

**DFG Research Training Group "TJ-Train", GRK 2318**  
**Tight junctions and their proteins:**  
**molecular features and actions in health and disease**  
**Retreat, September 17-19, 2018**  
**Hotel Döllnsee-Schorfheide**



---

**September 17, 2018**

**12:00 – 1:00 p.m. Lunch**

**1:00 – 1:10 p.m. Welcome by Jörg Schulzke / Dorothee Günzel**

**Chair: Laura-Sophie Beier**

**1:10 – 2:10 p.m. Plenary lecture by Alan Yu, Kansas City, KS, USA**

**Chair: Susanne Krug**

**2:10 – 2:30 p.m. Hannah Lutz: *Effects of HIV-associated inflammatory cytokines on macromolecule translocation across the gut mucosa***

**2:30 – 3:00 p.m. Carolin Grünhagen: *Macromolecule uptake across the mucosa in HIV infection***

**3:00 – 3:30 p.m. Izabela Kowalczyk: *The role of endocytic receptors in neuroepithelial integrity and neural stem cell fate***

**3:30 – 4:00 p.m. Coffee break**

**Chair: Roland Bücker**

**4:00 – 4:30 p.m. Praveen Natthamilarasu: *HT-29/B6-GR/MR - a cell model to investigate tight junction alterations and ENaC dependent sodium absorption in Campylobacter infection***

**4:30 – 5:00 p.m. Fábía Lobo: *Campylobacteriosis and barrier-protective influences in the cell and animal model***

**5:00 – 5:20 p.m. Eduard Butkevych: *MLC-dependent tight junction changes during Campylobacter jejuni infection in HT-29/B6 cells***

**5:20 – 5:40 p.m. Sholpan Omarova: *Barrier- and transport function in postinfectious irritable bowel syndrome***

**5:40 – 6:30 p.m. Meeting of external referees and doctoral students (without PIs)**

**Photo session in front of the hotel or in the garden**

**7:00 – 10:00 p.m. Dinner**

**DFG Research Training Group "TJ-Train", GRK 2318**  
**Tight junctions and their proteins:**  
**molecular features and actions in health and disease**



---

**September 18, 2018**

**Chair: Martin Lehmann**

- 8:30 – 9:00 a.m.      **Hannes Gonschior:** *Resolving the tight junctional structure and dynamic by using super resolution microscopy*
- 9:00 – 9:30 a.m.      **Deborah Delbue da Silva:** *IL-22 effects in cell polarity and barrier function in intestinal epithelial cells*
- 9:30 – 10:00 a.m.    **Danielle Cardoso da Silva:** *Tracking a primary barrier defect in celiac disease*
- 10:00 – 10:30 a.m.    Coffee break**

**Chair: Michael Fromm**

- 10:30 – 11:00 a.m.   **Laura-Sophie Beier:** *Targeting of claudins by CPE-based modular biologicals*
- 11:00 – 11:30 a.m.   **Jiachen Hu:** *Role of the tricellular tight junction in inflammatory bowel diseases*
- 11:30 – 12:00 a.m.   **Carlos Ayala-Torres:** *Contribution of tricellulin to paracellular water permeability in epithelia of different tightness*

**Photo session in front of the hotel or in the garden**

**12:00 – 1:00 p.m.    Lunch**

**Chair: Deborah Delbue da Silva**

- 1:00 – 2:00 p.m.      **Matthias Ocker:** *Medical Research - From Bench to Bedside to Office*

**Chair: Dominik Müller**

- 2:00 – 2:30 p.m.      **Murat Seker:** *The role of Cnnm2 in the regulation of transepithelial magnesium transport*
- 2:30 – 3:00 p.m.      **Roman Mannweiler:** *Impedance spectroscopy indicates multiple barriers in stratified epithelia*
- 3:00 – 3:30 p.m.      **GRK2318, feedback and strategy for the next year**
- 3:30 – 4:00 p.m.      Coffee break**
- 4:00 – 7:00 p.m.      **Debate Training for students**
- 7:00 – 10:00 p.m.    Dinner**
- 8:00 – 9:00 p.m.      **Steering Committee Meeting**

**DFG Research Training Group "TJ-Train", GRK 2318**  
**Tight junctions and their proteins:**  
**molecular features and actions in health and disease**



---

**September 19, 2018**

**Chair: Dorothee Günzel**

**8:30 – 9:00 a.m.**      **Alexander Holler:** *Transcriptional integration of tight junction assembly in renal epithelial cells*

**9:00 – 9:30 a.m.**      **Janna Leiz:** *Transcriptional Networks of tight junction biogenesis in renal collecting ducts*

**9:30 – 10:15 a.m.**    **Susanne Krug:** *Electron microscopy*

**10:15 – 10:45 a.m.**   **Coffee break**

**10:45 – 11:30 a.m.**   **Jörg Schulzke:** *Correction of active transport for subepithelial resistance*

**11:30 – 1:00 p.m.**    **Martin Lehmann:** *Super-resolution microscopy imaging of nanoscale structures in cells and tissues*

**1:00 – 2:00 p.m.**      **Lunch**

**End of the Retreat**