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12th
FELASA
SECAL
CONGRESS
10-13 June, 2013
Barcelona, Spain
Barcelona's International Convention Center

**Animal Research:
Better Science from Fewer Animals**

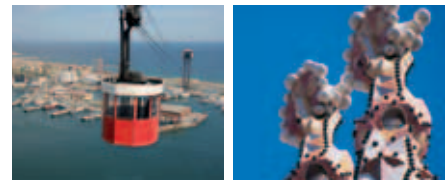
Final Programme





12th FELASA SECAL CONGRESS

ANIMAL RESEARCH: Better Science from Fewer Animals



Organisers



Committees

Chair of Congress Patri Vergara

Coordinators Xavier Cañas
Dolores García-Olmo
Marta Giral
Javier Guillén
Juan Martín-Caballero
Pilar Pallarés
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10-13 June, 2013 • **Barcelona**, Spain



Welcome to **B a r c e l o n a**

On behalf of the Organising Committee, I have great pleasure in welcoming you to the **12th FELASA and 12th SECAL** joint congress in Barcelona, Spain.

We have chosen the title: “**Animal Research: Better Science from Fewer Animals**” both to emphasise the essential contribution that experimental animals have made to biomedical research, and in the hope that the new models and methodological approaches presented at this congress will facilitate the use of fewer animals and better experimental results.

I have great pleasure in presenting the **12th FELASA SECAL** Congress programme. In the tradition of **FELASA** and **SECAL** congresses, we are offering an informative and educative program with 36 state-of-the-art sessions, 10 workshops and several satellite workshops, on topics such as e-learning, cryopreservation, occupational health and presentation of the first guidelines for the maintenance and welfare of cephalopods used for research. There will also be over 340 poster and 8 oral presentations. We have prioritised poster rather than oral presentations because the posters will be displayed for the duration of the congress and will therefore provide better opportunities for authors to discuss their results and projects with colleagues.

The sessions and workshops have been organised in three colour-coded itineraries: **Blue - Health, Welfare and Legal Issues**; **Green - Animal Facility Managing**; and **Red - LAS Applied Research**. The program has been prepared by a scientific committee with extensive knowledge and experience in LAS, with the aim of providing a comprehensive range of topics to cater for varied interests in the field of laboratory animal science.

This is the first **FELASA Congress** after the publication of the European Directive 2010/63/EU and you will find several sessions that deal with different aspects of this Directive and its implementation in various European countries. We also wanted to strengthen and give increased visibility to animal models for human diseases, and we have tried to orientate the traditional topics of a LAS congress to the final objective of our work: Finding new therapies for human and animal diseases.

We hope that this **FELASA-SECAL Congress** will provide good opportunities for making contacts, networking and sowing the seeds for future projects. I would like to draw your attention to the vast exhibitors' area where companies from different areas and with different approaches will present their latest equipment and innovations. We have been pleasantly surprised by the amount of interest shown by exhibitors in our congress so, please, take the opportunity to spend some time with them particularly during coffee and lunch which will be served in the exhibitors' area.

We would like you to enjoy this congress from both a scientific and social perspective and we invite you to participate in our evening social programme, where you can savour our traditional local cuisine and beverages, meet old colleagues and make new friends. Please also remember that it will be worth while getting up a bit earlier on Wednesday to participate in the walk/run race. It will give you the opportunity to invigorate yourself and experience the sea front at one of the best moments of the day!

Patri Vergara
Chair of Congress



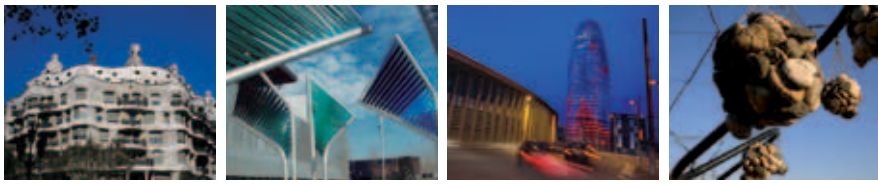
MONDAY, 10 JUNE					
08:00	Registration opens				
Rooms	114	115	116 + 117	118	119
09:00	WS04 ▶ Planning an effective animal imaging unit	WS07 ▶ Experimental design		WS01 ▶ New challenges in education and training in LAS: Using e-learning	
12:00	Welcome Reception at the Exhibition Area				
13:00			Opening Ceremony and Plenary Lecture		
14:00	S01 ▶ What is new in FELASA? FELASA Working Groups	S25 ▶ Aging: Care and management of aged animals (rat, mouse, zebrafish, NHP)	S13 ▶ New project development: Efficiency, economics, and the environment	WS02 ▶ How to present our work to society	WSE ▶ New technologies in rodent and zebrafish health monitoring. Idexx BioResearch
15:30	Coffee break at the Exhibition Area				
16:00	S14 ▶ Economic limitations in the design and management of animal facilities	S26 ▶ Neurological disorders: Phenotyping for models of Alzheimer, Parkinson (NHP) and Down Syndrome	S02 ▶ Education and training in LAS: Implementation of the new European Directive 2010/63	WSE ▶ Assessing automation in animal facility projects. Tecniplast	
17:30					
19:30	Welcome Party				

TUESDAY, 11 JUNE					
07:30	Registration opens				
Rooms	114	115	116 + 117	118	119
08:00	S03 ▶ Cephalopods and Directive 2010/63: Challenges and opportunities	S15 ▶ Outsourcing or in-house services	S31 ▶ Severity assessment and endpoints in disease models	WS05 ▶ Design of databases according to the different management needs	
09:30	Coffee break at the Exhibition Area				
10:00	S16 ▶ Implementation of occupational health and safety programmes	S28 ▶ Data sharing	S04 ▶ Europe-USA harmonisation on health monitoring for rodent shipments and harm-benefit analysis in ethical review	WS08 ▶ Meet the editor	
11:30			Plenary Lecture		
12:30	Poster presentation (odd numbers) and Lunch at the Exhibition Area				
14:00	S06 ▶ Quality assurance of education and training in LAS	S29 ▶ Experimental models and the microbiota	S17 ▶ Adapting to zebrafish: Facilities and management	WS06 ▶ Funding opportunities for the European Laboratory Animal Science Community	S05 ▶ From national legislation to the new European Directive 2010/63 in Eastern European countries
15:30	Coffee break at the Exhibition Area				
16:00	S18 ▶ Human resources management	S30 ▶ Experimental models for the study of metabolic diseases	S07 ▶ Pain in laboratory animals	WSE ▶ Getting beyond compliance-development in rodent cage design and care procedures. Tecniplast	
17:30	SECAL General Assembly			WS11 ▶ Meeting of the T&T Board with FELASA accredited course organisers (by invitation only)	

WEDNESDAY, 12 JUNE					
07:00	12 th FELASA SECAL Walk / Run Race				
08:30	Registration opens				
Rooms	114	115	116 + 117	118	119
09:00	S08 ▶ ICLAS, an organisation serving in a global context	S19 ▶ Biosafety and biocontainment in high-risk experimental models	S27 ▶ Neurodegenerative diseases: Design of shared units	WS03 ▶ Aspects of genetic monitoring in rodents	
10:30	Coffee break at the Exhibition Area				
11:00	S09 ▶ Pigs as research models	S32 ▶ Discovery and toxicology: Alternative methods	S20 ▶ Transportation of laboratory animals: Legal, health, welfare and supply issues		WS09 ▶ Practical pathology for research and phenotyping
12:30	Poster presentation (even numbers) and Lunch at the Exhibition Area				
14:00	S21 ▶ Quality implementation and assessment in animal units	S33 ▶ Use of stem cells in disease animal models	S10 ▶ Health and welfare in NHP: A review	WS10 ▶ Towards evidence-based translational research	
15:30	Coffee break at the Exhibition Area				
16:00	S11 ▶ Health and welfare in GM rodents: A review	S34 ▶ Cardiovascular models: refinement in experimental surgery in large animals	S22 ▶ Approaches to ethical review after the implementation of the European Directive 2010/63/EU		
17:30					
18:30	Panoramic City Tour				
20:30	Congress Dinner				

THURSDAY, 13 JUNE					
08:00	Registration opens				
Rooms	114	115	116 + 117	118	119
08:30		S23 ▶ Sperm cryopreservation in non-rodent species	S35 ▶ Genetically altered models. Why research does not always translate?	WSE ▶ Making sense of mouse nomenclature, genetic background effects and the importance of genetic stability Charles River	WSE ▶ Cryopreservation of rodents, reproductive sciences and colony management of transgenic rodents – 3R Management. Janvier
10:00	Coffee break at the Exhibition Area				
10:30	S12 ▶ Farm animals and poultry as research models	S24 ▶ Disaster planning	S36 ▶ Managing genetically altered colonies		
12:00			FELASA 2013 Award and Plenary Lecture		
13:00			Closing Ceremony		

S ▶ Sessions**WS** ▶ Workshops**WSE** ▶ Workshops organised by Exhibitors**Blue itinerary** ▶ Health, welfare and legal issues**Green itinerary** ▶ Animal facility management**Red itinerary** ▶ LAS applied research



10-13 June, 2013 • **Barcelona**, Spain

Keynote Speakers



María A. Blasco

María A. Blasco (Alicante, 1965) obtained her PhD in 1993 for her research at the *Centro de Biología Molecular "Severo Ochoa"* under the supervision of M. Salas. That same year, Blasco joined the Cold Spring Harbor Laboratory in New York (USA) as a Postdoctoral Fellow under the leadership of C.W. Greider.

In 1997 she returned to Spain to start her own research Group at the *Centro Nacional de Biotecnología* in Madrid. She joined the CNIO in 2003 as Director of the Molecular Oncology Programme and Leader of the Telomeres and Telomerase Group and was appointed CNIO Director in 2011.

Blasco has received the Josef Steiner Cancer Research, *Rey Jaime I*, Körber European Science, *Alberto Sols*, and *Fundación Lilly Preclinical Research Awards* as well as the Spanish National *Santiago Ramón y Cajal Research Award in Biology* (2010). Blasco has also been awarded the EMBO Gold Medal and has served on its Council since 2008.

Her major research achievements include:

- Isolation of the core components of mouse telomerase and generation of the first knockout mouse for telomerase.
- Generation of the first mouse with increased telomerase expression in adult tissues. The finding that mammalian telomeres and subtelomeres have marks characteristic of constitutive heterochromatin.
- Discovery of telomeric RNAs, which are potent telomerase-inhibitors whose expression is altered in cancer.
- Demonstration that telomerase activity and telomere length determine the self-renewal capacity of adult stem cells.
- Identification of the longest telomeres as a universal feature of adult stem cell niches.
- The finding that telomerase over-expression in the context of cancer resistant-mice improves organismal fitness, produces a systemic delay in ageing and an extension in median life-span.
- Discovery that telomeres rejuvenate after nuclear reprogramming.
- Identification of the molecular mechanisms by which short telomeres/DNA damage limit nuclear reprogramming of defective cells.
- Discovery that telomeric protein TRF1 can act as both a tumour suppressor and as a factor in ageing prevention.



Cory Brayton

Dr. Brayton received her D.V.M. from Cornell University, and is board certified in Laboratory Animal Medicine (ACLAM), and Veterinary Pathology (ACVP). She did postdoctoral research and pathology training in New York City at the Animal Medical Center, Cornell University and The Rockefeller University. At The Rockefeller University (1989-1992), she became specifically interested in the pathology and characterization (phenotyping) of genetically engineered mice (GEM), and pursued this interest at several institutions while heading the Facility for Comparative Studies at the Hospital for Special Surgery (1992-1998). At Baylor College of Medicine (1998-2004), she headed the Comparative Pathology Laboratory, and was responsible for health surveillance and diagnostic pathology for a diverse research population including more than 150,000 mice. She also was associate professor in pathology, associate director of the Center for Comparative Medicine, and developed research collaborations, and national

and international conferences on the characterization and pathology of genetically engineered mice. In 2004 she moved to Johns Hopkins to develop a collaborative phenotyping core based in the Department of Molecular and Comparative Pathobiology (MCP), where veterinarian faculty investigators and trainees provide a unique comparative and translational research resource, in an institution with exceptional resources for multidisciplinary biomedical research.



Timo Nevalainen

Timo Nevalainen earned his DVM 1972 at the University of Helsinki, Finland, MS in Laboratory Animal Medicine at the Pennsylvania State University, USA 1976, and PhD in physiology 1984 in Helsinki. His professional career started as a physiology teacher, progressed to director of the National Laboratory Animal Center, both at the University of Kuopio. Since 1990 he has served as the Professor in Laboratory Animal Science (LAS) and Welfare both at the University of Kuopio (now University of Eastern Finland) and at the University of Helsinki. He has supervised eight PhD theses in LAS. While on sabbatical leaves, he has worked as a visiting professor at the University of Cincinnati and at the Pennsylvania State University.

He has had an active role in scientific and professional associations; he is past president of both Scand-LAS and FELASA, initiated and chaired an EU COST Action B24 and is involved with various other EU activities, such as evaluation of the 7th Framework Program. He has also a keen interest in establishing

competence education of all categories in his country of origin, Baltic countries, Russia and Thailand. He has had a key role in establishing FELASA education guidelines of all four categories, and FELASA Accreditation of training. Currently he is a member of the FELASA Accreditation Board and the ILAR Council.

The common theme of his research emphasizes the Refinement and Reduction alternatives, and their interplay in the use of laboratory animals. More recently, he has become interested in a third dimension, i.e. to examine how those Two R alternatives can also yield better science.

List of Sessions and Workshops



12th

FELASA SECAL CONGRESS

ANIMAL RESEARCH: Better Science from Fewer Animals

PLENARY LECTURES

PL1	Opening Ceremony Telomeres as therapeutic targets for cancer and aging	Monday, 10 June from 13:00 to 14:00 h. Room 116+117
PL2	High throughput and traditional phenotyping, how international efforts can help our research	Tuesday, 11 June from 11:30 to 12:30 h. Room 116+117
PL3	FELASA 2013 Award The two Rs approach	Thursday, 13 June from 12:00 to 13:00 h. Room 116+117

Blue Itinerary ▶ HEALTH, WELFARE and LEGAL ISSUES

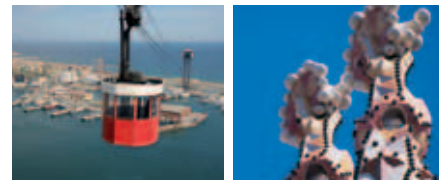
S01	What is new in FELASA? FELASA working groups	Monday, 10 June from 14:00 to 15:30 h. Room 114
S02	Education and training in LAS: Implementation of the new European Directive 2010/63	Monday, 10 June from 16:00 to 17:30 h. Room 116+117
S03	Cephalopods and Directive 2010/63: Challenges and opportunities	Tuesday, 11 June from 08:00 to 09:30 h. Room 114
S04	Europe-USA harmonisation on health monitoring for rodent shipments and harm-benefit analysis in ethical review	Tuesday, 11 June from 10:00 to 11:30 h. Room 116+117
S05	From national legislation to the new European Directive 2010/63 in Eastern European countries	Tuesday, 11 June from 14:00 to 15:30 h. Room 119
S06	Quality assurance of education and training in LAS	Tuesday, 11 June from 14:00 to 15:30 h. Room 114
S07	Pain in laboratory animals	Tuesday, 11 June from 16:00 to 17:30 h. Room 116+117
S08	ICLAS, an organisation serving in a global context	Wednesday, 12 June from 09:00 to 10:30 h. Room 114
S09	Pigs as research models	Wednesday, 12 June from 11:00 to 12:30 h. Room 114
S10	Health and welfare in NHP: A review	Wednesday, 12 June from 14:00 to 15:30 h. Room 116+117
S11	Health and welfare in GM rodents: A review	Wednesday, 12 June from 16:00 to 17:30 h. Room 114
S12	Farm animals and poultry as research models	Thursday, 13 June from 10:30 to 12:00 h. Room 114



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Green Itinerary ▶ ANIMAL FACILITY MANAGING		
S13	New project development: Efficiency, economics and the environment	Monday , 10 June from 14:00 to 15:30 h. Room 116+117
S14	Economic limitations in the design and management of animal facilities	Monday , 10 June from 16:00 to 17:30 h. Room 114
S15	Outsourcing or in-house services	Tuesday , 11 June from 08:00 to 09:30 h. Room 115
S16	Implementation of occupational health and safety programmes	Tuesday , 11 June from 10:00 to 11:30 h. Room 114
S17	Adapting to zebrafish: Facilities and management	Tuesday , 11 June from 14:00 to 15:30 h. Room 116+117
S18	Human resources management	Tuesday , 11 June from 16:00 to 17:30 h. Room 114
S19	Biosafety and biocontainment in high-risk experimental models	Wednesday , 12 June from 09:00 to 10:30 h. Room 115
S20	Transportation of laboratory animals: Legal, health, welfare and supply issues	Wednesday , 12 June from 11:00 to 12:30 h. Room 116+117
S21	Quality implementation and assessment in animal units	Wednesday , 12 June from 14:00 to 15:30 h. Room 114
S22	Approaches to ethical review after the implementation of European Directive 2010/63/EU	Wednesday , 12 June from 16:00 to 17:30 h. Room 116+117
S23	Sperm cryopreservation in non-rodent species	Thursday , 13 June from 08:30 to 10:00 h. Room 115
S24	Disaster planning	Thursday , 13 June from 10:30 to 12:00 h. Room 115

Red Itinerary ▶ LAS APPLIED RESEARCH		
S25	Aging: Care and management of aged animals (rat, mouse, zebrafish, NHP)	Monday , 10 June from 14:00 to 15:30 h. Room 115
S26	Neurological disorders: Phenotyping for models of Alzheimer, Parkinson (NHP) and Down Syndrome	Monday , 10 June from 16:00 to 17:30 h. Room 115
S27	Neurodegenerative diseases: Design of shared units	Wednesday , 12 June from 09:00 to 10:30 h. Room 116+117
S28	Data sharing	Tuesday , 11 June from 10:00 to 11:30 h. Room 115
S29	Experimental models and the microbiota	Tuesday , 11 June from 14:00 to 15:30 h. Room 115
S30	Experimental models for the study of metabolic diseases	Tuesday , 11 June from 16:00 to 17:30 h. Room 115
S31	Severity assessment and endpoints in disease models	Tuesday , 11 June from 08:00 to 09:30 h. Room 116+117
S32	Discovery and toxicology. Alternative methods	Wednesday , 12 June from 11:00 to 12:30 h. Room 115
S33	Use of stem cells in disease animal models	Wednesday , 12 June from 14:00 to 15:30 h. Room 115
S34	Cardiovascular models: Refinement in experimental surgery in large animals	Wednesday , 12 June from 16:00 to 17:30 h. Room 115
S35	Genetically altered models. Why research does not always translate?	Thursday , 13 June from 08:30 to 10:00 h. Room 116+117
S36	Managing genetically altered colonies	Thursday , 13 June from 10:30 to 12:00 h. Room 116+117



WORKSHOPS

WS01	New challenges in education and training in LAS: Using e-learning	Monday, 10 June from 09:00 to 12:00 h. Room 118
WS02	How to present our work to Society	Monday, 10 June from 14:00 to 15:30 h. Room 118
WS03	Aspects of genetic monitoring in rodents	Wednesday, 12 June from 09:00 to 12:00 h. Room 118
WS04	Planning an effective imaging unit	Monday, 10 June from 09:00 to 12:00 h. Room 114
WS05	Design of databases according to the different management needs	Tuesday, 11 June from 08:00 to 09:30 h. Room 118
WS06	Funding opportunities for the European Laboratory Animal Science Community	Tuesday, 11 June from 14:00 to 15:30 h. Room 118
WS07	Experimental design	Monday, 10 June from 09:00 to 12:00 h. Room 115
WS08	Meet the Editor	Tuesday, 11 June from 10:00 to 11:30 h. Room 118
WS09	Practical pathology for research and phenotyping	Wednesday, 12 June from 11:00 to 12:30 h. Room 119
WS10	Towards evidence-based translational research	Wednesday, 12 June from 14:00 to 15:30 h. Room 118
WS11	Meeting of the T&T Board with FELASA accredited course organisers (<i>by invitation only</i>)	Tuesday, 11 June from 17:30 to 19:00 h. Room 118

SATELLITE WORKSHOP

SW01	Mouse sperm cryopreservation (<i>Not included in the registration fee</i>)	Monday, 10 June from 09:00 to 12:00 h Faculty of Medicine, University of Barcelona
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INDUSTRY WORKSHOPS

New technologies in rodent and zebrafish health monitoring	Monday, 10 June from 14:00 to 15:30 h. Room 119 Organised by ▶ Idexx BioResearch
Assessing automation in animal facility projects	Monday, 10 June from 16:00 to 17:30 h. Room 118 Organised by ▶ Tecniplast
Getting beyond compliance-development in rodent cage design and care procedures	Tuesday, 11 June from 16:00 to 17:30 h. Room 118 Organised by ▶ Tecniplast
Making sense of mouse nomenclature, genetic background effects and the importance of genetic stability	Thursday, 13 June from 08:30 to 10:00 h. Room 118 Organised by ▶ Charles River
Cryopreservation of rodents, reproductive sciences and colony management of transgenic rodents. 3R management	Thursday, 13 June from 08:30 to 10:00 h. Room 119 Organised by ▶ Janvier



12:00 **Welcome Reception** ▶ Exhibition Area

13:00 **Opening Ceremony and Plenary Lecture** ▶ Room 116+117
PL1 ▶ Telomeres as therapeutic targets for cancer and aging
María A. Blasco, *Spanish National Cancer Research Center (CNIO), Spain*
Introduced by ▶ Juan Martín-Caballero

Session 01 What is new in FELASA? FELASA working groups ▶ Room 114

Chairpersons ▶ Ann-Christine Eklöf / Ana Isabel Santos

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14:00 **S01-1 ▶ FELASA is not just a congress organiser!**
Jan-Bas Prins, *Leiden University Medical Center, The Netherlands*

14:30 **S01-2 ▶ FELASA Working Groups: Aims and overview**
Ann-Christine Eklöf, *Karolinska University Hospital, Sweden*

14:50 **S01-3 ▶ FELASA Accreditation of health monitoring programmes and testing laboratories involved in health monitoring**
Werner Nicklas, *German Cancer Research Center, Germany*

15:10 **S01-4 ▶ FELASA education and training accreditation system**
Patri Vergara, *Autonomous University of Barcelona, Spain*

Session 25 - Aging: Care and management of aged animals (rat, mouse, zebrafish, NHP) ▶ Room 115

Chairpersons ▶ Gabi Itter / Udo Albus

14:00 **S25-1 ▶ Hearing disorders in aged mice**
Sylvie Cosnier-Pucheu, *Sanofi Recherche, France*

14:30 **S25-2 ▶ Caring for aging and aged nonhuman primates**
Susanne Rensing, *Abbvie Deutschland GmbH & Co KG, Germany*

15:00 **S25-3 ▶ Growing zebrafish: A challenge?**
Nouha Ritschel, *Max-Planck-Institute, Germany*

Session 13 - New project development: Efficiency, economics and the environment ▶ Room 116+117

Chairpersons ▶ Alberto Gobbi / Jim Wallace

14:00 **Welcome and introduction**
Alberto Gobbi, *European Institute of Oncology and COGENTECH S.c.a.r.l., Italy*

14:05 **S13-1 ▶ New project development: Efficiency, economics and the environment**
Jim Wallace, *Science Associates, United Kingdom*

14:15 **S13-2 ▶ Driving the delivery of sustainable laboratory facilities in the UK higher education sector**
Arthur Nicholas, *Manchester University, United Kingdom*

14:35 **S13-3 ▶ Waste not: How the paradigm shift in cagewash equipment can significantly reduce energy consumption and reduce operating costs**
Jeff Zynda, *Payette, USA*

14:55 **S13-4 ▶ Improving animal facility efficiency step by step: Logistics and lean**
Federica Baldin, *European Institute of Oncology and COGENTECH S.c.a.r.l., Italy*

15:10 **S13-5 ▶ ORAL COMMUNICATION: Design and development of a new animal facility at Trinity College Dublin: Opportunities and pitfalls**
S. Mehigan, *Trinity College Dublin, Ireland*

15:20 Questions and discussion

15:30 **Coffee break** ▶ Exhibition Area



Scientific Programme

Monday ▶ 10 JUNE

Session 14 - Economic limitations in the design and management of animal facilities

▶ Room 114

Chairpersons ▶ Xavier Cañas / Gabbi Itter

- 16:00** **S14-1 ▶ Implementation of Directive 2010/63/EU in industry: Impact assessment, change management and leadership**
Colin Dunn, *Charles River Laboratories, United Kingdom*
- 16:30** **S14-2 ▶ The low(er) carbon animal research facility**
Steven Cubitt, *The Cube, Cambridge, United Kingdom*
- 17:00** **S14-3 ▶ Implementing common operation management in distributed facilities founders of phenomin, the French national infrastructure for mouse phenogenomics**
Yann Herault, *ICS-TAAM, France*

Session 26 - Neurological disorders: Phenotyping for models of Alzheimer, Parkinson (NHP) and Down Syndrome

▶ Room 115

Chairpersons ▶ Mara Dierssen / Clare Stanford

- 16:00** **S26-1 ▶ Generation of new animal models for Alzheimer disease by interfering with synaptic protein complexes**
Monica DiLuca, *University of Milan, Italy*
- 16:30** **S26-2 ▶ Progress in translational animal models of Parkinson's disease**
Emma Lane, *Welsh School of Pharmacy, United Kingdom*
- 17:00** **S26-3 ▶ Alzheimer's disease and Down Syndrome: A mouse model**
Frances Wiseman, *Institute of Neurology UCL, United Kingdom*

Session 02 - Education and training in LAS: Implementation of the new European Directive 2010/63 ▶ Room 116+117

Chairpersons ▶ David Smith / Ismene Dontas

- 16:00** **S02-1 ▶ A framework for education and training in Europe. Overview of the work of the Expert Working Group**
Susanna Louhimies, *EC, DG ENV Brussels, Belgium*
- 16:30** **S02-2 ▶ A mechanism for supervision and assessment of competence**
Manuel Berdoy, *Oxford University, United Kingdom*
- 16:50** **S02-3 ▶ Accreditation and mutual acceptance of laboratory animal science courses within Europe**
Patri Vergara, *Autonomous University of Barcelona, Spain, and David Smith, FELASA*
- 17:10** **S02-4 ▶ Selecting and training members of Animal Welfare Bodies**
Maggy Jennings, *RSPCA, United Kingdom*



Session 03 - Cephalopods and Directive 2010/63: Challenges and opportunities

▶ Room 114

Chairpersons ▶ Paul Andrews / Graziano Fiorito

- 08:00 S03-1 ▶ Why were cephalopods included in Directive 2010/63/EU?**
Paul Andrews, *St. George's University of London and Boyd Group Cephalopod Working Group, United Kingdom*
- 08:30 S03-2 ▶ The development of consensus guidelines for care and welfare of cephalopods: Key recommendations**
Graziano Fiorito, *Cephalopod Research Organization, CephRes-ONLUS, Italy*
- 09:00 S03-3 ▶ Challenges in applying guidelines for care and welfare of cephalopods to daily practice. A view from a researcher and carer**
Michael Kuba, *Hebrew University, Israel*

Session 15 - Outsourcing or in-house services?

▶ Room 115

Chairpersons ▶ Juan Martín-Caballero / Alberto Gobbi

- 08:00 S15-1 ▶ Outsourcing services in a Lean Mouse Facility**
Alberto Gobbi, *European Institute of Oncology and COGENTECH S.C.A.R.L., Italy*
- 08:20 S15-2 ▶ A third option: Outsourcing + indoor**
Sara Capdevila, *PRBB, Spain*
- 08:40 S15-3 ▶ Right-sourcing your animal care and use programme**
Ernesto de la Cueva, *Charles River, Spain*
- 09:20** Questions and discussion

Session 31 - Severity assessment and endpoints in disease models

▶ Room 116+117

Chairpersons ▶ Dirk Wedekind / Anne-Dominique Degryse

- 08:00 S31-1 ▶ Severity assessment under Directive 2010/63/EU**
David B. Anderson, *Convenor FELASA/ESLAV/ECLAM WG on Severity Classification, United Kingdom*
- S31-2 ▶ Report of FELASA/ESLAV/ECLAM Working Group on Severity. Approach of the WG**
David B. Anderson, *Convenor FELASA/ESLAV/ECLAM WG on Severity Classification, United Kingdom*
- S31-3 ▶ Severity assessment of mouse models used in oncology studies**
David B. Anderson, *Convenor FELASA/ESLAV/ECLAM WG on Severity Classification, United Kingdom*
- 08:35 S31-4 ▶ Severity assessment of a rat stroke model**
Ana Criado, *Aptuit, Italy*
- 08:45 S31-5 ▶ Severity assessment: A useful refinement tool in regulatory toxicology studies**
Carla Bol, *WIL Research Laboratories, The Netherlands*
- 08:55 S31-6 ▶ Severity assessment of a rat arthritis model**
Istvan Gyertyan, *Gedeon Richter Plc., Hungary*
- 09:05 S31-7 ▶ Severity assessment in GMOs**
Dirk Wedekind, *Hannover Medical School, Germany*
- 09:15 S31-8 ▶ Conclusion: Frameworks and tools of work**
Susanna Louhimies, *European Commission, DG Environment, Belgium*
- 09:25** Questions and discussion
- 09:30** **Coffee break** ▶ Exhibition Area



Scientific Programme

Tuesday ▶ 11 JUNE

Session 16 - Implementation of occupational health and safety programmes

▶ Room 114

Chair ▶ Juan Rodríguez

- 10:00** **S16-1 ▶ Occupational health and safety program in veterinary vaccine R&D**
Patrick Hardy, *AFSTAL*
- 10:40** **S16-2 ▶ Occupational health and safety program in an animal imaging facility**
Jordi Llop, *CIC bioMAGUNE, Spain*
- 11:05** **S16-3 ▶ Occupational health and safety issues working with animals under biosafety conditions**
Gonzalo Pascual, *Animal Health Research Center, Spain*

Session 28 - Data sharing

▶ Room 115

Chair ▶ Ghislaine Poirier

- 10:00** **Introduction**
- 10:05** **S28-1 ▶ Cross company data-sharing in pharmaceutical development: The good, the could and the should**
Kathryn Chapman, *NC3Rs, United Kingdom*
- 10:25** **S28-2 ▶ EEG markers of motor activity in wild type and TASTPM mice: A multi-laboratory data-sharing experience in the framework of PharmaCog project**
Claudio Babiloni, *University Sapienza of Rome, Italy*
- 10:45** **S28-3 ▶ How open research can make academia and animal use more efficient**
Mark Hahnel, *Figshare, United Kingdom*
- 11:05** **S28-4 ▶ Data management for the international mouse phenotyping consortium**
Andrew Blake, *International Mouse Phenotyping Consortium, United Kingdom*
- 11:25** Questions and discussion

Session 04 - Europe - USA harmonisation on health monitoring for rodent shipments and harm-benefit analysis in ethical review

▶ Room 116+117

Chairpersons ▶ Javier Guillén / Kathy Laber

- 10:00** **S04-1 ▶ The AALAS-FELASA Liaison Body**
Javier Guillén, *AAALAC International, Spain*, and Kathy Laber, *Medical University South Carolina, USA*
- 10:20** **S04-2 ▶ Update from the AALAS-FELASA Working Group on Health Monitoring of Rodents for Animal Transfer**
Jan-Bas Prins, *Leiden University Medical Centre, The Netherlands*
- 10:55** **S04-3 ▶ Working Group on Harm-Benefit Analysis**
Christian Newcomer, *AAALAC International, USA*

11:30 Plenary Lecture

▶ Room 116+117

PL2 ▶ High throughput and traditional phenotyping, how international efforts can help our research
Cory Brayton, *Johns Hopkins University, USA*

Introduced by ▶ Xavier Cañas

12:30 **Poster presentation (odd numbers) and lunch** ▶ Exhibition Area



Session 06 - Quality assurance of education and training in LAS

▶ Room 114

Chairpersons ▶ Bryan Howard / Ana Isabel Santos

14:00

Introduction

Bryan Howard, *FELASA Education and Training Board* and Ana Isabel Santos, *Faculty of Medical Sciences, UNL, Portugal*

14:05

S06-1 ▶ Examination strategies in laboratory animal science

Axel Kornerup Hansen, *Faculty of Life Sciences, Denmark*

14:30

S06-2 ▶ Engaging with students: Obtaining and using feedback to enhance quality

Anna Olsson, *Institute for Molecular and Cell Biology, Portugal*

14:55

S06-3 ▶ A simple modular scheme of education in animal experimentation: The Swiss example

Philippe Bugnon, *Zurich University, Switzerland*

15:20

Questions and discussion

Session 29 - Experimental models and the microbiota

▶ Room 115

Chairpersons ▶ André Bleich / Marion Berard

14:00

S29-1 ▶ Modelling the host-microbial superorganism. Taking experimental animal husbandry to the next level

Kathy McCoy, *University of Bern, Switzerland*

14:30

S29-2 ▶ A European Consortium for Gnotobiology

Marion Berard, *Institut Pasteur, France*

14:45

S29-3 ▶ Hygienic monitoring of germ-free and gnotobiotic animals

Werner Nicklas, *German Cancer Research Center, Germany*

15:00

S29-4 ▶ A multi-hit model: The IL10-deficient mouse model for inflammatory bowel disease

André Bleich, *Hannover Medical School, Germany*

15:15

S29-5 ▶ ORAL COMMUNICATION: Gut commensal microbiota and TLR expression variations in rats depending on commercial origin

Sandra Barbosa, *Autonomous University of Barcelona, Spain*

15:23

S29-6 ▶ ORAL COMMUNICATION: The phenomenon of bacterial translocation from the gut in experimental fungal infection neutropenic animal models

Labros Sabracos, *University Hospital Attikon, Greece*

Session 17 - Adapting to zebrafish: Facilities and management

▶ Room 116+117

Chairpersons ▶ Juan Martín Caballero / Marco Brocca

14:00

S17-1 ▶ Setting up a zebrafish facility

Juan Ramos, *PRBB, Spain*

14:20

S17-2 ▶ Setting up a new zebrafish facility inside an existing laboratory animal area, challenges and results

Isabelle Grandjean, *Institute Curie, France*

14:40

S17-3 ▶ Zebrafish breeding, try to raise awareness through new technologies and improvements

To be confirmed

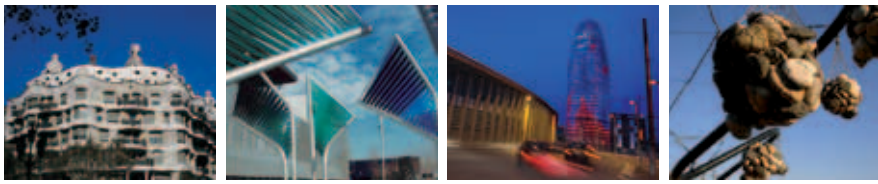
15:00

S17-4 ▶ A modern way of managing a zebrafish facility, focus on improving zebrafish nutrition and tanks washing with detergents

Erik Sanders, *Washington University, USA*

15:20

Questions and discussion



Scientific Programme

Tuesday ▶ 11 JUNE

Session 05 - From national legislation to the new European Directive 2010/63 in Eastern European countries

▶ Room 119

Chairpersons ▶ Nikos Kostomitsopoulos / Timo Nevalainen

- 14:00** **S05-1 ▶ Implementation of the new European Directive 2010/63 in Baltics**
Osvaldas Ruksenas, *Vilnius University, Lithuania*
- 14:15** **S05-2 ▶ From national legislation to the new European Directive 2010/63 in Republic of Bulgaria**
Petya Petkova, *Bulgarian Food Safety Agency, Bulgaria*
- 14:30** **S05-3 ▶ Hungary**
Gabor Bognar, *Gedeon Richter P.L.c. R&D, Hungary*
- 14:45** **S05-4 ▶ Implementation of the Directive 2010/63 to the Polish law**
Marta Gajewska, *Curie Memorial Cancer Center and Institute of Oncology, Poland*
- 15:00** **S05-5 ▶ Romania**
Bogdan Marinescu, *Victor Babes Institute, Romania*
- 15:15** Questions and discussion
- 15:30** **Coffee break** ▶ Exhibition Area

Session 18 - Human resources management

▶ Room 114

Chairpersons ▶ Joana Visa / Jussi Helppi

- 16:00** **S18-1 ▶ Managing laboratory animal facilities with the right attitude. Create a management culture that works**
Jussi Helppi, *MPI-CBG, Germany*
- 16:40** **S18-2 ▶ Human resource management in a transgenic core facility**
Ronald Naumann, *MPI-CBG, Germany*
- 17:05** **S18-3 ▶ Consider the welfare not only of animals, but of people and machines as well in the vivarium!**
Bruce W. Kennedy, *California State Polytechnic University – Office of Research, USA*

Session 30 - Experimental models for the study of metabolic diseases

▶ Room 115

Chairpersons ▶ Ricardo Afonso / Sam Virtue

- 16:00** **S30-1 ▶ An indirect calorimeter for 200 euros?**
Sam Virtue, *Addenbrooke's Hospital Cambridge, United Kingdom*
- 16:20** **S30-2 ▶ Rising to the challenge of EU/2010/63: Reducing severity of animal studies of diabetes**
Nuno Franco, *IBMC, Portugal*
- 16:40** **S30-3 ▶ Rat models of obesity used for insulin resistance studies: A comparison from the user's perspective**
Ricardo Afonso, *New University of Lisbon, Portugal*
- 17:00** **S30-4 ▶ ORAL COMMUNICATION: Correlation between metabolic syndrome and renal injury in porcine model**
Diego Celdrán, *Centro de Cirugía de Mínima Invasión Jesús Usón, Spain*
- 17:10** **S30-5 ▶ ORAL COMMUNICATION: The influence of oral LPS on development of glucose intolerance in high-fat fed mice**
Merete Ellekilde, *University of Copenhagen, Denmark*
- 17:20** Questions and discussion



Session 07 - Pain in laboratory animals

▶ Room 116+117

Chairpersons ▶ Ignacio Álvarez / Javier Benito

16:00

S07-1 ▶ Pain in laboratory animals

Ignacio Álvarez, *Complutense University, Spain*

16:05

S07-2 ▶ New approaches to pain assessment in laboratory animals

Matthew Leach, *Newcastle University, United Kingdom*

16:45

S07-3 ▶ Chronic pain assessment

Javier Benito, *Complutense University, Spain*

17:05

S07-4 ▶ Sustained release analgesia in laboratory animals

Patricia Foley, *University of Virginia, USA*

17:25

Questions and discussion



Scientific Programme

Wednesday ▶ 12 JUNE

Session 08 - ICLAS, an organisation serving in a global context

▶ Room 114

Chair ▶ Marion Berard

- 09:00** **S08-1 ▶ International Council for Laboratory Animal Science (ICLAS): A global umbrella serving all.**
Patri Vergara, *ICLAS President, Spain*
- In Memoriam Tatsuji Nomura**
Naoko Kagiya, *Central Institute for Experimental Animals, Japan.*
- ICLAS Laboratory Animal Quality Programmes**
Patri Vergara, *Autonomous University of Barcelona, Spain*
- 09:25** **S08-2 ▶ ICLAS Ethics and Animal Welfare Committee: Ethical guidelines for researchers, editors and reviewers**
Hansjoachim Hackbarth, *Hannover Faculty of Veterinary, Germany*
- 09:40** **S08-3 ▶ ICLAS European Training Fellowship Programme**
Javier Guillén, *AAALAC International, Spain*
- 09:55** **S08-4 ▶ How ICLAS can help in Europe: The Turkish example**
Siyami Karahan, *Kirikkale University, Turkey*
- 10:10** **S08-5 ▶ ICLAS FELASA fellowship / presentation of the laureates**
Ann-Christine Eklöf, *Karolinska Institutet, Sweden*; and Nikos Kostomitsopoulos, *Foundation of Biomedical Research of the Academy of Athens, Greece*
- 10:25** Questions and discussion

Session 19 - Biosafety and biocontainment in high-risk experimental models

▶ Room 115

Chairpersons ▶ David Solanes / Uwe Mueller-Doblies

- 09:00** **S19-1 ▶ Engineering controls in animal facilities: Certainty of safety versus simplicity**
Neil Walls, *Neil Walls Consulting, Australia*
- 09:30** **S19-2 ▶ Meeting the challenges of managing different levels of biological risks in multi user facilities**
Uwe Mueller-Doblies, *The Pirbright Institute, United Kingdom*
- 10:00** **S19-3 ▶ ORAL COMMUNICATION: Sterilization of blower units in a new ABSL 3 containment using hydrogen peroxide: Cycle development and validation**
Bastian Pasche, *Centre for Infection Research, Germany*
- 10:10** **S19-4 ▶ ORAL COMMUNICATION: Doing the right things the right way. The importance of safe and secure research**
James Welch, *Elizabeth R Griffin Research Foundation, USA*
- 10:20** Questions and discussion

Session 27 - Neurodegenerative diseases: Design of shared units

▶ Room 116+117

Chairpersons ▶ Rony Kalman / Ignasi Sahún

- 09:00** **S27-1 ▶ Mouse models of neurodegenerative diseases: Behavioural approach**
Ignasi Sahún, *Barcelona Scientific Park, Spain.*
- 09:30** **S27-2 ▶ Primate models of Parkinson's disease: Why? How? and refinement**
Hagai Bergman, *The Hebrew University, Israel.*
- 10:00** **S27-3 ▶ Care and management of animals models of neurodegenerative disease**
Howard G. Rush, *University of Michigan, USA.*
- 10:30** **Coffee break** ▶ Exhibition Area



Session 09 - Pigs as research models

▶ Room 114

Chairpersons ▶ Peter Clausing / Peter Glerup

- 11:00 S09-1 ▶ Genetically engineered pig models for diabetes research**
Eckhard Wolf, *University of Munich, Germany*
- 11:40 S09-2 ▶ Pigs as models in wound healing**
Peter Glerup, *CiTOX LAB Scantox, Denmark*
- 12:00 S09-3 ▶ PET imaging in Göttingen minipig models of neurological and neuropsychiatric disorders and therapeutic interventions**
Anne M. Landau, *Aarhus University, Denmark*
- 12:20 S09-4 ▶ Validating the cognitive holeboard task for pigs**
Sanja Antonides, *University of Utrecht, The Netherlands*

Session 32 - Discovery and toxicology: Alternative methods (preliminary assays to reduce the use of lab animals)

▶ Room 115

Chairpersons ▶ Antonio Martínez Escandell / María José Alonso

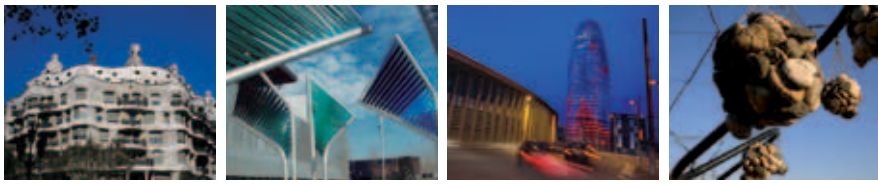
- 11:00 S32-1 ▶ Current status of nanopharmaceuticals**
María José Alonso, *University of Santiago de Compostela, Spain*
- 11:15 S32-2 ▶ What are cells telling us about nanomaterial safety?**
Peter Wick, *Empa Materials Science & Technology, Switzerland*
- 11:45 S32-3 ▶ Nanoparticles as a valuable tool for in vivo toxicology**
Alfonso Garcia-Bennett, *Uppsala University, Sweden*
- 12:00 S32-4 ▶ Early detection of hepatotoxicity in drug development process**
María José Gómez-Lechón, *Hospital Universitario "La Fe", Spain*
- 12:15 S32-5 ▶ The International Consortium for Innovation and Quality in Pharmaceutical Development (IQ) in 3Rs leadership group: The pharmaceutical industry's promotion of alternatives**
Joachim Coenen, *Merck KGaA, Germany*

Session 20 - Transportation of laboratory animals: Legal, health, welfare and supply issues

▶ Room 116+117

Chairpersons ▶ Magda Chlebus / Susanna Louhimies

- 11:00 S20-1 ▶ Transportation of laboratory animals: Research, welfare and legal aspects**
Magda Chlebus, *EFPIA, Belgium*
- 11:05 S20-2 ▶ Continuity of supply: A wake up call**
Kirk Leech, *The Association of the British Pharmaceutical Industry (ABPI), United Kingdom*
- 11:15 S20-3 ▶ Relevant legislation and guidelines**
Oscar Dignoes, *Ministry of Agriculture, Spain*
- 11:30 S20-4 ▶ An integrated strategy to support airline companies**
François Lachapelle, *GIRCOR, INSERM, France*
- 12:45 S20-5 ▶ The importance of optimized global transport of nonhuman primates**
Lars Mikkelsen, *MSD, Singapore*
- 12:00** Questions and discussion
- 12:30** **Poster presentation (even numbers) and lunch** ▶ Exhibition Area



Scientific Programme

Wednesday ▶ 12 JUNE

Session 21 - Quality implementation and assessment in animal units

▶ Room 114

Chairpersons ▶ Anne-Dominique Degryse / Antonio Martínez-Escandell

- 14:00 S21-1 ▶ ISO and GLP quality management systems in the context of regulatory requirements**
Antonio Vila-Coro, Vivotecnia, Spain
- 14:20 S21-2 ▶ GLP and AAALAC: Competitors or partners? Opportunities and challenges of GLP certified and AAALAC accredited organizations**
Joachim Coenen, Merck KGaA, Germany
- 14:40 S21-3 ▶ AAALAC accreditation in a university environment**
Harry van Herck, Academic Medical Center University of Amsterdam, The Netherlands.
- 15:00 S21-4 ▶ Continuous improvement of quality in animal care and use programs: Strategies for optimizing animal welfare and research using quality improvement techniques with performance standards**
Hilton Klein, Harlan Laboratories, USA
- 15:20** Questions and discussion

Session 33 - Use of stem cells in disease animal models

▶ Room 115

Chairpersons ▶ Daniela Salvatori / Montserrat Rigol

- 14:00 S33-1 ▶ Novel animal models for blood and immune disorders and stem cell biology**
Frank Staal, *Leiden University Medical Center, The Netherlands*
- 14:20 S33-2 ▶ Replacement of the in vivo assay "teratoma" with a new in vitro bioinformatic assay for testing pluripotency of stem cells: Development and validation**
Daniela Salvatori, *Leiden University Medical Center, The Netherlands*
- 14:40 S33-3 ▶ The porcine myocardial infarction model: Surgical approach and tissue engineering**
Carolina Gálvez, *Institut Germans Trias i Pujol, Spain*
- 15:00 S33-4 ▶ Murine model of myocardial infarction: Advantages and pitfalls for cardiac regeneration**
Carolina Soler-Botija, *Hospital Universitari Germans Trias i Pujol, Spain*
- 15:20** Questions and discussion

Session 10 - Health and welfare in NHP: A review

▶ Room 116+117

Chairpersons ▶ Thierry Decelle / Jan Langermans

- 14:00 S10-1 ▶ Breeding colony and pathology problems**
Ivan Balansard, *CNRS Marseille, France*
- 14:20 S10-2 ▶ NHPs quarantine and health screening**
Marielle Vandebunden, *University Louis Pasteur, France*
- 14:40 S10-3 ▶ Macaque breeding management: Introduction, success rate and tenure length of alphamales**
Annet Louwerse, *Biomedical Primate Research Centre, The Netherlands*
- 15:00 S10-4 ▶ Negative and positive reinforcement – A way to avoid unnecessary suffering**
Eva-Marie Wergard, *Karolinska Institute, Sweden*
- 15:15 S10-5 ▶ Defining, observing and assessing abnormal behaviour in nonhuman primates**
Kathryn Bayne, *AAALAC International, USA*
- 15:30** Coffee break ▶ Exhibition Area



Session 11 - Health and welfare in GM rodents: A review

▶ Room 114

Chairpersons ▶ Marcello Raspa / Ricardo Feinstein

- 16:00 S11-1 ▶ Revision of FELASA guidelines for health monitoring of rodents and rabbits**
Ricardo Feinstein, *National Veterinary Institute, Sweden*
- 16:30 S11-2 ▶ Rodent health monitoring: Critical steps with regard to technical development and innovation**
André Bleich, *Institute for Laboratory Animal Science, Hannover Medical School, Germany*
- 16:50 S11-3 ▶ Health and welfare in genetically altered models: Developing mouse welfare assessments**
James Bussell, *Wellcome Trust Sanger Institute, United Kingdom*
- 16:10 S11-4 ▶ Redesigning health monitoring: A win-win experience for 3Rs and resources**
Dolores Bonaparte, *Instituto de Medicina Molecular, Portugal*
- 16:20 S11-5 ▶ Potential vertical transmission: The case of mouse Norovirus**
Ferdinando Scavizzi, *National Research, CNR, Italy*

Session 34 - Cardiovascular models: Refinement in experimental surgery in large animals

▶ Room 115

Chairpersons ▶ M^a Fernanda Martín Cancho / Dara Kraitchman

- 16:00 S34-1 ▶ Animal models of cardiovascular disease for research and training**
Verónica Crisóstomo, *Minimally Invasive Surgery Centre "Jesús Usón", Spain*
- 16:30 S34-2 ▶ Cardiovascular imaging in large animal models**
Dara Kraitchman, *Johns Hopkins University, USA*
- 17:00 S34-3 ▶ Cardiovascular research: An overview of minipigs and pigs as animal models**
Niels-Christian Ganderup, *Ellegaard Göttingen Minipigs A/S, Denmark*

Session 22 - Approaches to ethical review after the implementation of the European Directive 2010/63/EU

▶ Room 116+117

Chairpersons ▶ Martje Fentener van Vlissingen / Sally Robinson

- 16:00 S22-1 ▶ When is it animal testing morally acceptable?**
Henriette Bout, *University of Amsterdam, The Netherlands*
- 16:30 S22-2 ▶ Overview of project (ethical) evaluation in Europe under the Directive 2010/63/EU**
Javier Guillén, *AAALAC International, Spain*
- 16:55 S22-3 ▶ Diversity in the implementation and organisation of project evaluations across some European countries: Round-table session**
Sally Robinson, *AstraZeneca, United Kingdom*; Martje Fentener van Vlissingen, *Erasmus Laboratory Animal Science Center EDC, The Netherlands*; Javier Guillén, *AAALAC International, Spain*; Thierry Decelle, *Sanofi Pasteur, France*; Cornelia Exner, *Philipps-Universität Marburg, Germany*



Scientific Programme

Thursday ▶ 13 JUNE

Session 23 - Sperm cryopreservation in non-rodent species

▶ Room 115

Chairpersons ▶ Pilar Pallarés / Fiammetta Berlinguer

08:30 S23-1 ▶ It is possible to predict semen-fertilizing ability after cryopreservation?

Fiammetta Berlinguer, *University of Sassari, Italy*

09:00 S23-2 ▶ Sperm cryopreservation in wild animals

M^a Jesús Sánchez-Calabuig, *INIA, Spain*

09:30 S23-3 ▶ State of the art of the cryopreservation of fish sperm

Elsa Cabrita, *ICMAN-Institute of Marine Science of Andalusia, Spain*

Session 35 - Genetically altered models. Why research does not always translate

▶ Room 116+117

Chairpersons ▶ Belén Pintado / Jan-Bas Prins

08:30 S35-1 ▶ Genetically altered models: Do they translate? An introduction

Jan-Bas Prins, *Leiden University Medical Centre, The Netherlands*

08:45 S35-2 ▶ Both coding and non-coding genomic DNA sequences contribute to define the genetic diversity and the phenotype in mice

Lluís Montoliu, *CNB-CSIC, Spain*

09:15 S35-3 ▶ More knowledge with fewer animals in less time

Ivo Huijbers, *The Netherlands Cancer Institute, The Netherlands*

09:45 S35-4 ▶ ORAL COMMUNICATION: Managing genetic drift in mice and rats models colonies

Emmanuel Gomas, *Charles River Laboratories, France*

09:55 Questions and discussion

10:00 Coffee break ▶ Exhibition Area



Session 12 - Farm animals and poultry as research models

▶ Room 114

Chairpersons ▶ Samuel Vidal / Ricard March

10:30 S12-1 ▶ The management of farm animals in a BSL 3 conditions

Patrick Hardy, *AFSTAL, France*

11:00 S12-2 ▶ The Guide for the care and use of agricultural animals in research and teaching and its utilization to provide guidance in agricultural and biomedical research

Bart Carter, *South Western Medical Center, USA*

11:30 S12-3 ▶ Animal welfare assessment at experimental facilities in dairy cattle

Isabel Blanco Penedo, *IRTA, Spain*

11:45 S12-4 ▶ Management of poultry in research

Roser Dolz, *Universitat Autònoma de Barcelona, Spain*

Session 24 - Disaster planning

▶ Room 115

Chairpersons ▶ Ernesto de la Cueva / Thierry Decelle

10:30 Introduction

Ernesto de la Cueva, Charles River, Spain

10:35 S24-1 ▶ Disaster plan and crisis preparedness

Thierry Decelle, *Sanofi Pasteur, France*

11:15 S24-2 ▶ Don't Panic! Dealing with the disaster

Adrian Deeny, *University College London, United Kingdom*

11:35 S24-3 ▶ Crisis communications

Melvyn Young, *Novartis International AG, Switzerland*

11:55 Questions and discussion

Session 36 - Managing genetically altered colonies

▶ Room 116+117

Chairpersons ▶ Belén Pintado / Jan-Bas Prins

10:30 S36-1 ▶ Transgenic mouse colony management

Heather Marshall, *Stowers Institute for Medical Research, USA*

11:00 S36-2 ▶ Archiving genetically altered lines: When and how to create your backup

Belén Pintado, *Centro Nacional de Biotecnología, Spain*

11:15 S36-3 ▶ Genetic contamination, there is always the risk. The importance of genetic monitoring

Jan-Bas Prins, *Leiden University Medical Centre, The Netherlands*

11:30 To outsource or not to outsource, that is the question

Round table and discussion

12:00 FELASA 2013 Award & Plenary Lecture

PL3 ▶ The two Rs approach

Timo Nevalainen, *University of Eastern Finland*

Introduced by ▶ Jan-Bas Prins

▶ Room 116+117

13:00 Closing Ceremony

▶ Room 116+117


09:00-12:00 Workshop 01 - New challenges in education and training in LAS: Using e-learning ▶ Room 118

Chair ▶ Timo Nevalainen

Description ▶ Laboratory animal science (LAS) is confronting major changes due to the new Directive 2010/63/EU and the recent advances in new technologies to deliver theoretical and practical education and training. The laboratory animal science community will be faced with new challenges to meet the objectives of the Directive but can see this as an opportunity to further advance laboratory animal science training and education. While excellent courses exist, not enough LAS programs are available across Europe at present. Online courses can help close this gap, as they are available anywhere at any time and are not limited to a certain number of participants. Further, they offer more flexibility for both teacher and student. Theoretical knowledge and practical aspects of LAS can be taught at a students' own study pace. In cases where course providers want to offer class-room teaching the educational quality can be improved by offering e-learning as preparation, thus spending more time discussing the topics with the students. The aim of the workshop will be to discuss the challenges and opportunities that e-learning in LAS will provide.

09:00-12:00 Workshop 04 - Planning an effective animal imaging unit ▶ Room 114

Chair ▶ Hanna-Marja Voipio

Description ▶ In recent years, live animal imaging facilities for diverse type of scientific work have been built and planning of new facilities is in progress. Organizing the practical work and logistics in these imaging centres is a demanding task with many challenges. Transporting animals from one institute to another poses a risk of spreading infectious diseases. What happens to your animal model in a multimodality, multisite study? The seminar focuses on practical challenges how to plan an imaging unit within the old facility. Target group: Unit managers, planners, research personnel of laboratory animal facilities and veterinarians working with animal imaging techniques.

09:00-12:00 Workshop 07 - Experimental design ▶ Room 115

Chairpersons ▶ Manuel Berdoy / Marlies Leenaars

Description ▶ Statistics and experimental design in biology are mostly about logic, common sense and using simple techniques (e.g. randomization, blinding) to produce un-biased experimental results. This is good news because this should be relatively straightforward. Yet this is where the biggest blunders are made by professional biologists. This hands-on workshop aims to identify these traps, address how we can best apply experimental design to animal experiments, and describe how design, and its proper reporting, is important when carrying out Systematic Reviews. And we aim to have fun in the process, thereby also demonstrating that the words "enjoyment" and "statistics" can belong in the same sentence, at least sometimes. The workshop is aimed at scientists performing animal research, from research students to post-doc academics and industry based scientists.

09:00 WS07-1 ▶ The essence of experimental design and statistics

 Manuel Berdoy, *Oxford University, United Kingdom*
09:30 WS07-2 ▶ Experimental design practical

 Simon Bate, *Statistical Sciences, Glaxo SmithKline, United Kingdom*
11:30 WS07-3 ▶ Systematic reviews to help experimental design

 Marlies Leenaars, *SYRCLE, Radboud University Nijmegen, The Netherlands*
14:00-15:30 Workshop 02 - How to present our work to Society? ▶ Room 118

Chair ▶ Bella Williams

Description ▶ The session will be on communication of work on animal research and animal welfare to society.

14:00 WS02-1 ▶ Helping the public to understand animal research

 Wendy Jarrett, *Understanding Animal Research, United Kingdom*
14:30 WS02-2 ▶ Staying silent does not help – Ignoring the media is the wrong thing to do

 Edward Sykes, *Science Media Centre, United Kingdom*
15:00 WS02-3 ▶ Communications and animal welfare

 Barney Reed, *Royal Society for the Prevention of Cruelty to Animals (RSPCA), United Kingdom*



Workshops

Tuesday ▶ 11 JUNE

08:00-09:30 Workshop 05 - Design of databases according to the different management needs ▶ Room 118

Chair ▶ Jan-Bas Prins

Description ▶ The objectives are to provide an overview of options and available products in the market: How they address general and more specific management needs, but also to show, which customer demands could be regarded as realistic and those that are not so realistic and the customer's 'does and don'ts' from the suppliers perspective. The workshop is aimed at those involved in designing and implementing "registration software" in animal facilities.

08:00 WS05-1 ▶ Design of animal registration software: One size fits all, tailor made or somewhere in between?

Jan-Bas Prins, *Leiden University Medical Center, The Netherlands*

10:00-11:30 Workshop 08 - Meet the Editor ▶ Room 118

Chairpersons ▶ Beat Riederer / Merel Ritskes-Hoitinga

Description ▶ The Journal "Laboratory Animals" has seen some recent changes and it is therefore important to open the dialogue with affiliated societies, publisher and authors. The FELASA meeting provides the ideal platform for discussion, to compare point-of-views and sense the expectations of authors concerning the future role and position of the journal. In this workshop members of LAS associations are invited to provide input to the editorial board members and the publisher and to have interactive discussions on these points.

10:00 WS08-1 ▶ Publishing your research in a peer-reviewed journal

Louise Skelding, *SAGE, United Kingdom*

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10:15 WS08-2 ▶ Meet the editor

Beat Riederer, *Laboratory Animals Editorial Board, Switzerland*

10:30 WS08-3 ▶ What is the value of systematic reviews of animal studies?

Merel Ritskes-Hoitinga, *Laboratory Animals Editorial Board, The Netherlands*

10:45 WS08-4 ▶ Ethics in animal research and publishing

Anna Olsson, *Laboratory Animals Editorial Board, Portugal*

11:00 Questions and discussion



14:00-15:30 Workshop 06 - Funding opportunities for the European Laboratory Animal Science Community ▶ Room 118

Chair ▶ Gregory Boivin

Description ▶ The objective of the workshop is to familiarize the European scientific community about the funding opportunities in the United States. Three research foundations will be presented by representatives of each organization with information on their target audience, the missions of the foundations, and application procedures. This will be followed by a presentation on how to write a grant for these entities. Following the presentations ample time will be available for questions and answers with the panel. The expected audience includes scientists, veterinarians, veterinary students, and animal care staff.

14:00 Introduction

Gregory Boivin, *Wright State University, USA*

14:05 WS06-1 ▶ Applying for a grant to the ACLAM Foundation

Robert J Russell, *RJ Russell Associates, USA*

14:20 WS06-2 ▶ Applying for a grant to the GLAS Foundation

Claire Hankenson, *University of Pennsylvania, USA*

14:35 WS06-3 ▶ Applying for a grant to CAAT

Joanne Zurlo, *Johns Hopkins Bloomberg School of Public Health, USA*

14:50 WS06-4 ▶ Grant writing tips and how to avoid some pitfalls

Gregory Boivin, *Wright State University, USA*

15:05 Questions and discussion

17:30-19:30 Workshop 11 - Meeting of the T&T Board with FELASA accredited course organisers ▶ Room 118

(by invitation only)


09:00-12:00 Workshop 03 - Aspects of genetic monitoring in rodents

▶ Room 118

Chairpersons ▶ Ana Pérez / James Fahey

Description ▶ The main objectives of this workshop are: (I) To know why it is important to do genetic monitoring and how just phenotype is not sufficient to monitor genetic quality. (II) To clearly identify the genetic background and the mutation through the use of international nomenclature. (III) To explain breeding for inbred, outbreds and speed congenic techniques specific for establishing and maintaining congenic strains and closed colony strains. (IV) To explain classical (ordinary) methods testing biochemical and immunological markers and advanced methods testing SSLP and SNPs which are applicable for genetic monitoring. (V) To explain new policies defining closed colony strains. Genetic drift is real and has to be faced.

09:00 WS03-1 ▶ Why genetic monitoring?
James Fahey, *Jackson Labs, USA*
09:30 WS03-2 ▶ Introduction into the international nomenclature of laboratory rodents
Janice Pendola, *Jackson Labs, USA*
09:50 WS03-3 ▶ Genetic crosses for establishing and maintaining inbred, closed colony strains, outbreds and congenics
Ana Pérez, *Taconic, USA*

10.30

Break

10:45 WS03-4 ▶ Genetic techniques: Classical and advanced methods
Ana Pérez, *Taconic, USA*
11:05 WS03-5 ▶ Genetic monitoring for inbreds and closed colony strains
Hideki Katoh, *Hamamatsu University School of Medicine, Japan*
11:35 WS03-6 ▶ Genetic monitoring and genetic drift
Michael Wiles, *The Jackson Laboratory, USA*
11:00-12:30 Workshop 09 - Practical pathology for research and phenotyping

▶ Room 119

Chair ▶ Cory Brayton

Description ▶ The workshop will provide an overview of: (I) Systematic rodent (mouse) gross examination, including common pathology findings. (II) Systematic dissection and trimming suggestions. (III) Systematic approach to basic microscopic anatomy, and common histopathology findings. (IV) Text and online resources. Familiarity with basic rodent gross anatomy is expected. Techniques and information will be useful to technicians who collect or test tissue specimens, technicians, veterinarians, scientists aiming to submit tissues for pathology, conduct pathology assessments, or interpret pathology reports or results in a research setting that uses pathology for diagnosis (of ill or dead animals), or for phenotyping or other scientific data.

11:00 WS09-1 ▶ Rodent (mouse) gross examination, including common pathology findings
11:30 WS09-2 ▶ Systematic dissection and trimming
12:00 WS09-3 ▶ Systematic approach to basic microscopic anatomy, and common histopathology findings
14:00-15:30 Workshop 10 - Towards evidence-based translational research

▶ Room 118

Chairpersons ▶ Rob de Vries / Carlijn Hooijmans

Description ▶ The aims of our workshop are (1) to let the participants explore which factors explain why the results of animal experiments often do not get reproduced in clinical trials in humans, (2) to discuss with the participants to what extent these factors are avoidable and which stakeholders may play a role in avoiding these factors and (3) to get the participants acquainted with several tools, developed in the context of systematic reviews, that may be helpful for improving the translation of animal data to humans. The target audience are persons directly or indirectly involved in animal experiments the results of which are likely to be translated to the clinic.

Satelite Workshop

Monday ▶ 10 JUNE



12th FELASA SECAL CONGRESS

ANIMAL RESEARCH: Better Science from Fewer Animals

09:00-12:00 SW01 - Mouse sperm cryopreservation

▶ Faculty of Medicine. University of Barcelona

Chairpersons ▶ Jorge Szein / Jesús Martínez Palacio

Description ▶ The main objective of this workshop is to acquaint students on reliable methods of mouse sperm cryopreservation, Jax and Nakagata, without requiring appliances or large investments to establishing a program at their centers. This course involves manipulation of animals and LN2.

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Monday ▶ 10 JUNE

14:00-15:30 **New technologies in rodent and zebrafish health monitoring**

▶ Room 119

New technologies in rodent health monitoring

Matthew H. Myles, *Head of Idexx Radil, Serology R&D*

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Health monitoring for zebrafish

Lela Riley, *Director and General Manager, Idexx Radil BioResearch Services*

16:00-17:30 **Assessing automation in animal facility projects**

▶ Room 118

Allergies and MSD in LA facilities a prospective from an occupational medicine point of view

Massimo Corradi, *Department of Clinical Medicine, Nephrology and Health Sciences, University of Parma, Italy*

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How to solve allergies and MSD with automation

Steve Leary, *Division of Comparative Medicine, Washington University, St. Louis, Missouri, USA*

Faster, better & safer: automation at Imperial College, London: An overview of buildings; related drivers and decision making process to invest in automation

Mandy Thorpe, *Central Biomedical Services, Imperial College, London UK*

Integral cage change procedure and consequent work load in the washing area, new automation technologies to solve the issue

Marco Pagani, *Tecniplast Corporate Offices, Buguggiate, Italy*

Tuesday ▶ 11 JUNE

16:00-17:30 **Getting beyond compliance - Development in rodent cage design and care procedures** ▶ Room 118

Chair ▶ James Wallace
Science Associates, United Kingdom

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"Mind my head" – Improved welfare for head mounted rats with the GR1800 "Double Decker cage"

Caroline Chadwick, *Biomedical service Unit; University of Birmingham, United Kingdom*

Effect of two different individually ventilated cage (IVC) systems on laboratory mouse behavior and anxiety

Oliver Burman, *School of Life Sciences, University of Lincoln, Riseholme Park, United Kingdom*

Exposure and density of rat allergens in an animal room and for personnel. A comparison between novel IVC equipment for rats and conventional open cages

Ann Christine Eklöf, *Karolinska University Hospital, Stockholm Sweden*

Improving the welfare of animal research by standardized enriched housing conditions and longitudinal investigation of their behavioral display

Sally Makady, *Franz Penzoldt Zentrum, Uniklinikum Erlangen Nurnberg, Germany*



Thursday ▶ 13 JUNE

08:30-10:00 **Making sense of mouse nomenclature, genetic background effects and the importance of genetic stability**

▶ Room 118

Charles Clifford / Thomas Volz, *Charles River*

Janice Pendola / Barbara Witham, *The Jackson Laboratory*

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08:30-10:00 **Cryopreservation of rodents, reproductive sciences and colony management of transgenic rodents – 3R management**

▶ Room 119

Advanced cryopreservation methods:

New ways to manage genetically modified mouse colonies

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Stephen Linnel, *MBA, Senior Business Unit Manager,*

Reproductive Sciences and Breeding Services The Jackson Laboratory, Bar Harbor, Maine, USA

Reproductive sciences: Another method to manage your breeding of transgenic rodents

Karim Mesbah, *PhD, Director Reproductive Sciences, Customized Breeding Department Janvier, France*



10-13 June, 2013 • **Barcelona**, Spain

Awards

Thursday ▶ 13 JUNE

12:00-13:00 2013 FELASA Award

FELASA established in 2007 a triennial Award to recognize and reward a defined piece of original scientific work on any aspect of laboratory animal science, housing, husbandry or welfare that could lead or has led to changes or improvements into how animals are utilized in research, testing or education within Europe and that is consistent with FELASA`s aims and objectives.

The recipient of the 2013 FELASA Award is **Timo Nevalainen**, who will give a plenary lecture at the award ceremony.

13:00-13:30 Harlan Best Free Communication Award (during the Closing Ceremony)

One of the objectives of the company Harlan Laboratories Models S.L. is to promote scientific research related to the rational use of laboratory animals. For this reason, Harlan will give a new award, in this instance for the best free communication presented at the 12th FELASA SECAL Congress.

SECAL Best Poster Awards

All presented posters will be eligible for nomination for these awards, provided they are visible throughout the whole Congress and the authors are present during the Closing Ceremony.

A Poster Award Committee will review all the posters during the Congress. Selection will be based on the quality of the contents, originality and clarity of the presentation.

The winners (first and second prize) will be announced during the Closing Ceremony on Thursday 13 June.

Publications

The abstracts of the **12th FELASA SECAL Congress** have been published by the **Journal of the American Association for Laboratory Animal Science (JAALAS)**, in its **May issue (vol. 52, no. 3)**. It will be available for the congress delegates (please, see the USB stick), and also for the AALAS members through the journal's webpage.

JAALAS
Journal of the American Association for Laboratory Animal Science

The works presented in the **12th FELASA SECAL Congress** will be eligible to be selected for publication in **LabAnimal** as papers, previous overcoming a peer-review process. Accepted papers will be published in ordinary numbers of the journal, as well as in a later supplement devoted to the 12th FELASA SECAL Congress.

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