

Epithelial SLC26 Anion Transporters

International Symposium of the DFG Research Unit FOR5046

October 5-7 2023, Marburg, Germany

Thursday, 5th October

18:00	<i>Get-together for Invited Speakers: Kunstmuseum der Philipps-Universität, Biegenstraße 11, Marburg</i>
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Friday, 6th October

Venue: Alte Aula (Lahntor 3, Marburg)

Opening

08:30	Dominik Oliver	Welcome
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Structural insights into the transport mechanism of SLC26 and related transporters

Chair: Christoph Fahlke

08:40 (15+5)	Bassam Haddad, Jülich (FOR5046 P2)	Decoding the SLC26 family using computational prediction and consensus structure analysis
09:00 (15+5)	Piersilvio Longo, Jülich (FOR5046 P2)	Chloride transport mechanisms of SLC26a9 at atomic resolution
09:20 (25+10)	Ulrich Zacchariae, Dundee, UK	Mechanism of selective ammonium transport in the E. coli transporter AmtB
09:55 (20+10)	Eric Geertsma, Dresden (FOR5046 P1)	Interdomain-linkers control conformational transitions in the SLC23 elevator transporter UraA
10:25 -10:55	<i>Coffee break and poster mounting</i>	
10:55 (25+10)	Oliver Beckstein Tempe, USA	Sodium/proton antiporters: from structure to function via multiscale modelling
11:30 (20+10)	Dominik Oliver, Marburg (FOR5046 P3)	Prestin (SLC26A5): functional and MD studies
12:00 (25+10)	Eduardo Perozo, Chicago, USA	Structural and evolutionary insights into prestin function

12:35 -14:00	<i>Lunch: On your own</i>	
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14:00 - 14:45	<i>Poster Session (Alte Aula)</i>	
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The larger view: Beyond SLC26 transporters

Chair: Jan-Philipp Machtens

14:45 (25+10)	Carola Hunte, Freiburg	Regulators of sodium/proton exchangers
15:20 (20+10)	Christoph Fahlke, Jülich (FOR5046 P4)	Lysosomal function of SLC26A11
15:50-16:30	<i>Coffee break and poster session</i>	

16:30 (25+10)	Tobias Stauber, Hamburg	CLC chloride transporters of endo-lysosomes – from biophysics to pathophysiology in bone and brain
17:05 (25+10)	Christine Ziegler, Regensburg	Osmoregulatory transporters revisited: New views on osmotic stress sensing

20:00	<i>Dinner: Castle/Fürstensaal</i>	
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Saturday, 7th October

Cellular Function and Pharmacology of SLC26 transporters

Chair: Ursula Seidler

8:30 (25+10)	Bernd Fakler, Freiburg	Proteomic and structure-function analysis of PMCA-Neuroplastin pumps
9:05 (20+10)	Georg Lamprecht, Rostock Ilka Wittig, Frankfurt (FOR5046 P5)	Functional and proteomic analysis of intracellular SLC26A3 (DRA) trafficking
09:35 (25+10)	Pedro de Angeli, Würzburg	SLC26A6 contributes to selenite uptake and ferroptosis resistance
10:10-10:45	<i>Coffee break and poster session</i>	
10:45 (25+10)	Alan Verkman, San-Francisco, USA	Discovery and potential clinical applications of small molecule SLC26 inhibitors
11:20 (25+10)	Joseph Santos-Sacchi, Yale – New Haven, USA	SLC26a5 electromechanics and hearing
11:55 (25+10)	Karl Kunzelmann, Regensburg	Anoctamins in inflammation

12:30 -14:00	<i>Lunch: On your own</i>	
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Physiology and Pathophysiology of SLC26 anion transporters

Chair: Georg Lamprecht

14:00 (25+10)	Mike Gray, Newcastle, UK	Role of SLC4 and SLC26 transporters in HCO ₃ ⁻ secretion in normal and Cystic Fibrosis airways.
14:35 (20+10)	Ursula Seidler, Mahdi Amiri Hannover (FOR5046 P6)	Role of SLC26A3 and CFTR in bicarbonate secretion in intestinal mucosal cultures
15:05 (25+10)	Felix Knauf, Berlin	Role of SLC26A6 and SLC26A1 in oxalate and sulfate homeostasis
15:40-16:15	<i>Coffee break and poster session</i>	
16:15 (20+10)	Iana Lukianova, Berlin (FOR5046 P7)	The role of SLC26A2 in the kidney
16:45 (25+10)	Aminata Touré, Grenoble, France	SLC26 proteins in sperm motility and fertilisation potential
17:20 (25+10)	Jens Leipziger, Aarhus, Denmark	Pendrin, CFTR and the molecular physiology of collecting duct HCO ₃ ⁻ secretion

17:55	Eric Geertsma	Closing remarks
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19:00	<i>Casual Dinner: Institute for Physiology, Deutschhausstr. 2, Marburg</i>	
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