

PROGRAM

Saturday, September 18, 2010

15:00 **Welcome and Introduction**
Lena Claesson-Welsh

15:15 – 16:45 Session 1

THE QUIESCENCE SWITCH

Discussion leader: Lena Claesson-Welsh

15:15 Anti-angiogenic vessel pruning versus vessel normalization strategies?
Peter Carmeliet, Leuven (page 2)

15:45 VEGF signaling regulates centrosome duplication in endothelial cells of
developing blood vessels
Victoria Bautch, Chapel Hill (page 3)

16:15 Social cell behaviour in the angiogenic sprout
Holger Gerhardt, London (page 4)

16:45 *Coffee break*

17:15 – 19:00 Session 2

NOVEL FUNCTIONS

Discussion leader: Dietmar Vestweber

17:15 Tumour angiogenesis is reduced in the Tc1 mouse model of
Down Syndrome
Kairbaan Hodivala-Dilke, London (page 5)

17:45 **BLITZ:** Lipoprotein levels regulate angiogenesis by modulating expression of
VEGFR1
Karina Yaniv, Rehovot (page 101)

18:00 VEGF-B regulates endothelial fatty acid transport
Ulf Eriksson, Stockholm (page 6)

18:30 Identification of novel genes involved in tumour angiogenesis
Roy Bicknell, Birmingham (page 7)

19:15 *Dinner*

Sunday, September 19, 2010

08:30 - 10:30 Session 3

ENDOTHELIAL TIES

Discussion leader: Ralf Adams

- 08:30 Regulatory mechanisms at endothelial cell contacts
Dietmar Vestweber, Muenster (page 8)
- 09:00 **BLITZ:** Acetylation-dependent regulation of endothelial Notch signaling by the
SIRT1 deacetylase
Michael Potente, Frankfurt (page 83)
- 09:15 **BLITZ:** miR-221 contributes to endothelial cell morphogenesis in developing
zebrafish intersegmental arteries
Stefania Nicoli, Worcester (page 76)
- 09:30 Role of Angiopoietin-Tie2 system in retinal angiogenesis
Gou Young Koh, Daejeon (page 9)
- 10:00 Angiopoietin-1/Tie2 signal-mediated vascular maturation and quiescence
are regulated by Dll4-Notch signaling
Naoki Mochizuki, Osaka (page 10)
- 10:30 *Coffee break*

11:00 - 12:00 Session 4

ENDOTHELIAL BARRIERS

Discussion leader: Victoria Bautch

- 11:00 The role of canonical Wnt signaling in vascular development
Elisabetta Dejana, Milan (page 11)
- 11:30 Role of pericytes at the blood-brain barrier
Christer Betsholtz, Stockholm (page 12)
- 12:15 *Lunch*

13:30 - 15:15 Poster Session I

15:15 - 16:15 **Session 5**

ENDOTHELIAL REGULATION

Discussion leader: Christer Betholtz

- 15:15 Tissue macrophages act as cellular chaperones for vascular anastomosis downstream of VEGF-mediated endothelial tip cell induction
Christiana Ruhrberg, London (page 13)
- 15:45 VEGF- and Angiopoietin-mediated signaling pathways in endothelial cells
Hellmut Augustin, Heidelberg/Mannheim (page 14)

17:30 – 23:00 *Social event*

Monday, September 20, 2010

08:30 - 09:45 **Session 6**

VESSELS AND NERVES

Discussion leader: Eckhard Lammert

- 08:30 Axon guidance receptors in vascular development
Anne Eichmann, Paris (page 15)
- 09:00 **BLITZ:** The cerebral cavernous malformation protein CCM1 keeps the endothelium quiescent
Andreas Fischer, Mannheim (page 48)
- 09:15 G protein-coupled receptor regulation of central nervous system angiogenesis
Calvin Kuo, Stanford (page 16)
- 09:45 *Group photo*
- 10:00 *Coffee break*

10:30 - 12:15 **Session 7**

VESSEL FUSION, LUMEN FORMATION

Discussion leader: Holger Gerhardt

- 10:30 Post-transcriptional control of vascular development by microRNAs
Nathan Lawson, Worcester (page 17)
- 11:00 Molecular mechanisms of vascular lumen formation
Eckhard Lammert, Duesseldorf (page 18)
- 11:30 **BLITZ:** *In vivo* analysis of vessel fusion during DLAV formation in the zebrafish embryo
Markus Affolter, Basel (page 34)
- 11:45 Tu-be or not tu-be: tubulogenesis during cardiovascular development
Ondine Cleaver, Dallas (page 19)
- 12:15 *Lunch*

13:15 - 14:45 **Session 8**

VESSEL MORPHOGENESIS I

Discussion leader: Eli Keshet

- 13:15 VEGF-B to -D: novel structures and functions
Kari Alitalo, Helsinki (page 20)
- 13:45 Guidance and patterning of developing lymphatic vessels
Brant Weinstein, Bethesda (page 21)
- 14:15 Lymphangioblast formation and migration in zebrafish
Stefan Schulte-Merker, Utrecht (page 22)

14:45 - 16:15 **Session 9**

VESSEL MORPHOGENESIS II

- 14:45 Mechanisms of lymphatic remodelling
Taija Makinen, London (page 23)
- 15:15 **BLITZ:** Amotl2 controls endothelial cell polarity and aortic lumen formation
Lars Holmgren, Stockholm (page 55)
- 15:30 **BLITZ:** Regulation of angiogenesis by the Rac1 GEF DOCK4
Sabu Abraham, London (page 32)
- 15:45 Calcineurin/NFAT signaling in lymphatic vascular development and maintenance
Tatiana Petrova, Epalinges (page 24)
- 16 :15 *Coffee break*

16:15 - 18:00 **Poster Session II**

18:00 *Dinner*

19:15 - 20:15 **Session 10**

ENDOTHELIAL – MONOCYTE CROSSTALK

Discussion leader: Anne Eichmann

- 19:15 On-site education of VEGF-recruited monocytes improves their performance as angiogenic- and arteriogenic accessory cells
Eli Keshet, Jerusalem (page 25)
- 19:45 Neuropilin-1 Expressing Mononuclear cells (NEMs), a novel population of bone marrow cells recruited by Sema3A, contributes to vessel normalization and inhibits tumor growth
Mauro Giacca, Trieste (page 26)

Tuesday, September 21, 2010

8:30 -11:45 Session 11

VESSEL PATTERNING

Discussion leader: Stefan Schulte-Merker

- 08:30 Arterial specification signaling cascade
Michael Simons, New Haven (page 27)
- 09:00 **BLITZ:** Pulsatile shear and Gja5 (Connexin-40) modulate arterial identity and remodeling events during flow driven arteriogenesis
Ferdinand le Noble, Berlin (page 67)
- 09:15 **BLITZ:** Sprouting angiogenesis from the venous endothelial cells is regulated by BMP signaling
Suk-Won Jin, Chapel Hill (page 59)
- 09:30 Step-wise arterial and venous differentiation in mammals
Rong Wang, San Francisco (page 28)
- 10:00 *Coffee break*

10:30 -11:45 cont'd Session 11

- 10:30 **BLITZ:** CD44v6 collaboration with VEGFR-2 and c-Met leads to angiogenesis and metastasis
Veronique Orian-Rousseau, Karlsruhe (page 80)
- 10:45 Control of vascular guidance by neuronal cues
Amparo Acker-Palmer, Frankfurt (page 29)
- 11:15 Angiogenic pathways control bone marrow architecture and homeostasis
Ralf H. Adams, Muenster (page 30)

End of meeting

- 12:00 *Lunch*
- 13:00 *Departure of shuttle buses*