14TH BIENNIAL

INTERNATIONAL PODOCYTE CONFERENCE

MAY 23–26, 2023 | PHILADELPHIA, PA

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WELCOME

Dear Attendee:

On behalf of the Scientific Organizing Committee, welcome to the *14th Biennial International Podocyte Conference!*

The *Podocyte Conference* series began informally in 1999 when a small group of six "podocytologists" met in Heidelberg, Germany. This was a time when we recognized the clinical burden of glomerular disease yet had simple understanding and had what today we would consider rudimentary experimental tools to advance our knowledge. The meetings that followed became an annual and then a biannual series that helped foster a strong, collaborative international scientific community focused on understanding the mechanisms of glomerular disease with the hope of identifying targets for clinical interventions. Led by workers working from multiple perspectives and employing a variety of experimental approaches, our science has evolved dramatically, from that narrowly focused on the biology of the podocyte to understanding the podocyte in the context of its larger niche. Reflecting today's broader scientific views, the *14th International Podocyte Conference* has also widened its scope, recognizing advances in mechanisms of glomerular diseases, developments using modern discovery methods, and reflecting recent excitement and investment in drug development for glomerular diseases.

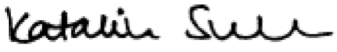
Founded in 1740 by Benjamin Franklin, the University of Pennsylvania has a rich history and is recognized as one of the top research institutions in the world. The university's innovative spirit and commitment to advancing knowledge make it the perfect setting for our conference, where we strive to deepen our understanding of glomerular diseases and identify potential therapeutic targets.

This *Podocyte Conference* includes more than 300 attendees from twenty-five countries discussing their research through oral presentation or presentation of over 120 abstracts. We are especially pleased to welcome more than eighty early career investigators, who will participate in a full day *Early Career Investigator Premeeting* on Tuesday, May 23, and then engage in the proceedings of the primary meeting. We are thrilled that you are bringing your energy, intelligence, and innovative ideas to the glomerular disease field, and we are certain that your interactions during this conference–both formal and informal—will enhance your understanding and create new opportunity and will move our field forward.

The *International Podocyte Conference* remains a unique venue for addressing the broad scientific complexities of the many diseases that comprise kidney glomerulopathies. It has thrived for more than two decades because of your enthusiastic participation and by the support of our generous sponsors. Again, welcome to Philadelphia and to the *14th Biennial International Podocyte Conference!* We wish you a productive meeting.

Sincerely,

Conference Co-Chairs, *14th Biennial International Podocyte Organizing Committee*



Katalin Susztak, MD, PhD
Professor of Medicine and Genetics
University of Pennsylvania

Lawrence B. Holzman, MD
Professor of Medicine and Pediatrics
University of Pennsylvania

CONFERENCE CO-CHAIRS

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Professor of Medicine (Renal Electrolyte and Hypertension Division) and Genetics University of Pennsylvania

Perelman Center for Advanced Medicine
University of Pennsylvania

Lawrence B. Holzman, MD

C. Mahlon Kline Professor of Medicine
Professor of Pediatrics

Perelman Center for Advanced Medicine
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PODOCYTE ORGANIZING COMMITTEE MEMBERS

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Alexander Starushchenko, PhD
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Joshua Tarnoff
Chief Executive Officer, NephCure Kidney International, King of Prussia, PA

PODOCYTE EARLY CAREER RESEARCHERS' COMMITTEE

Paul Diefenhardt, MD
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Lioba Ester, MD
The University Hospital Cologne

Daigoro Hirohama, MD, PhD
University of Pennsylvania, Philadelphia, PA

Amrei Maxi Mandel, MD
The University Hospital Cologne

Andrea Sanchez Navarro, PhD
Postdoctoral Fellow, Susztak Lab, Perelman School of Medicine at the University of Pennsylvania

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Rachel Lennon, BMedSci, BMBS, PhD
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Karl Skorecki, MD
Jochen Reiser, MD, PhD
Elena Torban, MD

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KFO 329 podocyte DFG Deutsche Forschungsgemeinschaft

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Children's Hospital of Philadelphia RESEARCH INSTITUTE

Penn – CHOP Kidney Innovation Center

SUPPORTER

american physiological society | AMERICAN JOURNAL OF PHYSIOLOGY RENAL PHYSIOLOGY

International Society of Glomerular Disease

Karger

Walking Directions from Sheraton University City to Houston Hall

Exit Sheraton and turn right onto Chestnut St toward S 36th Street (79 ft)

Turn left onto S 36th Street.

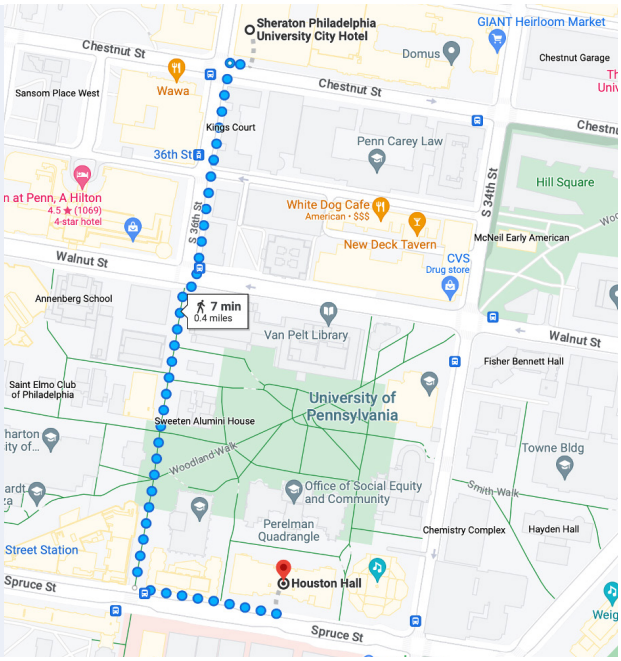
Walk two blocks and cross Walnut Street.

Take the interior path (36th Street Walk) until Spruce Street (.3 mi)

Turn left onto Spruce Street (384 ft)

Houston Hall is the second building on the left.

Note: The shuttle for the Group Dinner to the Moshulu on Thursday evening will only be running from the Sheraton Hotel



PAST CONFERENCES

13th	2021 — Manchester, United Kingdom
12th	2018 — Montreal, Canada
11th	2016 — Haifa and Jerusalem, Israel
10th	2014 — Freiburg, Germany
9th	2012 — Miami, Florida
8th	2010 — Bristol, United Kingdom
7th	2008 — Toronto, Canada
6th	2006 — Seattle, Washington, USA
5th	2004 — Helsinki, Finland
4th	2002 — Nîgata, Japan
3rd	2001 — Heidelberg, Germany
2nd	2000 — Ann Arbor, Michigan, USA
1st	1999 — Freiburg, Germany

WIFI

AirPennNet Guest Access

To get connected, guests just need to:

1. Select **AirPennNet-Guest** from the list of wireless networks that appear on their device.
2. Open a web browser.
3. Review and accept the Acceptable Use Policy terms and conditions.
4. Enter a valid email address.
5. Click Submit.

Access will expire at midnight each day so guests will to need renew their registration daily.

LOCAL AMENITIES

Locations listed below are in order of proximity from the Sheraton Philadelphia University City Hotel.

Restaurants

Axis Pizza [20 South 36th Street/10 feet]
Casual option open all hours offering breakfast, burgers & brick-oven pizza plus a large salad bar

Sang Kee Noodle House [3549 Chestnut Street/20 feet]
Noodles, dim sum & other traditional Chinese dishes in an elevated destination with outdoor seating

New Deck Tavern [3408 Sansom Street/0.2 miles]
Draft beers, quiz nights & pub grub

White Dog Cafe [3420 Sansom Street/0.2 miles]
A varied menu with seasonal & local ingredients

Franklin's Table Food Hall [3401 Walnut Street/0.2 miles]
8,000-square foot food hall featuring Philly's top restaurateurs

CO-OP Restaurant & Bar [20 South 33rd Street/0.2 miles]
Seasonal dishes, seafood & rotisserie items in a refined hotel setting open breakfast to dinner

Coffee

Spread Bagelry [3602 Chestnut Street/213 feet]
Cool, airy bagelry & bar for wood-fired, Montreal-style bagels, sandwiches, craft beer & more

Federal Donuts [3428 Sansom Street/0.2 miles]
Popular counter-serve outpost specializing in creative donuts, coffee, and Korean-style fried chicken

Starbucks [3401 Walnut Street/0.2 miles]
Seattle-based coffeehouse chain known for its signature roasts, light bites and WiFi availability

Wawa [3300 Market Street/0.2 miles]
24-hour convenience store chain known for coffee, sandwiches, and snacks

Dunkin Donuts [3437 Walnut Street/0.3 miles]
Long-running chain serving signature breakfast items & a variety of coffee drinks

Pharmacy

CVS Pharmacy [3401 Walnut Street/0.2 miles]
Drugstore chain selling a variety of beauty & health products, plus some grocery & household items.

Market

GIANT Heirloom Market [3401 Market Street/0.3 miles]
Acme Market [4001 Walnut Street/0.6 miles]

COCKTAIL RECEPTION AT PENN MUSEUM

Wednesday, May 24, 2023
5:30 PM – 7:30 PM

Join us for an evening of networking, cocktails and light dinner. Guests will enjoy access to the exhibits, can explore the Warden Garden and more.

Home to over a million extraordinary artifacts and archaeological finds from Africa, Asia, the Americas, and the Mediterranean, the Penn Museum has been uncovering our shared humanity across continents and millennia since 1887.

Transportation is not being provided for this event as it is in walking distance from the conference.

Penn Museum
3260 South Street
Philadelphia, PA 19104

Parking: Garage 7
Located at the corner of South Streets and Convention Avenue, just east of the Penn Museum. This garage accepts credit cards for payment only. Please be advised, parking is extremely limited during weekdays.

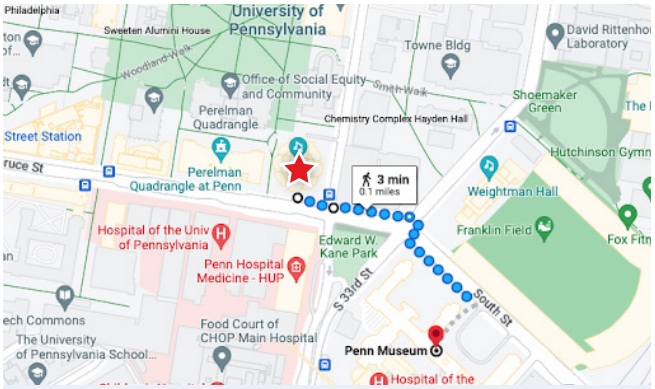
Designed in the 1890s, this beautiful historic building located on the University of Pennsylvania's campus is one of Philadelphia's premier unique venues. The Penn Museum is a 300,000 square–foot gem with exterior details including glass mosaics by the Tiffany Glass Company, sculptures by Alexander Stirling Calder, and marble medallions by John Ross of New York City.

From stone tools and household items to architectural monuments and rare art objects, the museum illustrates the story of humanity's history and achievements.

With materials from ancient Egypt, Asia, Mesopotamia, the Americas and ancient Greece and Italy, the Penn Museum explores the world — all under one roof.

In late 2019, the museum unveiled a major transformation of its Main Entrance Hall and two of its collections — the Africa Galleries and the Mexico and Central America Gallery.

In bridging archaeology, the study of objects made by humans, with anthropology, the science of humanity, we chart a course for finding one's own place in the arc of human history.



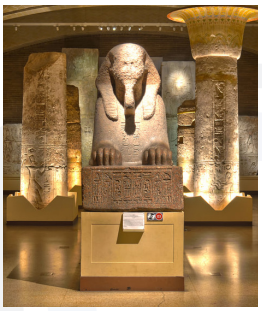
Walking Directions from Irvine Auditorium to Penn Museum

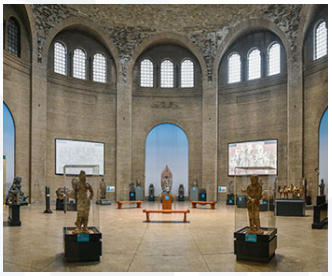
Exit out of main entrance of Irvine Auditorium and turn left onto Spruce Street (noted with a red star).

Walk down Spruce Street and cross 34th and 33rd Streets.

At the corner of 33rd Street, cross Spruce (now considered South Street) to the opposite side of the street. Penn Museum is on that corner.

Main entrance is further down South Street and is visible from corner of 33rd Street and South Street.





GROUP DINNER AT THE MOSHULU

Thursday, May 25, 2023
6:00 PM – 9:00 PM

Join us for an evening of networking, cocktails, and dinner on the Moshulu. This permanently docked boat is a Philadelphia landmark and the world's oldest and largest four–masted tall ship.

Enjoy contemporary American cuisine in the dining rooms and outdoor decks while taking full advantage of the unparalleled views of the city skyline and waterfront.

Roundtrip transportation will be provided from The Sheraton Hotel to the venue. Shuttle transportation pickup will begin at 5:30 PM to 6:15 PM outside the hotel lobby.

A return shuttle transportation will be provided from 8:30 PM – 9:10 PM.

Stay for an after-party from 9:00 PM to midnight featuring a DJ and cash bar. Note, there will be no return shuttle service after 9:10 PM

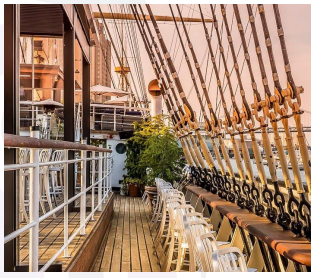
Parking
Parking on Penn's Landing is owned and operated by Delaware River Waterfront, which charges $20 per vehicle in the adjacent lot. Additional self–parking is available across Columbus Blvd. Taxi, Uber, and Lyft, the official rider service for Moshulu, are available in Columbus Circle.

(PRONOUNCED MO–SHU'–LU)

The "legendary" Moshulu is indeed the world's oldest and largest square–rigged sailing vessel still afloat. She is in fact the one and only restaurant venue on a Tall Ship today in the World. Built by William Hamilton & Co., Port of Glasgow, Scotland in 1904 for the G.J.H Siemers Co. of Hamburg, Germany as the four–masted barque Kurt. This "state–of–the–art" sailing ship was the finest and latest of man's achievements in the world's shipbuilding industry for the construction of bulk or packaged cargo sailing ships.

Named the Moshulu by Mrs. Woodrow Wilson (of Indian extraction herself) to honor the native American (Seneca Indian Tribe) meaning "One who Fears Nothing."



Keynote Lecture: mRNA–Based Cell Therapies for Cardiac Fibrosis

Wednesday, May 24 • 8:35 AM–9:20 AM

The session will include discussion of recent work focused on the use of targeted lipid nanoparticles to deliver mRNA to immune cells to generate chimeric antigen T (CAR T) cells for the treatment of fibrotic diseases.

Jonathan A. Epstein, MD

William Wikoff Smith Professor, Executive Vice Dean and Chief Scientific Officer, Perelman School of Medicine at the University of Pennsylvania

Senior Vice President and Chief Scientific Officer, University of Pennsylvania Health System

Dr. Epstein graduated from Harvard College in 1983, Harvard Medical School in 1988 and completed his Residency and Fellowship in Medicine and Cardiology at the Brigham and Women's Hospital, where he also completed an HHMI Postdoctoral Fellowship in Genetics. In 1996 he accepted a position as Assistant Professor of Medicine in the Division of Cardiology at the University of Pennsylvania. From 2006–2015, he served as Chairman of the Department of Cell and Developmental Biology and Scientific Director of the Penn Cardiovascular Institute. He is currently the William Wikoff Smith Professor, Executive Vice Dean and Chief Scientific Officer at the Perelman School of Medicine at the University of Pennsylvania.

Dr. Epstein has been the recipient of numerous awards, including the Sir William Osler Young Investigator Award from the Interurban Clinical Club (2001) and the Outstanding Investigator Award from the American Federation for Medical Research (2006). He is a member of the American Academy of Arts and Sciences, American Association of Physicians, Past President of the Interurban Clinical Club, Past President of the American Society for Clinical Investigation and a member of the National Academy of Medicine (previously the Institute of Medicine). He serves on several editorial boards, and is a past Deputy Editor of the Journal of Clinical Investigation. He is a member of the NIH Council of Councils and the NIH Precision Medicine Initiative Cohort Program Advisory Committee. Dr. Epstein was a founding co–director of the Penn Institute for Regenerative Medicine in 2007.

Dr. Epstein's research has focused on the molecular mechanisms of cardiovascular development and implications for understanding and treating human disease. His group has been at the forefront of utilizing animal models of congenital heart disease to determine genetic and molecular pathways required for cardiac morphogenesis, with implications for pediatric and adult cardiovascular disease. Stem cell, angiogenesis and epigenetic studies have had direct implications for the development of new therapeutic agents for heart failure and myocardial infarction.

Keynote Lecture: Using Large Biobanks, Medical Records, and Genetic Data for Disease Understanding

Thursday, May 25 • 8:45 AM–9:30 AM

In recent years, many large biobanks have been established around the world to facilitate large studies of common human disease. Through the development of electronic phenotyping algorithms, researchers can identify individuals with and without disease from the electronic medical records. Linkage of this medical record data with genetics enables large–scale genetic and phenotypic association studies that can lead to an increased understanding of many complex diseases.

Marylyn D. Ritchie, PhD

Edward Rose, M.D. and Elizabeth Kirk Rose, M.D., Professor Director, Institute for Biomedical Informatics (IBI)

Acting Director, Center for Precision Medicine

Vice President for Research Informatics at the University of Pennsylvania Health System

Dr. Marylyn D. Ritchie is the Edward Rose, MD and Elizabeth Kirk Rose, MD Professor of Genetics and Director of the Institute for Biomedical Informatics at the University of Pennsylvania School of Medicine. She is also Acting Director of the Penn Center for Precision Medicine, Co–Director of the Penn Medicine BioBank, and Vice President of Research Informatics in the University of Pennsylvania Health System. Dr. Ritchie is an expert in translational bioinformatics, with a focus on developing, applying, and disseminating algorithms, methods, and tools integrating electronic health records (EHR) with genomics. Dr. Ritchie has over 20 years of experience in translational bioinformatics and has authored over 375 publications (H–index 90). Dr. Ritchie was appointed as a Fellow of the American College of Medical Informatics (ACMI) in 2020. Dr. Ritchie was elected as a member of the National Academy of Medicine in 2021; she is being recognized "for paradigm–changing research demonstrating the utility of electronic health records for identifying clinical diseases or phenotypes that can be integrated with genomic data from biobanks for genomic medicine discovery and implementation science." Dr. Ritchie holds a PhD from Vanderbilt University in Statistical Genetics, an M.S. from Vanderbilt University in Applied Statistics, and a B.S. in Biology from the University of Pittsburgh at Johnstown. Dr. Ritchie is also the host of The CALM Podcast: Combining Academia and Life with Marylyn.

Thursday, May 25 • 2:20 PM–3:05 PM

Co-moderator: **Glenda Roberts,** Patient

Speakers: **Jaime Albright,** Patient Parent | **Joshua Albright,** Patient | **Kevin Mott,** Patient | **Martin Lewis,** Patient

African Americans who represent 13% of the US population account for more than 35% of patients with ESRD. However, less than 5% of clinical trial participants are Black. To reduce racial kidney health disparities, there is an urgent need to increase the participation of African Americans in clinical trials. In this roundtable, Black patients with history of FSGS, a community engagement expert and a nephrologist will discuss obstacles that hinder the participation of African Americans in clinical research. Strategies for removing these obstacles and for reducing racial kidney health disparity will also be discussed.

The session is sponsored by Travere Therapeutics.

TRAVERE THERAPEUTICS

Moderator: **Opeyemi Olabisi, MD, PhD**

Assistant Professor of Medicine
Duke University, Department of Medicine, Division of Nephrology, Duke Molecular Physiology Institute

Opeyemi Olabisi, MD, PhD is an Assistant Professor in the Department of Medicine, Division of Nephrology. Dr. Olabisi utilizes patient–stem cell–derived podocytes and reprogrammed mammalian cell lines as tools for uncovering disease mechanisms of APOL1 nephropathy.

Keynote Lecture: Using Large Biobanks, Medical Records, and Genetic Data for Disease Understanding

Friday, May 26 • 8:30 AM–9:15 AM

Nucleoside–modified mRNA vaccines against SARS–CoV–2 represent the first approved mRNA medicines for human use. The field is actively expanding the range of applicability of mRNA therapeutics and the future is undoubtedly bright. Dr. Pardi's lecture will highlight the most important findings that led to the birth of mRNA vaccines and discuss remaining roadblocks and current and future opportunities for mRNA medicines.

Norbert Pardi, PhD

Assistant Professor of Microbiology Vaccines Group Lead, Penn Institute for RNA Innovation Perelman School of Medicine, University of Pennsylvania Department: Microbiology

Dr. Norbert Pardi holds a Ph.D. in biochemistry and genetics. He has been working at the University of Pennsylvania since 2011 and currently holds an Assistant Professor position at the Department of Microbiology of the Perelman School of Medicine. His research interest is the development of mRNA-based therapeutics with particular focus on new generation infectious disease vaccines. He explored the development of a novel vaccine platform using nucleoside-modified mRNA in lipid nanoparticles (LNPs) and used it to generate highly effective vaccines targeting various pathogens (influenza virus, coronaviruses, malaria and others). Dr. Pardi is a pioneer of the nucleoside-modified mRNA vaccine technology and published milestone papers in the field. His work was recognized by prestigious national and international awards such as the Young Investigator Award of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), the Dennis Gabor Inventor Award or the BIAL Award in Biomedicine.

Tuesday, May 23, 2023

Early Career Researchers Meeting

Bodek Lounge

This pre-conference program is only open to Early Career Researchers. This is defined as anyone pre or postdoctoral (medical student, resident, fellow) and those within 2 years of their first academic appointment.

Includes a continental breakfast, coffee breaks, lunch, and social hour.

8:00 AM–8:30 AM	**Meeting Check In**
8:30 AM–9:10 AM	**Continental Breakfast**
9:10 AM–9:30 AM	**Introduction** **Katalin Susztak, MD, PhD** | Conference Co–Chair, Professor of Medicine and Genetics, Renal–Electrolyte and Hypertension Division, Perelman School of Medicine at the University of Pennsylvania **Thomas Benzing, MD** | Professor of Medicine and Chairman of the Department II of Internal Medicine, University of Cologne
9:30 AM–10:00 AM	**Keynote Lecture: Changing Shape** **Katarzyna (Kasia) Bozek, PhD** | Group Leader, Center for Molecular Medicine Cologne CMMC, University of Cologne

SELECTED TALKS FROM EARLY CAREER RESEARCHERS

Moderator: Lioba Ester, MD | The University Hospital Cologne

10:00 AM–10:45 AM	**Robin Ebbestad, MD** | Karolinska Institutet HIGH–RESOLUTION IMAGING AND DEEP LEARNING–BASED SEGMENTATION OF GLOMERULAR FILTRATION BARRIER PATHOLOGIES **Jeffrey Pressly, PhD** | Postdoctoral Associate, University of Miami Miller School of Medicine OSBPL7 IN CHRONIC KIDNEY DISEASE **Nina Cintron Pregosin, BS** | Graduate Student, Stony Brook University INVESTIGATING PODOCYTE–PARIETAL EPITHELIAL CELL COMMUNICATION THROUGH INTERCELLULAR BRIDGES **Inês Cabrita, PhD** | Department II of Internal Medicine and Center for Molecular Medicine, University of Cologne THE IMPACT OF PHASE–SEPARATED CONDENSATES FORMED BY YAP AND TAZ IN PODOCYTES **Shumeng Jiang, PhD** | Washington University in St. Louis MATHEMATICAL MODELING OF PODOCYTE ADHESION HIGHLIGHTS THE ROLE OF CELL CONTRACTILITY AND FLUID SHEAR STRESS ON KIDNEY FUNCTION **Luisa Ulloa Severino, PhD** | Postdoctoral Fellow, St. Michael's Hospital PODOCYTE SOFTENING AND PROTEINURIA: CAUSE OR CONSEQUENCE?
10:45 AM–11:00 AM	**Morning Break**
11:00 AM–11:30 AM	**Keynote Lecture: How to Find an Antigen?** **David Salant, MB, BCh** | Professor of Medicine and Vice–Chair for Research, Boston University Chobanian & Avedisian School of Medicine

All sessions and breaks take place in Irvine Hall, unless noted

Early Career Researchers Meeting (Continued)

SELECTED TALKS FROM EARLY CAREER RESEARCHERS

Moderator: Amrei Mandel, MD | The University Hospital Cologne

11:30 AM–12:00 PM	**Bshara Mansour, MD, MHA** | Postdoctoral Research Fellow, Boston Children's Hospital, Harvard Medical School X–LINKED RECESSIVE VARIANTS IN X–PROLYL AMINOPEPTIDASE 2 (XPNPEP2) AS A POTENTIAL NEW CAUSE OF NEPHROTIC SYNDROME **Yu Kamigaki, MD** | Nationwide Children's Hospital NEPHRIN AUTOANTIBODIES IDENTIFY TWO THIRDS OF STEROID–NAÏVE CHILDREN WITH IDIOPATHIC NEPHROTIC SYNDROME **Florian Buerger, MD, PhD** | Instructor of Pediatrics, Boston Children's Hospital, Harvard Medical School FVB/N–NOS1APEX3–/EX3– MICE DEVELOP SEVERE GLOMERULAR KIDNEY DISEASE, WHICH IS AMELIORATED BY ANTIPROTEINURIC TREATMENT **Matthew Tolerico** | PhD Student, University of Miami: Miller School of Medicine APOLIPOPROTEIN M TREATMENT RESTORES KIDNEY FUNCTION IN ALPORT SYNDROME
12:00 PM–1:30 PM	**Lunch Break—Get Together and Poster Viewing** *Houston Hall*
1:30 PM–2:00 PM	**Keynote Lecture: The Podocyte–Ome: Where do we stand in 2023?** **Markus Rinschen, MD** | Associate Professor, AIAS–COFUND Fellow, Department of Medicine, University Medical Center Hamburg–Eppendorf

SELECTED TALKS FROM EARLY CAREER RESEARCHERS

Moderator: Andrea Sanchez Navarro, PhD | Postdoctoral Fellow, Susztak Lab, Perelman School of Medicine at the University of Pennsylvania

2:00 PM–2:45 PM	**Sebastian Sewerin, MD** | Postdoctoral Fellow, Broad Institute of MIT and Harvard GENERATING A COMPREHENSIVE LIPOTOXICITY PROFILE FOR PODOCYTES **Dominik Spitz** | Renal Division, University Medical Center Freiburg MTOR–DEPENDENT AUTOPHAGY REGULATES SLIT DIAPHRAGM DENSITY IN PODOCYTE–LIKE DROSOPHILA NEPHROCYTES **Mariya Sweetwyne, PhD** | Assistant Professor, University of Washington RAPID AND DIRECT ISOLATION OF MITOCHONDRIA FROM KIDNEY PODOCYTES SHOWS HIGH OXIDATIVE PHOSPHORYLATION CAPACITY THAT IS DIMINISHED IN PRIMARY PODOCYTE CULTURES **Ryan Spear** | PhD Candidate, Rush University Medical Center ALTERED BONE MARROW MYELOPOIESIS CONTRIBUTES TO GLOMERULAR DYSFUNCTION **Jasper Nies, MD** | Department II of Internal Medicine and Center for Molecular Medicine, University of Cologne DECIPHERING THE CONTRIBUTION OF INFLAMMATORY MACROPHAGES TO FOCAL SEGMENTAL GLOMERULOSCLEROSIS
2:45 PM–3:00 PM	**Afternoon Break**

Early Career Researchers Meeting (Continued)

MODEL–CLUB DISCUSSION

Moderator: Richard Coward, MB, ChB, PhD, MRCP | Professor of Renal Medicine and Consultant Pediatric Nephrologist, Bristol Royal Hospital for Sick Children, University of Bristol, Bristol Medical School

3:00 PM–4:30 PM	Organoids—**Rafael Kramann, MD, PhD**	Director, Institute of Experimental Medicine and Systems Biology, RWTH Aachen University Cell Culture—**Stuart J. Shankland, MD, MBA, FRCPC, FASN, FAHA, FA**	Principal Investigator, University of Washington Drosophila—**Barry Denholm, PhD**	Principal Investigator, Biomedical Sciences, University of Edinburgh Zebrafish—**Mario Schiffer, MD**	Chair of Internal Medicine IV, Department of Nephrology, Friedrich–Alexander–Universität Erlangen–Nürnberg Mouse—**Thomas Benzing, MD**	Professor of Medicine and Chairman of the Department II of Internal Medicine, University of Cologne

EARLY CAREER RESEARCHERS ABSTRACTS

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002	**Saei**		DEEP-INTRONIC VARIANTS IN THE X-LINKED ALPORT SYNDROME: FROM DETECTION TO THERAPEUTIC HOPES
Glomerular Cell Paracrine Signaling/Cross Talk			
007	**Zeng**		INJURY INDUCED PARACRINE EFFECTS ON THE PODOCYTE’S TRANSCRIPTOME

Podocyte Cell Biology (e.g., Cytoskeleton, Intercellular Junction/Slit Diaphragm, Intracellular S)			
009	**Anandakrishnan**		DEEP LEARNING IDENTIFIES SUBPHENOTYPES OF DIABETIC KIDNEY DISEASE DRIVEN BY GENETIC VARIATIONS IN THE RHO PATHWAY
010	**Boi**		CRITICAL IMPORTANCE OF PODOCYTE GERANYLGERANYL TRANSFERASE TYPE-I FOR THE GLOMERULAR FILTRATION BARRIERS
011	**Bolanos Palmieri**		IDENTIFICATION OF RNASE1 AS A NOVEL MODULATOR OF PODOCYTE CYTOSKELETON ARCHITECTURE
013	**Cabrita**	O	THE IMPACT OF PHASE-SEPARATED CONDENSATES FORMED BY YAP AND TAZ IN PODOCYTES
014	**Cintron Pregosin**	O	INVESTIGATING PODOCYTE-PARIETAL EPITHELIAL CELL COMMUNICATION THROUGH INTERCELLULAR BRIDGES
017	**Fang**		PODOCYTE-SPECIFIC REGULATION OF PROTEIN PHOSPHATASE 2A WORSENS DKD PROGRESSION
018	**Helmuth**		DEVELOPING NOVEL ALLOSTERIC AGONISTS OF INTEGRIN ALPHA 3 BETA 1
020	**Lang**		THE DISTINCTIVE FUNCTIONS OF ENDOCYTIC MECHANISMS WITHIN THE MAINTENANCE OF SLIT DIAPHRAGMS IN DROSOPHILA NEPHROCYTES
022	**Lepa**		RAPGEF1 (C3G) IS ESSENTIAL FOR SLIT-DIAPHRAGM INTEGRITY IN MICE
025	**Matsuda**		GIT2 REGULATES RAC1 ACTIVITY AND IS CRITICAL FOR CYTOSKELETAL DYNAMICS IN PODOCYTES
026	**Mattias**		IDENTIFICATION OF ALTERNATIVE SPLICING EVENTS IN MECHANICALLY STRETCHED PODOCYTES AS A MODEL FOR GLOMERULAR HYPERTENSION
028	**Möller-Kerutt**		LIVE CELL IMAGING-BASED ANALYSES TO CHARACTERIZE THE PATHOGENIC POTENTIAL OF CRUMBS2 VARIANTS
029	**Odenthal**		MITOCHONDRIAL ROS SENSITIZE PODOCYTES TO INSULIN RESULTING IN MTOR ACTIVATION
031	**Pressly**	O	OSBPL7 IN CHRONIC KIDNEY DISEASE
033	**Siegerist**		THE PODOCYTE-SPECIFIC ANGULIN ILDR2 AND ITS ROLE IN TRICELLULAR TIGHT JUNCTIONS AND GLOMERULAR LOCAL IMMUNE TOLERANCE
034	**Sopel**		FINE-TUNED REGULATION OF PODOCYTE AUTOPHAGY AND NEPHRONECTIN BY MICRORNAS UPREGULATED IN MEMBRANOUS GLOMERULONEPHRITIS
035	**Spitz**	O	MTOR-DEPENDENT AUTOPHAGY REGULATES SLIT DIAPHRAGM DENSITY IN PODOCYTE-LIKE DROSOPHILA NEPHROCYTES
036	**Sweetwyne**	O	RAPID AND DIRECT ISOLATION OF MITOCHONDRIA FROM KIDNEY PODOCYTES SHOWS HIGH OXIDATIVE PHOSPHORYLATION CAPACITY THAT IS DIMINISHED IN PRIMARY PODOCYTE CULTURES
039	**Yu**		DELAYED TREATMENT OF COQ10 PRECURSORS FAILS TO RESCUE COQ10-DEFICIENT GLOMERULOPATHY
040	**Zhao**		ADIPOKINE UPD2 AND JAK/STAT PATHWAY MEDIATE HIGH-FAT DIET-INDUCED NEPHROCYTE DYSFUNCTION
ApoL1: Genetics, Biology, Disease			
041	**Adebayo**		ROLE OF CELL-FREE HEMOGLOBIN IN APOLIPOPROTEIN L1-MEDIATED SICKLE CELL NEPHROPATHY
044	**Lee**		A SNARE PROTECTIVE POOL ANTAGONIZES APOL1 RENAL TOXICITY IN DROSOPHILA NEPHROCYTES
045	**Nystrom**		COVID-19 VACCINATION IS NOT ASSOCIATED WITH INCREASED INCIDENCE OF PROTEINURIC KIDNEY DISEASE IN AFRICAN AMERICANS WITH HIGH-RISK APOL1 GENOTYPE
048	**Yoshida**		APOL1 KIDNEY RISK VARIANTS IN GLOMERULAR DISEASES MODELED IN TRANSGENIC MICE
049	**Zhu**		HIV-1 PROTEIN NEF ACTS IN SYNERGY WITH APOL1-G1 TO IMPAIR NEPHROCYTE FUNCTION BY INHIBITING AUTOPHAGY AND ENDOCYTOSIS PATHWAY

Glomerular Cell Lipid Biology/Intracellular Signaling			
051	**Sewerin**	O	GENERATING A COMPREHENSIVE LIPOTOXICITY PROFILE FOR PODOCYTES
052	**Tolerico**	O	APOLIPOPROTEIN M TREATMENT RESTORES KIDNEY FUNCTION IN ALPORT SYNDROME
Glomerular Cell Mechanisms of Injury and Aging			
053	**de Cos Gomez**		URINARY PLASMINOGEN AS A MARKER OF DISEASE PROGRESSION IN HUMAN GLOMERULAR DISEASE
054	**Fontanella**		STING ACTIVATION BY MTDNA TRIGGERS PODOCYTE INJURY IN DKD
059	**Veloso Pereira**		PODOCYTE INJURY LEADS TO A PREMATURE AGING PHENOTYPE
060	**Waller**		ANTIPROTEINURIC AND PODOCYTOPROTECTIVE EFFECTS OF THROMBIN INHIBITION THERAPY IN GLOMERULAR DISEASE
Glomerular Metabolism			
062	**Semenikhina**		NICOTINE INDUCES PODOCYTE INJURY THROUGH NOS UNCOUPLING AND PEROXYNITRITE PRODUCTION
Glomerulus: Novel Disease Models or Imaging Methods			
065	**Ebbestad**	O	HIGH-RESOLUTION IMAGING AND DEEP LEARNING-BASED SEGMENTATION OF GLOMERULAR FILTRATION BARRIER PATHOLOGIES
067	**Klawitter**		NIFURPIRINOL INDUCES A POTENT AND RELIABLE FSGS-LIKE PHENOTYPE IN ZEBRAFISH LARVAE
069	**Maggiore**		A NOVEL VASCULARIZED HUMAN KIDNEY ORGANOID TO STUDY PODOCYTE AND ENDOTHELIAL HEALTH AND DISEASE
070	**Schindler**		A NOVEL IN VIVO HIGH-CONTENT DRUG SCREENING ASSAY IDENTIFIES A PAN-HDAC INHIBITOR AS PODOCYTE-PROTECTIVE IN A FSGS-LIKE ZEBRAFISH MODEL
Immunobiology of Glomerular Disease (Including Complement Cascade Biology)			
074	**Hengel**		ANTI-NEPHRIN ANTIBODIES IN MINIMAL CHANGE DISEASE
075	**Nies**	O	DECIPHERING THE CONTRIBUTION OF INFLAMMATORY MACROPHAGES TO FOCAL SEGMENTAL GLOMERULOSCLEROSIS
Membranous Nephropathy: Pathobiological Mechanism, Genetics			
079	**Purohit**		ROLE OF NON-ANTI-PLA2R AUTOANTIBODIES IN MEMBRANOUS NEPHROPATHY
Glomerular Biology/Pathobiology/Disease: Other			
082	**Elmubarak**		WHOLE EXOME SEQUENCING REVEALS A MONOGENIC CAUSE OF STEROID RESISTANT NEPHROTIC SYNDROME IN 27.5% OF 320 FAMILIES
085	**Jiang**	O	MATHEMATICAL MODELING OF PODOCYTE ADHESION HIGHLIGHTS THE ROLE OF CELL CONTRACTILITY AND FLUID SHEAR STRESS ON KIDNEY FUNCTION
086	**Kamigaki**	O	NEPHRIN AUTOANTIBODIES IDENTIFY TWO THIRDS OF STEROID-NAÏVE CHILDREN WITH IDIOPATHIC NEPHROTIC SYNDROME
089	**Kolvenbach**		QUANTIFIABLE PHENOTYPING OF A NPHS1-DEFICIENT MOUSE MODEL
090	**Lemberg**		QUANTIFIABLE PHENOTYPING OF AN EXISTING NPHS1 KNOCKOUT MOUSE MODEL
091	**Berlingerio**		ALTERED MITOCHONDRIAL METABOLISM AND INCREASED OXIDATIVE STRESS CAUSE PODOCYTES DYSFUNCTION IN CYSTINOSIS
092	**Mansour**	O	X-LINKED RECESSIVE VARIANTS IN X-PROLYL AMINOPEPTIDASE 2 (XPNPEP2) AS A POTENTIAL NEW CAUSE OF NEPHROTIC SYNDROME
093	**Martinez-Rojas**		TRANSIENT INHIBITION OF THE SODIUM-GLUCOSE COTRANSPORTER 2 AFTER ISCHEMIA/REPERFUSION INJURY REDUCES RENAL VASCULAR RESISTANCE PREVENTING CHRONIC KIDNEY DISEASE IN THE LONG-TERM
094	**Mertens**		ASSESSING THE SPECTRUM AND PATHOGENICITY OF BIALLELIC VARIANTS IN NPHS2 IN 216 INDIVIDUALS WITH STEROID-RESISTANT NEPHROTIC SYNDROME
095	**Saida**		ESTABLISHING QUANTITATIVE AND REPRODUCIBLE PHENOTYPING OF AN NPHS1 KNOCKOUT MOUSE MODEL

096	**Spear**	O	ALTERED BONE MARROW MYELOPOIESIS CONTRIBUTES TO GLOMERULAR DYSFUNCTION
098	**Ulloa Severino**	O	PODOCYTE SOFTENING AND PROTEINURIA: CAUSE OR CONSEQUENCE?
099	**Waller**		LIMITED ROLE OF ANTITHROMBIN DEFICIENCY IN NEPHROTIC SYNDROME–ASSOCIATED HYPERCOAGULOPATHY
FSGS: Pathobiological Mechanism, Genetics			
103	**Batool**		REVEALING THE MOLECULAR NUANCES OF TRPC6 IN FOCAL SEGMENTAL GLOMERULOSCLEROSIS IN AN IN VITRO HUMAN PODOCYTE MODEL
105	**Buerger**	O	FVB/N-NOS1APEX3-/EX3- MICE DEVELOP SEVERE GLOMERULAR KIDNEY DISEASE, WHICH IS AMELIORATED BY ANTIPROTEINURIC TREATMENT
107	**Haak**		PRIMARY FIBROBLASTS AS A NOVEL ASSAY FOR THE FUNCTIONAL TESTING OF NEW α-ACTININ 4 VARIANTS IN GLOMERULAR DISEASE
109	**May**		PODOCYTE PROTEASE ACTIVATED RECEPTOR 1 ACTIVATION IN MICE CAUSES FOCAL SEGMENTAL GLOMERULOSCLEROSIS, AND MIRRORS HUMAN DISEASE SIGNALLING EVENTS
110	**Milosavljevic**		MODELING TBC1D8B-ASSOCIATED FSGS IN DROSOPHILA NEPHROCYTES
111	**Sharma**		NEPHROTIC SYNDROME-ASSOCIATED DE NOVO TRIM8 VARIANTS CONFER GAIN-OF-FUNCTION BY MODULATING POLYUBIQUITINATION AND 26S PROTEASOMAL DEGRADATION OF TRIM8.
112	**Yuen**		PODOCYTE YES-ASSOCIATED PROTEIN AND TRANSCRIPTIONAL CO-ACTIVATOR WITH PDZ-BINDING MOTIF HYPERACTIVATION: NOVEL DRIVERS OF COLLAPSING GLOMERULOPATHY
Discovery "Omics" Approaches for Glomerular Disease or Therapeutic Development			
114	**Bai**		COMPREHENSIVE SINGLE-NUCLEUS TRANSCRIPTIONAL AND METABOLOMIC PROFILING DEFINES UNIQUE PODOCYTE INJURY RESPONSES DURING OBESITY RELATED GLOMERULOPATHY
115	**Barreto**		HIGH-THROUGHPUT DISCOVERY OF NOVEL PODOCYTE-PROTECTIVE SMALL MOLECULES
116	**Bronstein**		EPIGENOMIC DYNAMICS OF PARIETAL EPITHELIAL CELLS IN PROLIFERATIVE GLOMERULOPATHY
118	**Kroll**		AN OPTIMIZED MS/MS-BASED WORKFLOW COMBINING LASER CAPTURE MICRODISSECTION AND MS/MS FOR MOLECULAR-LEVEL ANALYSIS OF FORMALIN-FIXED KIDNEY TISSUE
120	**Njeim**		DEVELOPING A SMALL MOLECULE DRUG TO TREAT DIABETIC KIDNEY DISEASE (DKD)

The poster number listed above applies to both the Early Career Researchers Pre-Conference Meeting and the primary conference.

Tuesday, May 23, 2023 (Additional Events)

12:00 PM–4:00 PM	**International Society of Glomerular Disease (ISGD)—Official Launch (Invitation Only)** *Sheraton Philadelphia University City* Tuesday, May 23rd is the official launch date of the International Society of Glomerular Disease, a professional society dedicated to providing a physician– and researcher–centric professional home for glomerular disease experts, advancing research, and advocating for glomerular specialists within the field of nephrology.
4:30 PM–6:00 PM	**Registration Desk** *Sheraton Philadelphia University City* This early registration option is open to all attendees. Attendees can visit the registration desk to receive their name badge and conference materials. Registration will open on Wednesday at 7:00 AM at Irvine.
6:00 PM–9:00 PM	**Faculty Dinner** *Barnes Foundation* This is an invitation only event for Faculty of the conference.

Wednesday, May 24, 2023

7:00 AM–10:00 AM	**Registration** *Irvine Auditorium Pre-Function Space* All attendees must visit the registration desk to receive their name badge and conference materials before attending any sessions.
7:30 AM–8:00 AM	**Continental Breakfast** A light breakfast of pastries and coffee will be served.
8:00 AM–8:35 AM	**Conference Welcome and Introduction** **Katalin Susztak, MD, PhD** | Conference Co–Chair, Professor of Medicine and Genetics, Renal–Electrolyte and Hypertension Division, Perelman Center for Advanced Medicine at the University of Pennsylvania **J. Larry Jameson, MD, PhD** | Robert G. Dunlop Professor of Medicine, Executive Vice President, University of Pennsylvania for the Health System, Dean of the Perelman School of Medicine **Josh Tarnoff** | Chief Executive Officer, NephCure Kidney International **Mark & Becka Levondosky** | Patient Family *Becka and Mark Levondosky from Tabernacle, NJ will be sharing their family's story. They have two boys, Tyler and Jaxon who are living with Nephrotic Syndrome due to the NPHS2 gene variant.*
8:35 AM–9:20 AM	**Keynote Lecture: mRNA–Based Cell Therapies for Cardiac Fibrosis** **Jonathan A. Epstein, MD** | William Wikoff Smith Professor, Executive Vice Dean and Chief Scientific Officer, Perelman Center for Advanced Medicine at the University of Pennsylvania *The session will include discussion of recent work focused on the use of targeted lipid nanoparticles to deliver mRNA to immune cells to generate chimeric antigen T (CAR T) cells for the treatment of fibrotic diseases.*

PODOCYTE CELL BIOLOGY

Moderators

Shuta Ishibe, MD | Professor, Yale School of Medicine

Nina Jones, MD | Professor, Canada Research Chair, Department of Molecular and Cellular Biology, University of Guelph

9:20 AM–9:45 AM	**Novel Kidney Imaging at Organ and Single Cell Level (Session 1.1)** **Victor Puelles, MD, PhD** | Professor of Complex Tissue Analysis; III. Department of Medicine, University Medical Center Hamburg–Eppendorf
9:45 AM–10:10 AM	**Slit Diaphragm—A Protein Network for Dynamic Control of Filtration? (Session 1.2)** **Florian Grahammer, MD** | Vice Chair of the III Medical Department, Department of Medicine, University Medical Center Hamburg-Eppendorf *The slit-diaphragm is thought to operate as final barrier or as molecular sensor of renal filtration. Using high-resolution proteomic analysis of slit-diaphragms affinity-isolated from rodent kidney, we show that the native slit-diaphragm is built from the junction-forming components Nephrin, Neph1 and Podocin and a co-assembled high-molecular weight network of proteins. Our results identify the slit-diaphragm as a multi-component system that is endowed with context-dependent dynamics via a co-assembled protein network.*
10:10 AM–10:20 AM	**Morning Break**
10:20 AM–10:45 AM	**Anti-Nephrin Mediated Podocytopathy—More than Minimal Change (Session 1.3)** **Astrid Weins, MD, PhD** | Department of Pathology, Brigham and Women's Hospital, Harvard Medical School *I will go over histological and ultrastructural features of diffuse podocytopathies, including minimal change disease, primary FSGS and recurrent FSGS. I will review our studies on the presence of anti-nephrin autoantibodies in all 3 entities. I will discuss the relevance of diagnostic testing for anti-nephrin antibodies in the context of 3 separate case-based discussions.*
10:45 AM–11:10 AM	**Nephrin Dynamics in Drosophila Nephrocytes (Session 1.4)** **Tobias Hermle, MD** | Principal Investigator, Renal Division, Department of Medicine, University of Freiburg *Drosophila nephrocytes provide a podocyte model with an accessible slit diaphragm in a genetically tractable model organism. We used this invertebrate model to study vesicular trafficking of Drosophila nephrin via endocytosis and found that selective routes of endocytosis maintain a stable yet dynamic filtration barrier.*

All sessions and breaks take place in Irvine Hall, unless noted

Wednesday, May 24, 2023 (Continued)

11:10 AM–11:35 AM	**What Can we Learn from Imaging the Cytoskeleton, Mitochondria and Autophagy in Neurons (Session 1.5)** **Erika L.F. Holzbaur, PhD** | William Maul Measey Professor in Physiology, Perelman Center for Advanced Medicine at the University of Pennsylvania
11:35 AM–1:20 PM	**Boxed Lunch/Review of Posters/Exhibition Hall** *Houston Hall, Hall of Flags*

THE GLOMERULAR BASEMENT MEMBRANE AND ALPORT SYNDROME

Moderators

Moumita Barua, MD | Senior Scientist, Toronto General Hospital Research Institute (TGHRI)
Mario Schiffer, MD | Chair of Internal Medicine IV, Department of Nephrology, Friedrich–Alexander–Universität Erlangen–Nürnberg

1:20 PM–1:45 PM	**Dynamic Assembly of the Glomerular Basement Membrane (Session 1.6)** **Rachel Lennon, BMedSci, BMBS, PhD** | Professor of Nephrology, Consultant Paediatric Nephrologist, The University of Manchester *Basement membranes are essential tissue scaffolds. This session will review their composition across diverse tissues and species and highlight the range of experimental systems for studying basement membranes. It will also introduce unpublished work on the circadian regulation, turnover and spatial dynamics of basement membrane components in glomerular health and disease.*
1:45 PM–2:10 PM	**CRISPR Approaches to Alter GBM Composition in Alport Syndrome (Session 1.7)** **Jeffrey H. Miner, PhD, FASN** | Eduardo and Judith Slatopolsky Endowed Professor of Medicine in Nephrology, Washington University School of Medicine in St. Louis *Improving the composition, structure, and function of the GBM in Alport syndrome is one approach to therapy. CRISPR-based tools can be used to activate pro-repair genes and repress pathogenic genes. Both of these approaches will be discussed in the context of mouse models of Alport syndrome.*

SHORT ORAL ABSTRACTS

Moderator: **Mira Krendel, PhD** | Principal Investigator, University of New York Upstate Medical University

2:10 PM–2:55 PM *The following abstracts will be presented orally in 5-minute sessions.*	**Pierre–Louis Tharaux, MD, PhD** | Professor, Inserm VASORIN ORCHESTRATES PODOCYTE QUIESCENCE AND GLOMERULAR HOMEOSTASIS DURING HEALTH AND GLOMERULAR DISEASES **Sanja Sever, PhD** | Associate Professor, Massachusetts General Hospital and Harvard Medical School DYNAMIN INTEGRATES GELSOLIN AND ARP2/3 COMPLEX NUCLEATED ACTIN NETWORKS IN PODOCYTES **Amrei Mandel, MD** | The University Hospital Cologne TRANSCRIPTION–BLOCKING DNA LESIONS IN PODOCYTES CAUSE FOCAL SEGMENTAL GLOMERULOSCLEROSIS AND INTERSTITIAL INFLAMMATION IN THE KIDNEY THAT CAN BE AMELIORATED BY CALORIE RESTRICTION **Ye Feng, PhD** | Postdoctoral Fellow, Icahn School of Medicine at Mount Sinai GLOMERULAR–TUBULAR CELLS CROSSTALK MEDIATED BY SOLUBLE RARRES1, A PODOCYTE–SECRETED PROTEIN **Catherine Meyer–Schwesinger, MD** | Professor, Department of Physiology, University Hospital Hamburg–Eppendorf PROTEASOMAL PROCESSIVITY INFLUENCES THE ENDOCYTIC ACTIVITY OF PODOCYTES **Sante Princiero Berlingerio, MSc** | PhD Candidate, KU Leuven ALTERED MITOCHONDRIAL METABOLISM AND INCREASED OXIDATIVE STRESS CAUSE PODOCYTES DYSFUNCTION IN CYSTINOSIS **Julian Milosavljevic** | Renal Division, University Medical Center Freiburg MODELING TBC1D8B–ASSOCIATED FSGS IN DROSOPHILA NEPHROCYTES **Hassan Saei** | PhD Candidate, Imagine Institute, Laboratory of Hereditary Kidney Diseases, Université Paris Cite DEEP–INTRONIC VARIANTS IN THE X–LINKED ALPORT SYNDROME: FROM DETECTION TO THERAPEUTIC HOPES
2:55 PM–3:10 PM	**Afternoon Break**

Wednesday, May 24, 2023 (Continued)

GLOMERULAR METABOLISM

Moderators

Paul Brinkköetter, MD | Deputy Director, Department II of Internal Medicine, Center for Molecular Medicine Cologne (CMMC), The University Hospital Cologne

Ilse Daehn, PhD | Principal Investigator, Associate Professor of Medicine, Division of Nephrology, Icahn School of Medicine at Mount Sinai

3:10 PM–3:35 PM	**Glomerular Lipids from Target Identification to Phase 2 Trials (Session 1.8)** **Alessia Fornoni, MD, PhD** | Professor of Medicine, Chief, Katz Family Division of Nephrology and Hypertension, University of Miami Miller School of Medicine *In this session, the role of impaired cholesterol efflux in the pathogenesis of glomerular diseases of both metabolic and non metabolic origin will be discussed. The session will start with the review of the physiological role of cholesterol in the glomerular filtration barrier. This will be followed by the evidence of a cause effect relationship between altered cholesterol efflux and GD. Finally, the drug discovery effort leading to the identification of a small molecule currently being tested in phase II clinical trials will be discussed.*
3:35 PM–4:00 PM	**Oxygen Sensing and Kidney Repair: New Insights (Session 1.9)** **Pinelopi Kapitsinou, MD** | Associate Professor of Medicine (Nephrology and Hypertension) Feinberg Cardiovascular & Renal Research Institute *Hypoxia is a common feature of both acute and chronic kidney diseases, and hypoxia/oxygen sensing play critical roles in kidney biology. In this session, we will discuss the roles of the PHD/HIF pathway in kidney repair as well as new potential therapeutic targets that have emerged from research on endothelial cell oxygen sensing.*
4:00 PM–4:25 PM	**ER Stress in Nephrotic Syndrome (Session 1.10)** **Ying (Maggie) Chen, MD, PhD** | Associate Professor of Medicine, Division of Nephrology Washington University School of Medicine in St. Louis

SHORT ORAL ABSTRACTS

Moderator: **Sandeep Mallipattu, MD, FASN** | DCI–Martin R. Liebowitz Professor of Medicine Chief, Division of Nephrology and Hypertension, Stony Brook Medicine

4:25 PM–4:50 PM *The following abstracts will be presented orally in 5-minute sessions.*	**Oliver Wessely, PhD** | Associate Staff, Cleveland Clinic A DESIGN–OF–EXPERIMENT APPROACH TOWARDS DIFFERENTIATION OF HUMAN PLURIPOTENT STEM CELLS INTO PODOCYTES **Laura Perin, PhD** | Associate Professor, CHLA/USC SINGLE CELL SPATIAL PROFILING OF GLOMERULAR STRUCTURES IN ALPORT SYNDROME **Nanditha Anandakrishnan, PhD** | Postdoctoral Fellow, Icahn School of Medicine at Mount Sinai DEEP LEARNING IDENTIFIES SUBPHENOTYPES OF DIABETIC KIDNEY DISEASE DRIVEN BY GENETIC VARIATIONS IN THE RHO PATHWAY **Linnan Bai, MD** | Hangzhou, China Department of Nephrology, Zhejiang University School of Medicine, Affiliated Sir Run Run Shaw Hospital COMPREHENSIVE SINGLE–NUCLEUS TRANSCRIPTIONAL AND METABOLOMIC PROFILING DEFINES UNIQUE PODOCYTE INJURY RESPONSES DURING OBESITY RELATED GLOMERULOPATHY **Rachel Njeim, PharmD, PhD** | Postdoctoral Fellow, Katz Family Division of Nephrology and Hypertension, University of Miami Miller School of Medicine DEVELOPING A SMALL MOLECULE DRUG TO TREAT DIABETIC KIDNEY DISEASE (DKD)
4:50 PM–5:00 PM	**Announcement: International Society of Glomerular Disease (ISGD)** **Tobias B. Huber, MD** | Director and Chair of the III Medical Department, Principal investigator, University Medical Center Hamburg–Eppendorf
5:30 PM–7:30 PM	**Wednesday Social Program** Cocktail Reception *Penn Museum* *Join us for an evening of networking, cocktails and light dinner. Guests will enjoy access to the exhibits, can explore the Warden Garden and more.* *The University of Pennsylvania Museum of Archaeology and Anthropology, Penn Museum, is home to over a million extraordinary artifacts and archaeological finds from Africa, Asia, the Americas, and the Mediterranean, the Penn Museum has been uncovering our shared humanity across continents and millennia since 1887.*

All sessions and breaks take place in Irvine Hall, unless noted

Thursday, May 25, 2023

6:15 AM–7:30 AM	**Rocky 6K Run** Channel your inner Rocky Balboa and join other conference attendees for this informal Rocky Run in the City of Brotherly Love. Meet in the lobby of the Sheraton Philadelphia University City Hotel. This is an optional activity. There is no formal registration to participate, and the race will not be timed.
8:00 AM–8:30 AM	**Continental Breakfast** A light breakfast of pastries and coffee will be served.
8:30 AM–8:45 AM	**Announcement of the Haiku Winners** **Jeffrey H. Miner, PhD, FASN** | Eduardo and Judith Slatopolsky Endowed Professor of Medicine in Nephrology, Washington University School of Medicine in St. Louis
8:45 AM–9:30 AM	**Keynote Lecture: Using Large Biobanks, Medical Records, and Genetic Data for Disease Understanding** **Marylyn D. Ritchie, PhD** | Edward Rose, M.D. and Elizabeth Kirk Rose, M.D., Professor Director, Institute for Biomedical Informatics (IBI) *In recent years, many large biobanks have been established around the world to facilitate large studies of common human disease. Through the development of electronic phenotyping algorithms, researchers can identify individuals with and without disease from the electronic medical records. Linkage of this medical record data with genetics enables large-scale genetic and phenotypic association studies that can lead to an increased understanding of many complex diseases.*

GENETICS OF GLOMERULAR DISEASE

Moderators

Friedhelm Hildebrandt, MD | Chief, Division of Nephrology, Boston Children's Hospital

Michelle McNulty, MS | Computational Biologist, Boston Children's Hospital

9:30 AM–9:55 AM	**Defining the Genetic Architecture of Kidney Function/Rare and Common Variants (Session 2.1)** **Adriana M. Hung, MD, MPH** | Associate Professor of Medicine, Vanderbilt University Medical Center
9:55 AM–10:20 AM	**Rare Variants in FSGS (Session 2.2)** **Simone Sanna-Cherchi, MD** | Associate Professor of Medicine, Division of Nephrology, Columbia University
10:20 AM–10:35 AM	**Morning Break**
10:35 AM–11:00 AM	**Genetic Drivers of Pediatric Steroid Sensitive Nephrotic Syndrome (Session 2.3)** **Matt Sampson, MD, MS** | Principal Investigator, Nephrology, Associate Professor of Pediatrics, Harvard Medical School; Boston's Children Hospital, Harvard University, Broad Institute, Brigham & Women's Hospital
11:00 AM–11:25 AM	**Genetic Approaches to IgA Nephropathy (Session 2.4)** **Krzysztof Kiryluk, MD, MS** | Associate Professor of Medicine, Division of Nephrology, Columbia University

SHORT ORAL ABSTRACTS

Moderator: **Erwin Böttinger, MD** | Chief Executive Officer, Wyss Center for Bio and Neuroengineering

11:25 AM–11:45 AM *The following abstracts will be presented orally in 5-minute sessions.*	**Victoria Assimon, PhD** | Associate Director, Biochemistry, Maze Therapeutics MZ-301 IS A SMALL MOLECULE INHIBITOR OF APOL1 PORE FUNCTION THAT ATTENUATES ALBUMINURIA IN A MOUSE MODEL OF APOL1-MEDIATED KIDNEY DISEASE **Bibek Poudel, PhD** | Postdoctoral Fellow, University of Pennsylvania SMALL MOLECULAR APOL1 PORE BLOCKER AMELIORATES RENAL INJURY IN PODOCYTE-SPECIFIC G2APOL1 TRANSGENIC MICE **Maximilian Schindler, PhD** | Department of Anatomy and Cell Biology, University Medicine, Greifswald A NOVEL IN VIVO HIGH-CONTENT DRUG SCREENING ASSAY IDENTIFIES A PAN-HDAC INHIBITOR AS PODOCYTE-PROTECTIVE IN A FSGS-LIKE ZEBRAFISH MODEL **Khun Zaw Latt, MD, PhD** | Visiting Fellow, NIDDK GENE EXPRESSION PROFILE IN AN INTERFERON-EXPOSED APOL1 HIGH-RISK TRANSGENIC MOUSE RESEMBLES EXPRESSION PROFILES IN URINARY PODOCYTES FROM SUBJECTS WITH APOL1 HIGH-RISK GENOTYPE

Thursday, May 25, 2023 (Continued)

11:45 AM–1:30 PM	**Boxed Lunch/Review of Posters/Exhibition Hall** *Houston Hall, Hall of Flags*

APOL1 MEDIATED KIDNEY DISEASE

Moderator: **Opeyemi Olabisi, MD, PhD** | Assistant Professor of Medicine, Duke University, Department of Medicine, Division of Nephrology, Duke Molecular Physiology Institute

1:30 PM–1:55 PM	**APOL1 Mediated Disease/Mechanism (Session 2.5)** **Martin Pollak, MD** | Professor of Medicine, Harvard Medical School Chief, Division of Nephrology, Harvard University, Beth Israel Deaconess Medical Center (BIDMC)
1:55 PM–2:20 PM	**Unlocking the Mysteries of APOL1 Mediated Kidney Disease: Exploring the Crucial Role of Endothelial Cells in Disease Development (Session 2.6)** **Junnan Wu, PhD, MD** | Professor, Zhejiang University School of Medicine
2:20 PM–3:05 PM	**Special Session: Barriers to Human Research in Black Community** Moderator: **Opeyemi Olabisi, MD, PhD** | Assistant Professor of Medicine, Duke University, Department of Medicine, Division of Nephrology, Duke Molecular Physiology Institute Co-moderator: **Glenda Roberts,** Patient **Jaime Albright,** Patient Parent | **Joshua Albright,** Patient | **Kevin Mott,** Patient | **Martin Lewis,** Patient *African Americans who represent 13% of the US population account for more than 35% of patients with ESRD. However, less than 5% of clinical trial participants are Black. To reduce racial kidney health disparities, there is an urgent need to increase the participation of African Americans in clinical trials. In this roundtable, Black patients with history of FSGS, a community engagement expert and a nephrologist will discuss obstacles that hinder the participation of African Americans in clinical research. Strategies for removing these obstacles and for reducing racial kidney health disparity will also be discussed.* *The session is sponsored by Travere Therapeutics*
3:05 PM–3:20 PM	**Afternoon Break**

BIOLOGY OF MEMBRANOUS NEPHROPATHY

Moderators

Laura Mariani, MD, MS | Assistant Professor, University of Michigan
Pierre Ronco, MD, PhD | Editor, *Kidney International*

3:20 PM–3:45 PM	**Membranous Nephropathy, The Journey of the Antigen, Genetics and Treatment (Session 2.7)** **Laurence Beck, MD, PhD** | David J. Salant Professor of Nephrology, Boston University Chobanian & Avedisian School of Medicine
3:45 PM–4:10 PM	**New Experimental Models for Membranous Nephropathy (Session 2.8)** **Nicola Martin Tomas, MD** | Researcher, University Medical Center Hamburg-Eppendor
4:10 PM–4:35 PM	**Complement Activation and Effector Pathways in Membranous Nephropathy (Session 2.9)** **Andreas Kistler, MD** | Cantonal Hospital Thurgau/Frauenfeld, University of Zurich *In this session, the role of complement in PLA2R-antibody mediated membranous nephropathy (MN) will be discussed. Experimental evidence for and against the role of each complement activation pathway will be reviewed. The contribution of membrane attack complex and anaphylatoxins as complement effector pathways leading to podocyte damage will be discussed, as well as implications for the design of clinical trials with targeted complement inhibition in MN.*
4:35 PM–5:00 PM	**PLA2R1 Versus other Antigens: Different Roads to Membranous Nephropathy (Session 2.10)** **Gérard Lambeau, PhD** | Director of Research, CNRS and Université Côte d'Azur *The presentation will provide information on the molecular biology of PLA2R1 and other MN antigens : structure, function, cell biology and expression, and will discuss working hypotheses and some of the molecular mechanisms leading to MN, from the autoimmune response to the pathogenic phase in podocytes.*

All sessions and breaks take place in Irvine Hall, unless noted

Thursday, May 25, 2023 (Continued)

5:00 PM–5:05 PM	**Closing**
6:00 PM–9:00 PM	**Thursday Social Program** Group Dinner at The Moshulu—Roundtrip transportation will depart from the Sheraton Philadelphia University City starting at 5:30 PM.

Friday, May 26, 2023

8:00 AM–8:30 AM	**Continental Breakfast** A light breakfast of pastries and coffee will be served.
8:15 AM–8:30 AM	**Award Winner Announcements** **Katalin Susztak, MD, PhD** | Conference Co–Chair, Professor of Medicine and Genetics, Renal–Electrolyte and Hypertension Division, Perelman Center for Advanced Medicine at the University of Pennsylvania **Lawrence B. Holzman, MD** | Conference Co-Chair, C. Mahlon Kline Professor of Medicine, Professor of Pediatrics, Perelman Center for Advanced Medicine at the University of Pennsylvania *The following awardees will be announced:* · *Marilyn G. Farquhar Lifetime Research Achievement Award* · *Wilhelm Kriz Early Career Research Achievement Award*
8:30 AM–9:15 AM	**Keynote Lecture: The Future of RNA Therapeutics** **Norbert Pardi, PhD** | Assistant Professor of Microbiology Vaccines Group Lead, Penn Institute for RNA Innovation; Perelman School of Medicine, University of Pennsylvania *Nucleoside-modified mRNA vaccines against SARS-CoV-2 represent the first approved mRNA medicines for human use. The field is actively expanding the range of applicability of mRNA therapeutics and the future is undoubtedly bright. Dr. Pardi's lecture will highlight the most important findings that led to the birth of mRNA vaccines and discuss remaining roadblocks and current and future opportunities for mRNA medicines.*

OMICS TOOLS FOR TARGET DISCOVERY

Moderators

Kirk Campbell, MD | Professor of Medicine and Pharmacological Sciences, Icahn School of Medicine at Mount Sinai

Paola Romagnani, MD, PhD | Full Professor, Chair of Nephrology and Head of the Nephrology and Dialysis Unit, University of Florence, University Children's Hospital Anna Meyer

9:15 AM–9:40 AM	**Single Cell Sequencing and Spatial Profiling in Kidney Disease (Session 3.1)** **Parker Wilson, MD, PhD** | Assistant Professor of Pathology and Laboratory Medicine, Perelman School of Medicine at the University of Pennsylvania *This session will discuss the application of single cell gene expression and chromatin accessibility profiling to the study of kidney disease. In addition, we will highlight recent advances in spatial transcriptomics.*
9:40 AM–10:05 AM	**Computational Tools for Single Cell Studies from Data to Clinical Translation (Session 3.2)** **Mingyao Li, PhD** | Professor of Biostatistics in Biostatistics and Epidemiology, University of Pennsylvania School of Medicine
10:05 AM–10:20 AM	**Morning Break**
10:20 AM–10:45 AM	**The Use and Limitation of Organoid Models for Target Discovery (Session 3.3)** **Nuria Montserrat, PhD** | Group Leader/ICREA Research Professor, The Barcelona Institute of Science and Technology (BIST)

Friday, May 26, 2023 (Continued)

SHORT ORAL ABSTRACTS

Moderator: **John Cijiang He, MD, PhD** | Professor, Medicine, Nephrology, Icahn School of Medicine at Mount Sinai

10:45 AM–11:10 AM *The following abstracts will be presented orally in 5-minute sessions.*	**Antonio M. Fontanella**	MSTP Student, University of Miami Miller School of Medicine STING ACTIVATION BY MTDNA TRIGGERS PODOCYTE INJURY IN DKD **Florian Siegerist, MD**	Researcher, Institute of Anatomy and Cell Biology, University Medicine Greifswald THE PODOCYTE-SPECIFIC ANGULIN ILDR2 AND ITS ROLE IN TRICELLULAR TIGHT JUNCTIONS AND GLOMERULAR LOCAL IMMUNE TOLERANCE **Paul Diefenhardt, MD**	Department II of Internal Medicine and Center for Molecular Medicine, University of Cologne BTLA STIMULATION ALLEVIATES EXPERIMENTAL CRESCENTIC GLOMERULONEPHRITIS **Richard Coward, MB, ChB, PhD, MRCP**	Professor of Renal Medicine and Consultant Pediatric Nephrologist, Bristol Royal Hospital for Sick Children, University of Bristol, Bristol Medical School SHIGA TOXIN TARGETS THE PODOCYTE CAUSING HAEMOLYTIC URAEMIC SYNDROME THROUGH ENDOTHELIAL COMPLEMENT ACTIVATION
11:10 AM–11:35 AM	**Journal Editors** **Future of Kidney Research and Translational Nephrology** **Moderator: Tobias B. Huber, MD**	Director and Chair of the III Medical Department, Principal investigator, University Medical Center Hamburg-Eppendorf **Katalin Susztak, MD, PhD**	Conference Co–Chair, *Med, Cell Metabolism* **Ellen Carney, PhD**	Senior Editor, *Nature Reviews Nephrology* **Harold Feldman, MD**	Emeritus Professor of Biostatistics and Epidemiology, *American Journal of Kidney Diseases* **Julie Ingelfinger, MD**	Deputy Editor, *New England Journal of Medicine (NEJM)* **Pierre Ronco, MD, PhD**	Editor, *Kidney International* **Alexander Starushchenko, PhD**	Editor, *American Journal of Physiology—Renal Physiology*
11:35 AM–1:10 PM	**Boxed Lunch/Review of Posters/Exhibition Hall** *Houston Hall, Hall of Flags*

IMMUNOBIOLOGY OF GLOMERULAR DISEASE

Moderators

Andrea Sanchez Navarro, PhD | Postdoctoral Fellow, Susztak Lab, Perelman School of Medicine at the University of Pennsylvania
Andrey Shaw, MD | Senior Fellow, Immunology-Oncology, Genentech

1:10 PM–1:35 PM	**Dynamic Molecular Profiling of Immune Responses in the Human Kidney (Session 3.4)** **Benjamin Stewart, MD, PhD**	Clinical Lecturer, Department of Medicine, University of Cambridge
1:35 PM–2:00 PM	**C3 Glomerulopathy (Session 3.5)** **Sophie Chauvet, MD, PhD**	Cordeliers Research Center, Inserm, Sorbonne University, University of Paris *Pathophysiology of C3 glomerulopathy, a prototype of complement mediated disease*
2:00 PM–2:15 PM	**Afternoon Break**

All sessions and breaks take place in Irvine Hall, unless noted

Friday, May 26, 2023 (Continued)

CLINICAL TRIALS

Moderators

Michelle Denburg, MD, MSCE | Associate Professor of Pediatrics and Epidemiology, Director of Research, Division of Nephrology Children's Hospital of Philadelphia, Perelman School of Medicine at the University of Pennsylvania

Jochen Reiser, MD, PhD | The Ralph C. Brown, MD, Professor of Internal Medicine, Rush University Medical Center

2:15 PM–2:40 PM	**Drug Development for Rare Glomerular Diseases: A Regulatory Perspective on Where We Are and Where We Need to Go (Session 3.6)** **Aliza Thompson, MD, MS** | Deputy Director of the Division of Cardiology and Nephrology, Center for Drug Evaluation and Research at the U.S. Food and Drug Administration (FDA)
2:40 PM–3:05 PM	**Munich: Predictive Randomized Clinical Trials (Session 3.7)** **Hans-Joachim Anders, MD** | Professor of Nephrology, Head of Renal Division, Inner City Campus, Department of Medicine IV, Hospital of the Ludwig Maximilian University *pRCTs are a novel tool to increase the predictive value of animal studies for human RCTs. We used Alport mice to test the renoprotective effects of several renoprotective drugs alone and in combination using uremia-free (kidney) lifespan as a primary endpoint. Data on MoA, podocytes and the filtration slit will be provided.*
3:05 PM–3:30 PM	**Vertex: Issues in Glomerular Disease Clinical Trial Development, Industry-Perspective (Session 3.8)** **David Altshuler, MD, PhD** | Executive Vice President, Global Research, and Chief Scientific Officer, Vertex Pharmaceuticals Incorporated
3:30 PM–3:55 PM	**NEPTUNE Match: Targeting Therapies to Patients with Nephrotic Syndrome (Session 3.9)** **Matthias Kretzler, MD** | Professor of Internal Medicine/Nephrology and Computational Medicine & Bioinformatics, University of Michigan *Linking patient specific disease mechanism to emerging therapies in nephrotic syndrome is a critical need of our research community.* *Using the full spectrum of clinical, molecular, genetic and histological information available in the NEPTUNE knowledge base from 780 patients prospectively followed in the network, NEPTUNE Match has established a dynamic framework to develop, communicate and test patient level pathway activity predictions across a wide spectrum of molecular pathways targeted in ongoing trials.* *We will present the strategy of matching molecular modes of action with patient level information currently deployed in Match to bring the right patient to the right trial at the right time.*
3:55 PM–4:00 PM	**Conference Closing** **Alexander Starushchenko, PhD** | Editor, *American Journal of Physiology—Renal Physiology* *Announcement of the American Journal of Physiology—Renal Physiology Abstract Awards. The AJP/Renal has selected 5 best posters from early career researchers during the pre-meeting. Winners will be recognized with a certificate and $100 award. The best oral abstract/poster during the main meeting will also be announced. This individual will receive a certificate and $500 award.*

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Wednesday, May 24, 2023

O = Oral Presentation for Primary Conference
EC = Early Career Researcher Poster

Glomerular Basement Membrane Biology and Disease			
001	**Delaney**	EC	A DROSOPHILA MODEL OF ALPORT SYNDROME AS A PLATFORM FOR VALIDATING PATHOGENICITY OF COL4A5 GENETIC VARIANTS
002	**Saei**	O + EC	DEEP-INTRONIC VARIANTS IN THE X-LINKED ALPORT SYNDROME: FROM DETECTION TO THERAPEUTIC HOPES
003	**Tsotakos**		THE LONG NON-CODING RNA MEG3 MAY AFFECT THE EXPRESSION OF BOTH APICAL AND BASEMENT MEMBRANE COMPONENTS OF GLOMERULAR EPITHELIAL CELLS IN DIABETIC KIDNEY DISEASE
Glomerular Cell Paracrine Signaling/Cross Talk			
004	**Coward**	O	SHIGA TOXIN TARGETS THE PODOCYTE CAUSING HAEMOLYTIC URAEMIC SYNDROME THROUGH ENDOTHELIAL COMPLEMENT ACTIVATION
005	**Daehn**		PODOCYTE DERIVED ENDOTHELIN-1 AND CROSSTALK WITH ENDOTHELIAL CELLS THROUGH EDNRA IS ESSENTIAL FOR GLOMERULAR INJURY.
006	**Feng**	O	GLOMERULAR-TUBULAR CELLS CROSSTALK MEDIATED BY SOLUBLE RARRES1, A PODOCYTE-SECRETED PROTEIN
007	**Zeng**	EC	INJURY INDUCED PARACRINE EFFECTS ON THE PODOCYTE'S TRANSCRIPTOME
Podocyte Cell Biology (e.g., Cytoskeleton, Intercellular Junction/Slit Diaphragm, Intracellular S)			
008	**Agrawal**		PODOCYTES EXHIBIT A DISTINCT ALTERNATIVELY SPLICED LANDSCAPE OF PPARγ MRNA COMPARED TO ADIPOSE TISSUE
009	**Anandakrishnan**	O + EC	DEEP LEARNING IDENTIFIES SUBPHENOTYPES OF DIABETIC KIDNEY DISEASE DRIVEN BY GENETIC VARIATIONS IN THE RHO PATHWAY
010	**Boi**	EC	CRITICAL IMPORTANCE OF PODOCYTE GERANYLGERANYL TRANSFERASE TYPE-I FOR THE GLOMERULAR FILTRATION BARRIERS

011	**Bolanos Palmieri**	EC	IDENTIFICATION OF RNASE1 AS A NOVEL MODULATOR OF PODOCYTE CYTOSKELETON ARCHITECTURE
012	**Burke**		THE PODOCYTE: GLOMERULAR SENTINEL AT THE CROSSROADS OF INNATE AND ADAPTIVE IMMUNITY
013	**Cabrita**	EC	THE IMPACT OF PHASE-SEPARATED CONDENSATES FORMED BY YAP AND TAZ IN PODOCYTES
014	**Cintron Pregosin**	EC	INVESTIGATING PODOCYTE-PARIETAL EPITHELIAL CELL COMMUNICATION THROUGH INTERCELLULAR BRIDGES
015	**Coward**		THE INSULIN / IGF AXIS IS CRITICALLY IMPORTANT IN THE KIDNEY PODOCYTE AND CONTROLS GENE TRANSCRIPTION AND SPLICEOSOME FUNCTION
016	**Ebefors**		CYTOSKELETON-ASSOCIATED PROTEIN 4 INFLUENCES PODOCYTE CYTOSKELETON DYNAMICS IN DIABETIC KIDNEY DISEASE
017	**Fang**	EC	PODOCYTE-SPECIFIC REGULATION OF PROTEIN PHOSPHATASE 2A WORSENS DKD PROGRESSION
018	**Helmuth**	EC	DEVELOPING NOVEL ALLOSTERIC AGONISTS OF INTEGRIN ALPHA 3 BETA 1
019	**Holthofer**		AN IN VITRO APPROACH TO UNDERSTAND CONTRIBUTION OF KIDNEY CELLS TO HUMAN URINARY EXTRACELLULAR VESICLES
020	**Lang**	EC	THE DISTINCTIVE FUNCTIONS OF ENDOCYTIC MECHANISMS WITHIN THE MAINTENANCE OF SLIT DIAPHRAGMS IN DROSOPHILA NEPHROCYTES
021	**Lee**		INHIBITION OF HEPARANASE ATTENUATES PODOCYTE INJURY INDUCED BY PUROMYCIN AMINONUCLEOSIDE
022	**Lepa**	EC	RAPGEF1 (C3G) IS ESSENTIAL FOR SLIT-DIAPHRAGM INTEGRITY IN MICE
023	**Majmundar**		DISCOVERY OF A NOVEL PODOCYTE COMPLEX OF NEPHROTIC SYNDROME DISEASE PROTEIN NOS1AP AND DYSTROGLYCAN COMPLEX PROTEIN SNTA1
024	**Mandel**	O	TRANSCRIPTION-BLOCKING DNA LESIONS IN PODOCYTES CAUSE FOCAL SEGMENTAL GLOMERULOSCLEROSIS AND INTERSTITIAL INFLAMMATION IN THE KIDNEY THAT CAN BE AMELIORATED BY CALORIE RESTRICTION
025	**Matsuda**	EC	GIT2 REGULATES RAC1 ACTIVITY AND IS CRITICAL FOR CYTOSKELETAL DYNAMICS IN PODOCYTES
026	**Mattias**	EC	IDENTIFICATION OF ALTERNATIVE SPLICING EVENTS IN MECHANICALLY STRETCHED PODOCYTES AS A MODEL FOR GLOMERULAR HYPERTENSION
027	**Meyer-Schwesinger**	O	PROTEASOMAL PROCESSIVITY INFLUENCES THE ENDOCYTIC ACTIVITY OF PODOCYTES
028	**Möller-Kerutt**	EC	LIVE CELL IMAGING-BASED ANALYSES TO CHARACTERIZE THE PATHOGENIC POTENTIAL OF CRUMBS2 VARIANTS
029	**Odenthal**	EC	MITOCHONDRIAL ROS SENSITIZE PODOCYTES TO INSULIN RESULTING IN MTOR ACTIVATION
030	**Pasupulati**		GROWTH HORMONE CONTRIBUTES TO THE PATHOPHYSIOLOGY OF DIABETIC NEPHROPATHY BY INDUCING TNF-α AND TGF-β1 IN PODOCYTES
031	**Pressly**	EC	OSBPL7 IN CHRONIC KIDNEY DISEASE
032	**Sever**	O	DYNAMIN INTEGRATES GELSOLIN AND ARP2/3 COMPLEX NUCLEATED ACTIN NETWORKS IN PODOCYTES
033	**Siegerist**	O + EC	THE PODOCYTE-SPECIFIC ANGULIN ILDR2 AND ITS ROLE IN TRICELLULAR TIGHT JUNCTIONS AND GLOMERULAR LOCAL IMMUNE TOLERANCE
034	**Sopel**	EC	FINE-TUNED REGULATION OF PODOCYTE AUTOPHAGY AND NEPHRONECTIN BY MICRORNAS UPREGULATED IN MEMBRANOUS GLOMERULONEPHRITIS
035	**Spitz**	EC	MTOR-DEPENDENT AUTOPHAGY REGULATES SLIT DIAPHRAGM DENSITY IN PODOCYTE-LIKE DROSOPHILA NEPHROCYTES
036	**Sweetwyne**	EC	RAPID AND DIRECT ISOLATION OF MITOCHONDRIA FROM KIDNEY PODOCYTES SHOWS HIGH OXIDATIVE PHOSPHORYLATION CAPACITY THAT IS DIMINISHED IN PRIMARY PODOCYTE CULTURES

037	**Tharaux**	O	VASORIN ORCHESTRATES PODOCYTE QUIESCENCE AND GLOMERULAR HOMEOSTASIS DURING HEALTH AND GLOMERULAR DISEASES
038	**Tumlin**		EFFICACY OF VOCLOSPORIN IN MAINTAINING PODOCYTE FUNCTION AND VIABILITY IN A RAT STREPTOZOTOCIN MODEL OF DIABETIC NEPHROPATHY
039	**Yu**	EC	DELAYED TREATMENT OF COQ10 PRECURSORS FAILS TO RESCUE COQ10-DEFICIENT GLOMERULOPATHY
040	**Zhao**	EC	ADIPOKINE UPD2 AND JAK/STAT PATHWAY MEDIATE HIGH-FAT DIET-INDUCED NEPHROCYTE DYSFUNCTION

Thursday, May 25, 2023

ApoL1: Genetics, Biology, Disease			
041	**Adebayo**	EC	ROLE OF CELL-FREE HEMOGLOBIN IN APOLIPOPROTEIN L1-MEDIATED SICKLE CELL NEPHROPATHY
042	**Assimon**	O	MZ-301 IS A SMALL MOLECULE INHIBITOR OF APOL1 PORE FUNCTION THAT ATTENUATES ALBUMINURIA IN A MOUSE MODEL OF APOL1-MEDIATED KIDNEY DISEASE
043	**Latt**	O	GENE EXPRESSION PROFILE IN AN INTERFERON-EXPOSED APOL1 HIGH-RISK TRANSGENIC MOUSE RESEMBLES EXPRESSION PROFILES IN URINARY PODOCYTES FROM SUBJECTS WITH APOL1 HIGH-RISK GENOTYPE
044	**Lee**	EC	A SNARE PROTECTIVE POOL ANTAGONIZES APOL1 RENAL TOXICITY IN DROSOPHILA NEPHROCYTES
045	**Nystrom**	EC	COVID-19 VACCINATION IS NOT ASSOCIATED WITH INCREASED INCIDENCE OF PROTEINURIC KIDNEY DISEASE IN AFRICAN AMERICANS WITH HIGH-RISK APOL1 GENOTYPE
046	**Poudel**	O	SMALL MOLECULAR APOL1 PORE BLOCKER AMELIORATES RENAL INJURY IN PODOCYTE-SPECIFIC G2APOL1 TRANSGENIC MICE
047	**Poudel**		ENDOTHELIAL CELL-SPECIFIC G2APOL1 EXPRESSION INDUCES HYPERTENSION VIA STING AND NLRP3 PATHWAYS
048	**Yoshida**	EC	APOL1 KIDNEY RISK VARIANTS IN GLOMERULAR DISEASES MODELED IN TRANSGENIC MICE
049	**Zhu**	EC	HIV-1 PROTEIN NEF ACTS IN SYNERGY WITH APOL1-G1 TO IMPAIR NEPHROCYTE FUNCTION BY INHIBITING AUTOPHAGY AND ENDOCYTOSIS PATHWAY
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050	**Mitrofanova**		ROLE OF SMPDL3B IN REGULATION OF ALBUMINURIA IN EXPERIMENTAL ALPORT SYNDROME
051	**Sewerin**	EC	GENERATING A COMPREHENSIVE LIPOTOXICITY PROFILE FOR PODOCYTES
052	**Tolerico**	EC	APOLIPOPROTEIN M TREATMENT RESTORES KIDNEY FUNCTION IN ALPORT SYNDROME
Glomerular Cell Mechanisms of Injury and Aging			
053	**de Cos Gomez**	EC	URINARY PLASMINOGEN AS A MARKER OF DISEASE PROGRESSION IN HUMAN GLOMERULAR DISEASE
054	**Fontanella**	O + EC	STING ACTIVATION BY MTDNA TRIGGERS PODOCYTE INJURY IN DKD
055	**Kreidberg**		FOXC2 AND WT1 REGULATE TRANSCRIPTIONAL REPROGRAMMING DURING THE PODOCYTE RESPONSE TO INJURY IN THE CONTEXT OF HUMAN DISEASE, THE MECHANISMS WHEREBY TRANSCRIPTION FACTORS REPROGRAM GENE EXPRESSION IN REPARATIVE RESPONSES TO INJURY ARE NOT WELL UNDERSTOOD. WE HAVE STUDIED THE MECHANISMS OF TRANSCRIPTION
056	**Kreidberg**		YAP-DEPENDENT EPITHELIAL:STROMAL INTERACTIONS IN THE KIDNEY GLOMERULUS ARE DEPENDENT ON INJURY DRIVEN CHANGES IN THE INTEGRIN REPERTOIRE

057	**Lenoir**		TRPC6-MEDIATED CALPAIN ACTIVATION IMPAIRS PODOCYTE AUTOPHAGY AND CAUSES PODOCYTE INJURY IN DIABETIC KIDNEY DISEASE
058	**Perin**		FASTING MIMICKING DIET AND PODOCYTE PROTECTION
059	**Veloso Pereira**	EC	PODOCYTE INJURY LEADS TO A PREMATURE AGING PHENOTYPE
060	**Waller**	EC	ANTIPROTEINURIC AND PODOCYTOPROTECTIVE EFFECTS OF THROMBIN INHIBITION THERAPY IN GLOMERULAR DISEASE
Glomerular Endothelial Biology and Disease			
061	**Perin**		THE ROLE OF GLOMERULAR ENDOTHELIAL LIPID METABOLISM IN ALPORT SYNDROME
Glomerular Metabolism			
062	**Semenikhina**	EC	NICOTINE INDUCES PODOCYTE INJURY THROUGH NOS UNCOUPLING AND PEROXYNITRITE PRODUCTION
Glomerular Physiology			
063	**Endlich**		SHEAR STRESS ON PODOCYTE FOOT PROCESSES ARISING FROM FLOW IN FILTRATION SLITS STUDIED BY NUMERICAL FLOW SIMULATIONS
064	**Unnersjö-Jess**		MECHANICAL FORCES AT THE KIDNEY FILTRATION BARRIER GOVERN SPATIAL ORIENTATION OF PODOCYTE PROCESSES ON CAPILLARIES
Glomerulus: Novel Disease Models or Imaging Methods			
065	**Ebbestad**	EC	HIGH-RESOLUTION IMAGING AND DEEP LEARNING-BASED SEGMENTATION OF GLOMERULAR FILTRATION BARRIER PATHOLOGIES
066	**Hackl**		INVESTIGATING PODOCYTE INJURY IN ACUTE MURINE KIDNEY SLICES BY COMBINING MULTIPHOTON WITH SUPER-RESOLUTION MICROSCOPY
067	**Klawitter**	EC	NIFURPIRINOL INDUCES A POTENT AND RELIABLE FSGS-LIKE PHENOTYPE IN ZEBRAFISH LARVAE
068	**Köhler**		A NOVEL IN VIVO TOOL MIMICKING FABRY DISEASE IN DROSOPHILA MELANOGASTER
069	**Maggiore**	EC	A NOVEL VASCULARIZED HUMAN KIDNEY ORGANOID TO STUDY PODOCYTE AND ENDOTHELIAL HEALTH AND DISEASE
070	**Schindler**	O + EC	A NOVEL IN VIVO HIGH-CONTENT DRUG SCREENING ASSAY IDENTIFIES A PAN-HDAC INHIBITOR AS PODOCYTE-PROTECTIVE IN A FSGS-LIKE ZEBRAFISH MODEL
071	**Staruschenko**		TYPE 2 DIABETIC NEPHROPATHY (T2DN) RAT AS A MODEL TO STUDY PODOCYTES IN THE SETTING OF DIABETIC NEPHROPATHY
072	**Xian**		PATIENT IPSC-BASED PHENOTYPIC AND TRANSCRIPTOMIC SCREENING OPTION TO UNRAVEL NEW TARGETS AND PATHWAYS IN CONGENITAL NEPHROTIC SYNDROME
Immunobiology of Glomerular Disease (Including Complement Cascade Biology)			
073	**Diefenhardt**	O	BTLA STIMULATION ALLEVIATES EXPERIMENTAL CRESCENTIC GLOMERULONEPHRITIS
074	**Hengel**	EC	ANTI-NEPHRIN ANTIBODIES IN MINIMAL CHANGE DISEASE
075	**Nies**	EC	DECIPHERING THE CONTRIBUTION OF INFLAMMATORY MACROPHAGES TO FOCAL SEGMENTAL GLOMERULOSCLEROSIS
076	**Sampat**		KIDNEY C5AR IS EXPRESSED IN RESIDENT MACROPHAGES, TUBULAR EPITHELIAL CELLS, AND IN ASSOCIATION WITH FIBROSIS
Membranous Nephropathy: Pathobiological Mechanism, Genetics			
077	**Al-Rabadi**		A MOUSE MODEL OF SERINE PROTEASE HTRA1 - ASSOCIATED MEMBRANOUS NEPHROPATHY
078	**Perin**		C3A/C3AR1 SIGNALING AS A CRUCIAL PATHOGENIC MECHANISM IN MEMBRANOUS NEPHROPATHY
079	**Purohit**	EC	ROLE OF NON-ANTI-PLA2R AUTOANTIBODIES IN MEMBRANOUS NEPHROPATHY

Friday, May 26, 2023

Glomerular Disease Clinical Studies Methods/Trial Development			
080	**Kretzler**		NEPHROTIC SYNDROME STUDY NETWORK
Glomerular Biology/Pathobiology/Disease: Other			
081	**Brodsky**		ULTRASTRUCTURAL GLOMERULAR CHANGES IN AN EXPERIMENTAL MODEL OF WARFARIN RELATED NEPHROPATHY
082	**Elmubarak**	EC	WHOLE EXOME SEQUENCING REVEALS A MONOGENIC CAUSE OF STEROID RESISTANT NEPHROTIC SYNDROME IN 27.5% OF 320 FAMILIES
083	**Endlich**		DECREASE OF THE FILTRATION SLIT DENSITY IS AN EARLY INDICATOR OF DISRUPTION OF THE FILTRATION BARRIER INTEGRITY
084	**Hackl**		FRET-BASED VISUALIZATION OF CGMP SIGNALING IN GLOMERULAR ENDOTHELIAL CELLS AND PODOCYTES
085	**Jiang**	EC	MATHEMATICAL MODELING OF PODOCYTE ADHESION HIGHLIGHTS THE ROLE OF CELL CONTRACTILITY AND FLUID SHEAR STRESS ON KIDNEY FUNCTION
086	**Kamigaki**	EC	NEPHRIN AUTOANTIBODIES IDENTIFY TWO THIRDS OF STEROID-NAÏVE CHILDREN WITH IDIOPATHIC NEPHROTIC SYNDROME
087	**Khandker**		MC1R AGONIST PL8177 PROTECTS AGAINST PODOCYTE LOSS IN A STREPTOZOTOCIN-INDUCED RAT MODEL OF DIABETIC NEPHROPATHY
088	**Klötzer**		KETOGENIC DIET IN EXPERIMENTAL GLOMERULONEPHRITIS
089	**Kolvenbach**	EC	QUANTIFIABLE PHENOTYPING OF A NPHS1-DEFICIENT MOUSE MODEL
090	**Lemberg**	EC	QUANTIFIABLE PHENOTYPING OF AN EXISTING NPHS1 KNOCKOUT MOUSE MODEL
091	**Berlingerio**	O + EC	ALTERED MITOCHONDRIAL METABOLISM AND INCREASED OXIDATIVE STRESS CAUSE PODOCYTES DYSFUNCTION IN CYSTINOSIS
092	**Mansour**	EC	X-LINKED RECESSIVE VARIANTS IN X-PROLYL AMINOPEPTIDASE 2 (XPNPEP2) AS A POTENTIAL NEW CAUSE OF NEPHROTIC SYNDROME
093	**Martinez-Rojas**	EC	TRANSIENT INHIBITION OF THE SODIUM-GLUCOSE COTRANSPORTER 2 AFTER ISCHEMIA/REPERFUSION INJURY REDUCES RENAL VASCULAR RESISTANCE PREVENTING CHRONIC KIDNEY DISEASE IN THE LONG-TERM
094	**Mertens**	EC	ASSESSING THE SPECTRUM AND PATHOGENICITY OF BIALLELIC VARIANTS IN NPHS2 IN 216 INDIVIDUALS WITH STEROID-RESISTANT NEPHROTIC SYNDROME
095	**Saida**	EC	ESTABLISHING QUANTITATIVE AND REPRODUCIBLE PHENOTYPING OF AN NPHS1 KNOCKOUT MOUSE MODEL
096	**Spear**	EC	ALTERED BONE MARROW MYELOPOIESIS CONTRIBUTES TO GLOMERULAR DYSFUNCTION
097	**Tomas**		CD39-TARGETED PLASMA CELL DEPLETION FOR THE TREATMENT OF ANTIBODY-MEDIATED KIDNEY DISEASE
098	**Ulloa Severino**	EC	PODOCYTE SOFTENING AND PROTEINURIA: CAUSE OR CONSEQUENCE?
099	**Waller**	EC	LIMITED ROLE OF ANTITHROMBIN DEFICIENCY IN NEPHROTIC SYNDROME–ASSOCIATED HYPERCOAGULOPATHY
100	**Wessely**	O	A DESIGN-OF-EXPERIMENT APPROACH TOWARDS DIFFERENTIATION OF HUMAN PLURIPOTENT STEM CELLS INTO PODOCYTES
FSGS: Pathobiological Mechanism, Genetics			
101	**AbuMaziad**		MITOCHONDRIAL BIOGENESIS AND THERAPEUTIC INTERVENTIONS IN PODOCYTOPATHIES USING NOVEL APPROACHES
102	**Agrawal**		ALTERNATIVE MRNA SPLICING AND POLYADENYLATION PROVIDE A NOVEL MECHANISM OF REGULATION OF THE GLOMERULAR FILTRATION BARRIER

103	**Batool**	EC	REVEALING THE MOLECULAR NUANCES OF TRPC6 IN FOCAL SEGMENTAL GLOMERULOSCLEROSIS IN AN IN VITRO HUMAN PODOCYTE MODEL
104	**Braun**		ATF4 MEDIATES PODOCYTE INJURY RELATED TO ENDOPLASMIC RETICULUM STRESS
105	**Buerger**	EC	FVB/N-NOS1APEX3-/EX3- MICE DEVELOP SEVERE GLOMERULAR KIDNEY DISEASE, WHICH IS AMELIORATED BY ANTIPROTEINURIC TREATMENT
106	**Ester**		THE FSGS DISEASE GENE PRODUCT AND NUCLEAR PORE PROTEIN NUP205 REGULATES NUCLEAR LOCALIZATION AND ACTIVITY OF THE TRANSCRIPTIONAL REGULATORS YAP AND TAZ IN PODOCYTES
107	**Haak**	EC	PRIMARY FIBROBLASTS AS A NOVEL ASSAY FOR THE FUNCTIONAL TESTING OF NEW α-ACTININ 4 VARIANTS IN GLOMERULAR DISEASE
108	**Lassé**		AN INTEGRATED ORGANOID OMICS MAP EXTENDS MODELING POTENTIAL OF KIDNEY DISEASE
109	**May**	EC	PODOCYTE PROTEASE ACTIVATED RECEPTOR 1 ACTIVATION IN MICE CAUSES FOCAL SEGMENTAL GLOMERULOSCLEROSIS, AND MIRRORS HUMAN DISEASE SIGNALLING EVENTS
110	**Milosavljevic**	O + EC	MODELING TBC1D8B-ASSOCIATED FSGS IN DROSOPHILA NEPHROCYTES
111	**Sharma**	EC	NEPHROTIC SYNDROME-ASSOCIATED DE NOVO TRIM8 VARIANTS CONFER GAIN-OF-FUNCTION BY MODULATING POLYUBIQUITINATION AND 26S PROTEASOMAL DEGRADATION OF TRIM8.
112	**Yuen**	EC	PODOCYTE YES-ASSOCIATED PROTEIN AND TRANSCRIPTIONAL CO-ACTIVATOR WITH PDZ-BINDING MOTIF HYPERACTIVATION: NOVEL DRIVERS OF COLLAPSING GLOMERULOPATHY
Discovery "Omics" Approaches for Glomerular Disease or Therapeutic Development			
113	**Akilesh**		DIGITAL SPATIAL PROFILING OF MINIMAL CHANGE DISEASE
114	**Bai**	O + EC	COMPREHENSIVE SINGLE-NUCLEUS TRANSCRIPTIONAL AND METABOLOMIC PROFILING DEFINES UNIQUE PODOCYTE INJURY RESPONSES DURING OBESITY RELATED GLOMERULOPATHY
115	**Barreto**	EC	HIGH-THROUGHPUT DISCOVERY OF NOVEL PODOCYTE-PROTECTIVE SMALL MOLECULES
116	**Bronstein**	EC	EPIGENOMIC DYNAMICS OF PARIETAL EPITHELIAL CELLS IN PROLIFERATIVE GLOMERULOPATHY
117	**Eddy**		PLASMA PDGFRB AND URINARY A2M PREDICT AN INTRA-RENAL SPARSENTAN RESPONSE PROFILE IN KIDNEY BIOPSIES FROM PATIENTS WITH GLOMERULAR DISEASE
118	**Kroll**	EC	AN OPTIMIZED MS/MS-BASED WORKFLOW COMBINING LASER CAPTURE MICRODISSECTION AND MS/MS FOR MOLECULAR-LEVEL ANALYSIS OF FORMALIN-FIXED KIDNEY TISSUE
119	**McNulty**		MULTI-POPULATION GENOME-WIDE ASSOCIATION STUDY IMPLICATES BOTH IMMUNE AND NON-IMMUNE FACTORS IN THE ETIOLOGY OF PEDIATRIC STEROID SENSITIVE NEPHROTIC SYNDROME
120	**Njeim**	O + EC	DEVELOPING A SMALL MOLECULE DRUG TO TREAT DIABETIC KIDNEY DISEASE (DKD)
121	**Perin**	O	SINGLE CELL SPATIAL PROFILING OF GLOMERULAR STRUCTURES IN ALPORT SYNDROME

The poster number listed above applies to both the Early Career Researchers Pre-Conference Meeting and the primary conference.

CONGRATULATIONS TO THIS YEAR'S HAIKU CONTEST WINNERS

NON-TECHNICAL

Mira Krendel
Upstate Medical University

Patient fisherman,
Its net catching proteins,
Filtrate flowing by...

NON-TECHNICAL

Shipra Agrawal
Stony Brook University

Hold feet together,
Podocyte to Podocyte.
Pee, live, smile and laugh!

TECHNICAL

Shreeram Akilesh
University of Washington

Cytoskeleton
Rac, Rho in opposition
Intact or effaced

TECHNICAL

Linda Rehaume
Aurinia Pharmaceutical

Filtering all day,
Interdigitating bae,
Blood protein to stay!

Thursday, May 25, 2023

START TIME IS 6:15 AM

Meet in the lobby of the Sheraton Philadelphia University City Hotel
3549 Chestnut Street, Philadelphia, PA 19104

Race Leaders: Bibek Poudel, Lauren Lee & Konstantin Kloetzer

Channel your inner Rocky Balboa and join other conference attendees for this informal Rocky Run in the City of Brotherly Love.

The racecourse will take attendees from the hotel to the Chestnut Street bridge, to the Rocky statue and the steps leading up to the entrance of the Philadelphia Museum of Art.

There is no formal registration to participate, the race will not be timed.

MARILYN G. FARQUHAR
LIFETIME RESEARCH ACHIEVEMENT AWARD

The Farquhar Award is presented bi–annually at the International Podocyte Conference to recognize an individual whose research contributions have been foundational to our understanding of glomerular biology or to understanding the pathobiology of glomerular disease.

Tobias B. Huber, MD

Director and Chair of the III. Medical Department
University Medical Center Hamburg Eppendorf
Hamburg, Germany

Tobias B. Huber is Chair of the Center of Internal Medicine and Director of the III. Department of Medicine (Nephrology, Rheumatology, Endocrinology and Transplantation) at the University Medical Center Hamburg-Eppendorf (UKE). Together with his team he is internationally recognized for discovering signaling pathways relevant for kidney development, filtration, maintenance, and disease. He published over 275 articles, is one of the internationally most cited podocyte researches, receives numerous national and international recognitions including the Donald W. Seldin Young Investigator Award of the American Society of Nephrology and is elected member of the American Society of Clinical Investigation, the Association of American Physicians, and the National Academy of Sciences –Leopoldina-. A major focus of his career has been to mentor, educate and facilitate careers of young talents and clinician-scientists. Recently he was elected as inaugural president of the newly formed International Society for Glomerular Disease.

WILHELM KRIZ
EARLY CAREER RESEARCH ACHIEVEMENT AWARD

The Kriz Award is presented bi–annually at the International Podocyte Conference to recognize an early career investigator whose has made innovative or impactful research contributions toward to understanding of glomerular biology or to understanding the pathobiology of glomerular disease. *To be eligible, the nominee must be less than 45 years old on May 26, 2023.*

Shreeram 'Ram' Akilesh, MD, PhD

Associate Professor, Renal Pathology
Medical Director, Immunofluorescence Laboratory
Director, Digital Spatial Profiling Core Facility
Member, Kidney Research Institute
Department of Laboratory Medicine & Pathology
University of Washington, Seattle, WA

Dr. Akilesh graduated as the Valedictorian of his graduating class from Dartmouth College and then attended Washington University School in St. Louis of Medicine where he performed his thesis work in the laboratory of Dr. Andrey Shaw and was awarded MD and PhD degrees. Following a residency in Anatomic Pathology at Barnes-Jewish Hospital in St. Louis, Dr. Akilesh completed a Fellowship in Renal Pathology at the University of Washington, Seattle with Dr. Charles Alpers. He then completed a Damon Runyon awarded post-doctoral fellowship training in epigenomics. In 2013, Dr. Akilesh joined the faculty at the University of Washington and has established an NIH and DOD-funded research program as an Associate Professor in the Department of Laboratory Medicine and Pathology. As a practicing renal pathologist and researcher, Dr. Akilesh has made fundamental contributions to the understanding of the genetics of FSGS, the mechanisms of podocyte foot process effacement, the dissection of genome regulation of glomerular cells, and more recently spatial transcriptomics of human glomerular disease.

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14TH BIENNIAL

INTERNATIONAL PODOCYTE CONFERENCE

MAY 23–26, 2023 | PHILADELPHIA, PA