

TT2010 FINAL PROGRAM, updated March 17, 2010

Monday, March 22, 2010

TT2010 Registration

Welcome address: Boris Jerchow, Walter Rosenthal, Lluís Montoliu

SESSION I: **Technical Advances and New Tools.** Chair: Michael Bader

Generation of genetically engineered animals using zinc-finger nucleases

Ignacio Anegón INSERM, UMR 643, Nantes, France

Nuclear transfer as a new tool for preserving mouse strain **Teruhiko Wakayama** RIKEN Center for Developmental Biology, Kobe, Japan

Rodent transgenesis mediated by a novel hyperactive Sleeping Beauty transposon system

Lajos Mates Max Delbrück Center for Molecular Medicine, Berlin, Germany

Inducible gene knockdown in rats using RNA interference technology

Michael Bader Max Delbrück Center for Molecular Medicine, Berlin, Germany

Lunch/Posters

SESSION II: **Short Presentations I** Chairs: Ingo Voigt and Katja Becker

Zygote restraint and DNA delivery without a holding pipette or a microinjection pump

Sandra H. Burnett

Microbiology and Molecular Biology Department, Brigham Young University, Provo, UT, USA

RNAi mediated knockdown of gene activities in transgenic rats **Kai Schönig** Central Institute of Mental Health, Mannheim, Germany

Investigation of the effect of LIF and bFGF on rabbit ESC pluripotency and derivation efficiency

Pouneh Maraghechi Agricultural Biotechnology Center, Gödöllő, Hungary

Crisp4 iCre knock-in mice have sperm defective in binding to zona pellucida, and express the iCre recombinase predominantly in the proximal epididymis

Heikki T. Turunen Department of Physiology, Institute of Biomedicine and Turku University Graduate School of Biomedical Sciences, University of Turku, Finland

SESSION III: **Running a Transgenic Service Facility – Round Table**

Chair: Ingo Voigt and Katja Becker

Running a Transgenic Unit

Ana Novoa Transgenic Unit, Instituto Gulbenkian de Ciência, Oeiras , Portugal

Running a Transgenic Mice Facility in Uruguay, South America. A Fulfilled Challenge

Martina Crispo Unidad de Animales Transgénicos y de Experimentación, Institut Pasteur de Montevideo, Uruguay

Overview of the Transgenic mouse Core Facility of DMBR-Ugent **Tino Hochepped** University of Ghent Discussion

Coffee break

SESSION IV: **ISTT Prize for Transgenic Technologies** sponsored by genOway

Chair: Lluís Montoliu

Prize Talk: **Francis Stewart**

Advanced transgenesis and genome engineering using recombineering and site specific recombinases
Genomics, BioInnovationsZentrum, Technische Universität Dresden, Germany

Dinner

Tuesday, March 23, 2010

SESSION V: **Stem Cells** Chair: Benoît Kanzler

Induced Pluripotency **Hans Schöler** Department of Cell and Developmental Biology, Max Planck Institute for Molecular Biomedicine, Münster, Germany

Generation of embryonic stem cells from mouse and rat **Jennifer Nichols** Centre for Stem Cell Research, University of Cambridge, Tennis Court Road, Cambridge, UK

Gene Targeting in Mouse Eggs via Zinc-Finger Nucleases **Ralf Kühn** Institute for Developmental Genetics, Helmholtz Center Munich, Munich, Germany and Technical University Munich, Munich, Germany

Lessons learned from working with C57BL/6 ES cell lines **Branko Zevnik** TaconicArtemis GmbH, Cologne, Germany Coffee break

SESSION VI: **Ethical Issues, Animal Welfare** Chair: Boris Jerchow

Pros and Cons of Animal Experiments **Ivar Aune** Freelance Sciencewriter, Germany

The Challenges of Regulating Animal Research – A Global View **Judy MacArthur Clark** Animals Scientific Procedures Inspectorate, Home Office, London, UK

Accreditation of (Transgenic) Animal Care and Use Programmes **Javier Guillen** European Activities, AAALAC International, Pamplona, Spain Lunch/Posters

SESSION VII: **Laboratory Animals and Their Environment** Chair: Anne Plück

Mouse Coat Color Genetics **Lluis Montoliu** Centro Nacional de Biotecnología (CNB-CSIC), Madrid, Spain

Ultrasonic vocalizations in rodents – relevance for rodent models of neuropsychiatric disorders
Markus Wöhr Laboratory of Behavioral Neuroscience, National Institute of Mental Health, National Institutes of Health, Bethesda, USA

Light and the temporal structure in the mouse **Menno Gerkema** Dept Chronobiology; University of Groningen

SESSION VIII: **Short Presentations II** Chair: Anne Plück

Evaluation of the chromatin barrier activity of the chicken β - globin insulator in ovine nuclear donor cells **Silvia Nicolas** Instituto de Desarrollo Ganadero y Sanidad Animal, University of Leon, Spain

A linearized human chromosomal vector as a new tool to generate transgenic mice
An Weuts Dept. of Human Genetics – Human Genome Lab – VIB11, K. U. Leuven, Belgium

ISTT General Assembly

TT2010 Gala Dinner

Wednesday, 24th March, 2010

SESSION IX: **Cryopreservation And IVF – Round Table** Chair: Franciscus van der Hoeven

In Vitro Fertilization in the mouse **Robert Taft** The Jackson Laboratory, Bar Harbor, ME, USA,
Jane Farley The Jackson Laboratory, Bar Harbor, ME, USA

Maintaining a Successful Cryopreservation Program **Carlisle Landel** Kimmel Cancer Center and Department of Microbiology and Immunology, Thomas Jefferson University, Philadelphia, PA, USA

Cryopreservation and reproduction assisted techniques at the transgenic core facility of the Biotechnology Labor (BTL) at the University of Heidelberg

Frank Zimmermann Biotechnology Labor, IBF- University of Heidelberg Discussion

Coffee break

SESSION X: **International Projects**

Chair: Geert Michel

The European Conditional Mouse Mutagenesis Program (EUCOMM)

Wolfgang Wurst Helmholtz Center Munich, Institute of Developmental Genetics, Germany

Systemic analysis is needed - the German Mouse Clinic and beyond

Martin Hrabe de Angelis Helmholtz Zentrum München; Institute of Experimental Genetics, Munich, Germany

A survey to establish performance standards for the production of transgenic mice

Thomas J. Fielder Transgenic Mouse Facility, University Laboratory Animal Resources, University of California-Irvine

Lunch/Posters

SESSION XI: **Phenotyping** Chair: Branko Zevnik

Non-Mendelian inheritance in the mouse **Hermann Bauer** Dept. of Developmental Genetics, MPI for Molecular Genetics, Berlin, Germany

Mouse models reveal roles of CLC chloride/proton exchangers in endosomal/lysosomal function and secretion **Thomas J. Jentsch** Max-Delbrück-Centrum für Molekulare Medizin (MDC) and Leibniz-Institut für Molekulare Pharmakologie (FMP), Berlin, Germany

Transgenic mice 30 years later: Genetic dissection of AP-1 (Fos/Jun) Functions in Development and Disease **Erwin F. Wagner** Cancer Cell Biology Program, Spanish National Cancer Centre (CNIO), Melchor Fernandez Almagro, Madrid, Spain

Closing (Registration Awards, next TT meeting, closing remarks) Lluís Montoliu, Thom Saunders/Peter Sobieszczuk, Boris Jerchow

2010 Workshops

Workshop I: Hands On Workshop „Basic Techniques“

Instructors: Katja Becker, Thomas Hennek, Benoît Kanzler, Christian Klasen, Geert Michel, Roland Naumann, Anne Plücker, Tanja Tropartz, Franciscus van der Hoeven, Ingo Voigt, Johannes Wilbertz

Workshop II: Mouse Colony Management Software (MCMS)

Chair: Boris Jerchow

MausDB: the open source phenotype- and mouse management system of the German Mouse Clinic
Holger Maier

Helmholtz Zentrum München - German Research Center for Environmental Health (GmbH),
Ingolstädter, Neuherberg, Germany

JAX Colony Management System (JCMS): An extensible colony and phenotype data management
system

Chuck Donnelly

The Jackson Laboratory, Bar Harbor Maine, USA

Break Workshop II: MCMS

Workshop II: MCMS continued Chair: Boris Jerchow

Solving information management challenges of modern lab animal science – a showcase of the
PyRAT animal facility management software

Thomas Komarek

Scionics Computer Innovation GmbH, Dresden, Germany

Mausoleum

Hanns-Eugen Stöffler

Mönsheim, Germany