Speakers

P. S. Aronson, Department of Internal Medicine, Section of Nephrology, Yale School of Medicine, New Haven/USA

B. Buchholz, Department of Medicine 4 – Nephrology and Hypertension, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

L. G. Cantley, Department of Internal Medicine, Section of Nephrology, Yale School of Medicine, New Haven/USA

H. Castrop, Institute of Physiology, University of Regensburg, Germany

O. Devuyst, Institute of Physiology, University of Zurich, Switzerland

R. Flavell, Department of Immunobiology, Yale School of Medicine, New Haven/USA

F. Güler, Nephrology and Hypertension, Hannover Medical School, Germany

A. Hall, Institute of Anatomy, University of Zurich, Switzerland

C. A. Hübner, Institute of Human Genetics, Universitätsklinikum Jena, Germany

R. Kleta, Department of Medicine and Physiology, University College London, UK

S. Kmoch, Institute for Inherited Metabolic Disorders, Charles University in Prague, Czech Republic

F. Knauf, Department of Medicine 4 – Nephrology and Hypertension, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

C. Korbmacher, Institute of Cellular and Molecular Physiology, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

A. Köttgen, Division of Nephrology, Albert-Ludwigs-University Freiburg, Germany

K. Kunzelmann, Department of Medicine 4 – Nephrology and Hypertension, University of Regensburg, Germany

A. Linkermann, Clinic for Internal Medicine IV – Nephrology and Hypertension, University Medical Center Schleswig-Holstein, Campus Kiel, Germany

P. Maxwell, Cambridge Institute for Medical Research, University of Cambridge, UK

O. W. Moe, Department of Internal Medicine and Physiology, Charles and Jane Pak Center of Mineral Metabolism and Clinical Research, UT Southwestern Medical Center, Dallas, TX, USA

J. Norman, UCL Centre for Nephrology, University College London, UK

B. Schermer, Department of Internal Medicine II and Center for Molecular Medicine, University of Cologne, Germany

G. Schley, Department of Medicine 4 – Nephrology and Hypertension, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

J. Schödel, Department of Medicine 4 – Nephrology and Hypertension, Friedrich-Alexander-Universitat Erlangen-Nürnberg, Germany

S. Somlo, Department of Internal Medicine, Section of Nephrology, Yale School of Medicine, New Haven/USA

R. J. Unwin, Department of Medicine and Physiology, University College London, UK

M. Zeisberg, Department of Nephrology and Rheumatology, University Medical Center Göttingen, Germany

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Scientific organisation

Michael Wiesener and Kai-Uwe Eckardt
Department of Medicine 4 – Nephrology and Hypertension
michael.wiesener@uk-erlangen.de

Information and registration

There is no registration fee, but for organizational purposes we kindly ask you to register via the registration form available at www.medizin4.uk-erlangen.de

CME credits from the “Bayerische Landesärztekammer”:
Friday 1 point, Saturday 8 points, Sunday 4 points

General Information

Conference venue: Welcome Kongresshotel, Mußstr. 7, 96047 Bamberg
Phone: +49 951 70 00-0, fax: +49 951 70 00-516
www.welcome-to-bamberg.de

Railway: Bamberg is linked to Nuremberg Central Station (direct railway connection, ICE-train, 65 km distance) and to Munich Central Station (direct railway connection, ICE-train, 200 km distance). Bamberg railway station is 3 km away from the Welcome Kongresshotel.
By car: A 73 to Bamberg, Exit Memmelsdorf/Gartenstadt; turn left towards Bamberg; follow the Memmelsdorfer Straße (5 km). After the first bridge take a left turn toward “Konzert- und Kongress-Halle”. You will find the Welcome Hotel after 500 meters on the right side (parking in hotel garage).

Adaptation and Dysfunction of the Renal Tubule

Department of Medicine 4 – Nephrology and Hypertension
in collaboration with TRENAL, a translational kidney research network between Friedrich-Alexander-Universität Erlangen-Nürnberg, Yale University and University College London, funded by the DAAD
Molecular Targets in Renal Disease

**Dear friends and colleagues,**

We would like to cordially invite you to the 5th International Symposium on Molecular Targets in Renal Disease, continuing the successful tradition of the “Bamberg-Symposia”. Originally supported by the SFB 423 of the German Research Foundation (DFG), we are now pleased to announce a new collaboration of our symposium with TRENAL, a translational kidney research network between the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Yale University and University College London, funded by the German Academic Exchange Service (DAAD).

As in previous symposia, our intention is to review important pathomechanisms and to discuss potential therapeutic targets in renal diseases. This year’s meeting will focus on mechanisms of adaptation and dysfunction of the renal tubule. An outstanding faculty of international researchers has agreed to join us for this meeting. We are most excited that Professor Richard Flavell, chairman of Immunobiology at Yale University, will present the opening plenary lecture. Subsequently different aspects of tubular function and injury will be covered in six thematic areas.

An important goal of the meeting is to provide junior investigators and emerging physician-scientists with the opportunity to liaise with senior faculty and to discuss novel research directions in the context of their own interests. All participants are cordially invited to actively contribute their recent research findings as poster presentation.

While there will be no registration fee, we would like to ask you to register in advance through the symposium website.

The meeting will again take place in the Welcome Kongresshotel in Bamberg, a medieval town north of Erlangen and Nuremberg, which is easy to reach via train (ICE connection) and the airports of Nuremberg, Frankfurt or Munich. Accommodation is available at the conference venue and in close surroundings.

We are very much looking forward to welcoming you in Bamberg and to an exciting research meeting.

Kai-Uwe Eckardt
Michael Wiesener

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**Scientific Programme**

**Friday, July 3rd**

18.00 – 19.00 **Welcome and introductions**  
Chair: K.-U. Eckardt, F. Knauf  
**Opening keynote lecture**  
Inflammation in health, dysbiosis and disease  
R. Flavell, New Haven

**19.00** **Dinner**

**Saturday, July 4th**

**Session 1 Tubular function – basic mechanisms**  
Chair: R. Warth, K. Amann
8.30 – 8.50 Tubular and glomerular aspects of albuminuria: A multiphoton microscopy study  
H. Castrop, Regensburg
8.55 – 9.15 Inherited tubulointerstitial nephropathy  
P. Maxwell, Cambridge
9.20 – 9.40 Mitochondrial function in the renal tubule  
A. Hall, Zurich
9.45 – 10.05 Epithelial functions of anoctamins  
K. Kunzelmann, Regensburg

**10.10 – 10.40 Coffee break**

**Session 2 Renal cyst formation**  
Chair: F. Engel, M. Köttgen
10.40 – 11.10 **Keynote lecture**  
Protein biogenesis, trafficking and the unfolded protein response in the pathogenesis of polycystic kidney and liver diseases  
S. Somlo, New Haven
11.15 – 11.35 Novel mediators of secretion-dependent cyst growth  
B. Buchholz, Erlangen
11.40 – 12.00 Hippo signaling in the pathogenesis of cystic kidney disease  
B. Schermer, Cologne
12.05 – 12.25 Fibrosis and progression of autosomal dominant polycystic disease  
J. Norman, London

**12.30 – 14.00 Poster discussion and lunch**

**Session 3 Tubulointerstitial fibrosis**  
Chair: A. Reis, J. Floege
14.00 – 14.20 Uromodulin and ADTKD  
O. Devuyst, Zurich
14.25 – 14.45 Genetic, molecular and clinical aspects of MUC1 kidney disease  
S. Knoch, Prague
14.50 – 15.10 Effects of HIF stabilization on progression of experimental CKD  
G. Schley, Erlangen

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**Scientific Programme**

**Friday, July 3rd**

15.15 – 15.35 **Coffee break**

**Session 4 Acute kidney injury and hypoxia**  
Chair: A. Kurtz, H. Haller
16.10 – 16.30 Acute kidney injury – pre-clinical studies to define therapeutic targets  
L. J. Cantley, New Haven
16.35 – 16.55 Regulated necrosis in acute kidney injury  
A. Linkermann, Kiel
17.00 – 17.20 Mechanisms of hypoxia induced AKI and progression to CKD  
F. Güler, Hannover
17.25 – 17.45 Hypoxia signaling and gene expression in tubular cells  
J. Schöbel, Erlangen

**Sunday, July 5th**

**Session 5 Renal tubular (dys)function and homeostasis**  
Chair: W. Rascher, J. Mann
9.00 – 9.30 **Keynote lecture**  
Fanconi syndrome  
R. Kleta, London
9.35 – 9.55 Renal tubular acidosis – the clinical phenotype  
R. J. Unwin, London
10.00 – 10.20 Intercalated cells and homeostasis  
C. Hübner, Jena
10.25 – 10.45 Regulation of the epithelial sodium channel (ENaC) by aldosterone and proteases  
C. Korbmaier, Erlangen

**10.50 – 11.20 Coffee break**

**Session 6 Phosphate, oxalate and urate metabolism**  
Chair: C. Kurts, H. Murer
11.20 – 11.50 **Keynote lecture**  
The role of the kidney in phosphate disorders  
O. W. Moe, Dallas
11.55 – 12.15 Mechanisms of epithelial oxalate transport  
P. S. Aronson, New Haven
12.20 – 12.40 The role of the inflammasome in hyperoxaluric kidney disease  
F. Knauf, Erlangen
12.45 – 13.05 New insights into tubular metabolism through forward genetic screens  
A. Köttgen, Freiburg

**13.15 Lunch and farewell**