



Preliminary Programme

There will be 3 sections to the meeting as follows:

1. Pre-meeting focussed on early career researchers (**Tue 9th June**)
2. Main meeting: Bridging basic and translational research (**Wed 10th-Fri 12th June**)
3. Patient-focussed meeting: Communicating research (**Sat 13th June**)

Pre-meeting outline (Tue 8.45-6pm):

08:45-09:05 **Introduction: Rachel Lennon & Thomas Benzing**

Session I Podocyt-omics: big data, big discoveries?

09:05-09:30 **Andreas Beyer:** System biology: analysis of large-scale omics datasets

09:30-10:50 **4x selected talks**

10:50-11:15 **Break**

11:15-13:15 Poster session and Lunch: guided poster session until 12:15/30, followed by lunch and discussions at the posters until 13:15/30.

Session II Models to investigate podocyte biology

13:30-14:00 **Melissa Little:** The future of kidney organoid modelling

14:00-15:20 **4x selected talks**

15:20-15:45 **Break**

Session III: Rotating round table discussions - What does the future hold?

15.45-1800 **With:** Andreas Beyer, Katalin Susztak, Richard Coward, Christoph Schell, Melissa Little, Ron Korstanje, Jeff Miner, Rachel Lennon, Thomas Benzing, Randy Levinson & Susan Allison

Topics: Mult-omics approaches, Imaging the glomerular filtration barrier, Podo-signalling, *In vivo* and *in vitro* models – their (dis-) advantages, GBM dynamics, Publishing without perishing and Career development

Pre-meeting dinner

Main meeting outline: (Wed 8.30am-6pm)

Timing:

Day 1 (Wed 8.30am-6pm)

08.30-09.00 **Welcome: Professor Graham Lord, Dean FBMH, local organising committee and NephCure**

09.00-12.30 **Plenary session I: Podocyte signalling pathways and genetic screening**

Basic: Podocyte signalling pathways – Discussion lead and overview: **Mira Krendel**

Britta George: Crosstalk between the slit diaphragm and cell-matrix adhesions

Christoph Schell: Signals to the cytoskeleton (20)

Friedhelm Hildebrandt: Rho/Rac/CDC42 signalling in steroid resistant nephrotic syndrome

Selected abstracts

Break

Translation: Genetic screening in glomerular disease-Discussion lead and overview: **Martin Pollak**

Matt Sampson: The genetic architecture of nephrotic syndrome from rare to common variants

Corinne Antignac: New insights into Galloway-Mowat syndrome

Danny Gale: What genetic cohort studies reveal about glomerular disease

Selected abstracts

12.30-14.00 ***Lunch and Poster Session I***

14.00-17.30 **Plenary Session II: Cellular crosstalk and immune mediated glomerular disease**

Basic: Cellular crosstalk-Discussion lead and overview: **Stuart Shankland**

Marcus Moeller: Functional roles of parietal epithelial cells

Becky Foster: Signals to the endothelium

Pierre-Louis Tharaux: Mechanisms of glomerular cell proliferation and migration

Selected abstracts

Break

Translation: Immune mediated glomerular disease- Discussion lead and overview: **Pierre Ronco**

Jonathan Barratt: IgA nephropathy- new mechanisms and management

Marina Noris: Targeting complement to treat glomerular disease

Silke Brix: ANCA and podocytes

Selected abstracts

17.30-18.00 **Keynote 1. Chair Peter Mathieson**

Menna Clatworthy: Lessons from single cell RNA sequencing

Welcome Reception: Manchester Museum

Day 2 (Thur 8am-6pm)

08.00-08.45 ***Breakfast Session 1: Meeting the Journal Editors***

0900-0930 **Keynote 2. Chair Paul Brenchley**

Martin Humphries: A systems approach to adhesion signalling

09.30-13.00 **Plenary Session III: The cell-matrix interface and podocyte pathology**

Basic: The cell-matrix interface- Discussion lead and overview: **Jeff Miner**

Nicole Endlich: Visualising podocyte-matrix interactions

Denise Marciano: Nephronectin and mesangial cell adhesion

Selected abstracts

Break

Translation Podocyte pathology- Discussion lead and overview: **Agnes Fogo**

Thomas Benzing: The molecular pathogenesis of proteinuria

Hani Suleiman: Basement membrane defects in transplant glomerulopathy

Moumita Barua: Defining glomerular phenotypes with image analysis and machine learning

Selected abstracts

13.00-14.30 **Lunch and Poster Session 2**

14.30-18.00 **Plenary Session IV: Experimental models and drug development**

Basic: Disease models- Discussion lead and overview: **Sue Quaggin**

Ron Korstanje: The influence of genetic background on disease phenotype in mice

Mario Schiffer: Deciphering the role of CD2AP with mechanistic studies in zebrafish and drosophila

Benjamin Freedman: Modelling disease in kidney organoids

Selected abstracts

Break (30 mins)

Translation: Drug development- Discussion lead and overview: **Andrey Shaw**

Aliza Thompson: Drug development- a regulatory perspective

Matthew Breyer: Common drug targets in glomerular disease

Peter Mundel: Precision medicine for podocytopathy

Selected abstracts

Conference sport: 5K run/football/other

Conference dinner: The Principal Hotel. Marilyn Farquhar award presentation.

Day 3 (Fri 8am-6.30pm)

08.00-08.45 **Breakfast Session 2: Meeting the mentors**

09.00-12.30 **Plenary Session V: Metabolic pathways and drug targets in metabolic kidney disease**

Basic: Metabolic pathways- Discussion lead and overview: **Alessia Fornoni**

Catherine Meyer-Schwesinger: Protein turnover in glomerular disease

Richard Coward: GSK3 as a critical regulator of podocyte function

Markus Rinschen: Metabolomic activity and its proteomic crosstalk

Selected abstracts

Break

Translation: Drug targets in metabolic kidney disease- Discussion lead and overview: **Tobias Huber**

Anna Greka: Small molecule therapy to reverse proteinopathy

Rama Natarajan: Metabolic memory in diabetic kidney disease

Fabiola Terzi: Endothelial-podocyte cross-talk drives aging nephropathy

Selected abstracts

12.30-13.00 **Keynote 3. Chair Elena Torban**

Melissa Little: Human kidney organoids in perspective.

13.00-14.30 **Lunch and Poster Session 3**

14.30-18.00 **Plenary Session VI: Systems biology and biomarkers**

Basic: Systems biology- Discussion lead and overview: **Katalin Susztak**

Paul Brinkotter: The role of anaerobic glycolysis in glomerular barrier integrity

Matthias Kretzler: Molecular signatures for targeting patients to trials in glomerular disease

Ana Konvalinka: Microproteomics in transplant glomerulopathy

Selected abstracts

Break

Translation: Disease biomarkers and circulating factors and - Discussion lead and overview: **Moin Saleem**

Jochen Reiser: Strategies for targeting circulating factors

Joshua J. Zaritsky: LDL apheresis in nephrotic syndrome

Selected abstracts

18.00-18.30 **Final remarks and announcement of 2022 IPC host.**

Speakers dinner: Christies

Preliminary patient-focused meeting outline (Sat 9am-6pm)

8:30-9:00 **Breakfast/Registration**

9:00-9:15 Welcome, agenda Overview (jointly with all)

9:15-10:15 Patient Introductions & Storytelling

10:15-10:30 NKI Community Expansion – setting the stage for community building in the UK and EU –
NephCure, NeST, NephcEurope, alport UK,

10:30-11:10 Nephrotic Syndrome Overview – Breaking Down the Diagnoses

11:10-11:40 **Break**

11:40-12:20 Learning Breakouts – (Physician Led)

BREAKOUT #1 Treatment Options & Care for Adults **BREAKOUT #2** Treatment Options & Care for Children

12:20-1:30 **Lunch**

1:30 – 2:15 The Current Research Landscape (opportunities and updates)

2:15-3:00 Panel Discussion – Nephrotic Syndrome Beyond the Meds, Adult Patient, Caregiver, Social Worker and Advocacy Resources OR Genetics & NS

3:00-3:20 **Break**

3:20-4:00 Nutrition for your kidneys

4:00-4:20 Building Community – Ways to get involved

4:20- 4:35 pm Evaluations & Closing Remarks