



CanSENS

Marios Constantinou

What is your project about and why is it important for the advancement of science?

The CanSENS project aims at the development of a non-invasive and cost-effective breath analysis sensor platform for early-stage colon cancer (CoC) screening, based on Surface-Enhanced Raman Spectroscopy (SERS). This project will improve the understanding of the complex relationship between the Volatile Organic Compound (VOC) profile and CoC occurrence, as well as establish a more accurate list of CoC-related VOCs and lead the way to a new clinical breath-based test.

Why is your project important for society? Have you planned any public engagement activities for those interested to learn more?

This CanSENS project is based on the development of a breath analysis device for a low-cost, rapid, non-invasive, and accurate screening of CoC. The proposed non-invasive breath device has the prospect of being used as a supplementary technique to the primary screening method currently being used in cancer diagnosis globally (i.e. colonoscopy). This will allow a further increase of the disease detection at early stages (I, II) and effectively reduce its mortality rate.

The CanSENS project has been actively participating in public engagement events, including the European Researcher's Night, promoting science at upper secondary schools, as well as communicating with the general public via social media and local press to boost the positive role and contribution of research to society.



Why did you choose Cyprus as a host country?

Cyprus has great potential to evolve as a research hub in the Mediterranean region. The excellent growth of the educational institutions, as well as their exceptional researchers, made me choose Cyprus as a host country. In addition, Cyprus is my home country, therefore after gaining skills and knowledge abroad I decided to bring my scientific experience back, contribute and be part of the research development of the country.

Cyprus has great potential to evolve as a research hub in the Mediterranean region. The excellent growth of the educational institutions, as well as their exceptional researchers, made me choose Cyprus as a host country.

How did you find your host organisation?

After thorough research on the potential scientific prospects in my field, I have chosen the University of Cyprus as the host organisation for my project as it is renowned for its multidisciplinary research in the country.

What tips can you give other researchers who would like to apply for MSCA?

Start the process as early as possible by finding a topic, an academic supervisor and a beneficiary. It is very important to define the impact of the project, become familiar with the application process and start preparing the first draft as early as possible. This allows you to start casual conversation with the project supervisor and/or collaborators, get

feedback, discuss ideas and improve the written proposal. Last but not least, consult RIF for their meticulous and excellent feedback.

Project: Colon Cancer Breath Screening using Nanowire-SERS

Start date: 6 Sep 2021 - **End date:** 15 Sep 2024

Topic: H2020-MSCA-IF-2020

Grant agreement ID: 101024362

Coordinated by: University of Cyprus



Find out more on CORDIS



Find out more on project social media

For questions, please e-mail: itheodorou@research.org.cy