nature medicine

VolkswagenStiftung

Genome Editing for Gene and Cell Therapy, a Herrenhausen Symposium

Herrenhausen Palace Conference Center
Hanover, Germany
November 3-4, 2016

Draft Conference Program

Thursday, November 3

	7:30 a.m.	**Registration**
	8:55 a.m.	Welcome Remarks
Keynote		
	9:00 a.m.	*Translating Genome Editing to the Clinic: Strategies, Considerations and Constraints* Toni Cathomen, Universität Klinkum Freiburg, Germany
Session 1	**Genome editing**	
	10:00 a.m.	*Defining, Altering, and Improving the Specificities of CRISPR-Cas Nucleases* Benjamin Kleinstiver, Harvard Medical School, USA
	10:30 a.m.	*Manipulating the Mitochondrial Genome with Designer Nucleases* Carlos Moraes, University of Miami Miller School of Medicine, USA
	11:00 a.m.	**Coffee break**
	11:30 a.m.	*The Mechanism of Cas9/CRISPR Cleavase-, Nickase-, and Dual Nickase-Mediated Genome Editing in Human Somatic Cells* Eric Hendrickson, University of Minnesota, USA
	12:00 p.m.	*From Surgery to Genome Surgery* Frank Buchholz, Technische Universitäten Dresden,Germany
	12:30 p.m.	**Lunch**
Panel		
	2:00 p.m.	*Panel discussion on therapeutics*
Session 2	**Cell therapy (relevant to *ex vivo* applications)**	
	3:00 p.m.	*Genome Editing of Hematopoietic Stem and Progenitor Cells* Matthew Porteus, Stanford University School of Medicine, USA
	3:30 p.m.	*CAR T Cell Therapy : The CD19 Paradigm and Beyond* Isabelle Rivière, Memorial Sloan Kettering Cancer Center, USA

Thursday, November 3 cont.

	4:00 p.m.	**Coffee break**
	4:30 p.m.	*Genome Editing for the Hemoglobin Disorders* Daniel Bauer, Harvard Medical School, USA
	5:00 p.m.	*Regulatory Considerations for Clinical Translation* Natalie Mount, Cell and Gene Therapy Catapult, UK
	5:30 p.m.	Short talk
	5:45 p.m.	**Conference dinner**
	7:30 p.m.	Close of day

Friday, November 4

Keynote		
	9:00 a.m.	Carl June, University of Pennsylvania, USA
Session 3	**Delivery in general**	
	10:00 a.m.	*Nucleic Acid Delivery Systems for RNA Therapy and Gene Editing* Daniel Anderson, Massachusetts Institute of Technology, USA
	10:30 a.m.	*Gene Editing In Vivo with Cas9 Ribonucleoprotein Complexed to Gold Nanoparticles* Niren Murthy, University of California, Berkeley, USA
	11:00 a.m.	**Coffee break**
	11:30 a.m.	*Therapeutic Genome Editing without the use of Nucleases* Mark Kay, Stanford University School of Medicine, USA
	12:00 p.m.	*Efficient In Vivo Liver-Directed and iPS-Based Ex Vivo Gene Editing Using CRISPR/Cas9* Thierry VandenDriessche, Vrije Universiteit Brussel, Belgium
	12:30 p.m.	Short talk
	12:45 p.m.	**Lunch and Poster session**
Session 4	**Gene therapy (relevant to *in vivo* editing)**	
	2:45 p.m.	*AAV for Genome Editing of Liver Metabolic Diseases* James Wilson, University of Pennsylvania, USA
	3:15 p.m.	Luigi Naldini, Ospedale San Rafaelle, Italy
	3:45 p.m.	*AAV-Mediated Gene Therapy for Genetic Disease* Katherine High, University of Pennsylvania, USA

Friday, November 4 cont.

	4:15 p.m.	**Coffee break**
Session 5	**Biomedical applications**	
	4:45 p.m.	*Understanding Cancer Drivers Using Inducible In Vivo Genome Editing* Lukas Dow, Weill Cornell Medical College, USA
	5:15 p.m.	*A CRISPR Dropout Screen Identifies Genetic Vulnerabilities in Acute Myeloid Leukaemia* Kosuke Yusa, Wellcome Trust Sanger Institute, UK
	5:45 p.m.	Short talk
	6:00 p.m.	Close of conference