



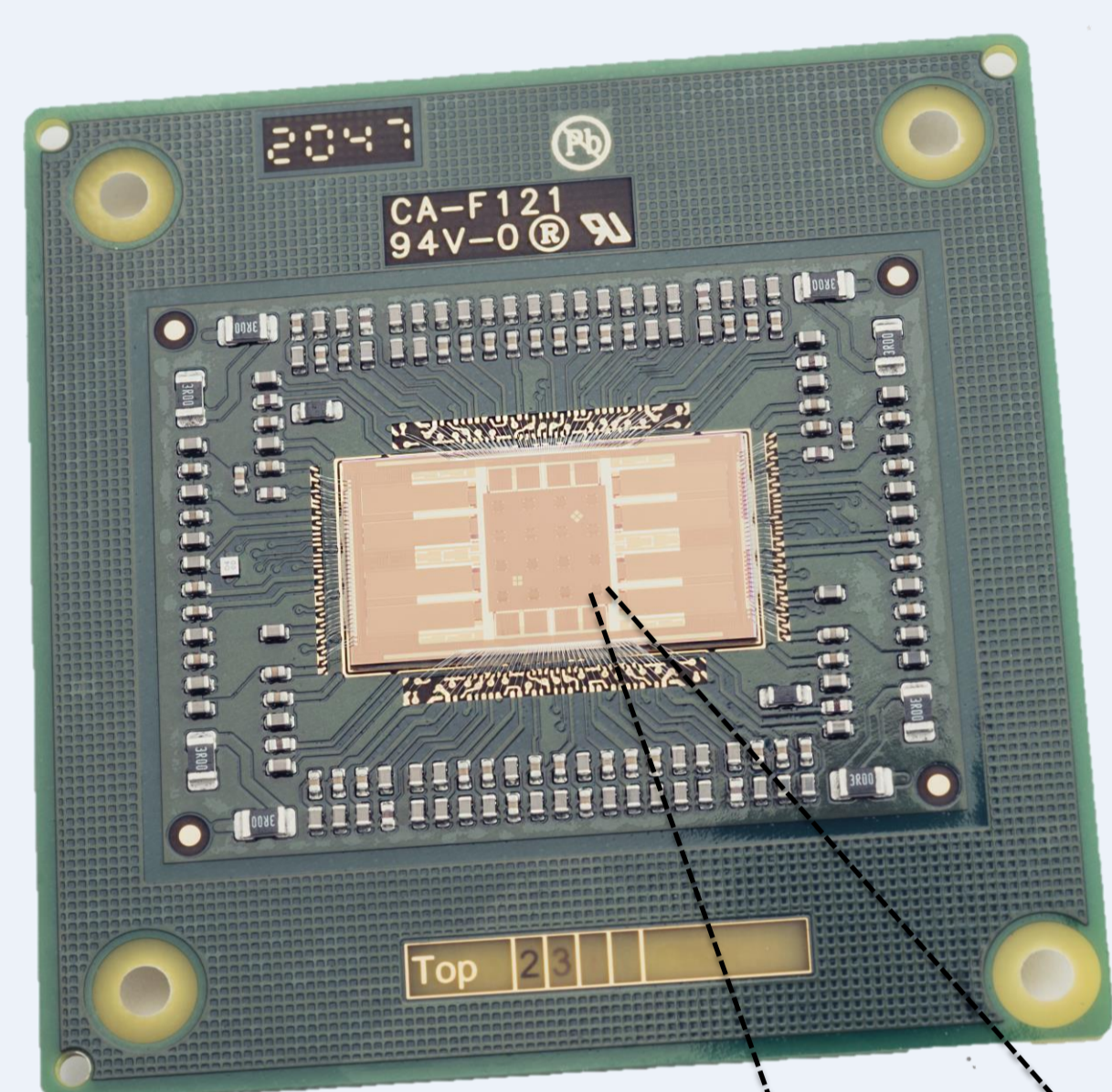
DIGIPREDICT

A multimodal CMOS MEA chip for organ-on-chip applications

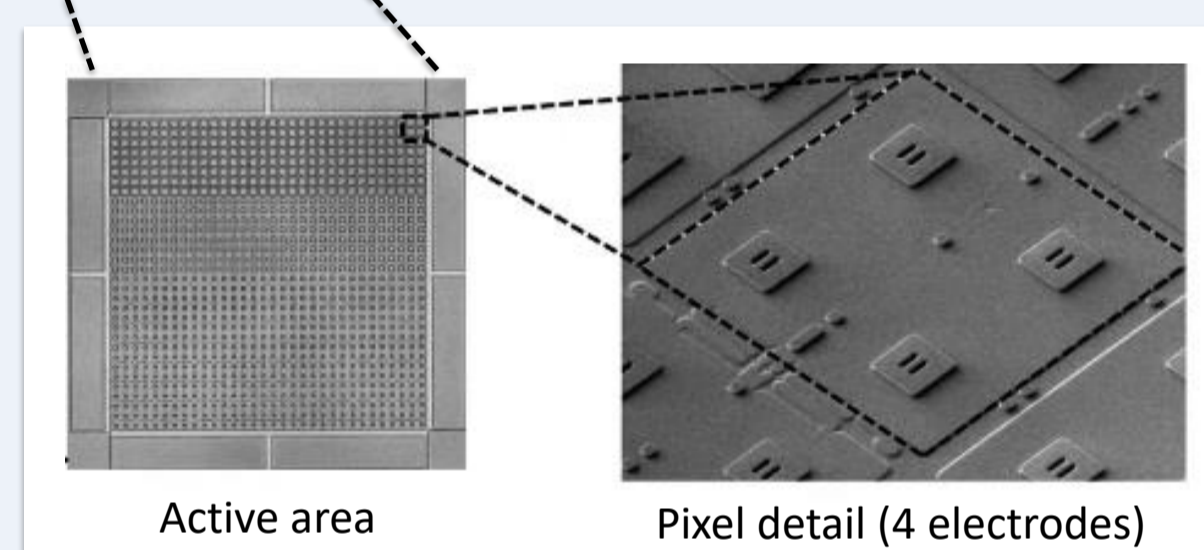
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CMOS-MEA chip

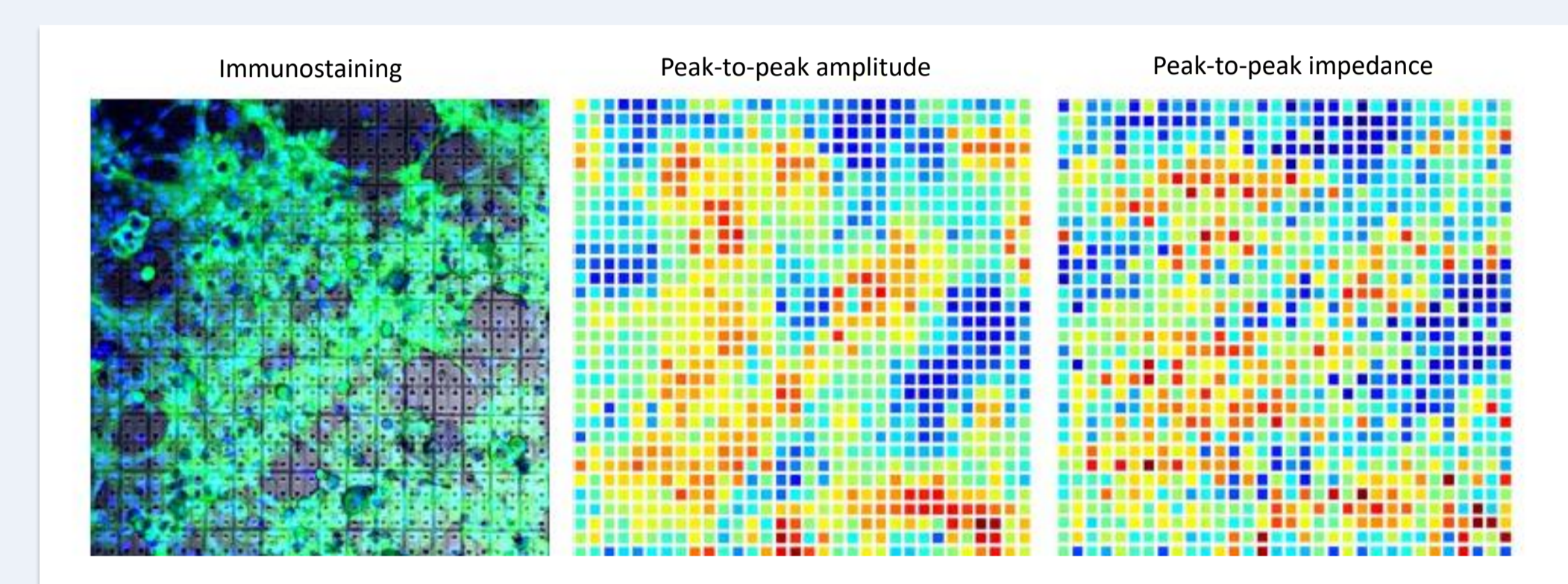


- 0.13 μm CMOS technology (active pixel design)
- 13684 electrodes distributed over 16 areas
- Electrode pitch of 15 μm (=4444 electrodes / mm^2)
- 1024 simultaneous read-out channels
- Sampling rate of 30kS/s



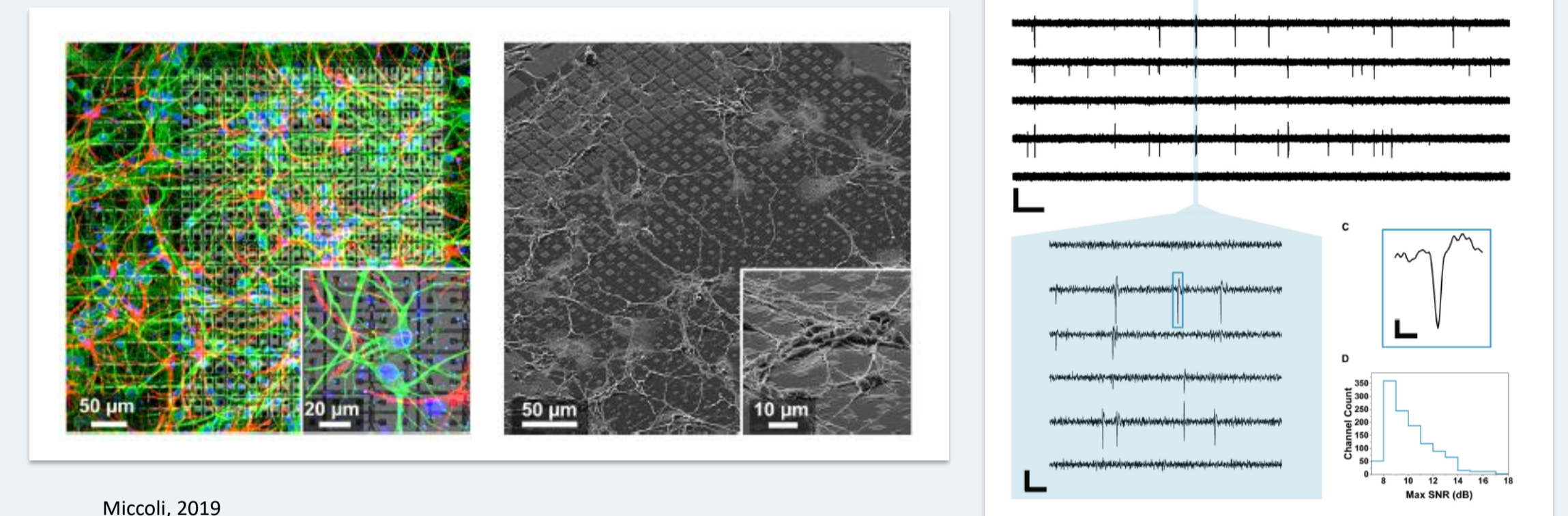
Chip applications

- Electrical image of cell behavior on chip



Mora Lopez, 2018

- Neural voltage recordings



Miccoli, 2019

IMEA system



- Integrated with an incubator proof recording system
- Portable system
- IMEA app (GUI) to perform and record in real time in-vitro measurements
- Data post-processing in the cloud



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