Program

Tuesday, April 21st

8:00 – 9:00 am  _Registration

9:00 – 9:30 am  _Opening of the Meeting
Oliver Brüstle, Chairman

Svenja Schulze, Minister for Innovation,
Science and Research of the State of North Rhine-Westphalia

9:30 – 10:50 am  _Opening Lectures, Chair: Oliver Brüstle
Fred Gage (La Jolla)
Neuronal plasticity genomic diversity

Dieter Sturma (Bonn)
Stem cell research: the ethical challenges

10:50 – 11:30 am  _Coffee Break, Poster Session

11:30 – 12:30 pm  _Session I: Neural Development and Stem Cells, Chair: Andreas Faissner
Jürgen Knoblich (Vienna)
Modelling human brain development in 3D organoid culture

Ronald McKay (Baltimore)
Using the functional identity of human stem cells

12:30 – 1:45 pm  _Lunch Break, Poster Session

1:45 – 3:00 pm  _Session II: Stem Cell Engineering, Chair: Martin Zenke
Matthias Lutolf (Lausanne)
Engineering tissues via extracellular matrix-guided stem cell self-organisation

Adam Cohen (Cambridge, USA)
All-optical electrophysiology for iPSC neuronal disease modeling

Judith Kempfle (Boston)
Sox2 – positive cells in the cochlea function as inner ear progenitors (selected talk)

3:00 – 3:30 pm  _Coffee Break, Poster Session

3:30 – 4:45 pm  _Session III: Self Organization of Stem Cells, Chair: James Adjaye
Hiromitsu Nakauchi (Tokyo)
“Organ niche” and “developmental complementation”
for generation of functional organs in vivo

Thomas Zwaka (New York)
Cell competition in pluripotent stem cells

Laura Stappert (Bonn)
Transcriptional Regulation & Non-Coding RNAs (selected talk)

4:45 – 7:00 pm  _Poster Session

7:30 – 10:30 pm  _Networking Event
Wednesday, April 22nd

8:30 – 9:30 am  _Registration

8:15 – 9:15 am  _Early Career Breakfast – Meet the Experts (registered participants only)

9:30 – 10:45 am  _Session IV: Therapeutic Approaches, Chair: Boris Greber
Shoukhrat Mitalipov (Portland)
_Nuclear transfer and reprogramming_

Clare Blackburn (Edinburgh)
_Inducing a thymus, in vivo and in vitro_

Luna Simone Pane (Munich)
_Antisense-mediated exon skipping: a therapeutic strategy for titin-based dilated cardiomyopathy (selected talk)_

10:45 – 11:30 am  _Panel Discussion “Great Expectations”_
Christina Berndt, Clare Blackburn, John Harris, Ralf Müller-Terpitz, Dieter Sturma

11:30 – 12:00 am  _Coffee Break_

12:00 – 1:30 pm  _Session V: Specification of Stem Cells, Chair: Christian Kaltschmidt_
Michael Brand (Dresden)
_Regeneration of the adult zebrafish brain_

Benedikt Berninger (Mainz)
_Brains in metamorphosis: Physiological and forced neurogenesis in the adult brain_

Henrik Semb (Copenhagen)
_From pancreas organogenesis to making beta cells in a dish_

1:30 – 2:30 pm  _Lunch Break, Poster Session_

2:30 – 3:30 pm  _Session VI: Disease Modeling, Chair: Matthias Höhn_
Rick Livesey (Cambridge)
_Mechanistic insights into Alzheimer’s disease pathogenesis from human stem cell models_

Ludovic Vallier (Cambridge)
_Modelling liver diseases using human induced pluripotent stem cells_

3:30 – 4:00 pm  _Coffee Break_

4:00 – 5:00 pm  _Session VII: HSC: Metabolism & Aging, Chair: Peter Horn_
Bertie Göttgens (Cambridge)
_Transcriptional network control of blood cell development_

Sten Eirik Jacobson (Oxford)
_Emergence of fetal immune-restricted lympho-myeloid progenitors prior to definitive hematopoietic stem cells_

Following  _Poster Awarding, Closing Remarks_