



Action BM0901

2009 - 2013

SYSGENET: European systems genetics network for the study of complex genetic human diseases using mouse genetic reference populations

Participating countries: AT, CH, CZ, DE, DK, EE, ES, FI, FR, GR, IL, IT, LU, NL, PL, UK

Chair of the Action: Klaus Schughart, DE, klaus.schughart@helmholtz-hzi.de

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<http://www.helmholtz-hzi.de/syngenet/>



Figure 1: Inbred mouse strains

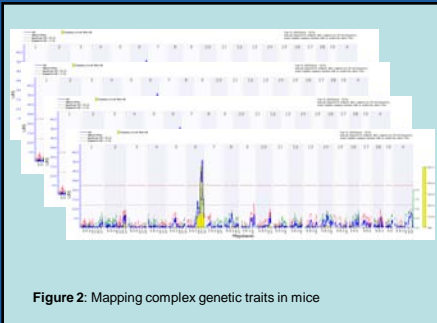


Figure 2: Mapping complex genetic traits in mice

Working Group 1: GRP resources

- collect information on existing GRPs, evaluate their power and use >> publication
- develop business models to sustain & distribute GRPs, esp. 1kCC
- integrate ethical issues, animal welfare

Chair: Guus Smit

Working Group 2: Phenotyping & genotyping

- collect information on ongoing phenotyping studies in EU >> publication
- organize work shops on specific phenotyping traits
- define strategies for financing plans for phenotyping
- interact with existing EU and international phenotyping projects

Chair: Paul Denny

Working Group 3: Bioinformatics

- provide access to bioinformatics platforms & training
- establish a common database to collect results (GN, WTC, etc.)
- provide new tools to analyze phenotype associations and networks

Chair: Ritsert Jansen

Working Group 4: International outreach

- establish relationship with non-EU activities, esp. 1kCC, JAX-DO
- interact with existing EU and international phenotyping projects
- cross-species studies, translational medicine; comparative genetics human & other species
- dissemination, external communication,

Chair: Fuad Iraqi

Working Group 5: Training & mobility

- review and oversee STSM
- define needs and initiate training programs for young researchers

Chair: Wim Crusio

Co-Chair: Leo Schalkwyk

Objectives:

- Create European network on systems genetics for complex genetic studies in mouse models:
 - combine expertise, methods, results
 - connect the different ongoing national programs
- Prepare concepts for a EU mouse resource infrastructure for GRPs
- Interact with world-wide systems genetics programs
- Prepare calls for research programs in the field of systems genetics in Europe

Main Achievements:

- Kick-off meeting in Brussels , November 13th , 2009
- Chair & co-chairs of Working groups nominated and participation of MC members defined
- 1st scientific, MC, WG SYSGENET meeting in Braunschweig, April 7th – 9th , 2010
- Next events:
 - WG3 workshop in Groningen in June
 - next MC meeting in November 2010