

KET*

Focus on (*) Key Enabling Technologies - nanotechnologies, advanced materials, advanced manufacturing and processing

360

INNOVATE TOGETHER

27th June 2019 - Strasbourg - FRANCE

Project idea/ Field of expertise:

Nanofluidic diagnostic systems based on advanced 3D nanostructures

Organisation Name:

Fraunhofer IMS

Adressed challenge(s)/ PPP(s):

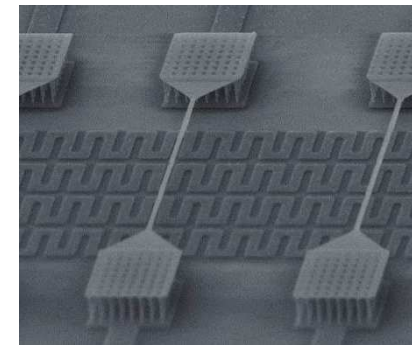
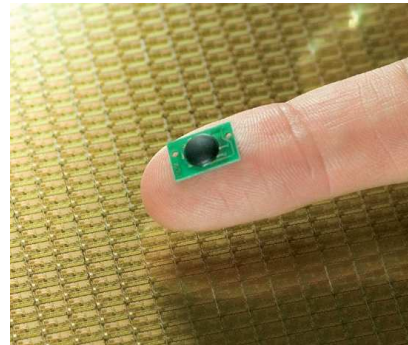
NMBP and/or
Societal Challenge 1: Health

Adressed topic(s) in Work Programme:

DT-NMBP-23-2020: Next generation organ-on-chip (RIA) or similar

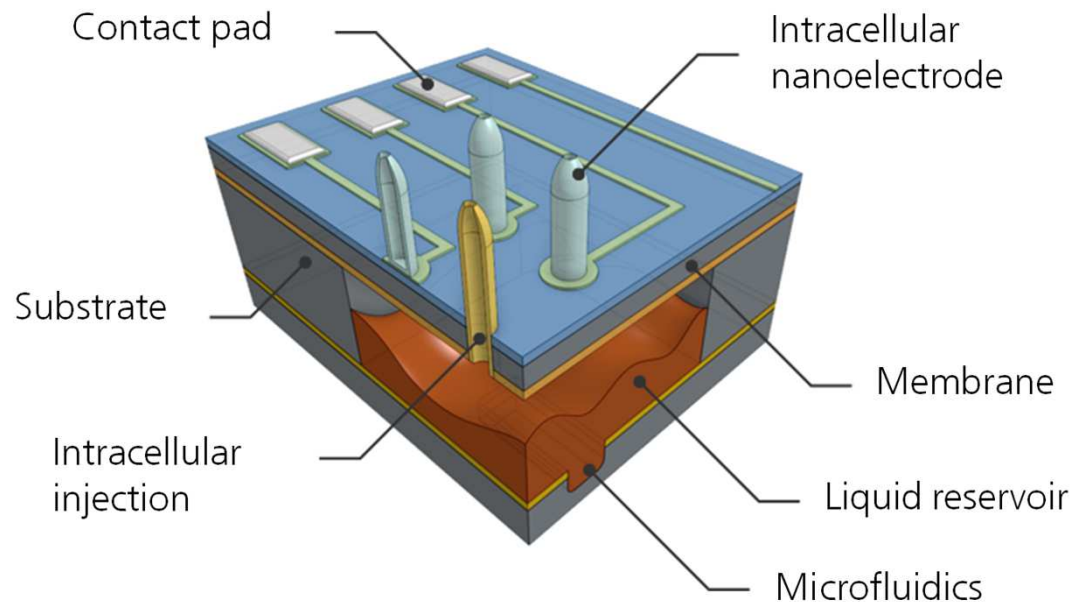
Fraunhofer IMS

- Over 30 years experience in microelectronics
- Research, development and prototyping for CMOS, microsystems and system integration
- Related EU-funded projects:
 - PoC-ID (rapid and sensitive point-of-care diagnostics)
 - EnABLES (self-sufficient sensor solutions)

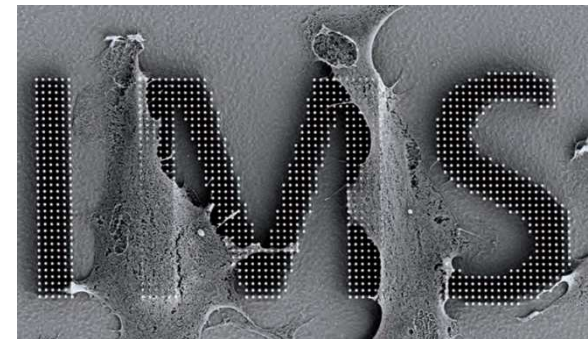


Nanofluidic diagnostic systems based on advanced 3D nanostructures

- Nanoinjection needles (nanostraws) on top of CMOS
- Intracellular delivery of drugs/mRNA/...
- In-situ monitoring of physiological parameters



Normal rat kidney cells on 3D nanoelectrodes



Consortium

Known partners / Competence offer

Name	Type	Country	Role in the project
RTO / university		D	Cell growth, personalized medicine

Partner search

Profile	Type	Country	Role in the project
SME / industry		all EU	Pharmaceutical development System integration, e.g. microfluidics
RTO / university		all EU	Scientific applications

Contact details

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