Name	***Position Title***
Matias Simons	Professor for Medicine&Systems Biology Emmy Noether Group Leader Principle Investigator, Spemann Graduate School-Freiburg

EDUCATION/TRAINING

Institution and Location	Degree	Year(s)	Field of Study
University of Freiburg, Vienna and Stockholm	M.D.	1995-2002	Medicine
University Hospital Freiburg, Germany		2002-2005	Residency Internal Medicine
Mount Sinai School of Medicine, New York, USA		2005-2008	Cell biology

A. Positions and Honours

Employment/Experience

2002-2005 Resident and Postdoc at the Renal Division, University Hospital Freiburg, Freiburg

2005-2008 Post Doc at the Department of Developmental and Regenerative Biology, Mount Sinai School of Medicine, New York, USA

2008-present Emmy-Noether fellow and Group Leader at the Renal Division, University Hospital Freiburg

2009-present W2/W3 Professorship for Medical Systems Biology at the University of Freiburg (tenure track)

Honors, Awards and Scholarships

1998 ERASMUS-stipend
2000 EMBO short term fellow
2002 MD thesis (“summa cum laude”)
2005 Theodor-Frerichs-Award of the German Society for Internal Medicine
2005-2007 EMBO long term fellow
2007-2008 DFG fellow
2008-present Emmy-Noether fellow by the DFG

Other Scientific Activities

Since 2006 *ad hoc* referee for scientific journals (Kidney International, Laboratory Investigation, European Journal of Human Genetics, American Journal of Physiology, Plos ONE)

10 selected publications:

1. Simons M, Saffrich R, Reiser J and Mundel P: Directed membrane transport is involved in process formation in cultured podocytes. *Journal of the American Society of Nephrology,1999 Aug;10(8):1633-9*

2. Simons M, Schwarz K, Kriz W, Miettinen A, Reiser J, Mundel P and Holthofer H: Involvement of lipid rafts in nephrin phosphorylation and organization of the glomerular slit diaphragm. *American Journal of Pathology 2001 Sep;159(3):1069-77*

3. Schwarz K, Simons M, Reiser J, Saleem MA, Faul C, Kriz W, Shaw AS, Holzman LB und Mundel P: Podocin, a raft-associated component of the slit diaphragm, interacts with CD2AP and nephrin. *Journal of Clinical Investigation 2001 Dec; 108(11):1621-162*

4. Huber TB*, Simons M*, Hartleben B, Sernetz L, Schmidts M, Gundlach E, Saleem MA, Walz G, Benzing T: Molecular basis of the functional podocin-nephrin complex: mutations in the NPHS2 gene disrupt nephrin targeting to lipid raft microdomains. *Hum Mol Genet. 2003 Dec 15;12(24):3397-405* (*equal contribution)

5. Simons M, Gloy J, Ganner A, Bullerkotte A, Bashkurov M, Schermer B, Benzing T , Cabello OA Polok B, Driever W, Jenny A, Mlodzik M, Obara T, Walz G: Inversin, the nephronophthisis type II gene product, functions as a switch molecule between Wnt signaling pathways, *Nature Genetics 2005 May;37(5):537-43*

6. Huber TB, Schermer B, Muller RU, Hohne M, Bartram M, Calixto A, Hagmann H, Reinhardt C, Koos F, Kunzelmann K, Shirokova E, Krautwurst D, Harteneck C, Simons M, Pavenstadt H, Kerjaschki D, Thiele C, Walz G, Chalfie M, Benzing T: Podocin and MEC-2 bind cholesterol to regulate the activity of associated ion channels. *Proc Natl Acad Sci U S A 2006 Nov 14;103(46):17079-86.*

7. Simons M, Gault W, Klein TJ, Gotthardt D, Shao Y, Wu AL, Fang Y, Dow J, Chen J, Zheng J, Boutros M, Mlodzik M: Electrochemical cues regulate the assembly of the Fz/Dsh complex at the plasma membrane during planar epithelial polarization, *Nature Cell Biology 2009 Mar;11(3):286-94.*

8. Skouloudaki K, Puetz M, Simons M, Hartleben B, Engel C, Moeller M, Schäfer T, Ramachandran H, Mlodzik M, Huber TB, Kim E, Kramer-Zucker A, Walz G: Scribble links Fat1 to the Hippo signaling cascade, and is required for normal development of the zebrafish pronephros, *PNAS 2009 May 26;106(21):8579-84.*

9. Ganner A, Schaefer T, Lienkamp S, Romaker D, Basker H, Simons M, Wallingford JB, Walz G: APC2 targets Dishevelled for ubiquitin-dependent degradation, *PNAS Oct 20;106(42):17799-804.*

10. Hermle T, Saltukoglu D, Grünewald J, Walz G, Simons M: The vacuolar proton pump, V-ATPase, regulates Frizzled receptor function in Wingless and planar polarity signaling [in revision]