Polycystic Kidney Disease: Challenges, differing viewpoints and ways forward
June 25-June 30, 2017
Big Sky, Montana

Organizers:

Vicente Torres, M.D., Ph.D.
Mayo Clinic
Rochester, MN

Marie Trudel, Ph.D.
Institut de Recherches Cliniques de Montréal - IRCM
Montreal, Quebec

Sunday, June 25, 2017
4:00 PM – 9:00 PM
Conference Registration

6:00 PM – 7:00 PM
Welcome Reception

7:00 PM – 8:00 PM
DINNER

8:00 PM – 9:30 PM
Keynote Address:
Juan Carlos Izpisua-Belmonte, Salk Institute for Biological Studies,
La Jolla, CA
Strategies for Kidney Regeneration

Monday, June 26, 2017
7:30 AM – 6:00 PM,
Conference Registration

7:30 AM – 8:30 AM
Breakfast

Session One: Genetic Mechanisms in PKD
Lisa Guay-Woodford, George Washington University, Washington DC and York Pei, Toronto General Research Institute,
Toronto, Ontario, Canada

8:30 AM – 8:35 AM
FASEB Opening Remarks

8:35 AM – 9:00 AM
In Memoriam: Dr. Jared James Grantham, presented by James Calvet,
University of Kansas Medical Center, Kansas City, KS
9:00 AM – 9:30 AM  Hanna Rennert, Weill Cornell Medical College, New York, NY: Understanding Next Generation Sequencing for PKD

9:30 AM – 10:00 AM  Peter C. Harris, Mayo Clinic, Rochester, MN: Analysis of genetic factors influencing the phenotype in ADPKD

10:00 AM – 10:15 AM  FASEB Sponsored Coffee Break


10:45 AM – 11:15 AM  Alexis Hofherr, University of Freiburg, Freiburg, Germany: Genome editing of renal epithelial cells to study PKD

11:15 AM – 12:00 PM  Abstract Oral Presentations

12:00 PM – 1:00 PM  Lunch-Meet the Experts Session

1:00 PM – 4:00 PM  Free Afternoon

4:00 PM – 6:00 PM  Poster Session

6:00 PM – 7:00 PM  Dinner

Session Two: Structure and Regulation of Polycystin 2
Bradley Yoder (University of Alabama at Birmingham, Birmingham, AL) and Jing Zhou (Harvard Medical School, Boston, MA)

7:00 PM – 7:30 PM  Erhu Cao, University of Utah School of Medicine, Salt Lake City, UT: The structure of Polycystin-2

7:30 PM – 8:00 PM  Elisabeth P. Carpenter, University of Oxford, Oxford, UK: The structure of the closed conformation of polycystin-2 solved by cryo-EM in detergent

8:00 PM – 8:30 PM  Christine Ziegler, Faculty of Biology and Preclinical Medicine, Regensburg, Germany: Role of lipids in the activation of Polycystin-2

8:30 PM – 9:00 PM  Yong Yu, St. John’s University, Queens, NY: Clues to Polycystin-2 function revealed by gain-of-function mutations

9:00 PM – 9:30 PM  Xing-Zhen Chen, University of Alberta, Edmonton, Canada: Gating and functional regulation of polycystin-2

9:30 PM – 10:00 PM  Horacio F. Cantiello, Universidad de Buenos Aires, Buenos Aires, Argentina: Various regulatory mechanisms of Polycystin-2 function

Tuesday, June 27, 2017
7:30 AM – 6:00 PM,  Conference Registration

7:30 AM – 8:30 AM  Breakfast

Session Three: Cell biology of PKD Proteins, extracellular vesicles and cilia
Bradley Yoder (University of Alabama at Birmingham, Birmingham, AL) and Jing Zhou (Harvard Medical School, Boston, MA)

8:30 AM – 9:00 AM  
Feng Qian, University of Maryland School of Medicine, Baltimore, MD: *Regulation of Polycystin-1 GPS cleavage and trafficking to the cilia*

9:00 AM – 9:30 AM  
Stefan Somlo, Yale University School of Medicine, New Haven, CT: *ER processing of Polycystin-1 and trafficking to the cilia*

9:30 AM – 10:00 AM  
William Y Tsang, IRCM, Montréal, Canada: *Regulation of ciliary entry*

10:00 AM – 10:30 AM  
FASEB Sponsored Coffee Break and *Group Photo*

10:30 AM – 11:00 AM  
Jinghua Hu, Mayo Clinic, Rochester, MN: *A novel paradigm for anchoring polycystins on the ciliary membrane*

11:00 AM – 11:30 PM  
Maxence Nachury, Stanford University School of Medicine, Stanford, CA: *Signal-dependent ectocytosis*

11:30 PM – 12:00 PM  
Takanari Inoue, Johns Hopkins University School of Medicine, Baltimore, MD: *Membrane composition dictates fall of primary cilia and rise of cell cycle*

12:00 PM – 1:00 PM  
Lunch

1:00 PM – 4:00 PM  
Free Afternoon

4:00 PM – 6:00 PM  
*Poster Session*

6:00 PM – 7:00 PM  
Dinner

**Session Four: Epigenetics and microRNAs**
Friedhelm Hildebrandt (Boston's Children's Hospital, Boston, MA) and Peter Igarashi (University of Minnesota, Minneapolis, MN)

7:00 PM – 7:30 PM  
Katalin Susztak, University of Pennsylvania, Philadelphia, PA: *Epigenetic based therapies for chronic diseases*

7:30 PM – 8:00 PM  
Xiaogang Li, University of Kansas Medical Center, Kansas City, KS: *Epigenetic based therapies for PKD*

8:00 PM – 8:30 PM  
Vishal Patel, University of Texas Southwestern Medical Center, Dallas, TX: *Role of non-coding RNAs in PKD*

8:30 PM – 9:00 PM  
TBN

9:00 PM – 10:00 PM  
*Abstract Oral Presentations*

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**Wednesday, June 28, 2017**

7:30 AM – 6:00 PM,  
Conference Registration
Session Five: Disease mechanisms (1): Cilia, calcium, and cAMP signaling
Alessandra Boletta (San Raffaele Scientific Institute, Milano, Italy) and Dorien Peters (Leiden University, Leiden, The Netherlands)

8:30 AM – 9:00 AM  Surya M. Nauli, The University of Toledo, Toledo, OH: Role of calcium signaling in PKD

9:00 AM – 9:30 AM  Paul G. DeCaen, Northwestern University Feinberg School of Medicine, Chicago, IL: Calcium signaling and polycystin-2

9:30 AM – 10:00 AM Steven Kleene, University of Cincinnati, Cincinnati, OH: Polycystin-2 dependent channel of primary cilia

10:00 AM – 10:15 AM FASEB Sponsored Coffee Break

10:15 AM – 10:45 AM Peter Igarashi, University of Minnesota, Minneapolis, MN: Adenylyl cyclases in ADPKD, AC5, AC6 or both?

10:45 AM – 11:15 AM Caroline Sussman, Mayo Clinic, Rochester, MN: Modulation of cystogenesis by phosphodiesterases and PKA regulatory subunits

11:15 AM – 12:00 PM Abstract oral presentations

12:00 PM – 12:30 PM Business Meeting

12:30 PM – 1:30 PM Lunch

1:30 PM – 3:00 PM Career Development Workshop
Gregory Germino (NIDDK, NIH, Bethesda, MD)

3:00 PM – 4:00 PM Free time

4:00 PM – 6:00 PM Poster Session

6:00 PM – 7:00 PM Dinner

Session Six: Disease Mechanisms (2): Other Pathways and model systems
Scientific Session Iain Drummond (Harvard Medical School, Boston, MA) and Terry Watnick (University of Maryland, Baltimore, MD)

7:00 PM – 7:30 PM  James Calvet, University of Kansas Medical Center, Kansas City, KS: The role of ciliary developmental signaling in PKD (notch, hedgehog, wnt)

7:30 PM – 8:00 PM  Leonidas Tsiokas, University of Oklahoma Health Sciences Center, Oklahoma City, OK: Wnt calcium signaling in PKD

8:00 PM – 8:30 PM  Ming Wu, Second Military Medical University, Shanghai, China: Hippo pathway in ciliogenesis and cystogenesis

8:30 PM – 9:00 PM  Benjamin S. Freedman, University of Washington School of Medicine, Seattle,
WA: Induced pluripotent stem cells and organoids to study PKD

9:00 PM – 9:30 PM
Timothy A. Fields, KUMC, Kansas City, KS: Roles of progenitor cells in cyst formation

9:30 PM – 10:00 PM
Katharina Hopp, University of Colorado, Aurora, CO: The role of the adaptive immune system in ADPKD.

Thursday, June 29, 2017
7:30 AM – 6:00 PM, Conference Registration
7:30 AM – 8:30 AM Breakfast

Session Seven: Cell Metabolism and metabolomics
Gregory Germino (NIDDK, NIH, Bethesda, MD) and Gerd Walz (University Hospital Freiburg, Germany)

8:30 AM – 9:00 AM
Robert H. Weiss, University of California, Davis, CA: Metabolomics of PKD

9:00 AM – 9:30 AM
Michael Caplan, Yale University School of Medicine, New Haven, CT: Polycystins and the Regulation of Mitochondrial Function

9:30 AM – 9:45 AM
FASEB Sponsored Coffee Break

9:45 AM – 10:15 AM
Eduardo N. Chini, Mayo Clinic, Rochester, MN: Food restriction and related metabolic interventions in PKD

10:15 AM - 10:45 AM
E. Wolfgang Kuehn, University Hospital, Freiburg, Germany: Cilia provide a link between metabolism and inflammation

10:45 AM – 11:15 AM TBN

11:15 AM – 12:00 PM Abstract Oral Presentations

12:00 PM – 1:00 PM Lunch

1:15 PM – 4:00 PM Group Activity (optional)

4:00 PM – 6:00 PM Poster Session

6:00 PM – 7:00 PM Dinner

Session Eight: Biomarkers and clinical trials
Arlene Chapman (Emory University School of Medicine, Atlanta, GA) and TBN

7:00 PM – 7:30 PM
Ronald Perrone, Tufts University School of Medicine, Boston, MA: Lessons from CRISP, HALT PKD, TEMPO and the PKD Outcomes Consortium: TKV and other Biomarkers.

7:30 PM – 8:00 PM
Bradley Erickson, Mayo Clinic, Rochester, MN: Advanced imaging of ADPKD

8:00 PM – 8:30 PM
Ron Gansevoort, University Medical Center Groningen, Groningen, The Netherlands: Update on the tolvaptan clinical trials and postmarketing
8:30 PM – 9:00 PM    Marie Hogan, Mayo Clinic, Rochester, MN: Update on clinical trials of somatostatin analogs for PKD and PLD

9:00 PM – 9:30 PM    Anjay Rastogi, David Geffen School of Medicine UCLA, Los Angeles, CA: Clinical Studies of Tesevatinib, an EGFR Inhibitor, for the Treatment of ADPKD

9:30 PM – 10:00 PM    Special Lecture: Regulatory Path to Drug Approval for Inherited Slowly Progressive Renal Diseases
Speaker: TBN

Friday, June 30, 2017

7:30 AM – 8:30 AM    Breakfast

Session Nine: Disease Mechanisms (3): Extrarenal tissues and organs
Robert Bacallao (Indiana University, Indianapolis, IN) and Albert Ong (University of Sheffield, Sheffield, UK)

8:30 AM – 9:00 AM    Tetyana V. Masyuk, Mayo Clinic, Rochester, MN: New insights into the pathobiology of Polycystic Liver Disease

9:00 AM – 9:30 AM    David A. Long, UCL Institute of Child Health, London, UK: Role of the vasculature in the progression of PKD

9:30 AM – 9:45 AM    FASEB Sponsored Coffee Break

9:45 AM – 10:15 AM    Barbara E. Ehrlich, Yale University, New Haven, CT: Function of the polycystins: Insights from the heart

10:15 AM – 10:45 AM    P. Darwin Bell, Medical University of South Carolina, Charleston, SC: The intrarenal renin-angiotensin system in PKD

10:45 AM – 11:15 AM    TBN

11:15 AM    Lunch to Go and DEPARTURES

END OF CONFERENCE
For additional information contact:
FASEB Science Research Conferences
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Bethesda, MD 20814

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