

Procedures of using animal laboratory

User training application

User training application form

User training completion

(Grant the authority to use IVRC)
Access authority application form

Submit and approval IACUC protocol

Animal experimental protocol
IACUC
- Deliberative period :
about one month
- After deliberations approval experiment is possible

Animal import application

Animal buying application form

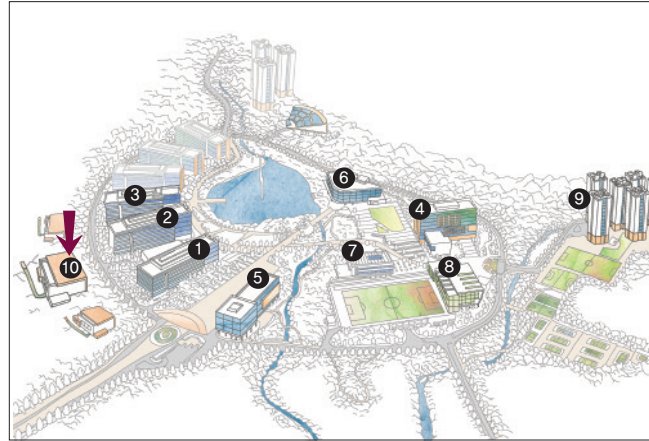
Research support application

Technical support application form
place/ equipment using application form
- Fundamental experiment training/ support
- Disease-model making support
- Equipment support

Animal import

Animal experiment

Campus Map



- ① National Science Building 102
- ② Engineering Building 104
- ③ Engineering Building 106
- ④ Technology Management Building 114
- ⑤ Main Administration Building 201
- ⑥ Academic Information Building(AIB) 202
- ⑦ Student Union Building 203
- ⑧ Gymnasium 205
- ⑨ Student Dormitory (301-307)
- ⑩ Stem Cell Research Center 105

How to get to UNIST

Airplane

After arriving Ulsan airport, you can take a taxi to get to UNIST.

Train

After arriving at Ulsan station, you can take a taxi or bus to get to UNIST.

Buses that run via the school are as follows : No.733, 807

KTX train

After arriving at KTX Ulsan station, you can take a taxi or bus to get to UNIST.

Buses that run via the school are as follows : No.337

Express Bus

After arriving at Ulsan express bus station, you can take a taxi or bus to get to UNIST.

Buses that run via the school are as follows : No.133, 733, 807

Car

From Seoul, Daejeon, Daegu, Busan

Gyeongbu Expressway(Direction of Busan) ▶ West Ulsan IC ▶ Highway N0.24 ▶ UNIST



In Vivo Research Center



생체효능검증센터



Introduction

Goals & Functions

The goal of IVRC is to provide a validation system using animal facility to raise *in vivo* efficacy of functional biomaterials which are newly created by advanced fusion technology in UNIST

The primary function of IVRC is to assist investigators for their research and to conduct animal experiments in accord with the highest scientific, human and ethical principles.

Goals

Reinforcement of research capability

- Core-based and research infrastructure
- Establish the foundation of world-class scientific / medical / engineering of fusion research system

Propulsion

In Vivo efficacy validation system

- Production of transgenic animal models
- Behavior and pharmacological analysis
- *In vivo* imaging analysis
- Toxicity / pathology tests
- Monitoring of novel drug candidates

Strategies

- Infrastructure and network formation for fusion research of basic science / medicine / engineering
- Source of research and technology acquisition and quantification



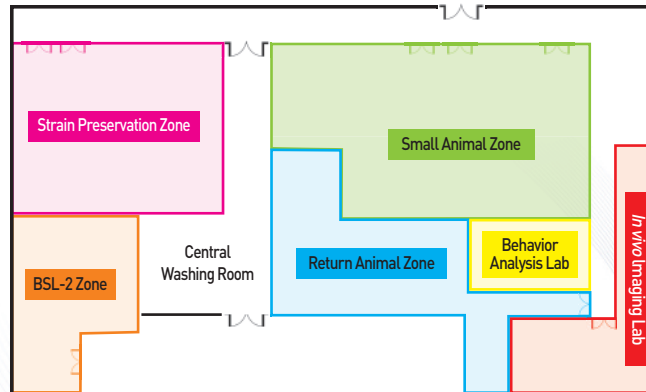
Facility

Animal Zone (4 Zone)

- **Strain Preservation Zone** : Clean area for strain preservation
- **Small Animal Zone** : General animal experiments
Establishment of animal disease models
- **Return Animal Zone** : Behavioral analysis study, *In vivo* imaging research
- **BSL-2 Zone** : BSL-2(Bio Safety level-2), Pathogen study

Analysis Lab. (4 Lab.)

- **Histopathology Lab.** : Gene/protein identification via immunochemical reaction of tissue
- **Autopsy Lab.** : Tissue extraction, Establishment of animal disease models
- **Behavior Analysis Lab.** : Behavior analysis of animal disease models
- **In vivo Imaging Lab.** : Optical and functional image analysis of experimental animals



[Animal Zone]

Major Equipment

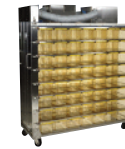
Sterilization & Breed System



Autoclave



H₂O₂ Sterilizer

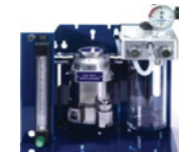


IVC Rack

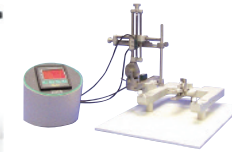


Cage Washer

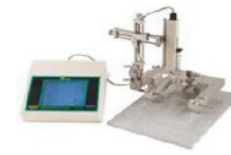
Anatomy



Animal Anesthesia System



Stereotaxic System



Quintessential Stereotaxic Injector

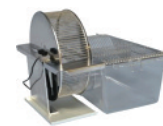
Behavior Analysis



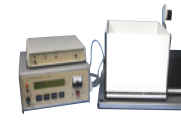
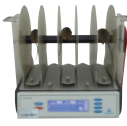
Video-tracking System



Mouse CLAMS



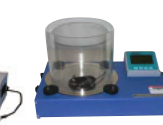
Exercise Ability Test System



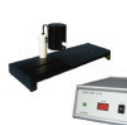
Passive Avoidance Cage



Digital Water Plethysmometer



Analgesia & Pain Test System



In vivo Imaging



Gamma Irradiator



In vivo Imaging System



Micro MRI



Echo MRI