

# PHENOTYPING

## Right answer for your scientific question... how to phenotype ?

Our mission is to give you a ready access to high-quality animal models for your next research program. Clinical phenotyping services address most of the physiological systems and cover most of the therapeutic areas, by using genetically engineered mouse models, spontaneous or induced pathological models. Our services enable to characterize the anatomical, physiological and behavioral phenotype traits of your mouse model, as well as validate target genes, assess your mouse model to mimic a specific human disease or perform *in vivo* preclinical drug screening.



### 8 Platforms services

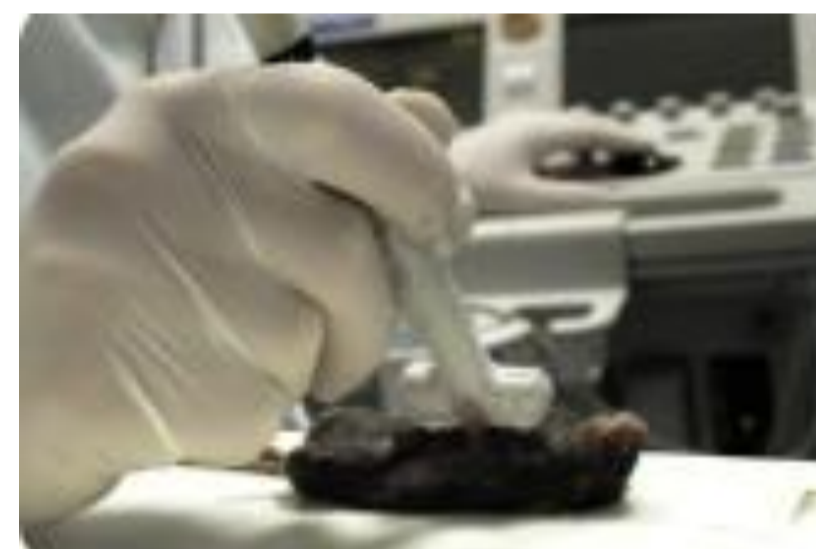
- 150-200 projects / year
- 12 therapeutic areas
- *In vivo* disease models
- More than 250 standardized assays for various functions
- Broad range R&D programs

### Deliverables:

Data, reports, pictures...

## CLINICAL PHENOTYPING

- Clinical chemistry
- Anatomopathology
- Behavior, cognition and sensory organs
- Cardiology, vascular system
- Embryology and reproduction
- Neuromuscular
- Nutrition, metabolism
- Nephrology
- Pulmonary
- Immunology, allergy, inflammation
- Infectiology
- Oncology



## DISEASE MODELS

- Lung disease
- Asthma
- Lung inflammation
- Intestinal bowel disease (~DSS)
- Peritonitis (LPS, Thyoglycolate, poly:IC, Zymosan A)
- Hypertension
- Cardiac hypertrophy
- Diet-induced atherosclerosis
- Diet-induced obesity
- Diet-induced diabetes
- Memory and learning deficits
- Alzheimer
- Orthotopic cancer models
- Design vaccine assays
- Immunization modes (TNP-KLH)
- EAE-Experimental autoimmune encephalomyelitis

## DRUG SCREENING

- Target identification / validation
- Risk assessments / side effects
- Target reorientation



## BIO-IMAGING UNDER BSL3 CONDITIONS

- Biphotonic *in vivo* imaging
- Confocal imaging
- Bioluminescence
- Cryomicrotome

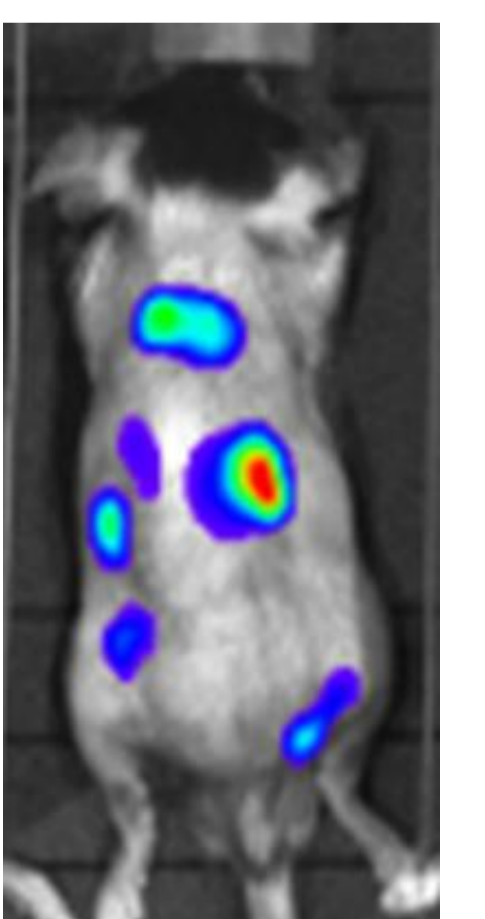


## PRECLINICAL IMAGING

- Optical imaging
  - Bioluminescence and planar fluorescence
  - Fluorescence tomography
- X Ray imaging
  - Planar radiology
  - Micro Computed Tomography



- Radioisotopic imaging
  - Planar scintigraphy
  - Single photon emission computed tomography (SPECT)
  - Positron Emission Tomography (PET)
- Photoacoustic imaging
- Ultrasounds imaging



We provide researchers with phenotyping tools, define together with the teams the most suited strategies to address their scientific questions and provide targeted and comprehensive analysis. PHENOMIN services are regularly renewed and implemented thanks to R&D programs addressed in different clinical phenotyping areas and disease models.