JOINT TRANSNATIONAL CALL 2016:

"Minimally and non-invasive methods for early detection and/or progression of cancer"

PARTNER REQUEST/COLLABORATION OFFER

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If you have any questions about this form, please do not hesitate to contact us at ✉

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Contact Information	
First name *	Tobias
Last name *	Schunck
Position *	Scientist
Telephone number	
E-mail address*	Tobias.schunck@imm.fraunhofer.de
Website address	https://www.imm.fraunhofer.de/
Institution/Organisation *	Fraunhofer ICT-IMM
Department*	Analysis Systems and Sensors
Street	
Postal Code / City *	55129 Mainz
Country *	Germany

***I agree with the publication of my contact data and of this form on the TRANSCAN-2 Website:**

☑ YES

OFFER FOR COLLABORATION

IF YOU PROPOSE YOURSELF AS A PARTNER IN A CONSORTIUM, PLEASE DETAIL YOUR EXPERTISE

Short description of the areas of interest and expertise (Max. 2000 words):

Overview:

As one of the pioneers of microfluidics, we have been developing **fully integrated** and **automated** Microfluidic Analysis Systems for over 20 years. Based on a “microfluidic construction kit“ with comprehensive coverage of the required functional elements, we are able to develop an application idea to the proof of function and build fully functional demonstrators up to pilot production within short time. During system development, we always take into account all aspects of economic efficiency and, if necessary, we complementarily check or optimize the system design using numerical simulation. (https://www.imm.fraunhofer.de/en/analysis-systems-and-sensors.html)

Highlights:

One of our main focusses is the field of **liquid biopsy**. We developed a compact benchtop device and low cost disposables for the fully automated isolation and separation of single CTCs:

- Total cell recovery of **75%** of 20 model cells (MCF7) spiked in 7.5 ml human whole blood.
- The probability for finding one background leukocyte per well is below 10%.
- Dispensed single cells were verified in a breast cancer specific RTqPCR. NGS tests are on-going.
- The device can handle all liquid biopsy markers: **CTCs, cfDNA, Exosomes**
- More possible applications: Cell printing, Cell sorting, Cell counting, Tissue gDNA Preparation, …

For details you can see:
https://www.imm.fraunhofer.de/content/dam/imm/de/documents/pdfs/PD_CTCelect.pdf

We offer our collaboration to consortia aiming to send a proposal to the call "Minimally and non-invasive methods for early detection and/or progression of cancer".

We have expertise in systems engineering and system integration, microfluidics, technological platforms, assay development and modification as well as electronic and software engineering