

The 66th Annual Meeting of Japanese Association for Laboratory Animal Science  
[Ordinary general meetin]

May16, 13:00~13:40

Room 1

[Congress Award Lecture]

May16, 13:40~15:30

Room 1

■ Ando-Tajima Award

L-1 **Understanding of varied life phenomena based on genetic modification technology and development of disease model**

Masahide Asano (Kyoto University Graduate School of Medicine, Institute of Laboratory Animals)

■ Encouragement Award

L-2 **Veterinary research for disease model development using common marmosets**

Takashi Inoue (Central Institute for Experimental Animals)

L-3 **Analysis of sperm function using genome-editing technology**

Haruhiko Miyata (Research Institute for Microbial Diseases, Osaka University)

May16, 10:30~12:00

Room 4

■ International Award Lecture (2018winner)

IA-1 Nur Syafnaz Zainal (LASAM/Malaysia)

IA-2 Charmaine R. Peredas (PALAS/Philippine)

IA-3 Hesika Varnakulasingham (SLALAS/Sri Lanka)

IA-4 Ratchaneevan Aeimlapa (TALAS/Thailand)

IA-5 Sai Bo Bo Tun (SALAS/Singapore)

[Plenary Lecture 1]

May15, 11:00~12:00

Room 1

Chairperson: Asano Atsushi (Faculty of Veterinary Medicine, Kagoshima University)

PL-1 **Specific neural activations establish gateways for immune cells in the specific blood vessel regions in the CNS.**

Masaaki Murakami (Division of Psychoimmunology, Institute for Genetic Medicine, Graduate School of Medicine, Hokkaido University)

[Plenary Lecture 2]

May15, 13:00~14:00

Room 1

Chairperson: Kazutaka Ohsawa (Life Science Support Center, Nagasaki University)

PL-2 **Working with deadly viruses: battling Ebola and influenza**

Yoshihiro Kawaoka (Division of Virology, Department of Microbiology and Immunology, Institute of Medical Science, University of Tokyo /  
Department of Pathobiological Science, School of Veterinary Medicine, University of Wisconsin-Madison)

[Plenary Lecture 3]

May16, 15:30~16:30

Room 1

Chairperson: Etsuro Ono (Department of Biomedicine, Center of Biomedical Research, Graduate School of Medical Sciences, Kyushu University)

PL-3 **Frontier of Germ Cell Reconstitution in Experimental Animals**

Katsuhiko Hayashi (Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

**[Educational Seminar]**

May17, 9:00~12:00

Room 2

Chairpersons: Tadashi Okamura (National Center for Global Health and Medicine)  
Noriyuki Kasai (Tohoku University)

**ES-1 Overview of Laboratory Animal Anesthesia**

Tadashi Okamura (National Center for Global Health and Medicine)

**ES-2 Practical inhalational anesthesia for mice and rats**

Kenjiro Konno (Fukushima Medical Device Development Support Centre)

**ES-3 Injectable anesthesia for mice, rats, and rabbits**

Yumiko Kirihara (Department of Experimental Animals, Interdisciplinary Center for Science Research, Organization for Research and Academic Information, Shimane University)

**ES-4 Inhalation anesthesia method for rabbits**

Takuya Ito (The Center of Development of Advanced Medical Technology, Jichi Medical University)

**ES-5 Canine and feline perioperative management in the preclinical studies**

Kazumasu Sasaki (Tohoku University)

**ES-6 Anesthesia of Swine**

Kentarō Setoyama (Institute of Laboratory Animal Science, Research Support Center, Kagoshima University)

**ES-7 Anesthesia of Monkeys**

Shigiko Takei (Animal Research Department, Safety Research Center, Ina Research Inc.)

**[Symposium 1]**

May15, 9:00~11:00

Room 1

Chairpersons: Chihiro Koshimoto (Frontier Science Research Center, University of Miyazaki)  
Katsumi Mominoki (Animal Experimental Facilities, Department of Animal Resources, Advanced Science Research Center, Okayama University)

**S1-1 AI-based drug discovery: data-driven approach to predict drug therapeutic effects and side-effects**

Yoshihiro Yamanishi (Department of Bioscience and Bioinformatics, Faculty of Computer Science and Systems Engineering, Kyushu Institute of Technology)

**S1-2 Future vision for Developments of Advanced Technology for Medical Devices**

Munenori Uemura (Director Team Business Promotion Office, Allm Inc./Department of Pediatrics, Field of developmental Medicine, Course of Health Research, Graduate School of Medical and Dental Sciences, Kagoshima University/Visiting Lecturer, Department of Advanced Medical Initiatives, Graduate School of Medical Sciences, Kyushu University)

**S1-3 The health care management and the action classification of animals by using Artificial Intelligence**

Masahito Yamamoto (Faculty of Information Science and Technology, Hokkaido University)

**[Symposium 2]**

May15, 14:00~16:30

Room 1

Chairpersons: Ichiro Miyoshi (Tohoku University School of Medicine)  
Makoto Suzuki (Okinawa Institute of Science and Technology Graduate University)

**S2-1 One Welfare as an Extension of the One Health Initiative: The Concept and Its Status**

Kathryn Bayne (Chief Executive Officer, AAALAC International)

S2-2 **A study of the dilemma between Animal Welfare and Japanese traditional concepts related to animals.**

Masashi Norihisa (Counsellor, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Government of Japan)

S2-3 **Current situation on animal welfare in Japan: companion animal welfare in Japan**

Yoshie Kakuma (Department of Animal Sciences, Teikyo University of Science)

S2-4 **Laboratory animal welfare in Japanese companies.**

Hiroshi Yamazoe (The Japanese Association for Laboratory Animal Science)

### [Symposium 3]

May15, 14:00~16:00

Room 2

Chairpersons: Tsunekata Ito (Animal Center, Institute for Promotion of Medical Science Research, Yamagata University Faculty of Medicine)  
Tomoo Eto (Central Institute for Experimental Animals)

S3-1 **Next generation human immune system mice in drug discovery research**

Ryoji Ito (Immunology Laboratory, Central Institute for Experimental Animals)

S3-2 **Trends in rat models of human diseases**

Tomoji Mashimo (Institute of Experimental Animal Sciences, Graduate School of Medicine, Osaka University)

S3-3 **Trends and keywords of the laboratory-animal technology education. -Simulator and Audio-visuals-**

Atsushi Tsukamoto (Department of Laboratory Animal Science, Azabu University)

### [Symposium 4]

May16, 9:00~12:00

Room 1

Chairpersons: Masaaki Komatsu (Department of Physiology, Juntendo University School of Medicine)  
Yoshiaki Kikkawa (Tokyo Metropolitan Institute of Medical Science)

S4-1 **Autophagy regulates multiple transcription factors**

Masaaki Komatsu (Department of Physiology, Juntendo University School of Medicine)

S4-2 **Mechanisms for spatiotemporal control of intracellular organelle remodeling during early development**

Ken Sato (Lab of Molecular Traffic, IMCR, Gunma University)

S4-3 **Novel functions of autophagy-related genes in vertebrates**

Hideaki Morishita (Department of Biochemistry and Molecular Biology, Graduate School and Faculty of Medicine, The University of Tokyo)

S4-4 **Physiological role of mitophagy in adipose tissue**

Tomotake Kanki (Department of Cellular Physiology, Niigata University Graduate School of Medical and Dental Sciences)

S4-5 **Anti-diseases and aging function of autophagy**

Tamotsu Yoshimori (Graduate School of Medicine, Osaka University)

### [Symposium 5]

May17, 9:00~12:00

Room 1

Chairpersons: Fumio Ike (RIKEN BRC Experimental Animal Division)  
Kazutaka Ohsawa (Life Science Support Center, Nagasaki University)

S5-1 **Infection Control at Animal Facilities**

Fumio Ike (RIKEN BRC Experimental Animal Division)

S5-2 **How can we manage biosecurity programs? -From the perspective of a pharmaceutical company-**

Toshihiko Watanabe (Chugai Pharmaceutical Co. Ltd.)

- S5-3 **Application of new technology at the CIEA ICLAS Monitoring Center**  
Nobuhito Hayashimoto (ICLAS Monitoring Center, Central Institute for Experimental Animals)
- S5-4 **Management of quality control programs for breeding companies**  
Shigeri Maruyama (Research Animal Diagnostic Service, Charles River Laboratories Japan)
- S5-5 **Microbiological controls in cynomolgus monkeys for biomedical science**  
Shinichiro Nakamura (Shiga University of Medical Science)
- S5-6 **Current status and issues of microbial monitoring in Center for Animal Resources and Development**  
Daisuke Torigoe (Institute of Resource Development and Analysis, Kumamoto University)

**[LAS Seminar 1]**

May15, 9:00~11:00

Room 4

Chairpersons: Noriyuki Kasai (Tohoku University)  
Tadashi Okamura (National Center for Global Health and Medicine)

- LAS1-1 **Support of biological education to high schools for citizens' understanding on animal experiments**  
Noriyuki Kasai (Tohoku University)
- LAS1-2 **The current state and problems of the high school biological education**  
Nobuko Nakai (KAKENHI Research Group for the Knowledge and Understanding of Animal Experimentation)
- LAS1-3 **Promotion of understanding animal use in research for high school students in other countries**  
Yoshie Kakuma (Department of Animal Sciences, Teikyo University of Science)
- LAS1-4 **Request for the cooperation of JALAS members**  
Nobuko Nakai (KAKENHI Research Group for the Knowledge and Understanding of Animal Experimentation)

**[LAS Seminar 2]**

May15, 9:00~11:00

Room 2

Chairpersons: Masahito Ikawa (Research Institute for Microbial Diseases, Osaka University)  
Atsushi Yoshiki (Experimental Animal Division, RIKEN BioResource Research Center)

- LAS2-1 **How to Knock-out your target gene in the mouse zygote?**  
Seiya Mizuno (Laboratory Animal Resource Center, University of Tsukuba)
- LAS2-2 **Production of genetically modified mice with CRISPR/Cas9 and its pitfalls**  
Taichi Noda (RIMD, Osaka University)
- LAS2-3 **Genetic quality control of genetically modified mice in the bioresource facility**  
Shinya Ayabe (Experimental Animal Division, RIKEN BioResource Research Center)
- LAS2-4 **Strategy of animal research using mouse reproductive technology**  
Toru Takeo (Center for Animal Resources and Development (CARD), Kumamoto University)

**[LAS Seminar 3]**

May17, 9:30~11:30

Room 4

Chairpersons: Masaru Tajima (The Institute of Experimental Animal Sciences, Department of Medicine, Osaka University)  
Erika Sasaki (Central Institute for Experimental Animals)

- LAS3-1 **How to use fully the mouse resource**  
Atsushi Yoshiki (RIKEN BioResource Research Center)

LAS3-2 **How to use “Platforms for Advanced Technologies and Research Resources”**

Masahito Ikawa (Research Institute for Microbial Diseases, Osaka University)

LAS3-3 **Pathological analysis: Homage and the awakening of novel concepts**

Shinya Toyokuni (Department of Pathology and Biological Responses, Graduate School of Medicine Nagoya University)

LAS3-4 **Introduction of the databases of model organisms in the National BioResource Project.**

Shoko Kawamoto (Genetic Resource Center, National Institute of Genetics)

**[International Award Lecture]**

May16, 10:30~12:00

Room 4

Chairpersons: Kazuo Goto (Teikyo University)

Toru Takeo (Kumamoto University)

IA-1 **Combination therapy of dual antigen DNA vaccine and anti-PDI using a preclinical transgenic mouse model**

Nur Syafinaz Zainal (Laboratory Animal Science Association of Malaysia (LASAM))

IA-2 **Ex vivo and in vivo antispasmodic activity of hexane GCC sub-fractions of *Tabernaemontana pandacaqui* Poir. Leaves in ICR mice**

Charmaine R. Peredas (Philippine Association for Laboratory Animal Science (PALAS))

IA-3 **Evaluation of mice incisional wound healing with probiotic therapy and contraction of muscle panniculus carnosus**

Hesika Varnakulasingham (Sri Lanka Association for Laboratory Animal Association (SLALAS))

IA-4 **Aberrant calcium and bone metabolism in type 2 diabetic Goto-Kakizaki rats and impact of anti-diabetic treatment**

Ratchaneevan Aeimlapa (Thai Association for Laboratory Animal Science (TALAS))

IA-5 **The anterior chamber of the eye as an islet transplantation site in Type-2 Diabetes**

Sai Bo Bo Tun (Singapore Association for laboratory Animal Science (SALAS))

**[Young Scientist Award]**

May16, 9:00~12:00

Room 4

Chairpersons: Fumikazu Matsuhisa (Division of Biological Resources and Development, Analytical Research Center for Experimental Sciences, Saga University)

Tokuko Iwamori (Research Center for Human Disease Modeling, Graduate School of Medical Sciences, Kyushu University)

Haruko Hirayama (Animal Experimental Facilities, Department of Animal Resources, Advanced Science Research Center, Okayama University)

Satoshi Nakamura (Kyudo, Co, Ltd)

Speaker 1

**Self-organization of marmoset embryo on the dish**

Keiko Kishimoto (CIEA)

Speaker 2

**Functional analysis of Exocyst complex in mice spermatogenesis**

Yuki Osawa (Graduate School of Comprehensive Human Sciences, University of Tsukuba)

Speaker 3

**Generation of novel mitochondrial disease model mice carrying a pathogenic mtDNA mutation**

Haruna Tani (Graduate School of Life and Environmental Sciences, University of Tsukuba)

Speaker 4

***In vivo* and *in vitro* evaluation of tumor-suppressing potential of Philippine stingless bee propolis**

Mark Joseph M. Desamero (Laboratory of Biomedical Science, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

Speaker 5

**Behavioral analysis of dementia model mice after neural cell transplantation**

Masanori Murayama (Department of Immunology and Medicine, St. Marianna University of Medicine)

Speaker 6

**Analysis of gene regulatory mechanisms of Neat1 long non-coding RNA in the neuropathic pain**

Motoyo Maruyama (Division of Laboratory Animal Science, Nippon Medical School)

Speaker 7

**A novel protein upregulated drastically in cardiomyocytes in response to ischemia reperfusion**

Hayato Sasaki (Laboratory of Laboratory Animal Science and Medicine, Division of Veterinary Medicine, Kitasato University)

Speaker 8

**MafB is essential in adipose tissue macrophage for regulating thermogenesis**

Megumi Ishida (Department of Anatomy and Embryology, Faculty of Medicine, University of Tsukuba)

Speaker 9

**The methods for preventing hypothermia induced by MMB anesthesia in mice**

Mizuho Tashiro (Laboratory of Experimental Animal Science, Nippon Veterinary and Life Science University)

Speaker 10

**The assessment of mouse spontaneous locomotor activity using motion picture**

Koji Kobayashi (Department of Animal Radiology, Graduate School of Agriculture and Life Sciences, The University of Tokyo)

**[Poster Presentation]**

May 15-16

Poster Room 1, 2, 3

Core Time May 15, 16:30~17:30 (Odd numbers)

May 16, 16:30~17:30 (Even numbers)

**[Luncheon Seminar]**

May 15

LS-1 Room 3, 12:00 ~ 13:00

Nepa Gene Co., Ltd.

Chairpersons: Makoto Matsuyama (Division of Molecular Genetics, Shigei Medical Research Institute)

Tomoharu Yasuda (Division of Immunology and Genome Biology Medical Institute of Bioregulation, Kyushu University)

**Mouse gene targeting using NEPA21 electroporator**

Tomoharu Yasuda (Division of Immunology and Genome Biology Medical Institute of Bioregulation, Kyushu University)

**GONAD: A simple Method for Genome-editing in Mice and Rats**

Makoto Matsuyama (Division of Molecular Genetics, Shigei Medical Research Institute)

LS-2 Room 4, 12:00 ~ 13:00

Kyudo Co., Ltd.

**Current situation of reproductive engineering technology in rats and establishment of rat private bank**

Naomi Nakagata (Division of Reproductive Engineering, Center for Animal Resources and Development (CARD), Kumamoto University)

May 16

LS-3 Room 2, 12:00 ~ 13:00

CLEA Japan, Inc.

Chairperson: Kyoko Shioya (National Cerebral and Cardiovascular Center)

**Progress of the aging research and aged mouse.**

Shigeraru Wakana (Foundation for Biomedical Research and Innovation at Kobe)

LS-4 Room 3, 12:00 ~ 13:00

BEX CO., LTD.

Chairperson: Kiyoshi Kano (Lab. of Veterinary Developmental Biology, Yamaguchi University)

**Optimization of i-GONAD electroporation conditions for genome editing in mice**

Masato Ohtsuka (Department of Molecular Life Science, Tokai University School of Medicine)

**Intro-embryo gene cassette knockin by CRISPR/Cas9 RNP electroporation with AAV vector**

Tomoyuki Yamaguchi (The Institute of Medical Science, The University of Tokyo)

LS-5 Room4, 12:00 ~ 13:00

Charles River Laboratories Japan, Inc.

Chairperson: Kazuki Tabata (Charles River Laboratories Japan, Inc.)

**Amelioration of routine health monitoring for production animals in CHARLES RIVER LABORATORIES JAPAN**

Shigeri Maruyama (Research Animal Diagnostiv Service, Charles River Laboratories Japan, Inc.)

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May17

LS-6 Room2, 12:00 ~ 13:00

ARK-Resource Co.,Ltd.

Chairperson: Toshiaki Kawabe (ARK Resource Co., Ltd.)

**Cutting-edge of reproductive technology in rat**

Tomoji Mashimo (Institute of Experimental Animal Sciences, Graduate School of Medicine, Osaka University)

Yoshiki Miyasaka (Reproductive Engineering Unit, Graduate School of Medicine, Osaka University)

LS-7 Room4, 12:00 ~ 13:00

Shin Nippon Biomedical Laboratories, Ltd.

Chairperson: Shogo Kusumoto (Shin Nippon Biomedical Laboratories, Ltd.)

**Animal experiment review at Shin Nippon Biomedical Laboratories, Ltd.**

Hiroyuki Izumi (Preclinical Company, Shin Nippon Biomedical Laboratories, Ltd.)

**[Hospitality Room]**

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May15-17

4F (401, 402, 403)

[HR-1] Central Institute for Experimental Animals (CIEA) (401)

[HR-2] CLEA Japan, Inc. (402)

[HR-3] Hamri Co., Ltd. (403)

**[Equipment Exhibition]**

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May15-17

2F Multipurpose hall

**[Social Gathering (Banquet)]**

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May16, 18:00 ~ 20:00

Room 2 (5F Int'l conference room)