

## Widening Country Inspiration Story

“You need to be highly motivated and stay focused on your goal.”

**Name of the fellow:** Christoforos Panteli  
**Country of the host:** Cyprus  
**Project Acronym:** SepsISensorR  
**Project start and end date:** 3.10.2022 – 2.10.2025  
**Type of MSCA, Horizon Europe:** Postdoctoral Fellowship



### What is your project about and why is the topic important for science advancement?

SepsISensorR is a device about diagnosis of sepsis via real-time detection of biomarkers in exhaled breath. The current diagnosis protocol in ICUs relies on clinical symptoms identification from nurses and doctors before chemical analyses are initialised. SepsISensorR will give clinicians a new medical instrument in their arsenal, that will allow non-invasive diagnostics in hospitals. It will also deliver new knowledge on the sepsis development stages and exhaled gases, infection source and load.

### Why is your project important for the society?

Sepsis kills 11 million people every year, out of which 2.9 million children under 5 years old – 1 death every 2.9 seconds. Half of sepsis cases occur in ICUs and 46% of those are fatal. Additionally, one sepsis case costs \$70000 and annual costs sum up to \$24 billion. SepsISensorR aims to decrease the avoidable mortality by increasing the efficiency and accuracy of sepsis diagnosis. By real-time breath monitoring and chemical detection of biomarkers, a more precise diagnosis can be achieved and thus administer specific antibiotics. Hence, this project

will contribute to tackling antibiotic resistance, save lives and costs.

### What communication and public engagement measures a have you foreseen?

To communicate and engage with the public, a Twitter account is active, we are participating in the European Researchers' Night.

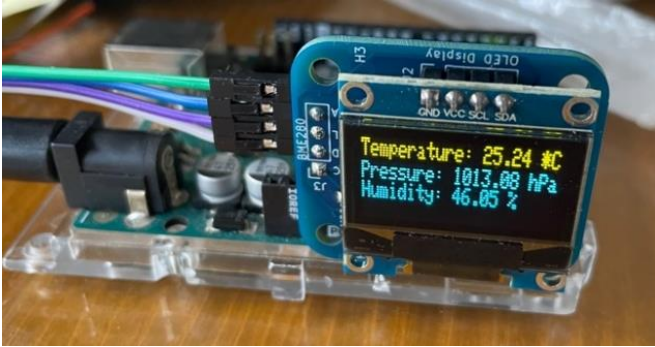
### Why did you choose a widening country as a host?

The reason behind choosing Cyprus as a host country is not only that it is my home country but also because in recent years there has been a lot of scientific development there. This suggests growth and innovation. Being able to return to my home country and contribute to this innovation was a big motivational factor. Additionally, the growth of the Cypriot economy and scientific community means that there are going to be new job opportunities in the near future.

### How did you find your host organisation?

Being originally from Cyprus I was already familiar with the research institutions on the island. Thus, I researched the output and quality of

research in those institutions. I found that the University of Cyprus and the NIDL group best matched my interests in biomedical research and breath analysis.



### What kind of support did you get?

The preparation process for an MSCA fellowship took about 5 months. In the initial stages my supervisor at the host organisation was my main support. We had lots of discussions to find common ground, formulate an idea and transfer knowledge. I received lots of advice and guidance while writing the application. Additionally, the NCPs were the second source of support. They organised seminars on the specific call but also on other European Horizon programmes. These seminars were very beneficial for understanding what the expectations are and familiarizing you with the specific details. The NCPs gave me feedback on my application, and this greatly contributed to achieving success.

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

The tips I would like to give to future MSCA applicants are: (a) find a supervisor in the host organisation with whom you communicate well. It is important to agree on a topic and receive constructive feedback and guidance; (b) have a good reason why you want this fellowship. The

competition across the EU is strong and so your application must be top-quality. A lot of hard work is required to achieve this. Therefore, you need to be highly motivated and stay focused on your goal; (c) be organised in your application and pay attention to detail.

More information on the project:



The Marie Skłodowska-Curie Actions (MSCA) support researchers at all stage of their career across all disciplines. The MSCA also support cooperation between industry and academia and provide innovative trainings and career developments.

The MSCA Postdoctoral Fellowships (PF) enable talented researchers to work on project in Europe and beyond. They aim at enhancing the innovative potential of postdoctoral researchers through advanced trainings, international and intersectoral mobility.

The MSCA-NET project is the MSCA NCP project to facilitate the transnational cooperation to achieve a consistent and harmonised level of NCP support. The scientific community can also profit from our project to support their MSCA application.

