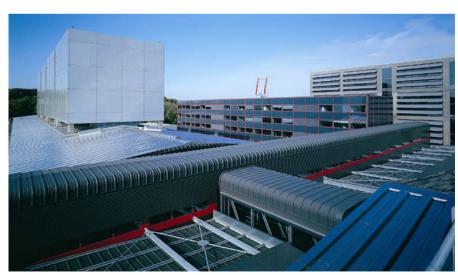
SIDR-UEVE: data management in Life Sciences

University of Evry Val d'Essonne (UEVE)



Institute for Scientific and Technical Information (INIST-CNRS)





Genopole®: First French Biopark





Sharing expertise, skills and resources

- Genopole is the first French Biopark dedicated to
 « Omics » sciences
- Genopole is composed of:
 - 21 academic laboratories
 - 67 private biotech companies
 - 15 technological platforms and equipments

Shared Infrastructures



CERFE (animal facility)

- Bioinformatic annotation
- Imaging and cytometry platform
- Mass spectrometry platform

Evr@Platform (augmented reality and virtual environment)

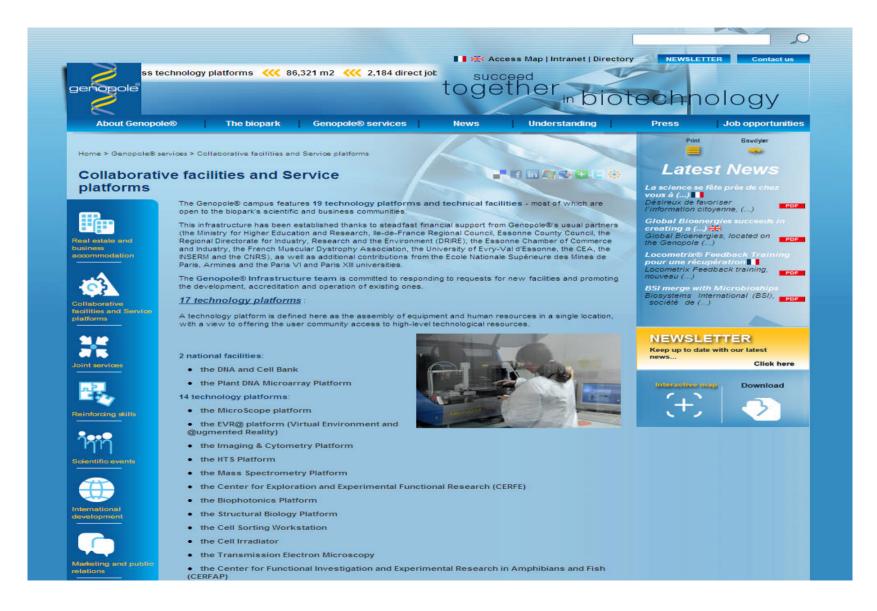
- Plant DNA microarray platform
- Biophotonics platform
- Surface functionalization platform
- Structural biology platform (NMR, AFM)
- DNA and cells bank
- High throughput screening platform

4 Equipments

- Transmission electron microscopy
- Cell sorting station
- Cell irradiator
- Incubator shared equipements

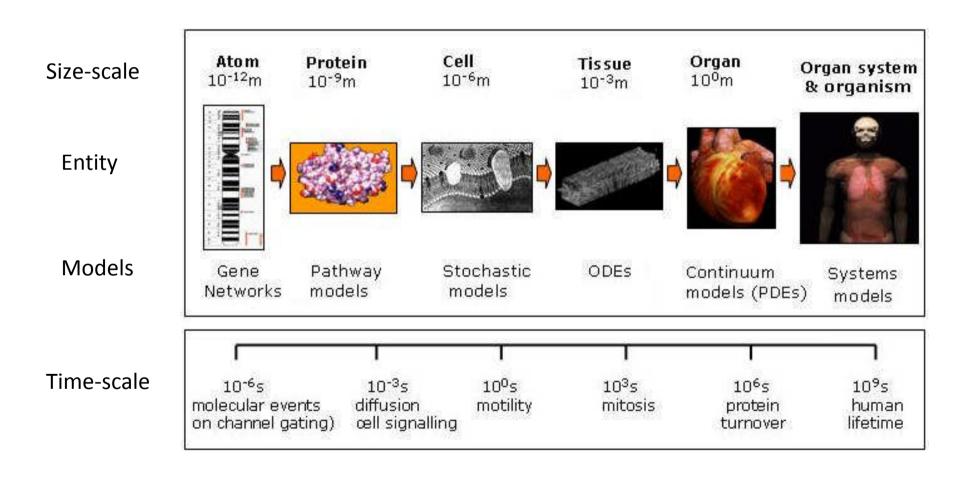
11 Platforms

Technology platform: Assembly of equipment and human resources in a single location, offering the user community access to high-level technological facilities



The Systems Biology era:

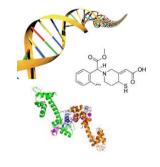
How to integrate complex data from multiple experimental sources to understand the functioning of biological systems?



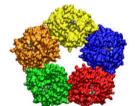
Experimental characterization

Biological entities

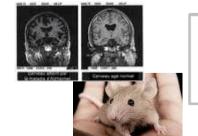
Technologies



Molecules: DNA, RNA, proteins, sugars, metabolites, lipids, ...



Molecular interactions: proteinprotein interactions, DNA-protein interactions, ...



Phenotypes: cells, organs, organims, species, ...

DNA sequencing, RNA sequencing, SNP array, DNAarray, Chromatography, Mass spectrometry, Nuclear Magnetic Resonance, Two dimensional-gel, ...

Protein arrays, ChIP-chip with DNA or tiling array, NMR ...

Cell phenotype: Cellular microarray, FACS, ...

Whole phenotype: Gene knock-out, RNAi