

# MURAB is a research project funded by the European Union.

The Project involves a **consortium of** 7 European partners: Universities, Technical Research Institutes and Industrial partners in what we named a clinical innovation triangle. The project started in January 2016 and lasts for 4 years.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 688188.

### **PARTNERS**

**UNIVERSITIES** 

UNIVERSITY OF TWENTE.





TECHNICAL RESEARCH INSTITUTES







**INDUSTRIAL PARTNERS** 





## **CONTACTS**

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## A REVOLUTION IN DIAGNOSIS

for breast cancer and muscle diseases



www.murabproject.eu

Magnetic resonance and Ultrasound Robotic Assisted Biopsy

## **A NEW PARADIGM**

MURAB (MRI and Ultrasound Robotic Assisted Biopsy) is a European research project, developing a new robotic assisted biopsy system.

It has the ambition to revolutionize the way diagnosis of cancer and muscle diseases are researched for patients and has the potential to save lives by early detection and treatment.



Designed for muscle and breast research, but possibly suitable for other applications.

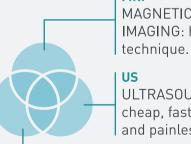
"One in eight women will have to deal with breast cancer in their lifetime.

Early diagnosis is very important to have a better quality of life and life expectancy.

MURAB has the potential to save lives by early detection and treatment."

Prof.dr.Ir Stefano Stramigioli MURAB Project leader - University of Twente

# MRI and Ultrasound combined with the precision of robotics in order to target the right place in the body.



MAGNETIC RESONANCE IMAGING: high sensitivity

ULTRASOUND: robust, cheap, fast, non-damaging and painless.

#### ROBOTICS

KUKA LBR Med certified for integration into a medical product.



## **EXPECTED RESULTS**



# REDUCTION OF PATIENT DISCOMFORT

Minimally invasive interventions, less pain and smaller wounds.



# MORE EFFICIENT BIOPSIES

Ultrasound guided biopsies are easier, faster and more accurate than before.



# SHORTER CLINICAL WORKFLOW

Less hospital visits, a shorter period of uncertainty.



# LESS HOSPITAL COSTS

Reduction in the number of over-diagnosis and subsequent overtreatment.