



*Institute & Graduate School
of Biomembranes* **IB**



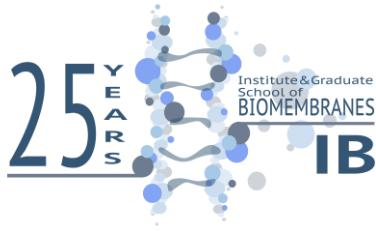
Venue:
De Leeuwenbergh
Servaasbolwerk 1a,
3512 NK Utrecht,
The Netherlands

Institute & Graduate School **IB**
of Biomembranes

Day of the IB Graduate Students 2016

Thursday, November 3rd

09.00	<i>Arrival & Coffee / Tea</i>
09:15	Opening by IB Director Bernd Helms
09:20	Marjolein Mijnders <i>(Cellular Protein Chemistry, UU, Braakman)</i> <i>Folding and domain assembly of the cystic fibrosis-related ABC transporter CFTR</i>
09:40	Yifei Lang <i>(Virology, UU, De Groot)</i> <i>Betacoronavirus adaptation to humans involved progressive loss of hemagglutinin-esterase lectin activity</i>
10:00	Sabine Oppedijk <i>(Membrane Biochemistry & Biophysics, UU, Breukink)</i> <i>How to specifically tackle Staphylococci; lessons learned so far from the mode of action of an antimicrobial peptide.</i>
10:20	Marcia Ferraz <i>(Biochemistry & Cell Biology, UU, Gadella)</i> <i>Use of 3-D printing technology to create an in vitro bovine oviduct</i>
10:40	<i>Coffee / Tea</i>
11:00	Hongbo Guo <i>(Virology, UU, de Haan)</i> <i>Studying Influenza A virus-receptor interactions using biolayer interferometry</i>
11:20	Aike Jeucken <i>(Biochemistry & Cell Biology, UU, Helms)</i> <i>Introduction of lipid droplet organelles in E. coli</i>
11:40	Qingyang Liu <i>(Cell Biology, UU, Akhmanova)</i> <i>Flavoprotein monooxygenase MICAL3 interacts with centalspindlin and regulates cytokinesis</i>
12.00	<i>Lunch</i>
13.00	Luca Ferrari <i>(Cellular Protein Chemistry, UU, Rudiger)</i> <i>Does size matter? Tau oligomers derail neurons</i>
13.20	Wentao Li <i>(Virology, UU, Bosch)</i> <i>Virus-receptor interactions of a pathogenic porcine coronavirus</i>
13.40	Anne Janssen <i>(Cell Biology, UU, Kapitein)</i> <i>Studying autophagy using inducible protein clusters</i>
14:10	Workshops for PhDs/ IB staff member meeting
15.10	<i>Coffee / Tea</i>
15:30	Winner of the IB Publication Prize 2016
16:15	Drinks
17.15	<i>Welcome reception at Sonnenborgh followed by Diner/Party for ALL IB members & registered participants</i>

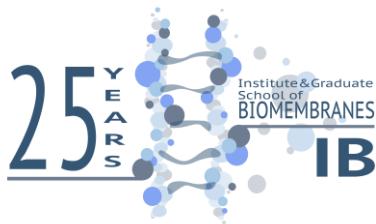


Institute & Graduate School of Biomembranes **IB**

IB Conference on Biomembranes 2016

Friday, November 4th

09.00	<i>Arrival, Coffee / Tea</i>	
09.15	Opening by IB Director Bernd Helms	
09.20	Margaret Robinson (University of Cambridge, UK) <i>Making Vesicles</i>	host Rabouille
10.10	Christian Eggeling (University of Oxford, GB) <i>Super-resolution optical microscopy studies of membrane bioactivity – potentials and limitations</i>	host Killian
11.00	<i>Coffee / Tea</i>	
11.25	Paul Saftig (Kiel University, Germany) <i>Lysosomal membrane proteins and their roles in health and disease</i>	host Klumperman
12.15	<i>Lunch</i>	
13.20	Susan Buchanan (NIH, Bethesda, USA) <i>Structural insight into the biogenesis of beta-barrel membrane proteins</i>	host Tommassen
14.10	Tamas Balla (NIH, Bethesda, USA) <i>Phosphatidylinositol 4-kinases. Emerging players in cellular lipid metabolism</i>	host Strating
15.00	<i>Coffee / Tea</i>	
15.25	2016 van Deenen medalist Winner Nobel laureate James Rothman (Yale School of Medicine, USA) <i>Membrane Fusion in the Cell and How it is Harnessed for Neurotransmission</i>	host Helms
16.15	<i>Closing & Drinks</i>	



Workshops IB conference 2016

T. Balla

Challenges in deciphering the lipid landscape in intact mammalian cells

Yeun Ju Kim, Maria-Luisa, Guzman-Hernandez, Eva Wisniewski, **Tamas Balla** (2015) Phosphatidylinositol-Phosphatidic Acid Exchange by Nir2 at ER-PM Contact Sites maintains Phosphoinositide Signaling Competence. *Dev Cell* 33, 549–561

Mira Sohn, Pavlina Ivanova, H. Alex Brown, Daniel J. Toth, Peter Varnai, Yeun Ju Kim, and **Tamas Balla** (2016). Lenz-Majewski mutations in *PTDSS1* affect phosphatidylinositol 4-phosphate metabolism at ER-PM and ER-Golgi junctions. *PNAS* 19;113(16):4314-9

Margaret Robinson

How can we study the function and the evolution of the membrane trafficking machinery?

Robinson, M. (2015). Forty Years of Clathrin-coated Vesicles. *Traffic*. 16, 1210-1238

Jennifer Hirst, Alexander Schlacht, John P Norcott, David Traynor, Gareth Bloomfield, Robin Antrobus, Robert R Kay, Joel B Dacks, **Margaret S Robinson** (2014) Characterization of TSET, an ancient and widespread membrane trafficking complex. *eLife*, 3:e02866

Jennifer Hirst, Georg H.H. Borner, Robin Antrobus, Andrew A. Peden, Nicola A. Hodson, Daniela A. Sahlender, and **Margaret S. Robinson** (2012) Distinct and Overlapping Roles for AP-1 and GGAs Revealed by the “Knocksideways” System. *Current Biology* 22, 1711–1716,

Susan Buchanan

Membrane protein crystallization: detergents, bicelles, and lipidic cubic phase

Fairman, J.W., Dautin, N., Wojtowicz, D., Liu, W., Noinaj, N., Barnard, T.J., Przytycka, T., Cherezov, V. & **Buchanan, S.K.** (2012). Crystal structures of the outer membrane domain of Intimin and Invasin from enterohemorrhagic *E. coli* and enteropathogenic *Yersinia pseudotuberculosis*. *Structure* 20, 1233-1243.

Ujwal, R. and Abramson, J. (2012). High-throughput crystallization of membrane proteins using the lipidic bicelle method. *J. Vis. Exp.* (JoVE), <http://www.jove.com/video/3383>

Noinaj, N., Mayclin, S., Stanley, A.M., Jao, C.C. & **Buchanan, S.K.** (2016). From constructs to crystals: towards structure determination of β-barrel outer membrane proteins. *J. Vis. Exp.* (JoVE), <http://www.jove.com/video/53245>.

Paul Saftig

Zunke F, Andresen L, Wesseler S, Groth J, Arnold P, Rothaug M, Mazzulli JR, Krainc D, Blanz J, **Saftig P**, Schwake M. (2016). Characterization of the complex formed by β -glucocerebrosidase and the lysosomal integral membrane protein type-2. *PNAS* 113 | no. 14 | 3791–3796

Neculai D, Schwake M, Ravichandran M, Zunke F, Collins RF, Peters J, Neculai M, Plumb J, Loppnau P, Pizarro JC, Seitova A, Trimble WS, **Saftig P**, Grinstein S, Dhe-Paganon S (2013). Structure of LIMP-2 provides functional insights with implications for SR-BI and CD36. *Nature* 504, 172-176

C. Eggeling

Super-resolution optical microscopy studies of membrane bioactivity – potentials and limitations

Route Leeuwenbergh-Sonneborgh

