

# ***SFB 35 - Colloquia in Membrane Transport***

Venue: Medical University Vienna, Center for Physiology and Pharmacology,  
Institute of Physiology, Schwarzspanierstraße 17, 1090 Vienna,

**"Big Lecture Hall Physiology"**.

(Harald Sitte, Tel.: (01) 40160 31323, [harald.sitte@meduniwien.ac.at](mailto:harald.sitte@meduniwien.ac.at))

Karl Kuchler, Tel.: (01) 4277 61807, [karl.kuchler@meduniwien.ac.at](mailto:karl.kuchler@meduniwien.ac.at))

---

Friday      11.03.2016 14:30 s.t.      **John Schütz** (host: K. Kuchler)

PhD Pharmaceutical Sciences MS 313,  
St. Jude Children's Research Hospital  
262 Danny Thomas Place Memphis,  
TN 38105-3678

***"ABC transporters and complex disease"***

---

**John Schütz** ([john.schuetz@stjude.org](mailto:john.schuetz@stjude.org))

---

The ATP-binding cassette (ABC) transporters are a superfamily of membrane proteins with the capability of transporting a variety of diverse compounds through membranes, with their membrane traverse relying on ATP hydrolysis. The human genome contains 48 ABC genes with almost one-third harboring mutations that produce inborn errors of metabolism; such errors have provided insight into their physiological roles and contribution to human disease. It has been postulated that functional alteration of many ABC transporters modifies disease state or progression. My presentation will focus on the role of ABC transporters to neonatal respiratory distress syndrome and myeloid leukemia.