

2nd International Congress on Stem Cells and Tissue Formation

Program

Sunday, July 6, 2008

		Conference Room
SUNDAY SESSIONS		
THE SUNDAY SESSIONS ARE ORGANIZED AND SUPPORTED BY GERMAN ACADEMY OF SCIENCES LEOPOLDINA AND ALFRIED KRUPP VON BOHLEN UND HALBACH-STIFTUNG		
Sunday Mesenchyme	Chair: Ezio Bonifacio (Dresden)	1
15:00 – 15:20	Didier Montarras (Paris) Gene expression profiling of purified adult skeletal muscle progenitor cells	
15:20 – 15:40	Reinhard Henschler (Frankfurt) Mesenchymal stem cells interact in a coordinated fashion with the vessel wall under conditions of shear stress	
15:40 – 16:00	Nicole Georgi (Brisbane) Co-culture of human mesenchymal stem cells and chondrocytes in nanofiber-fibrin-alginate composites	
16:00 – 16:20	Coffee break	
16:20 – 16:40	Wolfgang Wagner (Heidelberg) Maintenance of human hematopoietic progenitor cells upon co-culture with mesenchymal stromal cells is a complex process that involves various adhesion proteins	
16:40 – 17:00	Gerhard Gross (Braunschweig) Adult murine and human mesenchymal stem cell (MSC)-dependent formation of tendon and osteotendinous junctions	
17:00 – 17:20	Valeria Sordi (Milan) Mesenchymal cells appearing in pancreatic tissue culture are bone marrow-derived stem cells that act as feeder cells for transplanted islets	
Sunday Neurons	Chair: Gerd Kempermann (Dresden)	2
15:00 – 15:20	Jovica Ninkovic (München) Molecular mechanisms regulating neuronal subtype specification and integration in adult neurogenesis	
15:20 – 15:40	Julius Steinbeck (Bonn) Safety, neuronal maturation and axon outgrowth after human ES cell-derived neural stem cell transplantation	
15:40 – 16:00	Rod Rietze (Brisbane) Physical exercise in aged mice restores endogenous neural stem cells to youthful levels and augments the regenerative capacity of the brain	
16:00 – 16:20	Coffee break	
16:20 – 16:40	Monika Krampert (Regensburg) Smad7 regulates adult neural stem/progenitor proliferation in a TGF-beta independent manner	
16:40 – 17:00	Hai-Kun Liu (Heidelberg) The nuclear receptor tailless is required for generation and maintenance of adult neural stem cells	
17:00 – 17:20	Rainer Glass (Berlin) Endogenous neural precursors suppress glioma stem cells by releasing BMP7	

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SUNDAY SESSIONS (CONTINUED)		
THE SUNDAY SESSIONS ARE ORGANIZED AND SUPPORTED BY GERMAN ACADEMY OF SCIENCES LEOPOLDINA AND ALFRIED KRUPP VON BOHLEN UND HALBACH-STIFTUNG		
Sunday Reprogramming	Chair: Marius Wernig (Cambridge, USA)	3
15:00 – 15:20	Tobias Cantz (Münster) Metabolic liver disease-specific induced pluripotent stem cells	
15:20 – 15:40	Björn Oback (Hamilton, New Zealand) Antler stem cells and their differentiated progeny show similar reprogramming efficiency after nuclear transfer cloning in red deer	
15:40 – 16:00	Richard Davis (Melbourne) The homeobox gene, MIXL1, marks a primitive streak-like cell population in differentiating human embryonic stem cells	
16:00 – 16:20	Coffee break	
16:20 – 16:40	Kay Eckelt (Barcelona) Flatworms, regeneration and DNA-Arrays, new techniques for an old model organism	
16:40 – 17:00	Rupa Sridharan (Los Angeles) Mechanism of transcription factor induced reprogramming of somatic cells to a pluripotent state	
17:00 – 17:20	Ulrike Ziebold (Berlin) The undifferentiated state of mouse embryonic stem cells: a potential role for inhibitors of the Ras and FGF pathways	
WELCOME AND OPENING KEYNOTE LECTURE		
THE OPENING KEYNOTE LECTURE IS SPONSORED BY KLAUS TSCHIRA FOUNDATION		4-6
18:00 – 19:00	Austin Smith (Cambridge, UK) Capturing Pluripotency Welcome and Chair: Gerhard Ehninger (Dresden)	
SOCIAL EVENT		
19:30 – 23:00	Welcome Summer Party (Terrace Foyer)	

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Monday, July 7, 2008

	Main Hall	Hall 1 + 2	Hall 3 - 5
KEYNOTE LECTURE			
9:00 – 9.45	Yuval Dor (Jerusalem) Determinants of pancreatic beta cell proliferation and regeneration Chair: Michele Solimena (Dresden)	Posters will be presented all day	Exhibition will be open all day
SESSION 1	Diabetes Chair: Michele Solimena (Dresden)		
9:45 – 10:15	Andrew F. Stewart (Pittsburgh) Molecular control of pancreatic beta cell replication and regeneration		
10:15 – 10:30	Eckhard Lammert (Dresden) The vascular niche of pancreatic islets		
10:30 – 11:00	Evert Kroon (San Diego) In vivo generation of glucose-responsive insulin-secreting cells from human embryonic stem cell-derived pancreatic endoderm		
11:00 – 11:30	Coffee Break		
11:30 – 12:00	Harry Heimberg (Brussel) Beta cell progenitors in the adult pancreas		
12:00 – 12:15	Insa Schroeder (Gatersleben) Directed differentiation of SOX17-DsRed-expressing mouse embryonic stem cells into the endodermal and pancreatic lineage by Activin A		
12:15 – 12:45	Ezio Bonifacio (Dresden) The role of accessory cells and signals in maintaining islet beta cell survival and renewal		
12:45 – 14:00	Lunch & Posters & Exhibition		
SESSION 2	Neural stem cells Chair: Frank Buchholz (Dresden)	Posters will be presented all day	Exhibition will be open all day
14:00 – 14:30	Jonas Frisén (Stockholm) Stem cells and neurogenesis in the adult central nervous system		
14:30 – 14:45	Hisato Kondoh (Osaka) The regional identity of mouse neural stem cells indicated by their dependence on specific Sox2 enhancers		
14:45 – 15:15	Ryoichiro Kageyama (Kyoto) Oscillations in Notch signaling regulate maintenance of neural progenitors		
15:15 – 15:30	Jan Kaslin (Dresden) Adult neurogenesis in the zebrafish: constitution and molecular regulation of the progenitor niche		
15:30 – 16:00	Derek van der Kooy (Toronto) Case studies in clonality, self renewal and differentiation of mouse and human neural stem cells		
16:00 – 16:30	Yves Barde (Basel) Embryonic stem cells: A powerful tool to study neural development in vertebrates		
16:30 – 17:00	Coffee Break		

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	Main Hall	Hall 1 + 2	Hall 3 - 5
SESSION 3	Neural stem cells (continued) Chair: Wieland Huttner (Dresden)		
17:00 – 17:30	Arturo Alvarez-Buylla (San Francisco) Adult neural stem cells and their niche	Posters will be presented all day	Exhibition will be open all day
17:30 – 18:00	Arnold Kriegstein (San Francisco) The dynamics of neural stem and progenitor cells in cortical development		
18:00 – 18:30	Kirsty Spalding (Stockholm) Analysis of neurogenesis in the adult human brain using bomb-carbon		
18:30 – 19:00	Gerd Kempermann (Dresden) What is adult hippocampal neurogenesis good for?		
POSTER SESSION			
19:00 – 21:00		Poster, Beer & Brezel	

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Tuesday, July 8, 2008

	Main Hall	Hall 1 + 2	Hall 3 - 5
KEYNOTE LECTURE			
9:00 – 9.45	Martin Schwab (Zürich) Repair of interrupted fiber connections and circuits after spinal cord and brain injury Chair: Michael Brand (Dresden)	Posters will be presented all day	Exhibition will be open all day
SESSION 3A	Neural stem cells (continued) Chair: Michael Brand (Dresden)		
9:45 – 10:15	Elly Tanaka (Dresden) The properties of neural stem cells that can regenerate an injured spinal cord		
SESSION 4	Hematopoietic stem cells Chair: Martin Bornhäuser (Dresden)	Posters will be presented all day	Exhibition will be open all day
10:15 – 10:45	Andreas Trumpp (Lausanne) Dormant and activated HSCs during homeostasis injury and cancer		
10:45 – 11:00	Wei Liu (Shanghai) Tissue engineering of corneal stroma with dermal fibroblasts: phenotypic and functional switch of differentiated cells in cornea		
11:00 – 11:30	Coffee Break		
11:30 – 12:00	Achim Leutz (Berlin) WNT, stemness & leukemia		
12:00 – 12:15	Roberto Ensenat-Waser (Aachen) Somatic memory in pluripotent hybrids of mouse hematopoietic stem cells and ES cells		
12:15 – 12:45	Gerald de Haan (Groningen) Genome-wide identification of regulators of transcriptional networks during hematopoietic stem cell development		
12:45 – 14:15	Lunch & Posters & Exhibitions & Workshops & Information on FP7		
APPLIED BIOSYSTEMS COMPANY SATELLITE SYMPOSIUM		Conference Room 2	
Enabling science and safety in stem cell research: Applied Biosystems' molecular methods for the stem cell scientist			
13:00 – 13:05	Welcome	Hall 1 + 2 Posters will be presented all day	Hall 3 - 5 Exhibition will be open all day
13:05 – 13:25	Lyn Healy (NIBSC, London, UK) Pathogen detection in human stem cell cultures using quantitative Real-time PCR		
13:25 – 13:45	Astrid Ferlinz (Applied Biosystems, Darmstadt) Discovery and validation of non coding RNAs using the SOLiD system and TaqMan small RNA Assays		
13:45 – 14:05	Candia L. Brown (Applied Biosystems, Foster City, USA) Emerging Molecular Applications in Stem Cell Biology		
14:05 – 14:15	Final discussion		
INFORMATION ON SEVENTH RESEARCH FRAMEWORK PROGRAMME			
13:45 – 14:05	Jürgen Sautter (European Commission, Brussels) Research funding for innovative therapies under the EU Health Biotechnology Programme	Main Hall	

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Tuesday, July 8, 2008

12:45 – 14:15	Lunch & Posters & Exhibitions & Workshops & Information on FP7 (continued)		
LIVING UP TO LIFE – THE LEICA MICROSYSTEMS SYMPOSIUM		Conference Room 3	
13:00 – 13:05	Welcome		
13:05 – 13:25	Martin Hoppe (Leica Microsystems, Mannheim) Innovation in Confocal Microscopy – From Macro to Nano	Hall 1 + 2 Posters will be presented all day	Hall 3 - 5 Exhibition will be open all day
13:25 – 13:45	André Quinkertz (Leica Microsystems, Wetzlar) Real Life Imaging anywhere in a living animal – Leica FCM1000 in vivo Micro Endoscope		
13:45 – 14:05	Ravi Jagasia (Helmholtz Zentrum, München) Creb Signalling in the Maturation of newborn Neurons in the Adult Dentate Gyrus		
14:05 – 14:15	Final discussion		
	Main Hall	Hall 1 + 2	Hall 3 - 5
SESSION 5	Epithelial stem cells Chair: Elisabeth Knust (Dresden)		
14:15 – 14:45	Fiona Watt (Cambridge, UK) Stem cells and lineage selection in normal epidermis and tumours	Posters will be presented all day	Exhibition will be open all day
14:45 – 15:00	Christopher Antos (Dresden) The gene simplet controls cell proliferation and gene transcription during zebrafish caudal fin regeneration		
15:00 – 15:30	Reinhard Fässler (Martinsried) β1 integrin-mediated adhesion signalling is crucial for epidermal progenitor cell expansion		
15:30 – 15:45	Benedetta Bussolati (Turino) Altered phenotype and differentiation of adult renal resident stem cells in autosomal dominant polycystic kidney disease		
15:45 – 16:15	Shin-Ichi Nishikawa (Kobe) In vitro recapitulation of stem cell niche		
16:15 – 16:45	Michele de Luca (Modena) Epithelial stem cells and regenerative medicine		
16:45 – 17:15	Coffee Break		
17:15 – 17:45	Valera Vasioukhin (Seattle) Cell polarity in self-renewal and differentiation of neural progenitor cells		
17:45 – 18:15	Pamela Yelick (Boston) Progress in whole tooth tissue engineering		
SOCIAL EVENT			
19:30 – 22:30	Boat Tour on the River Elbe		

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Wednesday, July 9, 2008

	Main Hall	Hall 1 + 2
THE DEVELOPMENT LECTURE (THIS KEYNOTE LECTURE IS SPONSORED BY 'THE COMPANY OF BIOLOGISTS')		
9:00 – 9:45	Hans Schöler (Münster) Induction of pluripotency in somatic and germline cells Chair: Francis Stewart (Dresden)	Posters will be presented until lunch break
SESSION 6	Embryonic stem cells Chair: Francis Stewart (Dresden)	
9:45 – 10:15	Oliver Brüstle (Bonn) Generation of a primitive long-term self-renewing human ES cell-derived neural stem cell with potential for in vitro instruction and synaptic integration	
10:15 – 10:30	Athanassios Zovoilis (Göttingen) Spermatogonial Stem Cells Share microRNA Signature with Embryonic Stem Cells	
10:30 – 11:00	Peter Zandstra (Toronto) Controlling endogenous signaling networks to guide stem cell fate	
11:00 – 11:30	Coffee Break	
11:30 – 12:00	Marius Wernig (Cambridge, USA) Direct reprogramming of mouse fibroblasts and their therapeutic applicability	
12:00 – 12:15	Thomas Skutella (Tübingen) Generation of pluripotent stem cells from adult human testis	
SESSION 7	Cardiovascular disease Chair: Ruth Strasser (Dresden)	
12:15 – 12:45	Gustav Steinhoff (Rostock) Intramyocardial stem cell therapy – seven years clinical experience	
12:45 – 13:45	Lunch	
13:45 – 14:15	Jürgen Hescheler (Köln) Engineered embryonic stem cells for regenerative medicine	
14:15 – 14:30	Olaf Bergmann (Stockholm) Analysis of cellular turnover in the adult human heart using bomb-carbon	
14:30 – 15:00	Stefanie Dimmeler (Frankfurt/Main) Stem- and progenitor cells for cardiovascular repair	
15:00 – 15:15	Reinhold Medina (Belfast) Distinct human endothelial progenitor cell (EPC) subpopulations and their role in retinal angiogenesis	
15:15 – 15:45	Thomas Braun (Bad Nauheim) Homing of circulating stem cells and contribution to tissue remodeling	
15:45 – 16:00	Closing remarks	
END		