



Project Number: 610389

FP7-ICT-2013-10

Development of a low-cost point-of-care test for Tuberculosis detection

Deliverable D7.3a: Newsletters sent to user group

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Start date of project: 2013-11-01

Duration: 3 Years

Organisation name of lead contractor for this deliverable: **UGent**

Revision **[1.0]**

Project co-funded by the European Commission within the Seventh Framework Programme		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Description of the first newsletter release

The first newsletter mainly deals with the project start. It was sent out in January 2014 to about 40 people and is reproduced below.



New European project launched to develop a TB sensor that fits in your pocket

The problem



Tuberculosis (TB) is a major global health issue. According to the World Health

Organisation (WHO), every year there are worldwide 8.8 million new active TB cases and nearly 2 million TB deaths - 5000 every day - mostly in the poorest communities of the developing world. One third of the world's population has latent TB which may later develop into an active form of the disease. TB has also become the leading cause of death among people with HIV. While most cases of TB occur in developing countries, it is also reemerging as a threat in major urban populations in Europe, due to the increase in global travel.

The early treatment of TB is currently hindered by the lack of rapid, accurate diagnostic tools, especially those that can be applied as a point-of-care device in the resource-constrained settings in developing countries. Alternatives do exist, but they either come at a high cost or lack the required sensitivity.

Pocket's approach

The aim of the Pocket project is to integrate a number of world-class novel technologies into a point-of-care TB test that will fill the gap between current high-end, sensitive but expensive tests and low-end, cheap tests plagued by limited accuracy. The Pocket test is based on a sensor in a silicon nitride chip, where the choice of wavelength allows for the production of a low-cost readout instrument. Combined with novel diagnostic antibodies, this should result in very accurate detection of the TB antigens in urine, thereby diagnosing the presence of the TB bacterium. The objective of Pocket is to go beyond a mere laboratory prototype instrument, as during the final year of the project, Pocket will organise field trials in Africa and India.

Partners

The Pocket consortium is coordinated by Ghent University. The project partners are

- CIN2-CSIC Barcelona (SP, nanob2a.cin2.es): surface chemistry
- Ghent University (BE, photonics.intec.ugent.be):

- photonics transducer design
- Imec (BE, www.imec.be): chip fabrication
- Lionex (DE, www.lionex.de): antibody and antigen development
- microfluidic ChipShop (DE, www.microfluidic-chipshop.com): microfluidic chip development
- Trinean (BE, www.trinean.com): instrument design

started on November 1st 2013 and will run for 3 years under the Seventh framework Programme (FP7) of the European Union. The EU funding amounts to 2.6 million. The progress of the project can be followed at www.pocket-proj.eu.

Project info

Pocket (Development of a low-cost Point-Of-Care test for Tuberculosis detection)

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Pocket consortium during the kickoff in Ghent, Nov 2013.