# The 9th International Podocyte Conference

April 22-25, 2012

### Miami Beach Resort & Spa 4833 Collins Avenue Miami Beach, Florida 33140

	Sunday, April 22, 2012			
3:00 - 8:00 PM	Registration			
7:00 PM	Get-together for bites and drinks (Optional)			
	Monday, April 23, 2012			
7:00-8:00 AM	Breakfast			
8:00 AM	Welcome			
	Jochen Reiser, MD, PhD and Pascal Goldschmidt, MD			
	Dr. Irving Smokler, President, The NephCure Foundation			
8:20 AM	Alonzo Mourning "Proteinuria: A patient's view"			
8:35 AM	John Sedor, MD "Proteinuria: A nephrologist's view"			
	Session 1			
	Systems Biology Chairs: Richard Johnson, MD & Matthias Kretzler, MD			
9:00 AM	<b>Ali Gharavi, MD</b> "Searching for Genomic Disorders in Renal Hypodysplasia, a Secondary Cause of FSGS"			
9:25 AM	Katalin Susztak, MD, PhD			

 $\hbox{\it ``Genomics and epigenomics of diabetic kidney disease''}$ 

9:50 AM **David Salant, MD** 

"Immune-mediated podocyte injury"

10:15AM Karlhans Endlich, MD

"PodNet - A Protein-Protein Interaction Network of the Podocyte"

10:40 AM Break

11:00 – 11:25 AM Panel Discussion 1: "Integrating Pathology and Systems Biology"

Dontscho Kerjaschki, MD; Laura Barisoni, PhD; Agnes Fogo, MD; Richard Johnson, MD; Matthias Kretzler, MD; Wilhelm Kriz, MD; Maria Pia Rastaldi,

PhD

#### Session 2

### Selected presentations from abstracts

Chairs: Randy Levinson, PhD (Senior Editor, Nature Medicine)

11:30 AM Henning Hagmann, MD

"The lipid-modifying enzyme PON2 as a new interaction partner and regulator of

TRPC6"

11:45 AM Andreas Kistler, MD

"Janus-headed TRPC6: the calcium channel, known to cause FSGS when chronically

hyperactive, protects podocytes from acute complement-mediated injury"

12:00 – 1:00 PM **Lunch / Posters set-up** 

# Session 3 Integrins and the Sole Plate

Chairs: Jordan Kreidberg, MD, PhD and Roy Zent, MD

1:00 PM Amin Arnaout, MD

"Integrin biology and structure"

1:25 PM Ambra Pozzi, MD

"Regulation of glomerular collagen homeostasis by the matrix receptors integrins"

1:50 PM Chuanyue Wu, MD

"The integrin-actin network in podocytes"

### Session 4

## **Actin Dynamics, Cell Motility and Proein Sorting**

Chairs: Peter Mundel, MD and Lawrence Holzman, MD

2:15 PM	<b>Hidde Ploegh, PhD</b> "Quality and quantity control at the endoplasmic reticulum"			
2:40 PM	<b>Shuta Ishibe, MD</b> "Podocytes Stuck in Traffic- A link between the endocytic machinery and the actin cytoskeleton"			
3:05 PM	<b>Toshiro Fujita, MD</b> "Activation of Rac1-mineralocorticoid receptor pathway in proteinuric kidney disease"			
3:30 PM	Break			
3:45 - 4:30 PM	Panel Discussion 2: "The Podocyte Cytoskeleton"			
	Thomas Benzing, MD; Lawrence Holzman, MD; Jordan Kreidberg, MD; Peter Mundel, MD; Roy Zent, MD			
4:30 - 4:45 PM	Matthias Kretzler, MD "Neptune"			
4:45 - 6:30 PM	Poster Session/Poster Presentation. Odd Numbers, 5:00-6:00 PM			
7:00 PM	Dinner (Speakers and Chairs) Free Evening (Conference Registrants)			

### Tuesday, April 24, 2011

7:00 – 8:00 AM **Breakfast** 

### Session 5

The Slit Diaphragm, an Expanding Platform
Chairs: Karl Tryggvason, MD, PhD and Harry Holthoefer, MD, PhD

8:00 AM **Tobias Huber, MD** 

"Novel insights in Neph-Nephrin function"

8:25 AM	<b>Lorenz Sellin, MD</b> "Modifiers of Nephrin Interactions in Proteinuria	
8:50 AM	Mario Schiffer, MD "Stabilizers and Destabilizers of the Slit Diaphragm"	

# Session 6 Genetic Disorders

	Chairs: Susan Quaggin, MD and Michelle Winn, MD
9:15 AM	Martin Pollak, MD "Genetic Basis of FSGS in Adults: Common and Rare Forms"
9:40 AM	<b>Friedhelm Hildebrandt, MD</b> "Exome resequencing reveals novel genes for nephrotic syndrome that interact within a RhoA-related pathway"
10:05 AM	<b>Stuart Dryer, PhD</b> "Podocin, TRPC6, and regulation of podocyte mechanosensitivity"
10:30 AM	Break
10:45 - 11:30 AM	Panel Discussion 3: "From Genetics to Mechanism of Disease"
	Michelle Winn, MD; Friedhelm Hildebrandt, MD; Jeffrey Kopp, MD; Martin

# Pollak, MD; William Smoyer, MD; Susan Quaggin, MD

# Session 7 Selected presentations from abstracts Chairs: Senior Editors of JCI and NEJM

11:45 AM	Wilhelm Kriz awardee: <b>Heon Yung Gee, MD, PhD</b> "The Novel Nephrotic Syndrome-Causing Genes, ARHGDIA, ANKRD25, and MPDZ Interact with RHOA in Podocytes"
12:00 PM	<b>Shazia Ashraf, MS</b> "Targeted Exome Sequencing and Homozygosity Mapping Identify Mutation of ADCK4 as a Novel Single-Gene Cause of Steroid Resistant Nephrotic Syndrome"
12:15 PM	
	Andreas Goldwich, PhD
	"Podocytes as non-hematopoietic professional antigen-presenting cells"
12:30 - 1:30 PM	Lunch

# Session 8

# New Views of the Glomerulus

Chairs: Iain Drummond, PhD and Vivette D'Agati, MD

1:30 PM	Bruce Molitoris, MD				
	"Dynamic Aspects of Glomerular Permeability"				
1:55 PM	Janos Peti-Peterdi, MD				
	"Intravital imaging of novel GFP mouse models reveal podocyte and parietal cell				
	dynamics and confirm the glomerular origin of proteinuria in FSGS"				
2:20 PM	Erwin Boettinger, MD				
2:20 FW	"Cell-Cell Crosstalk In Podocyte-Initiated Glomerular Injury"				
	Cen-Cen Crosscark in Fouocyte-initiatea Glomeralar Injury				
	Caradan O				
	<u>Session 9</u> New pathways of proteinuria				
	Chairs: Jeff Miner and Moin Saleem				
	Gitairs. Jejj Miller and Mont Saleem				
2:45 PM	Richard Coward, PhD				
	"The podocyte, insulin and the IGFs. Insights from knockouts?"				
3:10 PM	Sumant Chugh, MD				
	"Angiopoietin-like-4 in nephrotic syndrome"				
3:35 PM	Christian Faul, PhD				
	"Paracellular protein transport across the epithelium of the small intestine and the				
	glomerular filter – mechanistic similarities?"				
4:00 PM	Roger Wiggins, MD				
4.00 I M	"Growth and podocyte stress"				
	drown and podocyte stress				
4:30 - 5:15 PM	Coffee Break				
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	<u>Session 10</u> Young Investigators				
	Chairs: Andrey Shaw, MD, PhD and Ross Cagan, PhD				
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Chairs: Andrey Shaw, MD, PhD and Ross Cagan, PhD

Laurence Beck, MD 5:15 PM

"Characterizing the humoral response to the podocyte antigen PLA2R in membranous

	nephropathy"
5:30 PM	Katsuhiko Asanuma, MD, PhD "Dendrin location in podocytes is associated with disease progression in animal and human glomerulopathy"
5:45 PM	<b>Kirk Campbell, MD</b> "Regulation of Splicing Factor SC35 expression by YAP2 is a novel podocyte survival mechanism"
6:00 PM	Jenny Nystrom, PhD "Melanocortin receptors in the kidney"
6:15 PM	Changli Wei, PhD "Characteristics of serum suPAR in distinct conservatively treated FSGS cohorts"
6:30 - 7:30 PM	Poster Session/Poster Presentation, Even Numbers
7:30 PM	Closing Dinner / Wilhelm Kriz and Marilyn Farquhar Awards

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7:00 – 8:00 AM **Breakfast** 

### Session 11 Glomerular Regeneration

Chairs: Marcus Moeller, MD and Kumar Sharma, MD

arhad Danesh, MD

"Nanotherapy with Secretome from Embryonic Stem Cells in Kidney Injury"

### 8:25 AM Raghu Kalluri, MD, PhD

"Mechanism and therapeutic potential of induced pluripotent stem cells in kidney

repair and regeneration"

### 8:50 AM Stuart Shankland, MD

"A new glomerular epithelial cell progenitor...stay tuned"

### Session 12 Novel Therapeutic Strategies

### Chairs: Peter Mathieson, MD and John He, MD

**9:15 AM Robert Zivin, PhD** (Keynote Speaker)

"Innovating away from chronic care"

9:40 AM Jeffrey Kopp, MD

"FSGS therapy: patient, pathway, pharmacopeia, and prevention"

10:05 AM Vineet Gupta, PhD

"Podocytes in Drug Discovery"

10:30 AM Break

10:45 AM Sanja Sever, PhD

"Dynamin, a novel target in chronic kidney disease?"

11:15 AM Alessia Fornoni, MD, PhD

"Targeting lipids in FSGS and Diabetic Kidney Disease"

11:45 AM **Concluding Remarks & Announcements** 

Jochen Reiser, MD, PhD

<sup>\*</sup>Subject to Change