

Program

Sunday, March 25, 2018

16:00 – 21:00 Registration

18:00 *BUFFET SUPPER*

20:00 – 20:10 Sebastian Fiedler **Welcome Note**

20:10 – 21:10 Lukas K. Tamm **Membrane asymmetry in viral and intracellular membrane fusion**

21:10 - *get together at the posters*

Monday, March 26, 2018

07:30 *BREAKFAST*

08:35 – 08:40 *announcements*

08:40 – 09:20 Erwin London **Influence of interleaflet coupling upon ordered domain formation in asymmetric vesicles**

09:20 – 10:00 Georg Pabst **Inside asymmetric membranes: Structure and leaflet coupling**

10:00 – 10:20 Milka Doktorova **Gramicidin increases lipid flip-flop in symmetric and asymmetric lipid vesicles**

10:20 – 10:50 *COFFEE BREAK*

10:50 – 12:30 **Poster flashes #1-40 & poster session**

12:30 – 12:40 **Conference Photo** (outside the lecture hall)

12:40 *LUNCH*

Program

Monday, March 26, 2018

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| 14:00 – 14:40 | Peter Pohl | Registration of lipid domains from the two membrane leaflets |
| 14:40 – 15:20 | Claudia Steinem | ENTH-PI(4,5)P₂ interaction as a function of lateral membrane tension: Introducing membrane asymmetry |
| 15:20 – 16:00 | Siewert-Jan Marrink | Molecular dynamics of complex cell membranes |
| 16:00 – 16:30 | <i>COFFEE BREAK</i> | |
| 16:30 – 17:10 | Annette Meister | Sarcolemma tubulation induced by the peripheral membrane protein N-BAR |
| 17:10 – 19:00 | Poster flashes #21-42 & poster session | |
| 19:00 | <i>DINNER</i> | |
| 20:00- 21:00 | Mark Sansom | Molecular simulation studies of protein/lipid interactions in complex biological membranes |

Program

Tuesday, March 27, 2018

07:30	<i>BREAKFAST</i>	
08:35 – 08:40		<i>announcements</i>
08:40 – 09:20	Oscar Ces	Generating and exploiting membrane asymmetry
09:20 – 10:00	Sylvie Roke	Lipid membrane asymmetry probed label-free with nonlinear light scattering and imaging: Direct probes of surface chemistry and electrostatic potential landscapes.
10:00 – 10:20	Marie Markones Carina Drechsler	Zeta potential quantifies charged lipids in the outer leaflet of asymmetric liposomes
10:20 – 10:50	<i>COFFEE BREAK</i>	
10:50 – 11:30	William Dowhan	Generating membrane protein and lipid asymmetry
11:30 – 12:10	Joost C.M. Holthuis	Dissecting protein-lipid crosstalk in life/death decision-making with photoactuated lipid probes
12:10 – 12:30	Frederick Heberle	Determining the structure of asymmetric bilayers with small-angle scattering: Insight from Molecular Dynamics simulations
12:30	<i>LUNCH</i>	

Program

Tuesday, March 27, 2018

- 14:00 – 14:40 Oliver Ernst **Phospholipid scrambling by rhodopsin**
- 14:40 – 15:20 Thomas Gutschmann **Reconstitution and function of the asymmetric outer membrane of gram-negative bacteria**
- 15:20 – 16:00 Ana J. García-Sáez **Membrane asymmetry in cell death**
- 16:00 – 16:30 *COFFEE BREAK*
- 16:30 – 17:10 **Discussion: Proper choice of models for membrane research**
- 17:10 – 17:30 Stefan Jorda **About the Wilhelm and Else Heraeus Foundation**
- 17:30 – 19:00 **Poster session**
- 19:00 *WE-HERAEUS DINNER*
(social event with cold & warm buffet with complimentary drinks)

Program

Wednesday, March 28, 2018

07:30	<i>BREAKFAST</i>	
08:30 – 08:40		Presentation of poster awards
08:40 – 09:20	Patricia Bassereau	Shaping of membranes upon asymmetric binding of BAR-domain proteins
09:20 – 10:00	Kirsten Bacia	Asymmetric protein-membrane binding in intracellular vesicle formation
10:00 – 10:20	Erik Strandberg	Membrane pore formation of the antimicrobial peptide MSI-103 promoted by lyso-lipids
10:20 – 10:50	<i>COFFEE BREAK</i>	
10:50 – 11:30	Sandro Keller	Polymer-encapsulated nanodiscs for membrane biophysics
11:30 – 12:10	Maria João Moreno	Transient asymmetry in biomembranes due to association of small molecules. Methods for its characterization and relevance for membrane permeability
12:10 – 12:30	Radek Šachl	Inter-leaflet coupling of lipid driven nanodomains
12:30 – 12:40	Heiko Heerklotz	Closing remarks
13:00	<i>LUNCH</i>	

End of the seminar and departure

NO DINNER for participants leaving on Thursday morning