

# KidneyCurrent

*The Quarterly KidneyCure e-Newsletter*

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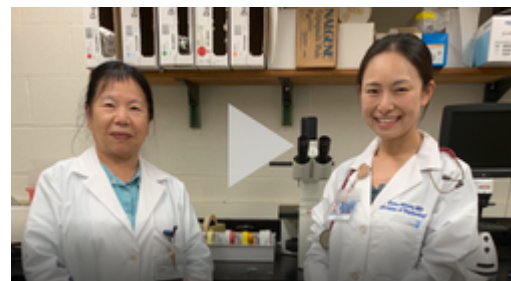
## Year-in-Review

As the year wraps up, everyone at KidneyCure wants to thank you for your continued support. In 2022 we established the [KidneyCure Diversity, Equity, Inclusion, and Justice Research Scholar Grant](#) with a donation from Otsuka and Visterra, launched the Cele Fogarty Travel Support Program for Patients (“Cele’s Champions”), expanded the [Kidney Week Endowed Lecture Program](#), and [awarded approximately \\$3 million to 23 kidney investigators](#) through our research grant programs—none of which would have been possible without you!

Wishing you and yours a happy and safe holiday season.

## Grant Recipient Video: Kana N. Miyata, MD

Kana N. Miyata, MD, an assistant professor in the Department of Internal Medicine, Division of Nephrology, at Saint Louis University School of Medicine, received a 2019 Ben J. Lipps Research Fellowship Grant. Hear about her work in diabetic kidney diseases, her hope that the next generation sees “kidney disease end completely,” and how receiving a KidneyCure grant came at a critical time to ensure her research could continue.



## Grant Recipients at Work

Current and former KidneyCure grant recipients are working across the research spectrum to advance our understanding and treatment of kidney diseases. [Find highlights](#) of recent publications, press, etc. as submitted by former KidneyCure grant recipients.

If you have any questions, please contact us at [kidneycure@asn-online.org](mailto:kidneycure@asn-online.org) or 202-640-4660.

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## Grant Recipients at Work

Highlights of recent works and publications as submitted by current and former KidneyCure grant recipients. Grant award year is indicated in parentheses.

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Jeannine M. Basta, PhD (2022)

- Press:
  - [Kidney Translational Research Center Focuses on Development of Kidney Atlas](#)
  - [Pediatric Center of Excellence in Nephrology established with NIH funding](#)

Ulf H. Beier, MD, DrMed (2017)

- [Thermogenic T cells: a cell therapy for obesity?](#)

Fabian Bock, MD, PhD (2021)

- [Kidney collecting duct cells make vasopressin in response to NaCl induced hypertonicity](#)
- [Reversal of the renal hyperglycemic memory in diabetic kidney disease by targeting sustained tubular p21 expression](#)

Subhashini Bolisetty, PhD (2019)

- [Functional consequence of myeloid ferritin heavy chain on acute and chronic effects of rhabdomyolysis-induced kidney injury](#)

Dorin-Bogdan Borza, PhD (2003)

- [The Alternative Pathway Is Necessary and Sufficient for Complement Activation by Anti-THSD7A Autoantibodies, Which Are Predominantly IgG4 in Membranous Nephropathy](#)
- [Endopeptidase Therapy for Anti-Glomerular Basement Membrane Disease: Beware of Anti-Hinge Antibodies!](#)
- [Editorial: Collagen IV nephropathies: Alport syndrome and beyond](#)

Benjamin Charles Bove, III, PhD, MPH (2019)

- [Acute and postacute sequelae associated with SARS-CoV-2 reinfection](#)

Ying Maggie Chen, MD, PhD, FASN (2013)

- [Targeting endoplasmic reticulum for novel therapeutics and monitoring in acute kidney injury](#)
- [Blocking CHOP-dependent TXNIP shuttling to mitochondria attenuates albuminuria and mitigates kidney injury in nephrotic syndrome](#)

Wei Chen, MD, MS, FASN (2017)

- [Outcomes of PD for AKI Treatment During COVID-19 in New York City: A Multicenter Study](#)
- [Associations of Dysnatremia with COVID-19 status and Mortality](#)

Emilie Cornec-Le Gall, MD, PhD (2015)

- [Monoallelic pathogenic ALG5 variants cause atypical polycystic kidney disease and interstitial fibrosis](#)

Michelle Denburg, MD (2012)

- [Long-term kidney and cardiovascular complications in pediatric cancer survivors](#)
- [Skeletal Outcomes in Children and Young Adults with Glomerular Disease](#)
- [Immunosuppression Exposure and Risk of Infection-Related Acute Care Events in Patients with Glomerular Disease: An Observational Cohort Study](#)

Michael David Donnan, MD, FASN (2020)

- [Formation of the glomerular microvasculature is regulated by VEGFR-3](#)

Stuart E. Dryer, PhD, FASN (2011)

- [TRPC6 Inactivation Reduces Albuminuria Induced by Protein Overload in Sprague Dawley Rats](#)
- [Ion channels and channelopathies in glomeruli](#)
- [Paraoxonase 2 \(PON2\) Deficiency Reproduces Lipid Alterations of Diabetic and Inflammatory Glomerular Disease and Affects TRPC6 Signaling](#)

Jacqueline M. Emathingier (2022)

- [Soluble ACE2 is Filtered into the Urine](#)

Samira S. Farouk, MD, MS, FASN (2020)

- [Acute Kidney Injury in a Patient with a Kidney Transplant and Posttransplant Lymphoproliferative Disorder: A Quiz](#)
- [Ensuring health equity for sexual and/or gender minority individuals](#)
- [A Chronic Kidney Disease Diagnosis: Now What? \(Podcast\)](#)

Eman Y. Gohar, MS, PhD (2022)

- Publications:
  - [G protein-coupled estrogen receptor 1 contributes to cisplatin-induced acute kidney injury](#)
  - [Aromatase inhibition elevates blood pressure and markers of renal injury in female rats](#)
- Press:
  - [APSselect](#)

Michael L. Granda, MD, MS (2022)

- [Tubular Secretion and Estimated GFR Decline in the Jackson Heart Study](#)
- [Metabolomic Profiling Identifies New Endogenous Markers of Tubular Secretory Clearance](#)

Susan B. Gurley, MD, PhD (2009)

- [Soluble ACE2 is Filtered into the Urine](#)

Irma Husain, MD (2021)

- Publication:
  - [Blocking CCL8-CCR8-Mediated Early Allograft Inflammation Improves Kidney Transplant Function](#)
- Press:
  - [ANIO GP Kaushal Annual Outstanding Trainee Award 2022](#)

Nishank Jain, MBBS, MPH, FASN (2018)

- [Platelet-Dependent Inflammatory Dysregulation in Patients with stages 4-5 Chronic Kidney Disease- A Mechanistic Clinical Study](#)
- [Screening for Cardiovascular Disease in CKD: PRO](#)

Eirini Kefalogianni, PhD (2021)

- [TNF or EGFR inhibition equally block AKI-to-CKD transition: opportunities for etanercept treatment](#)

Abhilash Koratala, MD, FASN (2022)

- [Diagnosis of Fluid Overload: From Conventional to Contemporary Concepts](#)
- [Incorporating Training in POCUS in Nephrology Fellowship Curriculum](#)
- [Point of care Ultrasound in Cirrhosis-associated Acute Kidney Injury: Beyond Inferior Vena Cava](#)

Ronak Lakhia, MD (2021)

- [Enhancer and super-enhancer landscape in polycystic kidney disease](#)

Seolhyun Lee, MD (2020)

- [Improving Solute Clearances by Hemodialysis](#)
- [Removal of Uremic Solutes from Dialysate by Activated Carbon](#)

Karel F. Liem, Jr., MD, PhD (2015)

- [A pathogenic variant in TULP3 causes renal and hepatic fibrocystic disease](#)

Kenneth Lim, MD, PhD, FASN (2022)

- [FGF23 and Cardiovascular Structure and Function in Advanced Chronic Kidney Disease](#)
- [Initiation of Dialysis Is Associated with Impaired Cardiovascular Functional Capacity](#)
- [Myocardial Cytoskeletal Adaptations in Advanced Kidney Disease](#)

Eugene Lin, MD, MS, FASN (2021)

- Publications:
  - [Association Between Nephrologist Ownership of Dialysis Facilities and Clinical Outcomes](#)
  - [Association Between Preoperative Hemodialysis Timing and Postoperative Mortality in Patients with End-stage Kidney Disease](#)
  - [Medicare Advantage Plans Pay Large Markups to Consolidated Dialysis Organizations](#)
- Press:
  - [New Dialysis Studies Inform Delivery of Care, Ways to Improve Patient Outcomes](#)
  - [Hidden Physician Financial Conflicts of Interest in Dialysis](#)
  - [Largest Medicare Advantage Plans Pay Large Markups for Dialysis, Could Increase Out-of-Pocket Spending](#)

Jamie S. Lin, MD, FASN (2017)

- [Tertiary lymphoid structure signatures are associated with immune checkpoint inhibitor related acute interstitial nephritis](#)

- [Urinary T cells are detected in patients with immune checkpoint inhibitor-associated immune nephritis that are clonotypically identical to kidney T cell infiltrates](#)
- [Case Report: Successful treatment of late-onset immune checkpoint inhibitor-associated membranous nephropathy in a patient with advanced renal cell carcinoma](#)

Omar H. Maarouf, MD (2013)

- [Urinary Neutrophil Gelatinase–Associated Lipocalin Predicts Intensive Care Unit Admission Diagnosis: A Prospective Cohort Study](#)
- [Hyponatremia](#)
- [A Critical Review of Medication Adherence in Hypertension: Barriers and Facilitators Clinicians Should Consider](#)

Amar J. Majmundar, MD, PhD (2020)

- [Activation of 2-oxoglutarate receptor 1 \(OXGR1\) by  \$\alpha\$ -ketoglutarate \( \$\alpha\$ KG\) does not detectably stimulate Pendrin-mediated anion exchange in \*Xenopus oocytes\*](#)
- [Genetic Variants in ARHGEF6 Cause Congenital Anomalies of the Kidneys and Urinary Tract in Humans, Mice, and Frogs](#)

Tanecia Mitchell, PhD (2021)

- Publication:
  - [Novel Translational Approaches to Study Kidney Disease](#)
- Press:
  - [Mitchell awarded \\$2.7 million R01 grant for kidney stone disease research](#)

Alla Mitrofanova, PhD (2021)

- [Activation of Stimulator of IFN Genes \(STING\) Causes Proteinuria and Contributes to Glomerular Diseases](#)
- [Mitochondrial Contribution to Inflammation in Diabetic Kidney Disease](#)
- [Benefit of B7-1 staining and abatacept for treatment-resistant post-transplant focal segmental glomerulosclerosis in a predominantly pediatric cohort: time for a reappraisal](#)

Kana N. Miyata, MD (2019)

- [Dual therapy with an angiotensin receptor blocker and a JAK1/2 inhibitor attenuates dialysate-induced angiogenesis and preserves peritoneal membrane structure and function in an experimental CKD rat model](#)
- [Factitious Hypobicarbonatemia in a Patient with Hypertriglyceridemia](#)

Naoka Murakami, MD, PhD, FASN (2019)

- [Outcomes of Kidney Transplantation in Patients with Myeloma and Amyloidosis in the US](#)
- [Afucosylation of HLA-specific IgG1 as a potential predictor of antibody pathogenicity in kidney transplantation](#)
- [Therapeutic Advances in COVID-19](#)

Javier A. Neyra, MD, MS, FASN (2014)

- [Prediction of Mortality and Major Adverse Kidney Events in Critically Ill Patients With Acute Kidney Injury](#)

Ester Oh, PhD (2022)

- [Sex hormones and the risk of cardiovascular disease and mortality in male and female patients with chronic kidney disease: A systematic review and meta-analysis](#)

Rulan S. Parekh, MD, MS, FASN (2000)

- [Longitudinal changes in Cardiac Structure and Function in Pediatric Kidney Transplant Recipients](#)
- [Effect of Wearing a Face Mask on Hand-to-Face Contact by Children in a Simulated School Environment: The Back-to-School COVID-19 Simulation Randomized Clinical Trial](#)
- [Family functioning and quality of life among children with nephrotic syndrome during the first pandemic wave](#)

Yu Leng Phua, PhD (2015)

- Publication:
  - [Persistent DNA damage underlies tubular cell polyploidization and progression to chronic kidney disease in kidneys deficient in the DNA repair protein FAN1](#)
- Press:
  - [Polyploid tubular cells and chronic kidney disease](#)
  - [UPMC Children's Nephrology Research Team Uncovers Roles of the DNA Repair Protein FAN1 in Kidney Tubular Repair and Regeneration](#)

Sian Piret, PhD (2020)

- [Transcriptional regulation of proximal tubular metabolism in acute kidney injury](#)

Felix Poppelaars, MD, PhD (2021)

- [Factor H related proteins modulate complement activation on kidney cells](#)

Nabin Poudel, PhD (2019)

- [Sphingosine 1-phosphate signaling in perivascular cells enhances inflammation and fibrosis in the kidney](#)

Reena Rao, PhD (2007)

- Publication:
  - [Myofibroblast depletion reduces kidney cyst growth and fibrosis in autosomal dominant polycystic kidney disease](#)
- Press:
  - [Microenvironment Drives Cyst Growth in ADPKD](#)

Yuvaram N.V. Reddy, MBBS, MPH, FASN (2020)

- [DEI fellowship focuses on kidney health disparities](#)
- [Medical education has woken up, and that's a good thing](#)

Rhiannon D. Reed, DrPH (2018)

- [Greater community vulnerability is associated with poor living donor navigator program fidelity](#)
- [Change in Body Mass Index and Attributable Risk of New Onset Hypertension among Obese Living Kidney Donors](#)
- [Reducing Racial Disparities in Access to Transplant in the United States: One Step at a Time](#)

Timo Rieg, MD, PhD (2010)

- [Sodium phosphate cotransporter 2a inhibitors: potential therapeutic uses](#)
- [NHE3 in the thick ascending limb is required for sustained but not acute furosemide-induced urinary acidification](#)

Aylin R. Rodan, MD, PhD, FASN (2013)

- [Apolipoprotein L1 Genotypes and the Association of Urinary Potassium Excretion with CKD Progression](#)
- [WNK kinases sense molecular crowding and rescue cell volume via phase separation](#)
- [Intracellular Ion Control of WNK Signaling](#)

Dorry L. Segev, MD, PhD (2009)

- [Delirium, changes in cognitive function, and risk of diagnosed dementia after kidney transplantation](#)
- [Hurricanes and Mortality among Patients Receiving Dialysis](#)
- [Listing at non-local transplant centers is associated with increased access to deceased donor kidney transplantation](#)

Johannes S. Schlondorff, MD, PhD (2009)

- [Gain-of-function, focal segmental glomerulosclerosis Trpc6 mutation minimally affects susceptibility to renal injury in several mouse models](#)
- [Trpc6 gain-of-function disease mutation enhances phosphatidylserine exposure in murine platelets](#)

Nikolaos Skartsis, MD, PhD (2017)

- [The dichotomous outcomes of TNF \$\alpha\$  signaling in CD4+ T cells](#)
- [Regulatory T cell homeostasis: Requisite signals and implications for clinical development of biologics](#)

Ken Sutha, MD, PhD (2019)

- [Disability Identity Among Diverse Learners and Employees at an Academic Medical Center](#)
- [Utilising low-cost, easy-to-use microscopy techniques for early peritonitis infection screening in peritoneal dialysis patients](#)

Roderick J. Tan, MD, PhD (2018)

- [Suppression of NRF2 Activity by HIF-1 \$\alpha\$  Promotes Fibrosis after Ischemic Acute Kidney Injury](#)

Sandhya S. Thomas, MD, FASN (2022)

- [SIRP \$\alpha\$  Mediates IGF1 Receptor in Cardiomyopathy Induced by Chronic Kidney Disease](#)
- [Progress in the management of patients with diabetes and chronic kidney disease](#)
- [Decoding the transcriptome of denervated muscle at single-nucleus resolution](#)

Sri Lekha Tummalapalli, MD, MBA, FASN (2019)

- [Early Findings from Medicare's End-Stage Renal Disease Treatment Choices Model](#)
- [Is Home Dialysis the Way Forward for Medicare? Assessing Potential Cost Savings Associated with Peritoneal Dialysis](#)
- [Comparing Costs of Hemodialysis and Peritoneal Dialysis](#) (Podcast)

Dan Wang, PhD (2021)



- [Kidney-on-a-Chip: Mechanical Stimulation and Sensor Integration](#)

Xiaonan H. Wang, MD (2002)

- [The impact of senescence on muscle wasting in chronic kidney disease](#)

Jason A. Watts, MD, PhD (2020)

- [A common transcriptional mechanism involving R-loop and RNA abasic site regulates an enhancer RNA of APOE](#)
- [Kidney epithelial cells make functional vasopressin in response to hypertonicity](#)

Le Xiao, PhD (2022)

- [Cryo-EM structures of the active NLRP3 inflammasome disk](#)

Ting Yang, MD, PhD (2020)

- [Cell - Specific Actions of the Prostaglandin E - Prostanoid Receptor 4 Attenuating Hypertension: A Dominant Role for Kidney Epithelial Cells Compared with Macrophages](#)