

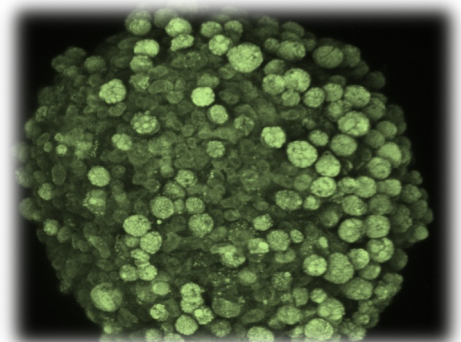
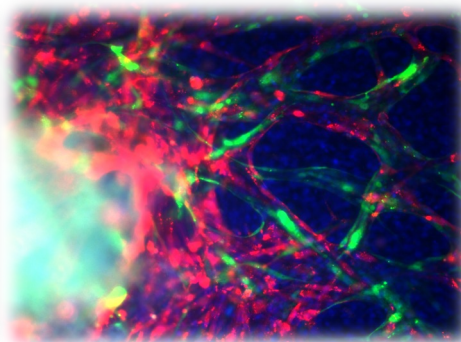
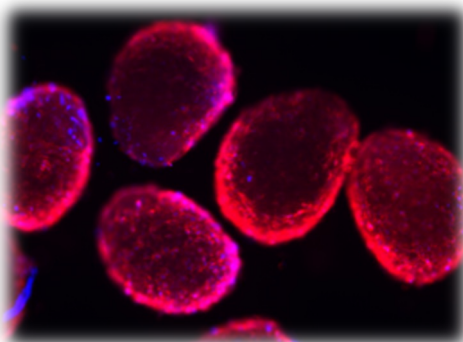
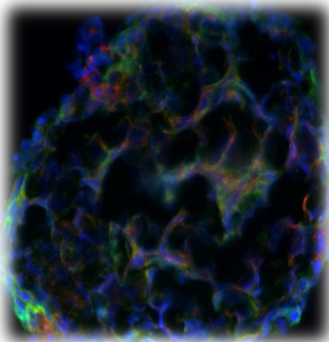
Technological platform: TiBioC

Tissue, Biomaterial and Characterization

INSERM-UNISTRA UMR1260

Centre de Recherche en Biomédecine de Strasbourg

1 rue Eugène Boeckel,
67000 Strasbourg



PRESENTATION

▪ MISSION

The mission of the TiBioC platform is to support its customers—whether from public or private sectors—in the development of their biomedical research projects. By carefully listening to and understanding their needs, TiBioC aims to provide appropriate guidance and deliver tailored services, ensuring that expectations are met throughout the entire process and that customers achieve full satisfaction.

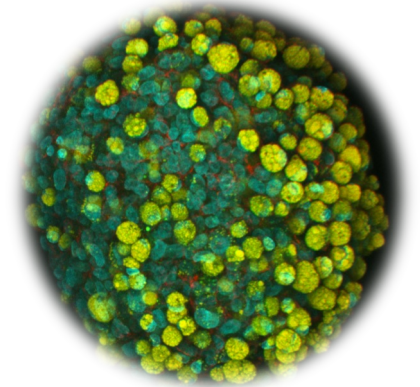
TiBioC offers to analyze the potential efficacy of candidate therapeutic molecules, whatever their chemical formulation, on classic cell cultures but also on more sophisticated 3D structures, and on in vivo models, notably CDX and PDX. We offer a range of customized analyses, including but not limited to cytotoxicity, proliferation and cell migration studies, histological and histopathological analyses using immunohistochemistry and immunofluorescence, and the formulation and characterization of biomaterials and their biocompatibility. We work with all types of human cell lines, both primary and patient-derived, and with healthy and pathological tissues, including tumor tissue from virtually every type of tumor.

Our innovation lies in the diversity and completeness of the tests carried out on a single molecule, ranging from 2D and 3D in vitro cellular tests to in vivo tests in mice, via the formulation of biomaterials capable of delivering this therapeutic molecule.

▪ WHO WE ARE

Dr Thierry MASSFELDER massfeld@unistra.fr	Research Director in INSERM	Scientific Manager of the platform
Dr Ysia IDOUX-GILLET yidouxgillet@unistra.fr	Engineer, Strasbourg University	Technical Manager of the platform
Dr Guillaume CONZATTI conzatti@unistra.fr	MC, Strasbourg University	Scientific Advisor
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Pr Thierry VANDAMME vandamme@unistra.fr	Professor, Strasbourg University	Scientific Advisor
Hervé GEGOUT hervé.gegout@unistra.fr	Technician, Strasbourg University	Technical agent

Our technological platform is referenced by the Cancéropôle Est, <https://www.canceropole-est.org/>, and followed by the Satt Conectus, <https://www.conectus.fr>, federated within the National SATT Network (<https://www.satt.fr/en>) for the establishment of the contracts and we are labeled by the Regional Cortecs network of the Strasbourg University, <https://cortecs.unistra.fr>.



▪ SERVICES

- **Strategy consulting**

- Study plan, coordination, gestion, data analysis and reports

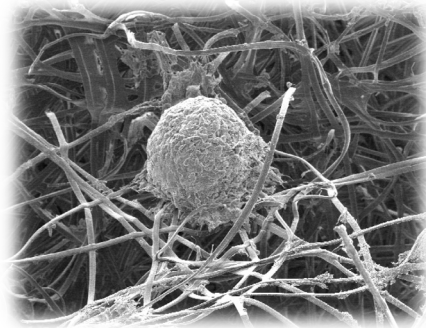
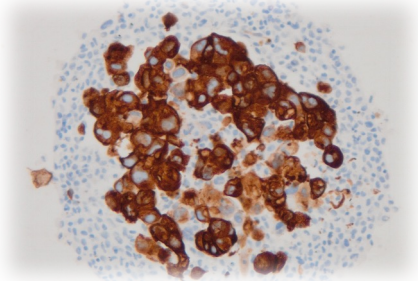
- **Formation**

- **Cytotoxicity studies**

- Cell shape (counting), cell proliferation and metabolism, cell death 2D and 3D

- **Histological studies**

- Characterization of biocompatibility of the biomaterial
- ACIPA test (Adhesion, Colonization, Infiltration, Proliferation and Apoptose)



- **Chemistry and formulation**

- Polymer synthesis
- Chemical functionalization
- Nano-emulsification by spontaneous and high-energy methods
- Light microscopy
- Lyophilization

- **Characterization of formulations and materials**

- Oscillatory rheology
- Stability studies

- **Physico-chemical characterizations**

- Drug dissolution and release profiles
- Spectrophotometry: UV-Vis, Fluorescence

- **Physical chemistry of particles, nanoparticles and interfaces**

- Particle size
- Drops tensiometry and interfacial rheology
- Characterization of the surface properties of nanoparticles

▪ EQUIPMENTS

- PSM Herasafe 2030i (ThermoFischer)
- Centrifuge Heraeus Megafuge 8R (ThermoFischer)
- Incubator Heracell 150i (ThermoFischer)
- Freezer -80°C MDF-C8V1 84L (PHCBI)
- Deep freezer -150°C MDF-1156 128L (PHCBI)
- Microscope EVOS XL CORE (ThermoFischer)
- Microscope Revolve R4K (Echo)
- Cryostat CM305S (Leica)
- Microtome RM2165 (Leica)
- Zetasizer Nano ZS (Malvern)
- Plate reader, Varioskan LUX UV-visible, Fluorescence (Thermo-Fisher)
- Rheometer oscillatory MARS 40 (Thermo-Fisher)
- Drop tensiomer, Tracker (Teclis)
- Spectrophotometer UV-Vis Cary 4000 + temperature control (Agilent)
- Ultrasonic probe for formulation 750W (Sonics)
- Freeze dryer ALPHA 2-4 LDPLUS (Christ)
- Dissolution apparatus 708-DS (USP2) (Agilent)

▪ STUDY PROCESS

