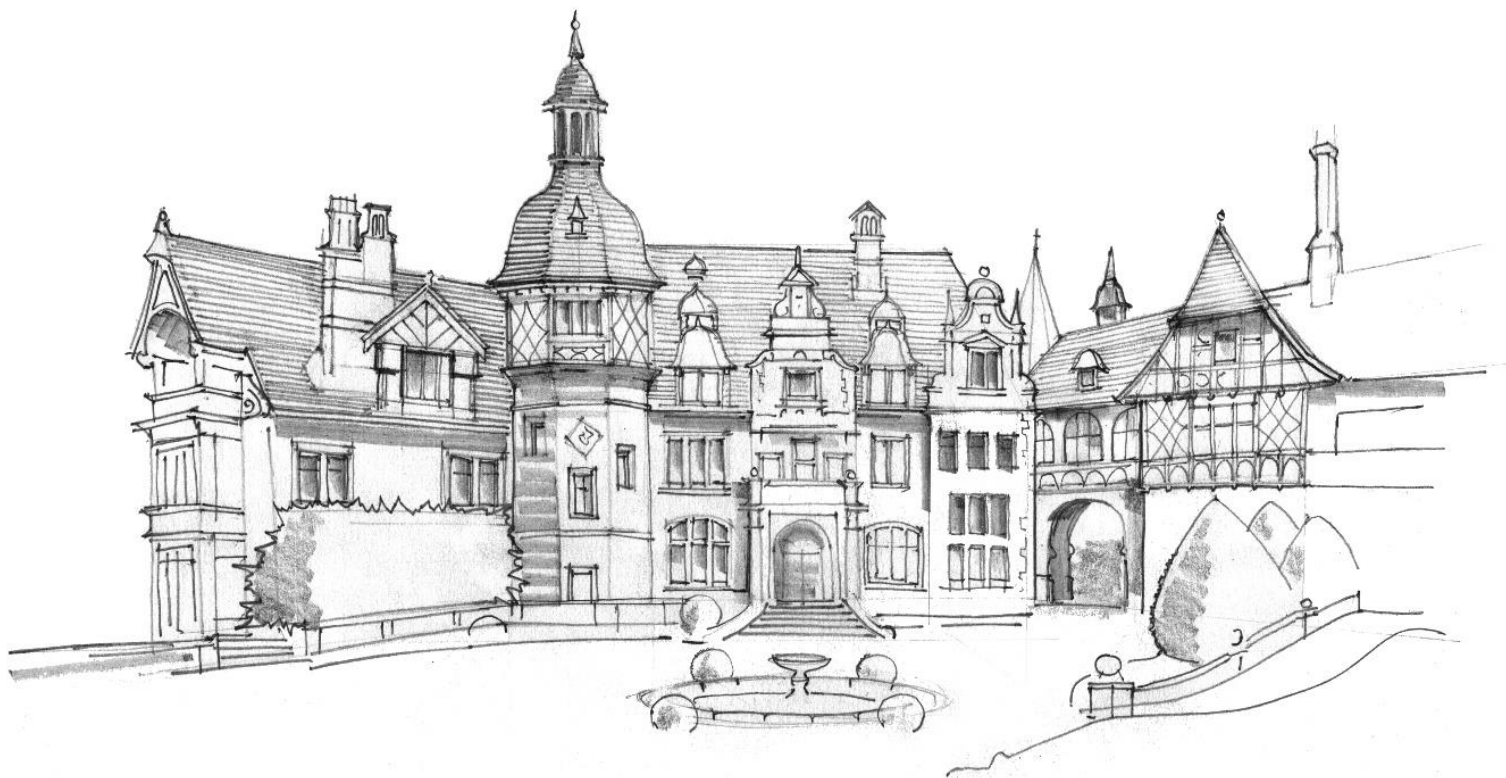


Program



12th Transport Colloquium

May 4–6, 2022

Schloss Rauschholzhausen, Germany

Organizers

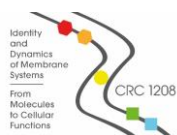
Joachim Geyer (Gießen)

Eckhard Hofmann (Bochum)

Lutz Schmitt (Düsseldorf)

The biennial meeting of the
GBM study group BIOMEMBRANES

Kindly supported by:



Wednesday, May 4th

15:00 Registration

16:30 Welcome

16:45 Session I: Drug transport

Session Chair: Jörg König

Mikko Niemi	Endogenous biomarkers for OATP1B1 phenotyping
Stefan Oswald	Regulation of intestinal drug transporters
Giuliano Ciarimboli	The organic cation transporter 3 is a histamine-transporter
Sarah Römer	Initial characterization of mechanisms conferring substrate specific variation in OCT1*2 activity
Muhammad Rafehi	Stereoselectivity in drug membrane transport by and the inhibition of organic cation transporters

19:00 Dinner

20:00 After dinner speech

Chair: Lutz Schmitt

Kaspar Locher	Structural and mechanistic studies of human drug and lipid transporters
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Thursday, May 5th

08:30 Session II: Bile acid and steroid transport

Session Chair: Joachim Geyer

Stan van de Graaf	Targeting hepatic bile salt uptake to treat metabolic and cholestatic diseases
Verena Taudte	Untargeted metabolomics in pharmacology - a study on Slc10a4 ko mice
Emre Karakus	The steroid sulfate uptake transporter Soat and its role in adipose tissue and 3T3-L1 adipocytes
Vincent Rönnpagel	Comparison of non-parenchymal cell and hepatocyte transporter expression in the mouse liver
Sophie Achilles	Tags in the large extracellular TMD7/8 loop affect glycosylation of TMD3/4 loop as well as activity of SLC26A3

10:30 Coffee break

10:50 Session III: Mitochondrial protein import/export

Session Chair: Thomas Becker

Chris Meisinger	Signalling pathways regulating mitochondrial protein import
Arun Kondadi	Cristae Dynamics: New insights about an old organelle
Lucas Gewehr	Structure of a fusogenic cyanobacterial dynamin-like protein
Jakob M. Silberberg	Post-translational regulation of the K ⁺ pump KdpFABC
Carmen Siebenaller	Phosphorylation regulates the IM30 membrane-fusion activity

13:00 Lunch

14:00 **Session IV: Structural basis for membrane transport**

Session Chair: Eric Geertsma

- Arne Möller The ABC transporter MsbA adopts the wide inward-open conformation in living cells
- Marc Nowaczyk Structure and function of cyanobacterial membrane protein complexes
- Gregor Hagelueken The structure of HiSiaQM defines the architecture of tripartite ATP-independent periplasmic (TRAP) transporters
- Marleen Meyer What can we learn about the mechanism of OCT1 polyspecificity using interspecies comparisons?
- Dariusz Zakrzewicz Tyrosine 146 of the bile acid transporter NTCP regulates hepatitis B virus (HBV) entry into hepatocytes

16:15 **Meeting of the GBM study group "Biomembranes" / Coffee break**

16:55 **Session V: Bacterial secretion**

Session Chair: Lutz Schmitt

- Marek Basler Type VI secretion system: mode of action and dynamic localization of a bacterial nanomachine
- Sebastian Geibel Structural biology of type VII secretion systems
- Lukas Schlösser Membrane binding opens a hinge in the IM30 protein
- Laura Paweletz Characterization of the plasma membrane H⁺-ATPase down to single vesicle level
- Kai Vocke Inhibition of MsbA by ppGpp

19:00 **Dinner**

20:00 **Poster Session**

Friday, May 6th

9:00 **Session VI: Dissecting the function: In Vitro techniques**

Session Chair: Eckhard Hofmann

- Sandro Keller Native nanodiscs for in vitro studies of membrane proteins
- Th. Günther-Pomorski Studying membrane transporters using reconstituted proteoliposomes
- Inga Hänelt Transport Mechanism and Regulation of Potassium/Proton Symporter KimA
- Sarina Veit A single vesicle fluorescence-quenching assay for multi parameter analysis of proteoliposomes
- Ndjali Quarta Small IM30 oligomers form carpet-like structures on membrane surfaces as well as condensates
- Nadja Hellmann Complex interactions of the antidepressant clomipramine with an ABC transporter

11:40 **Poster Prize, Concluding Remarks**

12:00 **Snack and Departure**