한국실험동물학회　　www.kalas.or.kr

2024 KALAS
International Symposium

JULY **24** |WED| – **27** |SAT|

📍 ICC JEJU, Jeju Island, KOREA

IMPACT
Innovative **M**odels for **P**redictive **A**nd **C**omparative **T**ranslational research

Plenary Lecture

JULY 25 |THU|

Jesús Ruberte ENG
Autonomous University of Barcelona
Insights from rodent models for understanding Diabetic Retinopathy

JULY 26 |FRI|

Inhee Mook ENG
Seoul Natl. Univ.
The current insights into Alzheimer's disease research and advancements in therapeutic development

Organized by
Korean Association for
Laboratory Animal Science (KALAS)

Sponsored by
TBA

JULY 24 (WED)

Symposium 1　　14:00-15:40 / Halla Hall A / ENG
Zebrafish animal model to study in vivo mechanisms of disease
Uncovering the secrets of tissue regeneration: From gene discovery to elucidating the mechanisms — Jun Su Kang (Wisconsin Univ.)
Zebrafish model to study muscle development and regeneration — Seong Kyu Choe (Wonkwang Univ.)
Application of zebrafish model to study peripheral nervous system disorders — Ji Eun Lee (Sungkyunkwan Univ.)
Neurotoxic effects of β-citronellol via KYN to 3-HK metabolic activation — Su Hyun Kim (Korea Univ.)

Symposium 2 (IACUC)　　14:00-15:40 / Halla Hall B / ENG
Post-experiment management of laboratory animals for 3R
Considerations for End-Experimental Animals — Ji Min Lee (Seoul Natl. Univ.)
Sharing and Utilization of Animal Biological Resources — So Young Yune (Ministry of Food and Drug Safety)
Laboratory animal rehoming — Jae-Hun Ahn (Seoul Natl. Univ. Hospital)
Sharing and Utilization of the Surplus of Experimental Animals — Seung Hyeok Seok (Seoul Natl. Univ.)

AAALAC International　　14:00-15:40 / Samda Hall / ENG
Part 1: One-point Lesson to Achieve AAALAC International Accreditation
Overview and Update of AAALAC International Accreditation Program — Montip Gettayacamin (AAALAC International)
Step 1: Preparing the Program Description and Site Visit — Young-Shin Joo (The Catholic University of Korea)
Step 2: Expectation of the Post Site visit communication and Council Deliberations — Seung Hyeok Seok (Seoul Natl. Univ.)

Symposium 3　　16:00-17:40 / Halla Hall A / KOR
Unraveling Immune Networks: Insights from Animal Models
TBA — Ju Won Park (University of Hawai'i at Mānoa)
Regulation of macrophage activation in cardiovascular diseases — Sung Ho Park (UNIST)
Transgenic mouse models: Invaluable tools for humoral immunity — Youn Soo Choi (Seoul Natl. Univ.)
Microglial inflammasome-dependent regulation of blood-brain barrier integrity — Je Wook Yu (Yonsei Univ.)

Symposium 4 (KLAT Education 1 With KIT)　　16:00-17:40 / Halla Hall B / KOR
Anatomy and practical Methods for Animal Testing I
Assessment of Rodent Respiratory Toxicity and Respiratory Function — Se Ran Yang (Kangwon Natl. Univ.)
Experimental technique in gastrointestinal research using rodents — Jong Hwang Park (Chonnam Natl. Univ.)
Assessment of brain and nervous system function — Jae Ho Shin (Eulji University)
Characteristics and Key Research Methods of the Hematopoietic System — Yi Rang Na (Seoul Natl. Univ. Hospital)

AAALAC International　　16:00-17:40 / Samda Hall / ENG
Part 2: Our Journey Balancing the Animal Welfare and Good Science by Voluntary Accreditation
Program Management — Hae-Jin Yoon (Korea Institute of Toxicology)
Personnel and Research Management — Jungmin Lee (Samsung Medical Center)
Internal Oversight of the Animal Care and Use Program — Ji Yeon Hwang (Seoul National University Bundang Hospital)
Overall Veterinary Care Provision and Communication — Young-Shin Joo (The Catholic University of Korea)
Functional Physical Plant — Jeong Hee Park (Korean Animal Technology (KOATECH))

JULY 25 (THU)

Plenary Lecture 1　　10:00-11:00 / Halla Hall A, B / ENG
Insights from rodent models for understanding Diabetic Retinopathy — Jesús Ruberte (Autonomous University of Barcelona)

Symposium 5　　11:00-12:40 / Halla Hall A / ENG
Frontiers in Metabolic Regulation: Paving the Way for Therapeutic Insights in Metabolic Diseases and Beyond
Elucidating adipocytes functions through development — Joan Sanchez-Gurmaches (Cincinnati Children's Hospital)
Role of CRTC2 in metabolic disorders — Seung Hoi Koo (Korea Univ.)
Targeting Immunometabolic Functions of Adipose Tissue Macrophages: Therapeutic Perspectives from Animal Model Studies — Yun Hee Lee (Seoul Natl. Univ.)
Fibrotic Niche-enriched Single-Cell Transcriptomics Uncovers Novel Age-Associated Cell Type in Liver — ChunA Kim (KRIBB)

Symposium 6　　11:00-12:40 / Halla Hall B / KOR
TBA

Symposium 7　　11:00-12:40 / Samda Hall / KOR
Utility of the Minipigs as Laboratory Animals
Development of wound healing agents using minipigs — Sokho Kim (Kunsan National University)
The use of miniature swine for preclinical modeling in cardiovascular research — Se-Il Park (Yonsei Univ.)
Dermal Toxicity and Efficacy Study using Yucatan Minipig — Jeong Ho Hwang (Korea Institute of Toxicology)
Pharmacokinetic and vaccine research model of miniature pig based on DPF condition — Hyunil Kim (Optipharm Inc.)

Academy Award Presentation　　14:00-14:40 / Halla Hall A

Symposium 8　　14:50-16:30 / Halla Hall A / ENG
Modeling Human Brain Development and Diseases
Modeling Neurodevelopmental Disorders Using Human Pluripotent Stem Cells — Hyunsoo Shawn Je (Duke-NUS Medical School)
Epitranscriptomic regulations in neurodevelopment and neurodegeneration — Ki Jun Yoon (KAIST)
Human spinal cord organoids as a model system for human neurodevelopment and disease — Ju Hyun Lee (KIST)
Decoding immune-microbiome-brain axis in a neurodevelopmental disorder mouse model — Eun Ha Kim (Korea Univ.)

Symposium 9　　14:50-16:30 / Halla Hall B / ENG
Recent Trends in Stem Cell & Organoid Research
Hair follicle stem cell and tissue regeneration — Han Seul Yang (KAIST)
Organoid Modelling of Human Fetal Lung Development — Kyung Tae Lim (Korea Univ.)
Biomaterials and devices for advanced organoid engineering — Seung Woo Cho (Yonsei Univ.)
Salivary Gland Organoids for Investigating the Etiology of Xerostomia — Hyung Sik Kim (Pusan Natl. Univ.)

Symposium 10　　14:50-16:30 / Samda Hall / KOR
Exploring Sensory Impairments: In Vivo Studies on Animal Models with Vision and Hearing Defects
Establishing Patient-mimicking Mutant Mice for the Development of Gene Editing Therapy — Young Hoon Sung (Ulsan Natl. Univ.)
Therapeutic Application on Angiogenesis-related Ocular Diseases — Seok Jae Lee (Seoul Natl. Univ. Hospital)
Allele-specific antisense oligonucleotide ameliorates KCNQ4-related autosomal dominant hearing loss — Seung Hyun Jang (Yonsei Univ.)
In Vivo Base Editing in Humanized Mice Mimicking Patients with Retinoschisis — Dong Hyun Jo (Seoul Natl. Univ.)

JULY 26 (FRI)

Symposium 11　　09:00-10:40 / Halla Hall A / ENG
Revolution of laboratory rodent health monitoring
Health Monitoring of Laboratory Rodent Colonies—Talking about (R)evolution — Byeong Cheol Kang (Seoul Natl. Univ.)
Prevalence of Parvovirus in rodent. – How can we deal with Chappavovirus in SPF rodent? — Yang Kyu Choi (Konkuk Univ.)
Strategy for Multiplex Real-Time PCR kit development — Ki Taek Nam (Yonsei Univ.)

Symposium 12　　09:00-10:40 / Halla Hall B / ENG
Cell-Gene Immunotherapy using Humanized Animal Models
In vivo and in vitro studies for evaluation of tumorigenicity of cell therapy product — Yoji Sato (National Institute of Health Sciences)
Development of CD19 CAR-NK therapy targeting pericytes in the tumor microenvironment using a glioblastoma-blood vessel assembloid xenograft model — Kyung Sun Kang (Seoul Natl. Univ.)
Assessing the Impact of CRISPR/Cas9 based ex vivo HSC Gene Therapy: Insights from Rhesus Macaque Competitive Repopulation Model — Byung Chul Lee (Sookmyung Women's Univ.)
Engraftment of human immune system in the most commonly used immunodeficient mouse model:Utilization for cell and gene therapy — Sang Nyun Kim (Orient Genia)
Regenerative approaches for off-the-shelf hypoimmunogenic stem cells — Da Hyun Kim (Sung Shin Women's Univ.)

Symposium 13 (KMPC 1)　　09:00-10:40 / Samda Hall / KOR
Liver diseases in animal models
TBA — Mi-Ock Lee (Seoul Natl. Univ.)
TBA — Won-Il Jeong (KAIST)
TBA — Jun-Won Yun (Seoul Natl. Univ.)
TBA — Kyoung-Jin Oh (KRIBB)

Plenary Lecture 2　　11:00-12:00 / Halla Hall A, B / ENG
The current insights into Alzheimer's disease research and advancements in therapeutic development — Inhee Mook (Seoul Natl. Univ.)

Symposium 14　　14:00-15:50 / Halla Hall A / ENG
Immunosuppressive treatment and immune monitoring protocol for the preclinical NHP study of xeno solid organ transplantation
Immunosuppressive treatment protocol for the xeno solid organ transplantation of NHP preclinical model in China — Hidetaka Hara (Yunnan Agricultural Univ.)
TBA — Eiji Kobayashi (The Jikei University School of Medicine)
Immunosuppressive treatment protocol for the xeno solid organ transplantation of NHP preclinical model in Korea — Jae Seok Yang (Yonsei Univ. Sevrance Hospital)
Monitoring examinations after the xeno solid organ transplantation of NHP preclinical model in Korea — Eun Jee Oh (Catholic Univ. Seoul St. Mary's Hospital)

Symposium 15 (KLAT Education 2)　　14:00-15:30 / Halla Hall B / KOR
Anatomy and practical Methods for Animal Testing II
Anatomy and practical Methods for Laboratory animal eyes — Won Tae Kim (KEYPRIME RESEARCH)
Normal anatomy and evaluation methods of bone — Jin Seok Kang (Namseoul Univ.)
Mouse models for liver cancer; Anatomy, Modeling, and Histopathology — Seung Ho Heo (Asan Medical Center)

Symposium 16　　14:00-15:50 / Samda Hall / KOR
Research trends and perspectives of animal models for functional gastrointestinal disease
FD(functional dyspepsia) animal models and screening test — Chang Gue Son (Daejeon Univ.)
Effects of vagotomy on GI motility and evaluation as a model animal — Young Su Yang (Korea Institute of Toxicology)
Development of gastrointestinal disease model animals using Helicobacter pylori — Yung Choon Yoo (Konyang Univ.)
Use of human/animal-derived intestinal stem cells and their differentiated cells to mimic intestinal metabolism and physiology — Kazuya Maeda (Kitasato Univ.)

JULY 27 (SAT)

Roundtable Meeting　　09:30-11:10 / Halla Hall A / KOR