

9TH JULY 2016 SATURDAY

MODULE 4:

ACUTE KIDNEY INJURY

Chairs: H. Haller (Hannover Medical School, GER) & R. Unwin (University College London, UK)

9:30 **OXYGEN SENSING**
Kai-Uwe Eckardt (FAU, GER)

10:10 **PATHOGENESIS OF AKI**
Lloyd Cantley (Yale University, USA)

Coffee break

11:00 **DRUG-INDUCED AKI**
Mark Perazella (Yale University, USA)

11:40 **INJURY AND RECOVERY BIOMARKERS OF AKI**
Chirag Parikh (Yale University, USA)

Please register in advance for the SUMMER SCHOOL by sending an email indicating the days you wish to attend to: mirjam.jacob@uk-erlangen.de

The SUMMER SCHOOL will take place in the auditorium of the **Translational Research Center, Schwabachanlage 12, 91054 Erlangen**

For directions and updates on the program please visit: www.trenal.net

TRENAL („Translational kidney research – from physiology to clinical application“) is an interdisciplinary network project that aims at leveraging the achievements of basic kidney research and translating them into novel diagnostic and therapeutic strategies.

TRENAL unites nephrologists, physiologists, nephro-pathologists and basic scientists from Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Yale University (YALE), University College London (UCL) and the Max Planck Institute for the Physics of Light Erlangen.

TRENAL is funded by the German Academic Exchange Service (DAAD). Detailed information regarding the network can be found on www.trenal.net

The **TRENAL** SUMMER SCHOOL has received additional support from a FAU Best Practice Internationalization Program Fund and from corporate partners.

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TRENAL
SUMMER SCHOOL

**FROM PHYSIOLOGY TO
CLINICAL APPLICATION**

6TH—9TH JULY 2016

ERLANGEN, GERMANY

THE PROGRAM

6TH JULY 2016 WEDNESDAY

8:30 *Registration opens*
9:15 *Introduction: Kai-Uwe Eckardt & Felix Knauf*
Welcome: Günter Leugering (Vice President for International Affairs)

MODULE 1:

PRIMER IN RENAL PHYSIOLOGY

Chairs: M. Bleich (CAU Kiel, GER) & M. Fromm (FAU, GER)

9:30 **AN OVERVIEW OF THE NEPHRON**
Mathew Bailey (University of Edinburgh, UK)

10:10 **GLOMERULAR FILTRATION**
Shuta Ishibe (Yale University, USA)

Coffee break

11:00 **SODIUM TRANSPORT**
Peter S. Aronson (Yale University, USA)

11:40 **UPDATE ON BARTTER AND GITELMAN SYNDROME**
Robert Kleta (University College London, UK)

Lunch break

Chairs: K. Amann (FAU, GER) & R. Veelken (FAU, GER)

13:10 **RENIN ANGIOTENSIN SYSTEM**
Armin Kurtz (University of Regensburg, GER)

13:50 **ROLE OF RENALASE IN HYPERTENSION**
Gary Desir (Yale University, USA)

Coffee break

14:40 **MINERALOCORTICOID ANTAGONISM**
Karl Hilgers (FAU, GER)

15:20 **RENAL INNERVATION**
Tilman Ditting (FAU, GER)

Afternoon program

7TH JULY 2016 THURSDAY

MODULE 2:

RENAL TRANSPORT PHYSIOLOGY

Chairs: M. Köttgen (Freiburg University, GER) & H. Murer (University of Zurich, SUI)

9:15 **INTRODUCTION TO POTASSIUM HANDLING**
Gerhard Giebisch (Yale University, USA)

9:30 **POTASSIUM SENSING BY THE DISTAL NEPHRON**
David Ellison (Oregon Health & Science University, USA)

10:10 **RENAL MAGNESIUM HANDLING**
Rene Bindels (Radboud University Medical Center, NL)

Coffee break

11:00 **RENAL PHOSPHATE HANDLING**
Orson Moe (UT Southwestern, USA)

11:40 **RENAL CALCIUM HANDLING**
Pascal Houillier (Centre de Recherche des Cordeliers INSERM Paris, FRA)

Lunch break

Chairs: K. Kunzelmann (Regensburg University, GER) & C. Korbmayer (FAU, GER)

13:10 **UPDATE ON EAST SYNDROME**
Detlef Bockenhauer (University College London, UK)

13:50 **CYST SECRETION**
Björn Buchholz (FAU, GER)

14:30 **CASE BASED DISCUSSIONS**
Felix Knauf & Ben Walsh

Free afternoon

8TH JULY 2016 FRIDAY

MODULE 3:

ACID & BASE AND WATER

Chairs: J. Mann (Munich, GER) & R. Kettritz (Charité Berlin, GER)

9:15 **INTRODUCTION TO ACID-BASE PHYSIOLOGY**
Felix Knauf (FAU, GER)

9:55 **STEWART'S APPROACH TO ACID-BASE**
Asghar Rastegar (Yale University, USA)

Coffee break

10:45 **RENAL TUBULAR ACIDOSIS**
Robert Unwin (University College London, UK) &

11:25 **METABOLIC ACIDOSIS IN THE ICU**
Ben Walsh (University College London, UK)

Lunch break

Chairs: R. Warth (Regensburg, GER) & P. Aronson (Yale University, USA)

13:00 **CHLORIDE DEPLETION VS. CONTRACTION ALKALOSIS**
Carsten Wagner (Zurich Center for Integrative Human Physiology, SUI)

13:40 **HYPONATREMIA**
Ewout Hoorn (Erasmus University Rotterdam, NL)

Coffee break

14:30 **HYPERNATREMIA**
Robert Zietse (Erasmus University Rotterdam, NL)

15:10 **CASE BASED DISCUSSIONS**
Ewout Hoorn & Robert Zietse

Afternoon program