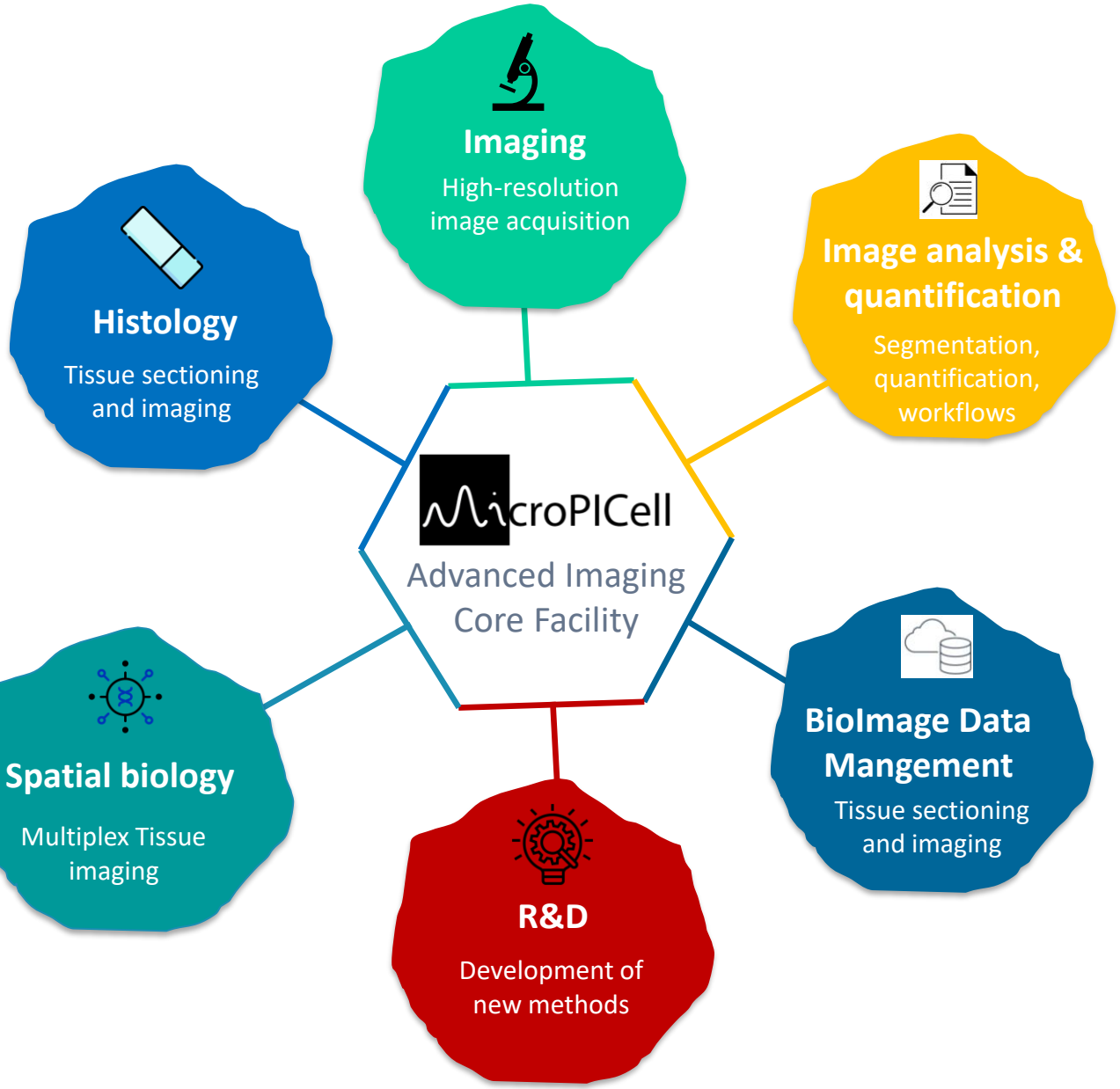


LRQA CERTIFIED ISO 9001 · NFX 50-900

MicroPICell BioCore facility



Perrine **Paul Gilloteaux**



Vincent **Guen**



Ludovic **Leconte**



Stéphanie **Blandin**



Ananbelle **Gourio**



Steven **Nedellec**



Anne **Gaignerie**



Théo **Barnouin**



Marc **Mongy**

Nantes Université · Inserm · cnrs · CHU NANTES

UNION EUROPÉENNE · RÉGION PAYS DE LA LOIRE

CE PROJET EST CO-FINANCÉ PAR LE FONDS EUROPÉEN DE DÉVELOPPEMENT RÉGIONAL dans le cadre du Plan de relance REACT-EU de l'Union européenne

CENTER of EXCELLENCE · SFR Bonamy · Biogenouest · IBiSA Infrastructures en Biologie Santé et Agronomie · FRANCE-BIOIMAGING · BioImage Cloud · EURO BIOIMAGING

Spatial Proteomics Imaging

Simplex

Multiplex

High-plex



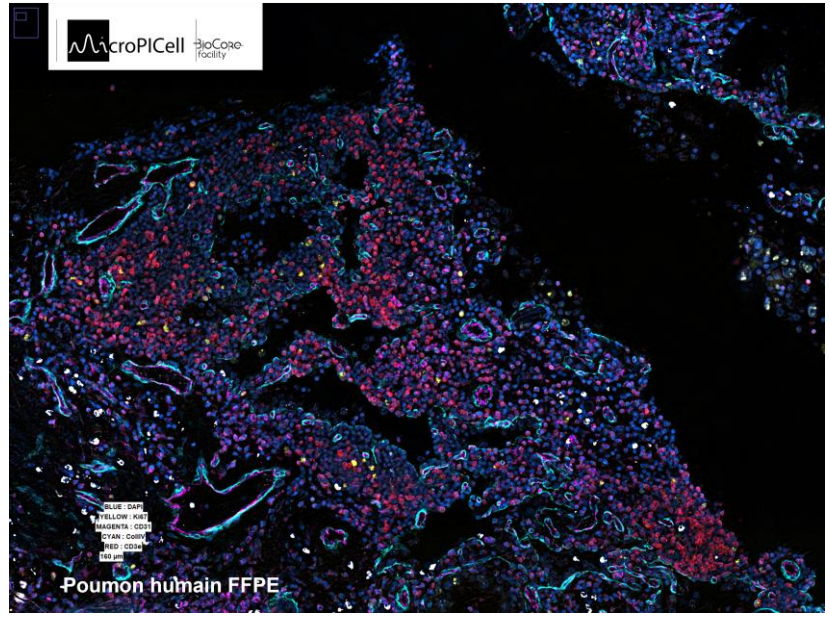


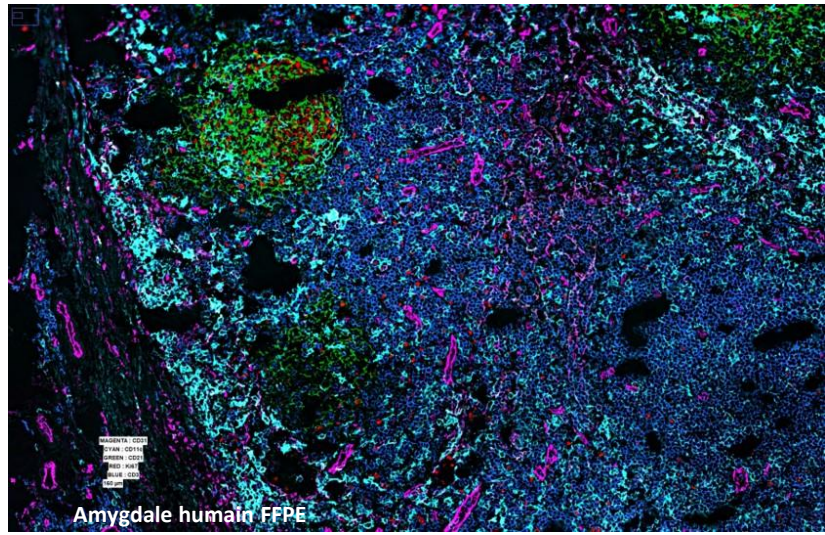
OPAL 6-plex Detection



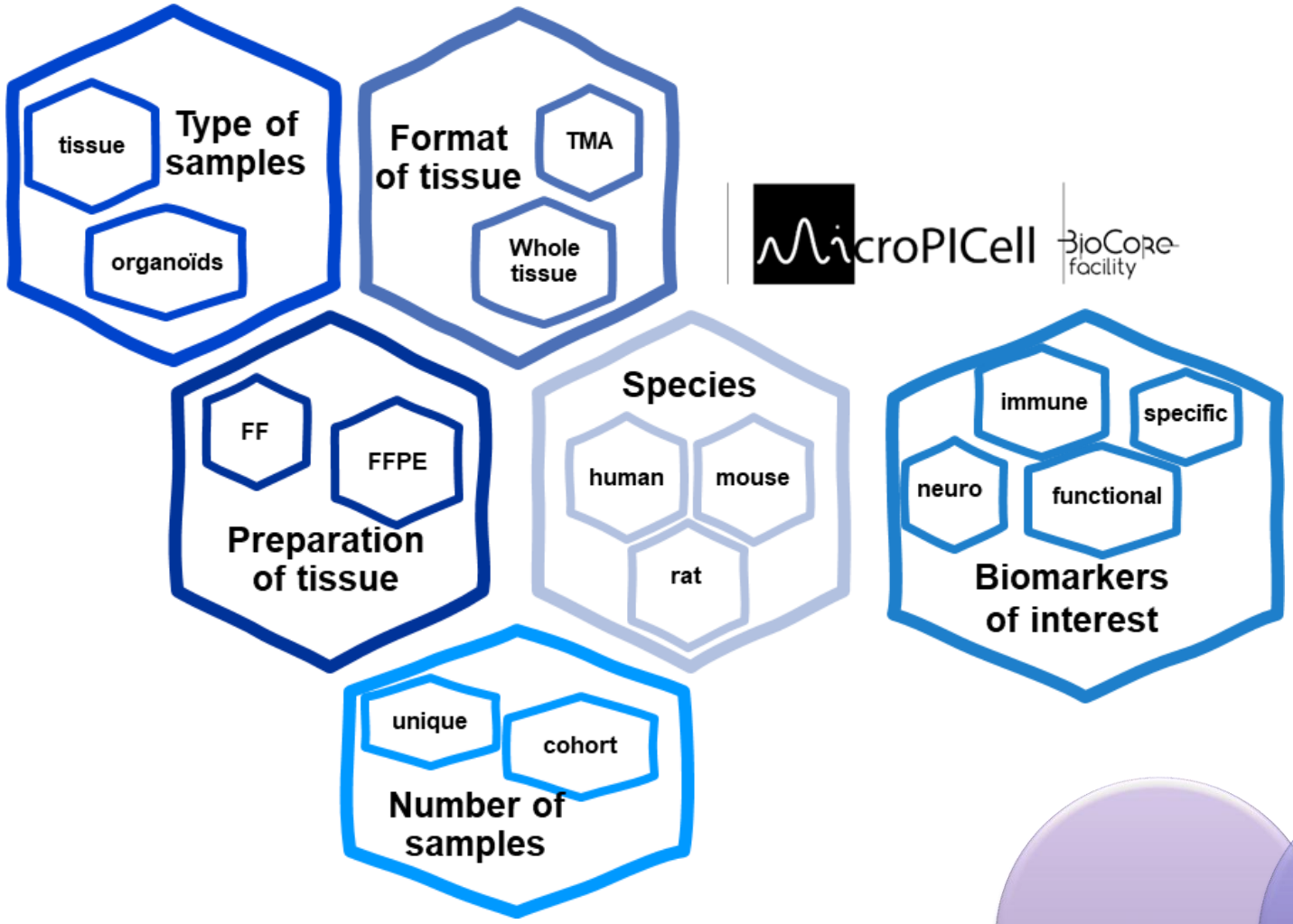


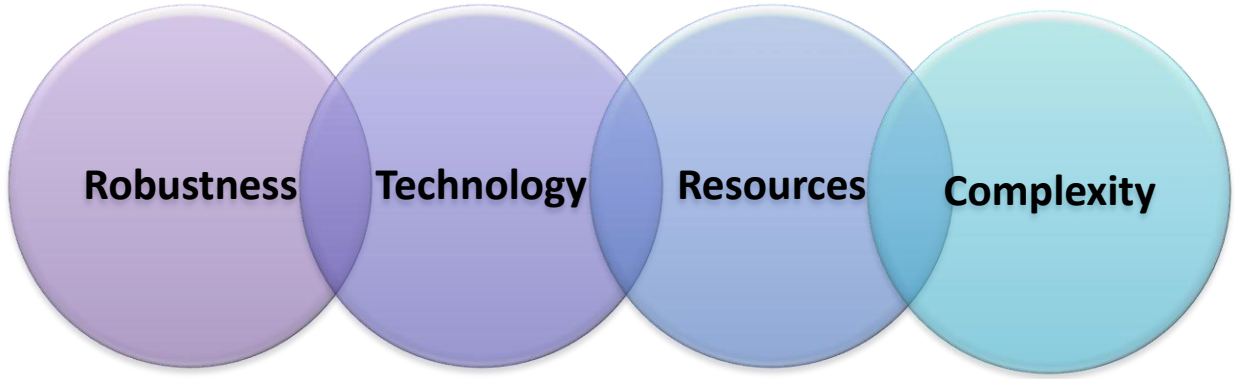
PhenoCycler system, Quanterix (Akoya Biosciences)





Key challenges for Spatial Biology Core Facility





Acquisition of new equipment



- **ANR BioGENI (*Biological Imaging Next-Generation Instruments*)**

2026

- **Defining equipment requirements :**

1. Tissue Processing

- Antibodies type (label-free)
- +/- Manual staining
- Multi-omics
- Slide (or coverslips)

2. Acquisition Strategy

- Resolution
- Sample throughput
- Imaging area
- Data size and format

3. Pre-processing and Data Analysis

- Background correction
- Segmentation
- Open-source

4. And…

- Financial cost
- Experimental time
- User support and training
- Data storage

Timing



Technical skills development

Key objective : To ensure that staff can operate the COMET system confidently and independently, in order to meet users' needs

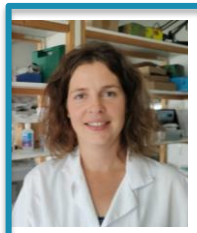
2026

Technical validation

Key objective : To deploy antibody panels across different tissues type, considering species and tissue type



Vincent GUEN
CRCI²NA, équipe 7B - DEVCAN
Project #1
Human Breast Cancer
FFPE



Marie-Astrid BOUTET
RMES, équipe REJOINT
Project #2
Human Synovial Membrane
FFPE



Richard DANGER
CR2TI, équipe 4
Project #3
Human Kidney
FFPE

2027

Service development

Key objective : Developing a service offering in line with the MicroPICell's scientific strategy

- **Business model development**
- **Workflow and procedures definition**
- **Data management**
- **Communication**

Multi-omics

Towards an integrated multi-omics service offering

SFR Bonamy

micropicell@univ-nantes.fr

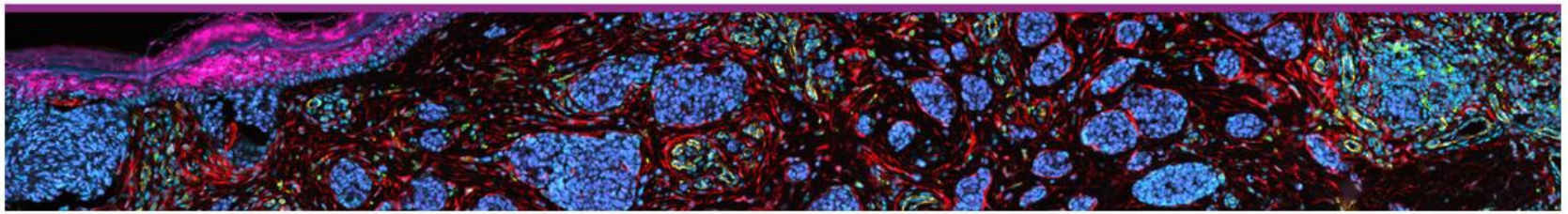
aurelie_domene@univ-nantes.fr

ESSB 2027 Waves of Innovation in Spatial Biology

European Society for Spatial Biology

4TH CONFERENCE OF THE EUROPEAN SOCIETY FOR SPATIAL BIOLOGY

SEPTEMBER 21–24, 2027
KURSAAL OSTEND, BELGIUM



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