

RENNES

biosit

BIOLOGIE
SANTÉ

INNOVATION TECHNOLOGIQUE

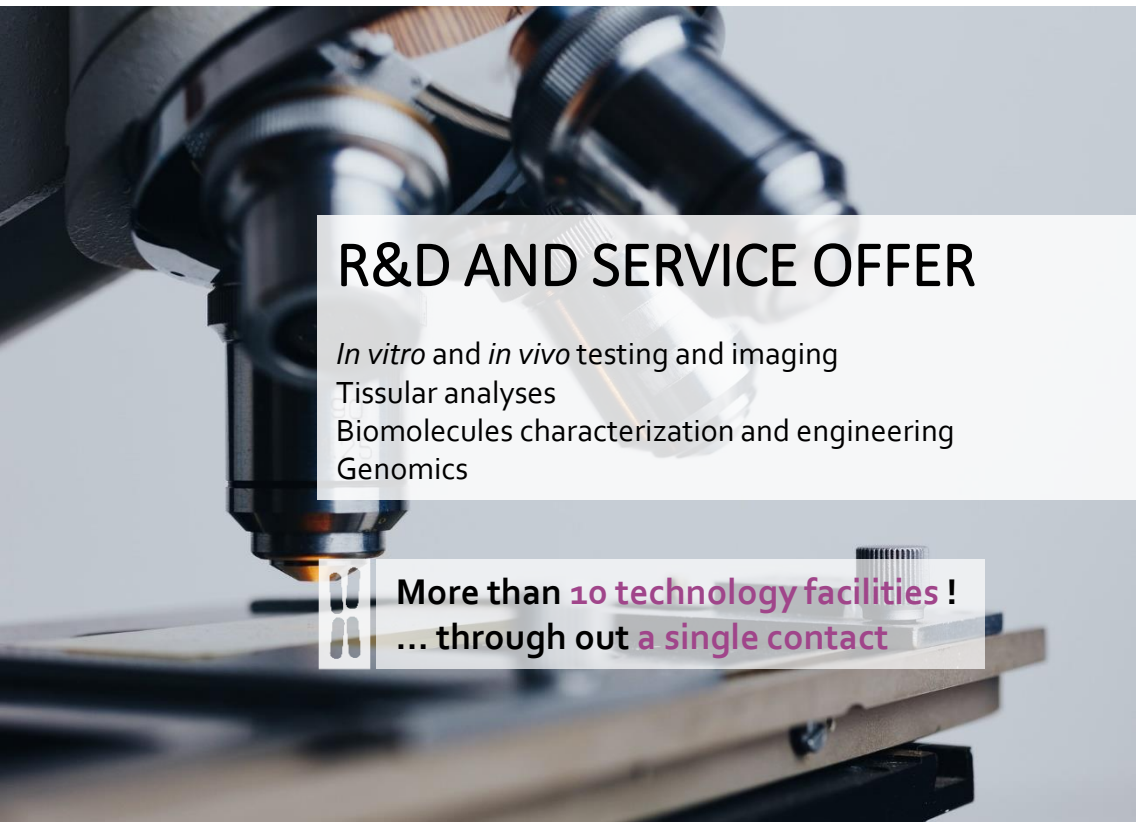


PRESENTATION



biosit

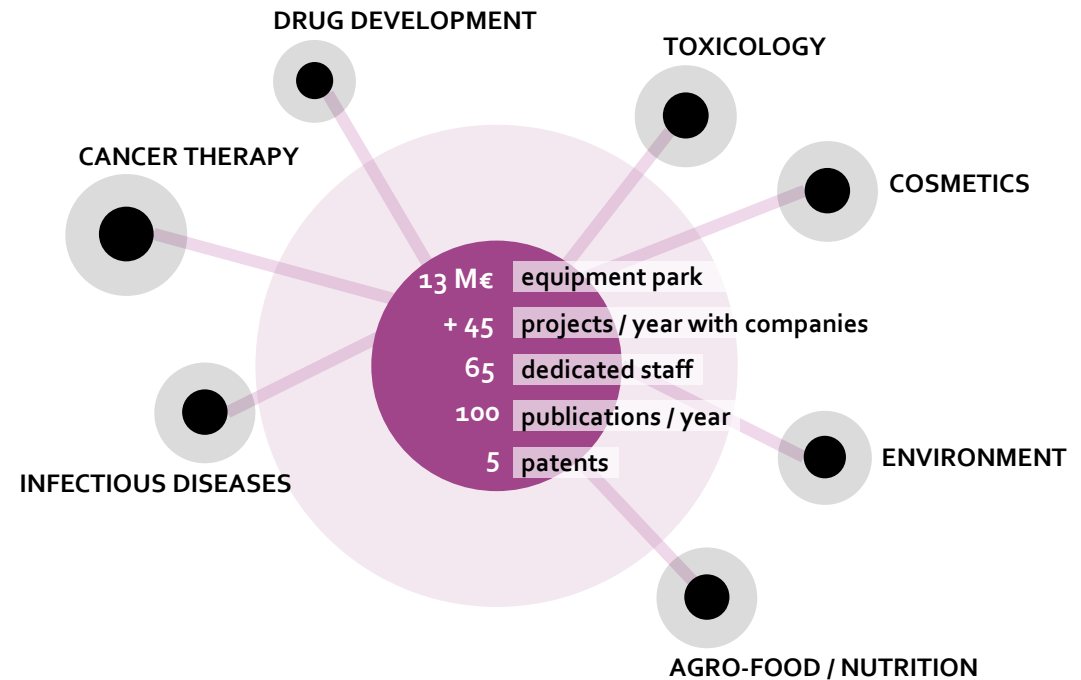
- organizes and manages the resources and means of **more than 10 facilities** in the field of biotechnologies and health.
- is a single R&D and services core facility offering a **global and integrated solution** to perform research projects
- is a unique interlocutor for the building and **management of complex projects**.



R&D AND SERVICE OFFER

In vitro and *in vivo* testing and imaging
 Tissular analyses
 Biomolecules characterization and engineering
 Genomics

More than 10 technology facilities !
 ... through out **a single contact**



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OUR R&D AND SERVICE OFFER

IN VITRO TESTING AND IMAGING



CELL CULTURE

- Cell lines collection and primary cell cultures
- Culture of infected cells (L3 facility)
- 3D cell culture techniques, Organotypic culture (fresh tissue), automated cell culture systems

CELL IMAGING AND IN VITRO ASSAYS

- High content screening of molecules
- Cytometry techniques: cell sorting, multiplex assays, ...
- Live observation of cellular processes and subcellular localization of molecules (photonics and electron microscopy)

IN VIVO TESTING AND IMAGING

IN VIVO IMAGING (MRI. PhotonImager)

- Preclinical imaging: anatomic imaging of small animals
- Detection and monitoring of cancer lesions
- *In vivo* dynamic imaging (oncology)
- Molecules bio distribution: contrast agents, probes



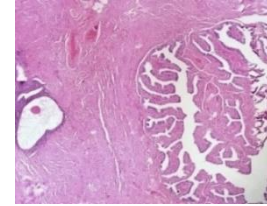
ANIMAL HOUSE (A1.A2.A3)

- Mice and rats breeding and experimentation
- Radiation: therapeutic protocol assessment and medullar aplasia

ANIMAL MODELS

- Mice (xenograft, orthotopic graft, patient derived xenograft)
- Rats
- Zebrafish: zebrafish assay
- DNA collection of spontaneous dog diseases (e.g. dermatological diseases)

TISSULAR ANALYSES



PATHOLOGY

CANCER – INFLAMMATION – INFECTION DISEASES – METABOLIC DISORDERS

- Use and development of biological sample collections (human and dog)
- Pathologists expertise for tissue slides analysis

HISTOLOGY

- Tissue slide preparation
- Protein and nucleic acids localization at nano- and micrometric scales
- Colorimetric observations
- Specific cell capture from tissue slides
- Molecular characterization of tissue
- Virtual tissue slides acquisition
- High throughput identification of biomarkers

BIOMOLECULAR ANALYSES AND GENOMICS

PHYSICO-CHEMICAL ANALYSES

- Molecules identification and chemical characterization
- Molecular interactions study (e.g. proteins, lipids, ...)
- Determination of peptides and proteins secondary and 3D structure
- Reconstruction of macromolecular complex structures



GENOMICS

- Access to a genomics equipment park (NGS)
- Genomics project design and management
- Bioinformatics

ANTIBODIES ENGINEERING

- Human anti-erythrocyte antibodies
- Murine monoclonal antibodies
- Custom development of assays (e.g. multiplex)