



A-PATCH FINAL SEMINAR

JUNE 7 – 8, 2022

TAMPERE
FINLAND



European
Commission

Horizon 2020
European Union funding
for Research & Innovation



FREE PARTICIPATION

JOIN THE DISCUSSIONS IN TAMPERE
OR ONLINE

A-PATCH FINAL SEMINAR: RESULTS, EXPERIENCES AND NETWORKING

Tuesday, 7th June 2022

09:00 – 09:20	Registration & reception	
09:20 – 09:30	Welcome note, agenda	VTT
09:30 – 11:30	A-PATCH journey <ol style="list-style-type: none"> 1. Introduction, background (Technion) 2. Patch development process (IMEC, TNO, Technion, RW) 3. Architecture, data management, integration (FIND) 4. Clinical studies, medical view, (LU) 5. Exploitation plan, stakeholder survey (CD) 6. A-PATCH DEMO 	A-PATCH consortium
11:30 – 11:45	Coffee break	
11:45 – 12:45	Perspective from the public authorities to the infectious diseases and implementation of A-PATCH <ul style="list-style-type: none"> - what is expected from new point-of-care technologies? - what are the main challenges for a technology like A-PATCH to be implemented to the health care system (e.g. receive WHO approval)? - what are the main challenges for improving TB diagnosis? 	
12:45 – 14:00	Lunch Break (self-paid)	
14:00 – 16:00	Ethics and responsibility - Workshop <ul style="list-style-type: none"> - medical ethics - ethics in point-of-care diagnosis business - wearable technologies/sensing solutions and ethics - ethics in research and product design 	
16:00 – 16:30	General discussion, summary of the day.	
16:30 –	Relax and enjoy Tampere by yourself!	

Wednesday, 8th June 2022

09:00 – 09:20	Registration & reception	
09:20 – 09:30	Orientation to the second day	VTT
09:30 – 10:45	Research panel <ul style="list-style-type: none"> - Introduction to the research projects 	
10.45 – 11:00	Coffee break	
11:00 – 12:45	Co-creation lab <ul style="list-style-type: none"> - Knowledge sharing, and lessons learned session among research projects and stakeholders (themes: exploitation, health equity, public engagement, inclusion, open innovation, open access, science education , social innovation) 	
12:45 – 14:00	Lunch Break (self-paid)	
14:00 – 15:30	Industry Roundtable <ul style="list-style-type: none"> - industry perspective around wearable technologies and digital health solutions 	
15:30 – 16:00	Final discussion, summary of the seminar, closing words.	

All sessions are open to all

PRACTICAL INFO

Venue: [G LiveLab Tampere](#) (scroll down for English language), [link to map](#)

Registration: free, but you need to confirm your participation **hereby 3rd June**, [registration link](#). You can choose on-site or online participation. Link to the online stream will be sent to you prior to the event.

Arrival to Tampere

From Tampere-Pirkkala Airport

There are several flights to Tampere-Pirkkala airport. From Tampere-Pirkkala airport you can take a bus line 1A that operates between Tampere city center and Tampere-Pirkkala airport. Frequency 1-2 per hour, bus stop number 7035. You can buy a ticket from driver and to Tampere city center it costs 5,50€

From Helsinki-Vantaa Airport

Travellers arriving at Helsinki airport can take a train to Tampere. You'll get the train ticket from Helsinki Airport to Tampere, [buy tickets](#). **Please notice** that train tickets cannot be bought onboard in the commuter trains. The entrance to the Airport railway station is located on the arrivals' floor at the corridor between T1 and T2. Take the commuter train P, it will go to Tikkurila where you should change a train (either InterCity or Pendolino) to Tampere. The train will take about 2 hours and train ticket price 21-25€.

If train is not possible, you can take a bus, [buy tickets](#). Bus stop is next to terminal 2. Bus to Tampere will take about 2h30min and ticket prices varies a lot from 10-30€ (cheaper if you buy it advance from net, but you can also buy a ticket from driver).

Accommodation in nearby hotels

- [Solo Sokos Hotel Torni Tampere](#), address: Ratapihankatu 43, 33100 Tampere, Finland, tel. +358 20 1234 634, torni.tampere@sokoshotels.fi. Price for a single room is 98€ (incl. breakfast, WLAN, sauna, gym, taxes). Booking reference VTT.
- [Scandic Hotels in Tampere](#)
- [Radisson Blu Hotel Tammer Tampere](#)

Get inspired by Tampere, [VisitTampere](#)

ABOUT THE A-PATCH

A-Patch aims to research, develop, and validate a novel non-invasive wearable sensing patch for detection of infectious disease at point-of-care, such as Tuberculosis (TB), from the skin, with an ability to serve as a monitoring and epidemic control tool.

The device will be **a wearable autonomous sensing patch** incorporating novel printable sensors and thin-film oxide based flexible electronics, self-repairing components, self-powered components, and a communication layer, for wireless transfer of sensor readout.

A-Patch will enable not only adequate patient diagnosis, treatment, and follow-up, but also a continual **screening of at-risk populations** and **real-time monitoring of epidemics**. A supply-chain and roadmap for large-scale production, regulatory approvals, and go-to-market strategy, will be prepared to enable full post-project commercialization and exploitation of the A-Patch platform.

The concept of A-Patch is to design and demonstrate a patch that sense **TB-specific volatile organic compounds (VOCs)**, which are compounds that are released into the bloodstream by or as a result of infected cells and can be detected from air trapped above the skin. Deviation from the healthy VOC range may indicate either infection or high infection risk, in which cases the autonomous wearable device can warn the user and recommend either follow-up testing or treatment. The patches can also be worn continuously for monitoring disease treatment and to ensure effective treatment.

To enable extended usage periods, we will design the sensor array to be self-repairing if scratched or cut, and the device to be self-powered by harvesting energy from skin movement. We will also incorporate a secure transmission component to enable privacy-ensured diagnosis monitoring by physicians, national health systems and worldwide health organizations.

More info via A-Patch www-page:

<https://apatch.technion.ac.il/>

