KidneyCurrent

The Quarterly KidneyCure e-Newsletter

December 2021



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2022 Grant Cycle Update

The 2022 application cycle for KidneyCure research grants, including the Ben J. Lipps Research Fellowship Program, the Pre-Doctoral Fellowship Award Program, the Transition to Independence Grants Program, and the William and Sandra Bennett Clinical Scholars Program closed Friday, December 10. Thanks in large part to supporters like you, up to 26 new investigators will join the esteemed roster of KidneyCure grant recipients. Applications will be reviewed in the coming months, and we look forward to sharing news of the new recipients with you next year.

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 works and publications as submitted by former KidneyCure grant recipients <a href="https://example.com/here/beta/fig/he

Thank You

As the year comes to a close, all of us at KidneyCure want to thank you for your continued support.

This year saw the launch of our new <u>website</u>, the expansion of our <u>Kidney Week Endowed Lecture Program</u>, and <u>nearly \$3</u> <u>million granted to trailblazing kidney investigators</u> through our research grant programs -- none of which would have been possible without you!

Together we will accomplish even more in 2022. Wishing you and yours a happy and safe new year!



There's still time to make a tax-deductible donation in 2021!

If you have any questions, please contact us at 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.

Matthew K. Abramowitz, MD, MS, FASN (2013)

- Obesity, Anion Accumulation, and Anion Gap Metabolic Acidosis: A Cohort Study
- Muscle Fibrosis and Maladaptation Occur Progressively in CKD and Are Rescued by Dialysis

Massimo Attanasio, MD (2010)

 An EMT-Primary Cilium-GLIS2 Signaling Axis Regulates Mammogenesis and Claudin-Low Breast Tumorigenesis

Carlton M. Bates, MD (2001)

• Urothelial Progenitors in Development and Repair

Ulf H. Beier, MD, DrMed (2017)

- Kynurenine induces T cell fat catabolism and has limited suppressive effects in vivo
- <u>Distinct Bioenergetic Features of Human Invariant Natural Killer T Cells Enable Retained</u> <u>Functions in Nutrient-Deprived States</u>
- Obesity-related IL-18 Impairs T-Regulatory Cell Function and Promotes Lung Ischemia-Reperfusion Injury

Fabian Bock, MD (2021)

- Publication:
 - o Rac1 Promotes Kidney Collecting Duct Integrity by Limiting Actomyosin Activity
- News Article:
 - Harrison Society Researcher Discovers Key Regulator of Kidney Cell Structure

Kevin F. Erickson, MD, MS, FASN (2017)

- <u>The Beneficial Effect of Providing Kidney Transplantation Information on Transplantation Status</u> <u>Differs Between For-profit and Non-profit Dialysis Centers</u>
- Patient Health Outcomes following Dialysis Facility Closures in the United States
- <u>Early Nephrologist Performance in the Merit-Based Incentive Payment System: Both Reassurance and Reason for Concern</u>

Alexander H. Flannery, PharmD, PhD (2020)

- Publications:
 - o <u>Serum Renin and Major Adverse Kidney Events in Critically III Patients: A Multicenter Prospective Study</u>
 - Azithromycin and Major Adverse Kidney Events in Critically III Patients with Sepsis-Associated Acute Kidney Injury
- Press:
 - o Predicting Long-Term Complications After Sepsis-Associated Acute Kidney Disease

Charles Ginsberg, MD (2017)

- The Vitamin D Metabolite Ratio Is Associated with Changes in Bone Density and Fracture Risk in Older Adults
- Diagnosis and Management of Osteoporosis in Advanced Kidney Disease: A Review
- Effect of Lanthanum Carbonate on Blood Pressure in CKD

Mark R. Hanudel, MD, MS, FASN (2020)

Enteral Ferric Citrate Absorption Is Dependent on the Iron Transport Protein Ferroportin

Lesley Ann Inker, MD, MS (2006)

- Publications:
 - New Creatinine- and Cystatin C-Based Equations to Estimate GFR without Race
 - o <u>A Unifying Approach for GFR Estimation: Recommendations of the NKF-ASN Task</u> Force on Reassessing the Inclusion of Race in Diagnosing Kidney Disease
- Press:
 - o A Race-Free Approach to Diagnosing Chronic Kidney Disease
 - NKF, Alport Syndrome Foundation Expand Registry for Patients with Rare Kidney Disease
 - o Expert Panel Recommends Against Use of Race in Assessment of Kidney Function
 - Nix Race From eGFR, Says Joint Task Force
 - o Experts Recommend Taking Race Out of The Equation for Kidney Disease
 - o Studies Evaluate Accuracy of eGFR Equations that Omit Race

Nishank Jain, MBBS, MPH, FASN (2018)

- Potent Antiplatelet Therapy May Reduce Death from Sepsis Among Patients on Chronic Dialvsis
- Comparative Effectiveness and Safety of Oral P2Y12 Inhibitors in Patients on Chronic Dialysis

Seolhyun Lee, MD (2020)

Impaired Tubular Secretion of Organic Solutes in Advanced Chronic Kidney Disease

Pei-Ju Liu, PhD (2019)

• <u>Steroid-Resistant Nephrotic Syndrome Associated MYO1E Mutations Have Differential Effects on Myosin 1e Localization, Dynamics, and Activity</u>

Amar J. Majmundar, MD, PhD (2018, 2020)

- Cystin Genetic Variants Cause Autosomal Recessive Polycystic Kidney Disease Associated with Altered Myc Expression
- Sequencing the Casr Locus in Pakistani Stone Formers Reveals a Novel Loss-Of-Function Variant Atypically Associated with Nephrolithiasis

Roy O. Mathew, MD, FASN (2000)

- Publication:
 - Patterns of Use and Clinical Outcomes with Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in Acute Heart Failure and Changes in Kidney Function: An Analysis of the Veterans' Health Administrative Database
- Press:

o When Is a Medication Changes Necessary in Veterans with Heart Failure?

Tanecia Mitchell, PhD (2021)

- Oxalate Alters Cellular Bioenergetics, Redox Homeostasis, Antibacterial Response, and Immune Response in Macrophages
- The TGF-B/HDAC7 Axis Suppresses TCA Cycle Metabolism in Renal Cancer

Kana N. Miyata, MD (2019)

 Deletion Of Heterogeneous Nuclear Ribonucleoprotein F in Renal Tubules Downregulates SGLT2 Expression and Attenuates Hyperfiltration and Kidney Injury in a Mouse Model of Diabetes

Naoka Murakami, MD, PhD, FASN (2019)

- Immunological Impact of a Gluten-Free Dairy-Free Diet in Children with Kidney Disease
- Gene Expression Profiling in Kidney Transplants with Immune Checkpoint Inhibitor-Associated Adverse Events
- Acute Kidney Injury in Patients Treated with Immune Checkpoint Inhibitors

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

- Serum Renin and Major Adverse Kidney Events in Critically III Patients: A Multicenter Prospective Study
- Why the Renin-Angiotensin-Aldosterone System (RAAS) in Critically III Patients Can No Longer Be Ignored
- Soluble Klotho and Incident Hypertension

David Donald McTavish Nicholl, MD, MS (2012)

- <u>Case Report: Absence of Clinically Significant Recurrent Diabetic Kidney Disease on</u> Postmortem Biopsy 32 Years After Kidney Transplantation for Type 1 Diabetes
- Comprehensive Immune Profiling of a Kidney Transplant Recipient with Peri-Operative SARS-CoV-2 Infection: A Case Report

Mark Parker, PhD (2015)

 Revisiting the Role of Ser982 Phosphorylation in Stoichiometry Shift of the Electrogenic Na+/qHCO3- Cotransporter NBCe1

Sian Piret, PhD (2020)

 <u>Loss of Proximal Tubular Transcription Factor Krüppel-Like Factor 15 Exacerbates Kidney Injury</u>
 <u>Through Loss of Fatty Acid Oxidation</u>

Aaron J. Polichnowski, PhD (2017)

<u>Salt-Sensitive Hypertension, Renal Injury, and Renal Vasodysfunction Associated with Dahl</u>
 <u>Salt-Sensitive Rats Are Abolished in Consomic SS.BN1 Rats</u>

Felix Poppelaars, MD, PhD (2021)

- <u>The Contribution of Complement to the Pathogenesis of IgA Nephropathy: Are Complement-Targeted Therapies Moving from Rare Disorders to More Common Diseases?</u>
- <u>Donor Genetic Variants in Interleukin-6 and Interleukin-6 Receptor Associate with Biopsy-</u> Proven Rejection Following Kidney Transplantation

 A Functional TGFB1 Polymorphism in the Donor Associates with Long-Term Graft Survival After Kidney Transplantation

Nabin Poudel, PhD (2019)

<u>Development of a Photoacoustic Microscopy Technique to Assess Peritubular Capillary</u>
 <u>Function and Oxygen Metabolism in the Mouse Kidney</u>

Reena Rao, PhD (2007)

- Patent: Methods and Medicaments for The Treatment of Renal Cell Carcinoma (US Patent number 11,110,098)
- The Tyrosine-Kinase Inhibitor Nintedanib Ameliorates Autosomal-Dominant Polycystic Kidney
 <u>Disease</u>
- Glycogen Synthase Kinase-3β Inhibits Tubular Regeneration in Acute Kidney Injury by a Foxm1-Dependent Mechanism

Hila Milo Rasouly, PhD (2016)

• Do Research Participants Share Genomic Screening Results with Family Members?

Rhiannon D. Reed, DrPH (2018)

 Impact of Social Vulnerability on Access to Educational Programming Designed to Enhance <u>Living Donation</u>

Peter P. Reese, MD, MS (2009)

- <u>Dialysis Nonadherence and Kidney Transplant Outcomes: A Retrospective Cohort Study</u>
- Association Of Donor Hepatitis C Virus Infection Status and Risk of BK Polyomavirus Viremia <u>After Kidney Transplantation</u>
- Effect of Financial Incentives for Process, Outcomes, or Both on Cholesterol Level Change: A Randomized Clinical Trial

Dorry L. Segev, MD, PhD (2009)

- Publications:
 - HOPE In Action: A Prospective Multicenter Pilot Study of Liver Transplantation from Donors Wwith HIV to Recipients with HIV
 - Risk of Breakthrough SARS-CoV-2 Infections in Adult Transplant Recipients
 - Safety and Immunogenicity of a Third Dose of SARS-CoV-2 Vaccine in Solid Organ
 Transplant Recipients: A Case Series
- Press:
 - o F.D.A. Aiming to Speed Extra Vaccine Doses for Immunocompromised Patients
 - How Immunocompromised People without Strong Vaccine Protection Are Coping with COVID
 - Why Antibody Tests Can't Tell You if You Should Get a Booster Shot
 - o "What Exactly Is the Plan for Us?"
- Letter of recognition from Anthony Fauci

John David Spencer, MD, FASN (2017)

• Ribonuclease 7 Polymorphism Rs1263872 Reduces Antimicrobial Activity and Associates with Pediatric Urinary Tract Infections

Roderick J. Tan, MD, PhD (2018)

• <u>Deletion of the Gamma Subunit of ENaC in Endothelial Cells Does Not Protect against Renal</u> Ischemia Reperfusion Injury

Xiaonan H. Wang, MD (2002)

- Downregulation of let-7 by Electrical Acupuncture Increases Protein Synthesis in Mice
- Pathophysiological Mechanisms Leading to Muscle Loss in Chronic Kidney Disease

Jie Zhang, PhD (2020)

- The Role of Macula Densa SGLT1-NOS1-TGF Pathway in Diabetic Hyperfiltration
- Knockout of Macula Densa Neuronal Nitric Oxide Synthase Increases Blood Pressure in db/db Mice