The KRI moves forward patient-centered research
A message from the director

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As we close out 2021, I hope you have stayed safe and healthy this year. At the Kidney Research Institute, we are immensely grateful for the work of our investigators and staff during this pandemic.

This year, KRI investigators have received national recognition for their efforts to improve kidney disease. KRI's Director of External Relations and Patient Engagement, Glenda V. Roberts, was appointed to a national task force to review inclusion of race in the estimation of glomerular filtration rate (eGFR) in the United States and its implications for diagnosis and management of patients with, or at risk for, kidney diseases. She was one of two patients appointed to the thirteen-person task force. The President of the United States recognized Glenda as a recipient of the “President's Volunteer Service Award 2020” for her leadership on COVID-19 initiatives for people living with kidney disease. KRI investigator Dr. Kate Butler, whose research focuses primarily on kidney transplant evaluation, has published her work in several important publications over the last year. She recently received a perfect score on her NIDDK K23 application, which will provide her funding to continue her research.

KRI investigators continue to do important research in the Puget Sound area. Dr. Nisha Bansal recently launched a new clinical trial to look at blood pressure treatment at home. Her study is enrolling in the Seattle and San Francisco areas. Several other KRI researchers have successfully been enrolling in study trials in the last year, and the KRI has hired several new research coordinators and staff to support recruitment efforts.

The KRI recently convened our Patient Advisory Committee (PAC) and Scientific Advisory Committee (SAC) virtually to share recent KRI research progress. We are grateful for their support and advisement, along with your support as we continue our efforts to improve the lives of kidney patients.
Making an impact for all of us

The KRI has been committed to serving the diverse populations of people living with kidney diseases since its inception. Our vision is that every available patient with kidney disease will be informed about, participate in, and benefit from research.

“Every” is a tall order. So, to elevate the patients’ voices, in 2016 the KRI created the Patient Advisory Committee (PAC). Since its formation, the composition of the PAC has evolved each year to better reflect the kidney patient community.

The 2021 PAC consist of local and national community members who represent varied backgrounds, experiences with kidney disease and treatment modalities, gender, disabilities and ages. One of the PAC’s goal is to offer researchers insights about kidney disease patients lived experiences and their preferences for better care.

“While we do not speak for ‘every’ patient, we aim to help KRI achieve its vision. Our wide range of views reflect the unique needs, concerns and interest of different segments of the kidney patient population,” according to Glenda V. Roberts, KRI’s Director of external relations and patient engagement.

“This transformative collaboration with patients and advocates as equal partners in research is a best practice model. I hope it will be adopted more broadly to help develop more clinically relevant research outcomes and improved care for every patient.”

The PAC meets yearly with KRI investigators and staff to learn of in-progress research, and to help our researchers prioritize outcomes for patients. The most recent PAC meeting happened virtually in November of 2021.

Dr. Nisha Bansal’s new clinical trial

The Home Blood Pressure trial (HOME-BP) is a new NIH funded randomized clinical trial in hemodialysis patients that aims to determine whether blood pressure measured at home on non-dialysis days is a better target for treatment compared with blood pressure measured prior to hemodialysis. This study builds upon the prior pilot Blood Pressure Lowering in Dialysis (BOLD) trial. For the HOME-BP trial, a total of 200 hemodialysis patients will be enrolled at the University of Washington and University of California, San Francisco. The outcomes of the trial will include frequency of low blood pressure during dialysis and symptoms such as cramping and fatigue. All study participants will be provided a Bluetooth enabled home blood pressure monitor and an iPod Touch to automate the transmission of blood pressure measured at home to the research team.

The study team includes the primary KRI study investigator, Dr. Nisha Bansal, and two research coordinators, Kels Laszlo and Sydney Johnson. According to Dr. Bansal, “Despite being one of the most important and modifiable risk factors for the development of cardiovascular disease, the best way to measure and treat blood pressure in patients treated with hemodialysis is not known. This study hopes to advance our understanding in this area.”
The revised kidney function estimator

In response to a national call for reevaluation of the use of race in clinical algorithms, the National Kidney Foundation (NKF) and the American Society of Nephrology (ASN) established a Task Force to reassess inclusion of race in the estimation of glomerular filtration rate (eGFR) in the United States and its implications for diagnosis and management of patients with, or at risk for, kidney diseases. The KRI’s Director of External Relations and Patient Engagement, Glenda V. Roberts, was one of two patients included in the 13-member Task Force.

eGFR estimates how well our kidneys are filtering waste and toxins from the blood. Doctors in a variety of medical specialties, not just nephrology, use the eGFR to quickly identify people with reduced kidney function, which is important for medical decision-making. The eGFR race multiplier increased the estimated kidney function of Black Americans by 16%. In 2003, the National Institute of Health’s Human Genome Project confirmed that there are no biological differences between races. According to a recent study by Dr. L. Zelnick et al, of the Kidney Research Institute, the racially tilted eGFR has caused thousands of Black people with kidney problems to wait approximately two years longer than non-Blacks to be meet criteria to get on the transplant list.

After reviewing testimony from 97 experts with diverse views and soliciting community input from 450 people from 18 states and 3 countries - during three separate web-based forums: (1) patients and their families; (2) medical students and trainees; (3) clinicians, scientists, and related health professionals - the task force evaluated 26 different eGFR equations. They affirmed that race is a social construct, not a biological one, and that it is not appropriate to include it in a medical biological tool.

Collaborating with the CKD-EPI team that created the latest race-based equations, a new race-free equation was created and published in the New England Journal of Medicine (NEJM). In a coordinated rollout with NEJM, on September 23, 2021, the Task Force published its recommendation (Figure 1). Ms. Roberts supports the recommendation, saying “No matter which quote you like about the arc of history being long and bending towards justice, I hope that we can agree that the new eGFR equations bend towards justice and equity for all people living with kidney disease in the United States.”

Also in the news

- Dr. Rajnish Mehrotra selected as the newest Division Head for University of Washington Division of Nephrology and was recently elected as Chair of the Northwest Kidney Center Board of Trustees.

- KRI researchers Dr. Catherine Butler, Dr. Jonathan Himmelfarb, Dr. Ian de Boer, Dr. Katherine Tuttle, and Ashveena Dighe published the article “A Participant-Centered Approach to Understanding Risks and Benefits of Participation in Research Informed by the Kidney Precision Medicine Project” in the American Journal of Kidney Diseases.

- Dr. Benjamin Freedman is senior author of “Cross-validation of SARS-CoV-2 responses in kidney organoids and clinical populations” in JCI Insight. KRI co-authors are Mark Wurfel, Jonathan Himmelfarb, and Pavan Bhatraju.

- Dr. Christine Limonte was interviewed for Authority Magazine’s Inspirational Women in STEM and Tech series.

- Dr. Stuart Shankland is lead author of “Podocyte Aging: Why and How Getting Old Matters” in the Journal of the American Society of Nephrology.

- Dr. Ann O’Hare is quoted in “Are Too Many Older Adults Told They Have Kidney Disease?” in the New York Times.

- Dr. Bessie Young is the new associate dean for the Office of Healthcare Equity.

- The novel palliative care/dialysis program spearheaded by Dr. Daniel Lam which has enrolled over 400 patients since its start in 2017. The this first-of-its-kind program has recently been spotlighted by the Seattle Times.
Congratulations to Dr. Catherine Butler, Acting Instructor at UW’s Division of Nephrology and a KRI investigator, who recently received a perfect score on her K23 application. The K23 is a grant from NIDDK that provides researchers with three to five years of funding and protected time to conduct patient-oriented research.

Dr. Butler’s work primarily focuses on kidney transplant evaluation. Her K23 application proposed a mixed methods approach to support shared decision-making around referral and evaluation for kidney transplant among older adults with kidney failure. To accomplish this, Dr. Butler will conduct qualitative interviews with patients, family members, and clinicians to understand the experience of transplant evaluation, as well as a national cohort study to understand how the transplant process unfolds on the system-level. Dr. Butler and her team will utilize the information they learn to adapt, and pilot test an existing communication tool to strengthen shared decision-making for older adults considering referral for kidney transplant.

Much of Dr. Butler’s recent work on kidney transplant evaluation has been published in several high-impact journals. Last year, her article “Thematic Analysis of the Health Records of a National Sample of US Veterans With Advanced Kidney Disease Evaluated for Transplant” was published in JAMA Internal Medicine. Recently, her article “Scarce Healthcare Resources and Equity during COVID-19: Lessons from the History of Kidney Failure Treatment” was published in the American Society of Nephrology journal Kidney360. The article “End-of-Life Care among US adults with ESKD in the United States who were Waitlisted or Received a Kidney Transplant” was published in the Journal of the American Society of Nephrology.