

ICFO to coordinate RAIS- H2020 project

Photonics KET - Biophotonics for screening of diseases

January 21, 2015

Officially launched on 1 January, 2015 with the formal kick-off meeting taking place at ICFO on 19 January, the Horizon 2020 project RAIS (Scalable, point-of-care and label free microarray platform for rapid detection of Sepsis) is now in motion. The project will be coordinated by ICREA Professor at ICFO Valerio Pruneri, in collaboration with ICREA Professor at ICFO Romain Quidant and companies and institutes from Switzerland, Italy, Spain, Germany, Belgium, and the United Kingdom.

The diagnosis and management of acute Sepsis is a critical area where fast and accurate results can translate into life changing health outcomes for individuals. The overall aim of RAIS is to develop a new point-of-care label-free microarray platform and validate it for quantifying levels of specific Sepsis' biomarkers.

The developed technology will be capable of detecting micro-ribonucleic acids

(microRNAs), interleukins and other specific biomarkers associated with Sepsis using a few microliters of blood or serum samples. In addition it will provide fast results (30 minutes sample to result) at an affordable cost per patient. The new technology will aim to reduce the Sepsis mortality rate of more than 70%, with estimated cost savings of several billion Euros per year as a consequence of shorter hospital stays, reduced use of unnecessary drugs and lower associated insurance bills.