

Novel method for COVID-19 diagnosis developed in Crete receives funding for immediate market release

Biosensors lab (<http://biosensorslab.biology.uoc.gr/>) has developed a novel molecular diagnostic method for the detection of nucleic acids at the point-of-care. The method exploits a newly designed portable 3D-printed device and a smartphone to perform isothermal amplification and real-time quantitative colorimetric detection of the target analyte. The simplicity of the methodology, rapid analysis time (<30 min) and affordable cost make it ideal for non-trained users at the point-of-need and in both the developed and resource limited countries. Clinical validation of the device with patients' samples, for infectious diseases (COVID-19) and cancer-mutations (*BRAF* V600E) detection, demonstrated excellent performance compared to standard methods (<https://www.biorxiv.org/content/10.1101/2020.07.22.215251v1>). Biosensors lab is headed



by **Prof. Electra Gizeli** and is co-established at the Dept. of Biology at the Univ. of Crete and Inst. of Molecular Biology and Biotechnology (IMBB) at FORTH. The work, funded by the Patras Science Park through the "Proof-of-Concept" grant, was carried out by a multidisciplinary team (Dr. G. Papadakis, Dr. A. Pantazis, N. Fikas) at IMBB-FORTH under the scientific supervision of



Dr George Papadakis.

BIOPIX DNA TECHNOLOGY P.C. (<https://biopix-t.com/>) was founded in December 2019 with the aim to offer molecular diagnostic solutions to those who need them, despite their financial status, geographical location or training. The company remains affiliated to FORTH, through the licensing of the relevant intellectual property (PCT/EP2019/079845), and the Univ. of Crete and Patras Science Park. BIOPIX-T is in the process of completing its first financing-round, attracting a total of 1.2M€ through venture capital and private investment, in order to bring to the market the novel device, branded under the name "IRIS". The company has already established commercial links for the release of a SARS-CoV-2 test in Europe, the USA and the sub-Saharan countries.



Recently (11/08), Biosensors Lab at IMBB-FORTH and BIOPIX-T were the recipients of significant **European funding** obtained under the emergency action for managing the coronavirus SARS-CoV-2 outbreak. The extra funding of 2.4M€ will go towards the certification of IRIS and validation of a combined COVID-19/FLU test. In addition to FORTH (Coordinator) and BIOPIX-T (medical device designer, manufacturer and provider), the consortium includes three hospitals in Europe (UCLH-UK, INSERM-France and ULB-Belgium), one consulting company for the certification (PKNM-Switzerland), one enzyme-biotech SME (EnzyQuest-Greece) and an end-user in South Africa (Kiara Health). The "IRIS-COV" project is one of the **23 to receive funding from a total of 454** submitted proposals (https://ec.europa.eu/info/files/new-research-projects-coronavirus_en).



Biosensors Lab and BIOPIX-T are dedicated to produce molecular diagnostic solutions for global diagnostics, including the rapid delivery of a test to combat COVID-19 pandemic.