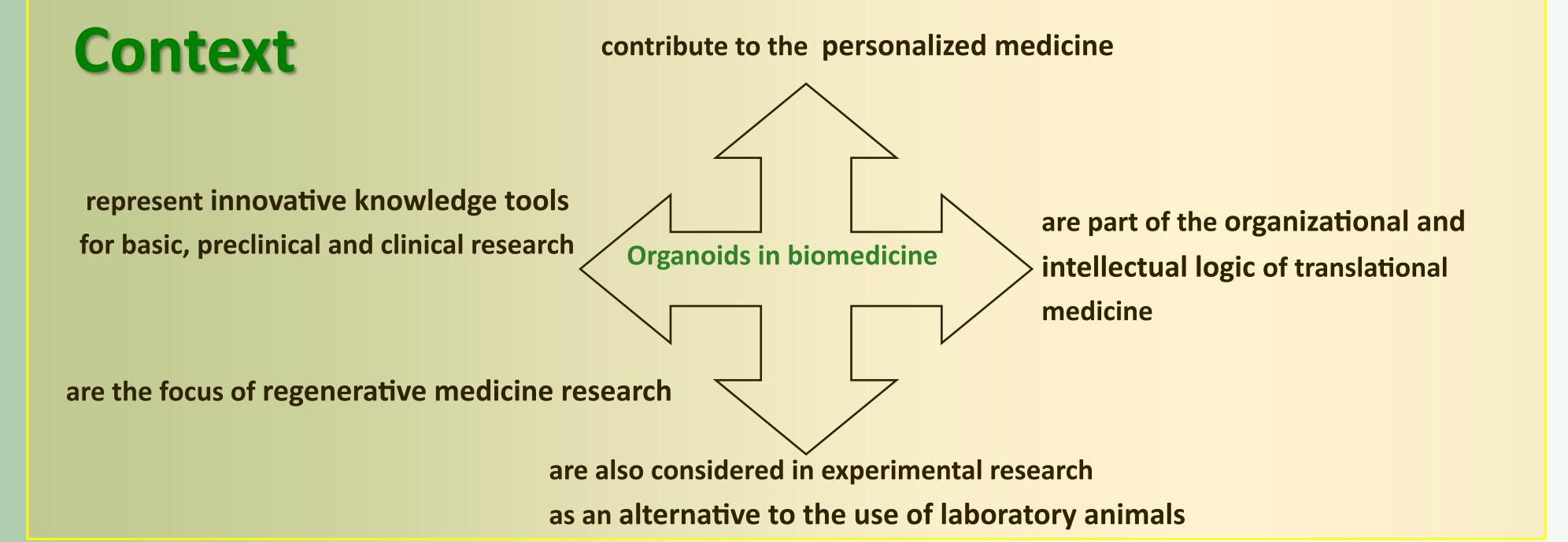


# **Organoids in action** An interdisciplinary approach in social sciences (ORGANACT)



Fabien Milanovic (Coord.), sociologist, assistant professor, Head of Human,	Cécile Vermot, sociologist, assistant professor, Biotechnologies Pole in Society (PBS), Sup'Biotech,
Social and Economic Sciences, Head of Biotechnologies Pole in Society (PBS),	France
Sup'Biotech, France. Fabien.Milanovic@supbiotech.fr	Adrien Bottacci, PhD Student in law, Aix Marseille Univ, CNRS, Univ Toulon, DICE, CERIC, Aix-en-
Aurélie Mahalatchimy, CNRS permanent researcher in law (CR), Aix Marseille	Provence, France; and UMR 7268 ADES CDSA
Univ, CNRS, Univ Toulon, DICE, CERIC, Aix-en-Provence, France	Marylou Rieucau, PhD student in sociology, Laboratoire d'ethnologie et de sociologie comparative - UMR
Baptiste Moutaud, anthropologist, pemanent researcher in CNRS (CR), Labora-	7186, Paris Nanterre, Univ
toire d'ethnologie et de sociologie comparative - UMR 7186, Paris Nanterre Univ	Guylaine Nicolas, Reader in law (Maître de conférences) FDSP-AMU, UMR 7268 ADES CDSA, France

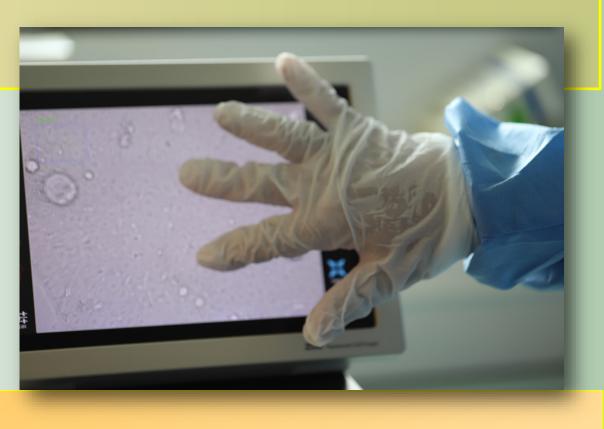
rganact takes an interdisciplinary approach, combining sociology, anthropology and law, to human organoids and the issues they raise in their production, circulation and use. These little-known entities blur the usual categories and qualifications, but remain little studied in SHS outside of ethical aspects. Organact aims to shed light on how these entities are regulated. It aims to provide an account of the many activities involved in scheduling organoid-based practices, and to assess their impact on the healthcare system.

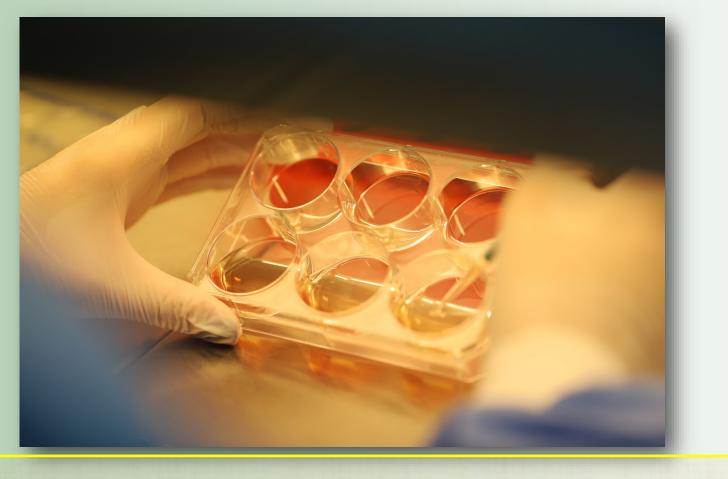


# Objectives

- to explore biomedical practices (care and research) that rely on organoids - to understand the impact of organoids on these practices, and how they are changing

them.





**Hypothesis** 

## Questioning

To shed light on the regulatory work of these entities: how are they appointed? What powers are vested in them? In what arrangements are they employed? What regulations do they give rise to?

# Methodology

**The ethnographic fieldwork** involves the empirical study of complementary case studies in France (through situated observations, interviews and documentation), covering a continuum of practices from basic research to clinical application.

H1: The specificities and uncertainties of organoids challenge existing frameworks in biomedical research and the healthcare system: some of the practices that mobilize them are well-defined, while others go beyond them. H2: Organoids elicit distributed regulatory activities

which our project aims to shed light on.

# **Socio-anthropological approach**

This approach is based on a *detailed comparative ethnography* of organoid production and use in France

- Comparison of the *constitution of organoids* (type of cells used, status and manipulation), their banking and the regulation of the resulting biobanks.

- Comparison of the horizons of personalized (or precision) medicine, and the logics of industrial appropriation and patentability of living organisms. - Comparison of the *epistemic, sociological and regulatory issues* involved in integrating organoids into biomedical research.

Anthropological and sociological analysis: aiming to take into account the diversity of organoid conditions (origins and stages of development) and their trajectories within the research practices or where they are manufactured and "cultivated".

The legal analysis will include these cases and will be complemented by an approach based on an exegesis of European and French legal texts.

# **Empirical inquiry**

Study 4 types of organoids in laboratory and hospital settings: describe the interweaving of conceptions of life, ethics and legal standards or normative frameworks with day-to-day practices:

- . Cerebroid for modeling neurodegenerative diseases
- . Gastruloids for studying morphogenesis of the cardiovascular system
- . Hepatic organoids in preclinical research and health monitoring
- . Intestinal organoids for cystic fibrosis research

### **Cross-cutting analysis / comparative analysis**

# Legal approach

Identification and relevance of the status and legal regime applicable to organoids: no legal definition of organoids, no single legal regime applicable, several legal criterias for various legal regimes

**General legal issues : complementarity between different fields of law, dis**tinction between hard-law and soft-law, obtention of human cells, quality and security of organoids, uses of organoids etc.

**Specific legal issues**: distinctions between various types of organoids and their respective status, specific rules for stem cell research generating organoids?



**ORGNOID STATUS:** laboratory products vs. attached to persons, moral value of these new living entities, qualification of organoids

INDUSTRIALIZATION AND THE MARKET: from manufacturing to conservation: organization, actors, distribution, flows

PROMISES AND RESISTANCE /ORGANOIDS: Testing future scenarios, controversy study



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