



# Taiwan Mouse Clinic and Animal Consortium

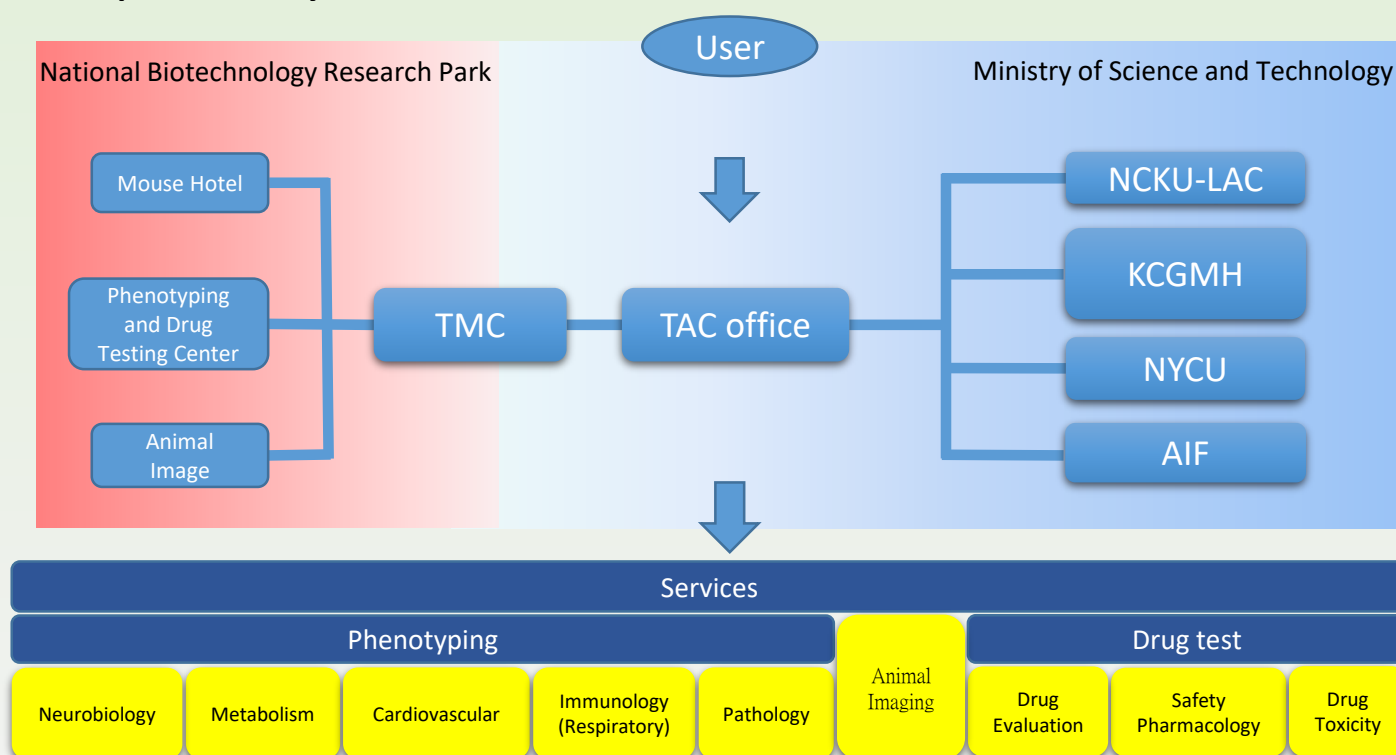
--National Comprehensive Mouse Phenotyping and Drug Testing Center--

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Taiwan Mouse Clinic (TMC) is located in the National Biotechnology Research Park. TMC collaborates with the Animal Image Facility (AIF) of Academia Sinica, the Molecular Imaging Platform of NYCU, the Laboratory Animal Center of NCKU and the laboratory of Phenomics & Diagnostics in KCGMH to form the Taiwan Animal Consortium (TAC). TMC & TAC provide a comprehensive animal testing platform to serve researchers working on drug development and preclinical validation. We offer (1) comprehensive mouse phenotyping assays; (2) animal health monitoring; (3) animal imaging; (4) mouse models of human diseases; and (5) drug evaluation: including efficacy, safety, and toxicity, aiming to help users to achieve milestones in new drug development. We provide user-friendly and high-quality services under supervision of the user committee and co-PIs/consultants who are experts in rodent models and drug development.

While *in vivo* drug testing assays for preclinical studies are needed, TMC and TAC is the top choice for you!



## Service items

### A. Animal Phenotyping

#### ●Metabolism

- ›Blood chemistry
- ›Metabolic rate
- ›Food and water intake
- ›Body composition

#### ●Cardiovascular

- ›ECG, EKG
- ›Blood pressure
- ›Telemetry ECG
- ›Cardiac phenotyping package

#### ●Neuroscience

- ›Modified-SHIRPA
- ›Home cage
- ›Open field
- ›Rota-rod
- ›Hot/cold plate
- ›Tail flick
- ›von Frey
- ›Grip strength
- ›Y maze
- ›Water maze
- ›Tail Suspension Test

#### ●Immune Disease

- ›Surface body temperature
- ›Core body temperature monitoring
- ›Lung function

#### ●Pathology

- ›Histopathology
- ›Slide scanning
- ›Blood test
- ›Complete cell count
- ›Urine analysis
- ›CSF extraction
- ›Bone and musculoskeletal tissue section for specific markers immunostaining
- ›Bone tissue bending for biomechanical analysis
- ›Joint synovitis analysis
- ›Vascular distribution and quantification
- ›Osmolarity analysis
- ›Blood gas analysis

### B. Animal Imaging

#### ●microCT

- ›Bone mineral density
- ›Trabecular bone
- ›Body fat and lean
- ›Whole body fat images
- ›Articular cartilage erosion analysis
- ›Osteophytes analysis
- ›Fatty marrow quantification
- ›Customized service

#### ●X ray

- ›2D-X ray

#### ●MRI

- ›In vivo Biospec 4.7T 40-cm /7T 20-cm bore horizontal MRI system
- ›In vivo Pharmascan 7T 16-cm bore horizontal MRI system

#### ●microPET/SPECT

- ›microPET imaging
- ›microSPECT imaging
- ›Customized service

#### ●Fluorescence/Luminescence

- ›In vivo optical image/ fluorescence & luminescence
- ›In vitro optical image/ fluorescence & luminescence
- ›Near infrared for joints synovitis quantification
- ›Customized service

#### ●Ultrasound

- ›High-Frequency Ultrasound
- ›Photoacoustic Imaging

### C. Drug Testing

- ›Customized service

#### ●In vivo Drug Target Validation

#### ●Drug Efficacy

#### ●Drug New Indication Development

#### ●Safety Pharmacology

#### ●Drug Toxicity Test

#### ●In vivo Customized Service

### D. Other Services

- ›X-ray irradiation
- ›Animal health monitoring