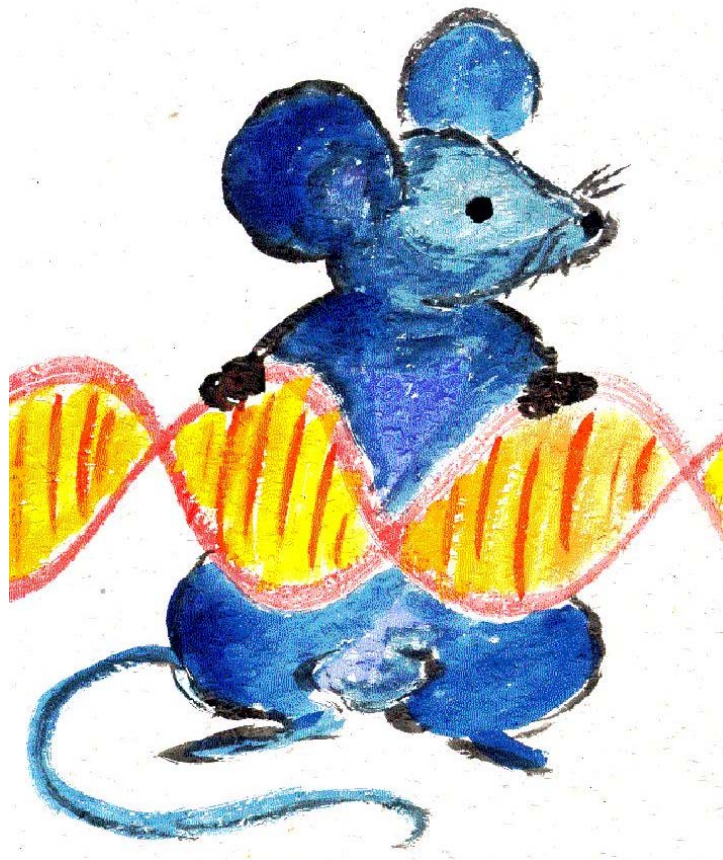


5th Workshop on Innovative Mouse Models



25-26 June 2009

Leiden University Medical Center
Albinusdreef 2, 2333 ZA Leiden

Organisation:

Jos Jonkers (*NKI, Amsterdam, Netherlands*)
Paul Krimpenfort (*NKI, Amsterdam, Netherlands*)
Werner Müller (*University of Manchester, UK*)
Els Robanus-Maandag (*LUMC, Leiden, Netherlands*)
Hein te Riele (*NKI, Amsterdam, Netherlands*)
Marian van Roon (*AMC, Amsterdam, Netherlands*)
Sjef Verbeek (*LUMC, Leiden, Netherlands*)

Cover art: Drs. Bernd Dworniczak and Petra Pennekamp, Institute for Human Genetics, Münster, Germany.

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Topics

- **Mouse models of disease**
- **Sleeping Beauty transposon mutagenesis**
- **Large-scale generation of conditional knockouts**
- **Induced Pluripotent Stem cells**
- **In vivo RNAi**
- **Mozaic mouse models**

Keynote speakers

Anton Berns

Netherlands Cancer institute, Amsterdam, The Netherlands

Adam Dupuy

University of Iowa, USA

Andras Nagy

Mount Sinai Hospital, Toronto, Canada

Barry Rosen

Wellcome Trust Sanger Institute, Hinxton, UK

Austin Smith

Wellcome Trust Centre for Stem Cell Research, Cambridge, UK

Francis Stewart

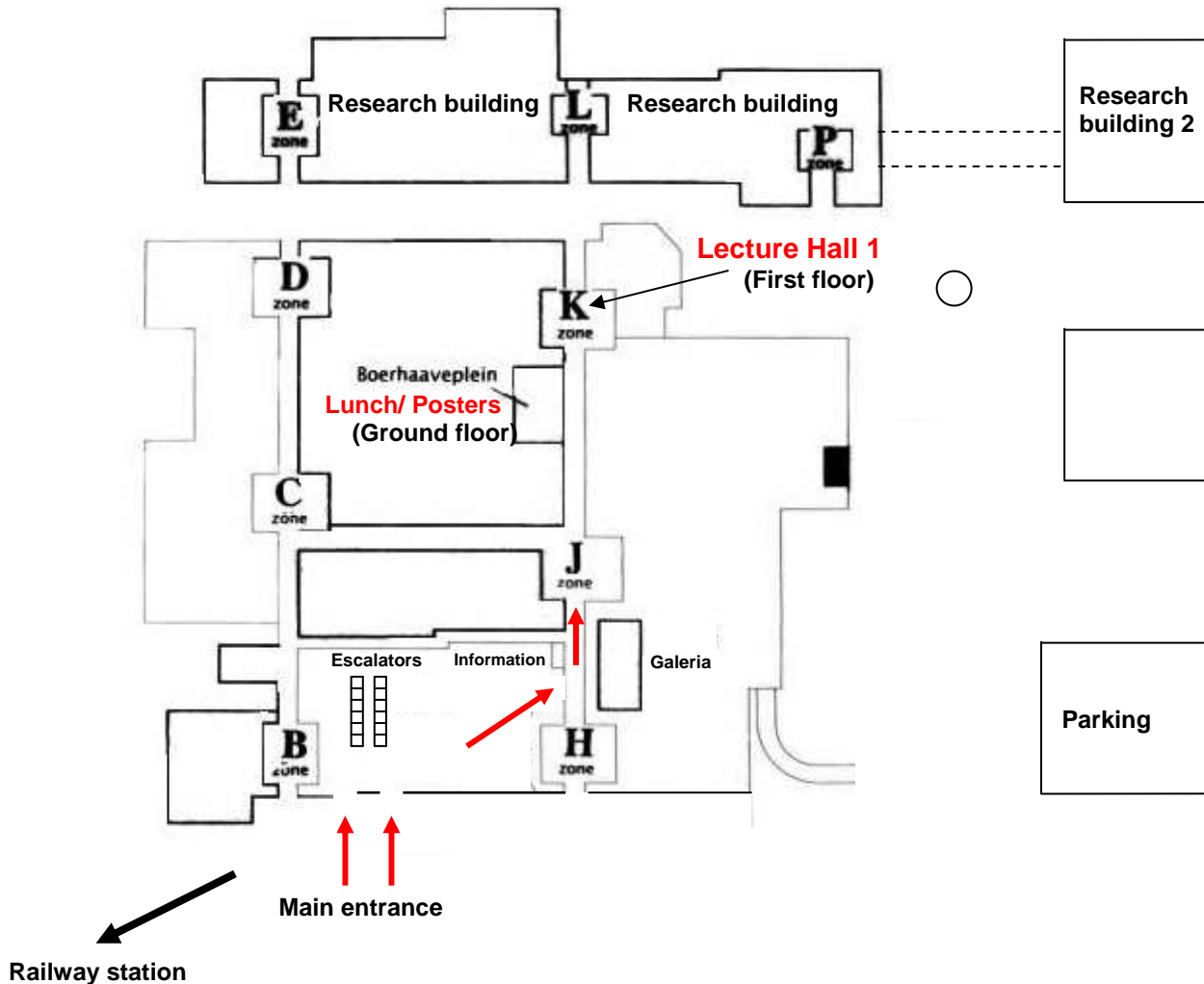
TU Dresden, Germany

Lars Zender

Helmholtz Centre for Infection Research, Braunschweig , Germany

Meeting Venue

Leiden University Medical Center, Albinusdreef 2, 2333 ZA Leiden



Getting there by train

- Get off the train at NS Leiden Central Station
- Leave the station at the LUMC/ Oegstgeest side
- Walk toward the LUMC Hospital

Getting there by car from Amsterdam

- Take the A4 motorway until the junction with the A44 motorway near Burgerveen
- Turn onto the A44 in the direction of Leiden West
- Leave the motorway at exit 8 Leiden
- Follow the signs for Leiden Centrum (Plesmanlaan)
- Follow the signs for LUMC Hospital

Getting there by car from Utrecht

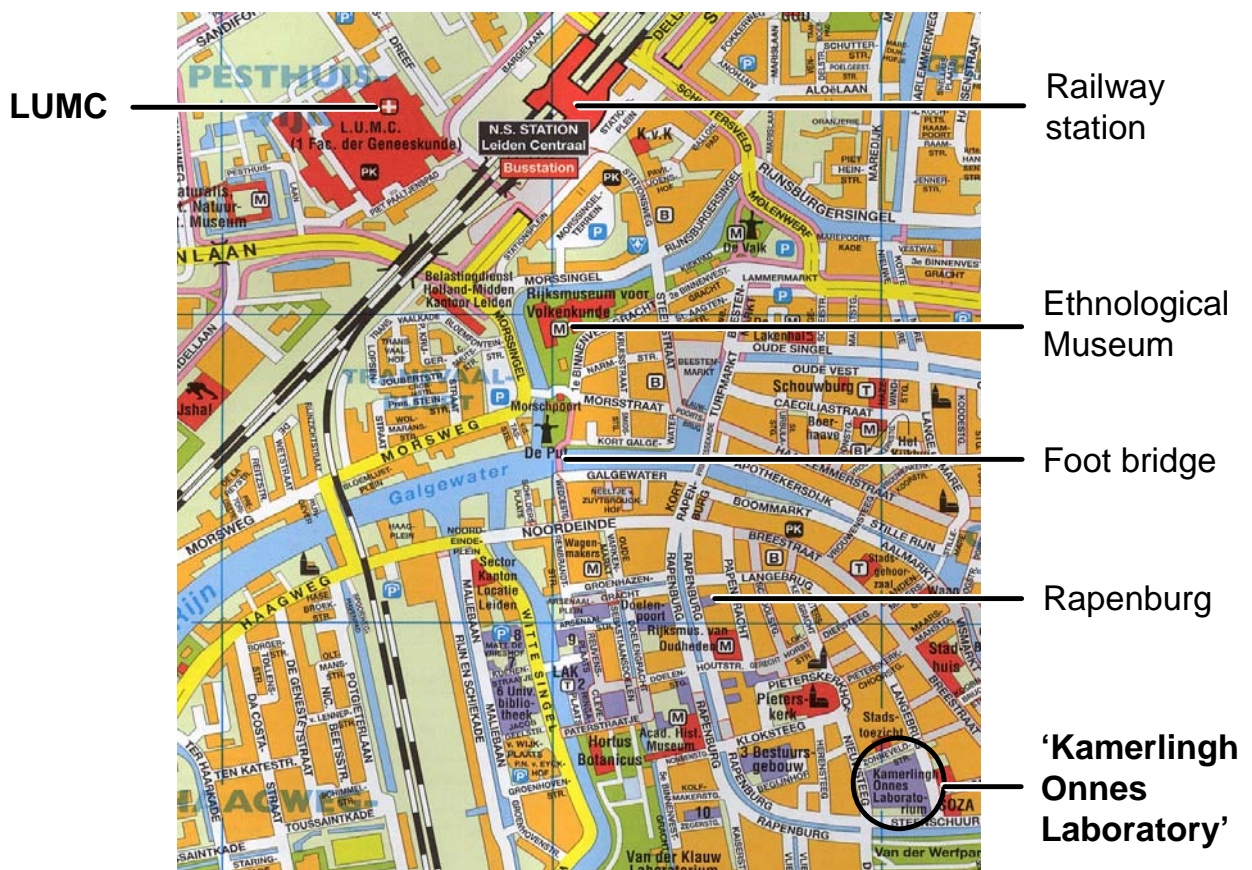
- From Bodegraven, follow the N11 to Leiden
- Turn left onto the A4 motorway in the direction of Den Haag

- Leave the motorway at the next exit (exit 7, Zoeterwoude-Dorp)
- Follow the N206 towards Leiden
- Keep following the N206 towards Leiden Zuid
- Follow the N206 for a further six kilometres in the direction of Katwijk
- Near the Holiday Inn, turn right twice and follow the signs for LUMC Hospital

Getting there by car from Rotterdam/The Hague

- Take the A4 motorway
- Leave the motorway at the first exit (= exit 7, Zoeterwoude-Dorp)
- Follow the N206 towards Leiden
- Keep following the N206 towards Leiden Zuid
- Follow the N206 for a further six kilometres in the direction of Katwijk
- Near the Holiday Inn, turn right twice and follow the signs for LUMC Hospital

Route from LUMC to the 'Kamerlingh Onnes building'



Program

Thursday June 25, 2009

08.00	Registration & welcome with coffee	
09.00-09.10	Opening <i>Sjef Verbeek</i>	25´
09.10-11.30	Session 1: 28 years of genetically engineered mice: quo vadis? <i>Chair: Hein te Riele</i>	
09.15	Anton Berns (Netherlands Cancer Institute, Amsterdam) <i>The evolution of mouse models by unnatural selection</i>	45´
10.00	Francis Stewart (TU Dresden) <i>Recombineering for systems biology and complex alleles</i>	45´
10.45	Barry Rosen (Wellcome Trust Sanger Institute, Hinxton) <i>High throughput gene targeting in mouse ES cells</i>	45´
11.30-13.30	Lunch + poster presentations	
13.30-17.00	Session 2: New technologies (I) <i>Chair: Jos Jonkers</i>	
13.30	Austin Smith (Wellcome Trust Centre for Stem Cell Research, Cambridge) <i>Capturing pluripotency</i>	45´
14.15	Andras Nagy (Mount Sinai Hospital, Toronto) <i>PiggyBac transposition reprograms fibroblasts to induced pluripotent stem cells</i>	45´
15.00-15.30	Coffee Break	
15.30	Lars Zender (Helmholtz Centre for Infection Research, Braunschweig) <i>Integrative oncogenomic approaches for accelerated cancer gene discovery in hepatocellular carcinoma</i>	45´
16.15	Adam Dupuy (University of Iowa) <i>The impact of cell of origin on genetic selection in Sleeping Beauty models of T-ALL</i>	45´
17.00-18.30	Poster presentations, Drinks & snacks	
18.30	Dinner	

Friday June 26, 2009

09.00-10.25	Session 3: Transposons <i>Chair: Marian van Roon</i>	
	Transposon-mediated mutagenesis in rat spermatogonial stem cells <i>Zoltan Ivics</i>	15'
	Molecular evolution of a novel hyperactive Sleeping Beauty transposase enables robust stable gene transfer in vertebrates <i>Lajos Mates</i>	15'
	Systematic comparison of transposable element vector systems in mammalian cells <i>Ivana Grabundzija</i>	15'
	Transposon activation to identify mutations cooperating with Apc to generate intestinal cancers <i>Helen March</i>	15'
	Functional dissection of B cell lymphoma pathways using a cell-type and stage- specific transposon tagging system <i>Federica Zanardi</i>	15'

10.25-10.55 Coffee Break

10.55-12.05	Session 4: New technologies (II) <i>Chair: Werner Müller</i>	
	Velocigene technology & molecular dissection of obesity-related QTLs <i>Evangelos Pefanis</i>	15'
	From gene-targeted ES cells to knockout mice ready for phenotypic studies: shortening the time-line and reducing costs <i>William Poueymirou</i>	15'
	In situ protein tagging of disease genes using the GGTC and EUCOMM gene trap resources <i>Frank Schnutgen</i>	15'
	Use of barcoded retroviral vectors for identification of collaborative events in leukemogenesis <i>Evgenia Verovskaya</i>	15'

12.05-14.00 **Lunch + poster presentations**

14.00-15.10	Session 5: New technologies (III) <i>Chair: Paul Krimpenfort</i> Generation of CreERT2 transgenic mouse lines for time and cell specific conditional gene inactivation: a tool for mouse functional genomics and creation of disease models <i>Marie-christine Birling</i>	15´
	Conditional targeting in distinct lung epithelial lineages using adenoviruses <i>K.D. Sutherland</i>	15´
	Improving the accessibility and flexibility of transgene insertion and expression at the hprt locus of HM1 ES cells <i>David Stevenson</i>	15´
	Lentiviral-mediated RNAi in vivo silencing of Col6a1, a gene with complex tissue specific expression <i>Nicola Facchinello</i>	15´

15.10-15.40	Coffee Break	
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15.40-16.40	Forum discussion <i>Moderator: Hein te Riele</i>	60´
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16.40	Drinks & snacks	
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 <p>EUROPEAN SCIENCE FOUNDATION <small>SETTING SCIENCE AGENDAS FOR EUROPE</small></p>	ESF
 <p>ISTT</p>	ISTT
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 <p>amC</p>	Academic Medical Center (AMC)