

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:

Electronic biosignals monitoring/recording
Biosensors and bioelectronics

Organisation Name:

Università di Cagliari

Dept. of Electric and Electronic Eng.

Microelectronics and Bioengineering Lab

Adressed challenge(s)/ PPP(s):

MEDICAL TECHNOLOGY INNOVATIONS

Adressed topic(s) in Work Programme:

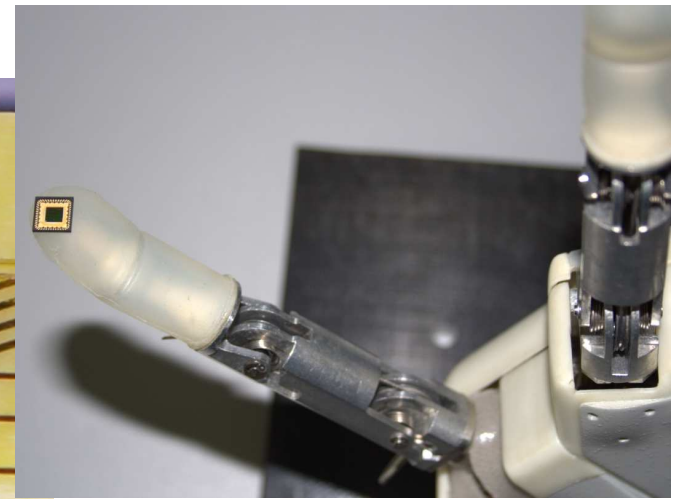
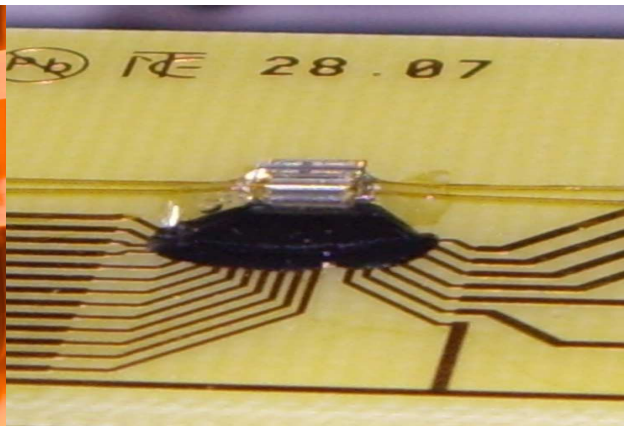
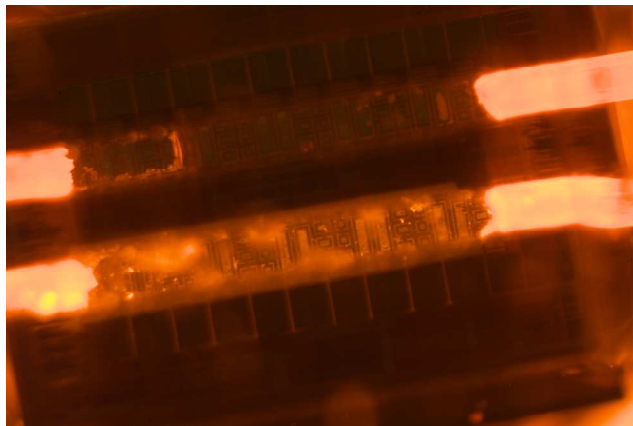
BIOTEC-07-2020: Multi-omics for the optimisation of genotype-phenotype associations

NMBP-21-2020: Custom-made biological scaffolds for specific tissue regeneration and repair

DT-NMBP-23-2020: Next generation organ-on-chip

Università di Cagliari

- Microelectronic and Bioengineering Lab - EOLAB
- Decades-long expertise in:
 - Biosensors (on silicon and plastic)
 - Custom, innovative microchips for biomedical applications
 - Neural interfaces and implantable electronics
- EOLAB covers all the **path** from **system conception** to **realization** of a complete platform
- Past experience in EU-funded project: *BEST (FP5)*, *SHAPES (FP6)*, *MADNESS (FP6)*, *NEBIAS (FP7)*, *CERBERO (H2020)*, *ALOHA (H2020)*



Our project idea / expertise

- We are looking for building or participating to a consortium interested in the **multi-omics** and **organ-on-chip** call for:
 - Realization of a high-density **biosensing platform** to **automatically** measure multiple kinds of information related to biomolecules in samples (i.e. liquid biopsy)
 - Realization of an electronic Petri dish capable of interfacing with cells (especially neurons) cultured on its surface: **recording** and **stimulating activity**

and

- We offer expertise in:
 - Conception and realization of novel **biosensors** on **standard** (silicon) or **unconventional** (plastic) substrates
 - Design and realization of **custom electronic platforms** for biomedical applications
 - **Interfacing electronic** systems with **biological entities**

Contact details

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