



INFRAFRONTIER / IMPC workshop

Promoting the international exchange of mouse mutant resources

Munich, Munich Sheraton Airport Hotel, May 8-9th, 2014



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Organizer

INFRAFRONTIER - <https://www.infrafrontier.eu/>

Funding will be provided by the EC FP7 funded InfraCoMP project. InfraCoMP's main objective is to coordinate collaboration between the INFRAFRONTIER Research Infrastructure and the International Mouse Phenotyping Consortium (IMPC). To this end, InfraCoMP organizes regular workshops that address the central issues that need to be resolved to ensure a fruitful cooperation between the two initiatives. Key InfraCoMP topics are:

- Mouse Phenotyping
- Mouse Production Archiving and Distribution
- Access to Phenotyping Data
- Community Engagements

Scope

- Main meeting objective is to simplify the international exchange of mouse mutant resources and to define the procedural changes required to achieve this goal
- Review key issues facing the mouse community and mouse repositories
- Review of major mouse mutant resources and restrictions on resource sharing
- Discussion of technical issues underpinning the international exchange of mouse mutant resources
- Focus on IP issues and the burdensome transactional negotiations involving licenses and MTAs
- Present best practices in sharing research tools
- Discuss the role of mouse repositories in the international exchange of mouse mutant resources
- Facilitate discussions on sharing of research tools among key stakeholders

Participants

- Directors of major mouse repositories
- IP and technology transfer experts
- Representatives of scientific journals
- Funders of research

Outcome

- Summary document and report to EC
- Published account of meeting to stimulate debate and to share results of our discussion



May 8th

10:00 - 11:00 Registration of participants and coffee

Contemporary issues facing the mouse community: Chair - Martin Hrabé de Angelis

11:00 - 11:10 Welcome address / Meeting objectives - Martin Hrabé de Angelis

11:10 - 11:20 INFRAFRONTIER - Martin Hrabé de Angelis

11:20 - 11:40 Contemporary issues facing the mouse community / a user perspective - Ian Jackson

11:40 - 12:00 Contemporary issues facing the for-profit mouse community - Colin Dunn

12:00 - 12:20 Contemporary issues facing mouse repositories - Lauryl Nutter

12:20 - 12:30 Discussion

12:30 - 13:45 Lunch break

Status and access to major 'omics' resources: Chair - Martin Hrabé de Angelis

13:45 - 14:00 IKMC / Status and sharing of resource and data - Wolfgang Wurst

14:00 - 14:15 Commercialisation of the EUComm resource - Emmanuelle Astoul

14:15 - 14:35 IMPC / Status and sharing of resources and data - Steve Brown

14:35 - 14:55 The Structural Genomics Consortium - supporting the discovery of new medicines through open access research - Chas Bountra

14:55 - 15:15 Discussion

Technical issues underpinning the international exchange of mouse mutant resources

Transportation of mice and germplasm: Chair - Yuichi Obata

15:15 - 15:35 Animal transportation - the bottlenecks and solutions - Kirk Leech

15:35 - 15:55 Alternatives to the LN₂ transport - unfrozen and dry-ice shipments - Toru Takeo, Martin Fray

15:55 - 16:15 Discussion

Health monitoring: Chair - Yuichi Obata

16:15 - 16:35 The revised FELASA recommendations for health monitoring of rodents and rabbits - Michael Mähler

16:35 - 16:55 Accreditation board for health monitoring programmes and testing laboratories - Jan-Bas Prins

16:55 - 17:15 Discussion

17:15 - 17:45 Coffee break

Informatics resources aiding the global exchange of mouse resources: Chair - Janan Eppig

17:45 - 18:05 The International Mouse Strain Resource IMSR and MGI - Janan Eppig

18:05 - 18:25 The International Mouse Phenotyping Consortium portal - Gautier Koscielny

18:25 - 18:45 The MRC Harwell MTA portal - Andrew Blake

18:45 - 19:00 Discussion

Resource and data sharing

19:00 - 19:30 The Rome Agenda and other initiatives to aid data and resource sharing - Peter Wells

20:00 Dinner

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May 9th

8:30 - 12:00

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Chair: Peter Wells

Towards a simplification of mouse mutant resource exchange:

08:30 - 09:15 Intellectual property issues and the mouse commons - Tania Bubela

09:15 - 09:30 IMPC resource - MTA issues and line exchange - Mark Moore

09:30 - 09:45 Best practice: Addgene as a model for sharing scientific resources - Joanne Kamens

09:45 - 10:00 Coffee break

10:00 - 12:00 Panel discussion on resource sharing and ways forward

Chair - Peter Wells

Panel:

- Tania Bubela, University of Alberta
- Mark Moore, International Mouse Phenotyping Consortium (IMPC)
- Colin Dunn, Charles River
- Ian Jackson, University of Edinburgh, MRC Human Genetics Unit
- Colin Fletcher, NIH
- Wolfgang Wurst, Helmholtz Zentrum München
- Joanne Kamens, Addgene
- Rafael Gacel, UC Davis

Topics for discussion:

- Obstacles towards a unified IMPC MTA
- Lessons to be learned from best practice examples for resource sharing
- Options for public private partnerships underpinning global resource sharing
- Enforcement of sharing policies vs community education

12:00 - 13:00 Lunch

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May 9th

13:00 - 15:00

Role of mouse repositories in the international exchange of mouse mutant resources

Panel discussion on repository perspectives on sharing mouse mutant resources and ways forward

Chair - Tania Bubela

Panel:

- Martin Hrabé de Angelis - European Mouse Mutant Archive (EMMA)
- Lauryl Nutter - Canadian Mutant Mouse Repository (CMMR)
- Kent Lloyd - Mutant Mouse Regional Resource Centers and KOMP Repository
- Cathleen Lutz - The Jackson Laboratory (JAX)
- Stuart Read - Australian Phenomics Network (APN)
- Yuichi Obata - RIKEN BRC
- Xiang Gao - Model Animal Research Center (MARC)
- Naomi Nakagata - Center for Animal Resources and Development (CARD)

13:00 – 13:10 Introductory presentation:

Centralized mouse repositories – common and specialized services provided by major mouse repositories around the world - Martin Hrabé de Angelis

Topics for discussion:

- Organizational issues that may underpin resource sharing
(FIMRe, joining of OECD Scicoll initiative, formation of a repository working group within IMPC, coordination via INFRAFRONTIER GmbH (ERIC))
- IT strategy underpinning mouse resource sharing
IMSR / MGI, IMPC portal and opportunities for data integration and further portal developments to aid sharing of mouse resources
- Application of 'Houston Principles'
(Sharing of resource collections such as IMPC mice among repositories in US, EU, Japan)
- Impact of genome editing technologies such as Crispr / Cas9 on mouse repositories

15:00 - 15:30

Final discussion, conclusions and future actions - Steve Brown and Martin Hrabé de Angelis

19:30 Dinner at Sheraton

List of participants

Institution	First name	Family name
HMGU	Nikolaus	Blum
HMGU	Anja	Petzet
HMGU	Judith	Kaufmann
HMGU	Martin	Hrabé de Angelis
HMGU	Sabine	Fessele
HMGU	Ana	Ambrosio de Castro
HMGU	Michael	Hagn
HMGU	Susan	Marschall
HMGU	Michael	Räb
HMGU	Wolfgang	Wurst
HMGU	Paul	Göttlich
HMGU	Daniel	Lahne
MRC Harwell	Steve	Brown
MRC Harwell	Martin	Fray
MRC Harwell	Sara	Wells
MRC Harwell	Ann Marie	Mallon
MRC Harwell	Andy	Blake

CNR	Glauco	Tocchini-Valentini
CNR	Marcello	Raspa
CNR	Ferdinando	Scavizzi
ICS	Abdel	Ayadi
IGBMC	Benedicte	Metais
SANGER	Ramiro	Ramirez-Solis
SANGER	Bill	Skarnes
SANGER	Joanna	Bottomley
SANGER	Emmanuelle	Astoul
Karolinska Institute	Brun	Ulfhaake
CNB- CSIC	Lluis	Montoliu
University of Oulu	Raija	Soininen
University of Oulu	Taina	Pihlajaniemi
EMBL-EBI	Gautier	Koscielny
IMG	Radislav	Sedlacek
Fleming	Demetrios	Vassilakos
University of Veterinary Medicine Vienna	Thomas	Rülicke
University of Veterinary Medicine Vienna	Auke	Boersma
Tel Aviv University	Fuad	Iraqi

University of Alberta	Tania	Bubela
University of Cambridge	Paul	Schofield
University of Edinburgh, MRC-HGU	Ian	Jackson
University of Leiden	Jan-Bas	Prins
University of Oxford	Chas	Bountra
Seoul National University	Je Kyoung	Seong
Korean Mouse Phenotyping Consortium	Il Yong	Kim
Korean Mouse Phenotyping Consortium	As Young	Wo
Australian Phenomics Network	Stuart	Read
RIKEN	Yuichi	Obata
RIKEN	Atsushi	Yoshiki
MARC	Xiang	Gao
CARD	Naomi	Nakagata
CARD	Toru	Takeo
Toronto Centre for Phenogenomics	Lauryl	Nutter
UC Davis	Kent	Lloyd
UC Davis	Rafael	Gacel
JAX	Janan	Eppig
JAX	Cat Lutz	Lutz

JAX	Stephen	Rockwood
JAX	Peter	Wells
JAX	Rob	Taft
NIH	Claire	Driscoll
NIH	Colin	Fletcher
IMPC	Mark	Moore
European Animal Research Association	Kirk	Leech
BioDoc - Biomedical Diagnostics	Michael	Mähler
Charles River	Colin	Dunn
Addgene	Joanne	Kamens
NATURE	Alison	Abbott
PLOS	Emma	Ganley