awarded a competitive EU grant entitled "**On-site biological sensing for aquatic pollutants and biohazards**", acronym AquaBioSens, a HORIZON Research & Innovation Action (RIA) under the call of ZEROPOLLUTION.

The successful proposal, coordinated by **Dr Martha Valiadi** (Scientific) and **Prof. Electra Gizeli** (Project), has been selected among several other proposals with a total budget of 3.843M€ of which 917K€ goes to IMBB-Biosensors lab.

The proposed work aims to drive the decentralisation of tools for the measurement of aquatic hazards and pollution supporting the EU "Restore our ocean and waters by 2030" mission and specifically the destination "Clean Environment and Zero Pollution". This will be achieved by developing novel tools based on cutting-edge techniques: i) immunoassays to measure organic contaminants, ii) isothermal environmental RNA quantification for harmful microalgae and fecal coliform bacteria, and iii) novel whole cell sensors based on genetically modified diatom microalgae and fish gill epithelia for multiplexed heavy metals quantification and toxicity assessment. The above will be coupled with state-of-the art biosensors, multichannel fluorimetry and organ-on-chip microfluidic devices. The developed tools will be validated in coastal and freshwater environments in the UK, Ireland and Greece, with the support of local government inspection agencies.

The successful proposal is built around a strong consortium of six more members, with four academic/research partners including the Uni Southampton and National Oceanography Centre, UK, the Dublin City Uni, Ireland, the Uni of Southern Denmark, and three SMEs located in Italy (ETT Solutions), Austria (Interspread) and Greece (BIOPIX-T).

AquaBioSens

For more information, please contact:

Dr M. Valiadi (martha_valiadi@imbb.forth.gr) & Prof. E. Gizeli (gizeli@imbb.forth.gr)