

Program IMM 2017
LUMC Leiden - Lecture hall 5

Thursday June 15, 2017

09.00	Registration & welcome with coffee	
10.00-10.05	Opening <i>Sjef Verbeek</i>	5'
10.05-12.20	Session 1: CRISPR/Cas9: mechanisms <i>Chair: Sjef Verbeek</i>	
10.05	Jean-Paul Concordet (INSERM/CNRS, Muséum National d'Histoire Naturelle, Paris, France) <i>Guidelines for sgRNA design</i>	45'
10.50	Jacob Corn (Innovative Genomics Initiative/Dept. of Molecular and Cell Biology, University of California, Berkeley, CA, USA) <i>CRISPR/Cas9 genome editing: from mechanism to therapy</i>	45'
11.35	Vikram Pattanayak (Joung lab, Massachusetts General Hospital, Charlestown, MA, USA) <i>The path towards an engineered Cas9 without off-target effects</i>	45'
12.20-14.00	Lunch + posters	
14.00-15.30	Session 2: CRISPR/Cas9: chromosomal engineering <i>Chair: Jos Jonkers</i>	
14.00	Yan Héroult (Institut Clinique de la Souris/Université de Strassbourg, Illkirch, France) <i>Chromosomal engineering at the CRISPR/Cas9 age</i>	45'
14.45	Søren Warming (Genentech, Inc., South San Francisco, CA, USA) <i>In-depth analysis of CRISPR off-targets in genetically engineered rodents</i>	15'
15.00	Bart van de Sluis (UMCG, Groningen, the Netherlands) <i>Somatic genome editing using CRISPR/Cas9 to study lipid metabolism</i>	15'
15.15	Benjamin Davies (University of Oxford, Oxford, United Kingdom) <i>Using site-specific nucleases to investigate enhancer-promoter interactions</i>	15'
15.30-16.00	Coffee/tea Break + posters	
16.00-17.30	Session 3: CRISPR/Cas9: enhancing HDR <i>Chair: Paul Krimpenfort</i>	
16.00	Fengfeng Zhuang (Beijing View Solid Biotech Co. Ltd, Beijing, China) <i>The Cas9-Avidin/Biotin-donor DNA system for double-floxp alleles</i>	45'
16.45	Ralf Kühn (Max Delbrück Center for Molecular Medicine/Berlin Institute of Health, Berlin, Germany) <i>Shifting the DSB repair pathway towards HDR</i>	30'
17.15	Tim Harmsen (NKI-AVL, Amsterdam, the Netherlands) <i>DNA mismatch repair and oligonucleotide end protection enable base-pair substitution distal from a CRISPR/Cas9-induced DNA break</i>	15'
17.30	City walk to "de Burcht" Drinks and snacks Dinner at Brasserie Restaurant Het Koetshuis de Burcht (Burgsteeg 13 - Leiden - tel. +31 (0)71 - 512 1688)	

Friday June 16, 2017

09.00-10.30	Session 4: Generation of conditional alleles <i>Chair: Els Robanus Maandag</i>	
09.00	Tomoji Mashimo (Graduate School of Medicine, Osaka University/Kyoto University, Japan) <i>Efficient generation of conditional knockout mice by CLICK</i>	45'
09.45	Ivo Huijbers (Netherlands Cancer Institute, Mouse Clinic for Cancer and Aging, Amsterdam, the Netherlands) <i>Generation of conditional alleles in zygotes</i>	45'
10.30-11.00	Coffee Break + posters	
11.00-12.15	Session 5: Humanized mice <i>Chair: Hein te Riele</i>	
11.00	Wojtek Auerbach (Regeneron Pharmaceuticals Inc., Tarrytown, NY, USA) <i>Single-step high efficiency humanization of entire genes</i>	45'
11.45	<u>Oliver Baker</u> (Cambridge, UK and Technical University, Dresden, Germany) <i>Targeted gene replacement of 42 kb using asymmetric donors in mES cells</i>	15'
12.00	<u>Alain de Bruin</u> (Utrecht University, the Netherlands) <i>Novel mouse model of liver cancer through activation of E2F transcription</i>	15'
12.15-13.15	Lunch + posters	
13.15-14.45	Session 6: Genome editing methods <i>Chair: Ivo Huijbers</i>	
13.15	Tomomi Aida (Medical Research Institute, Tokyo, Japan & Zhang lab, Massachusetts Institute of Technology, Cambridge, MA, USA) <i>Making knockin mice easy with cloning-free CRISPR</i>	45'
14.00	Kyoungmi Kim (Center for Genome Engineering, Institute for Basic Science, Seoul, South Korea) <i>Highly efficient RNA-guided base editing in mouse embryos</i>	45'
14.45-15.15	Coffee/tea Break + posters	
15.15-16.45	Session 7: Imaging and somatic gene editing <i>Chair: Werner Müller</i>	
15.15	Ru Wang (Boyden lab, Media Lab, Massachusetts Institute of Technology, Cambridge, MA, USA) <i>Expansion microscopy</i>	45'
16.00	Jos Jonkers (Netherlands Cancer Institute, Div. of Molecular Pathology, Amsterdam, NL) <i>Somatic gene modification in the mammary gland</i>	45'
16.45-17.15	Forum discussion: the impact of CRISPR/Cas technology <i>Moderators: Werner Müller and Hein te Riele</i>	30'
17.15	Closing remarks <i>Sjef Verbeek</i>	5'