



LEFT: Joyce Jackson, president and CEO of Northwest Kidney Centers, speaks to guests at the Kidney Research Institute's 10th anniversary celebration in Seattle Sept. 6.

RIGHT: Drs. Stuart Shankland, Ian de Boer, Jonathan Himmelfarb and Virginia Broudy also joined Joyce, speaking about the institute's past accomplishments and future goals.

Celebrating 10 years

A message from the director

DR. JONATHAN HIMMELFARB

2018 marks 10 years since the inception of the Kidney Research Institute. The KRI has grown tremendously over the past decade to be a leader for basic, clinical and translational kidney disease research. Our success is due to the support of our local and global community, kidney patients, financial donors and, of course, our own research staff. Since 2008, we have published more than 1,000 papers on research conducted by our investigators, and we have enrolled over 2,000 patients in our research studies.

In this newsletter, read about research fellow Dr. Ke Wang, a recent recipient of the prestigious Ben J. Lipps Research Fellowship Program Grant, an award the ASN Foundation for Kidney Research bestows upon a select few promising young research investigators every year. This issue also highlights research conducted by senior investigator Dr. Bryan Kestenbaum on the connection between AA-type amyloidosis, a rare type of kidney disease, and heroin use. Bryan's research could have direct clinical implications for how we study the disease in the future. As research has progressed at the KRI, we continue to offer opportunities for both kidney disease patients and healthy volunteers to participate in our research. Turn the page to read about the experience of two of our healthy research volunteers.

KRI's leadership in kidney disease research recently allowed us the opportunity to host a Kidney Innovation Accelerator (KidneyX) listening session. KidneyX is a new public-private collaboration between the American Society of Nephrology and the US Department of Health and Human Services that aims to find innovative ways to treat kidney disease. Only three listening sessions were hosted across the country, with Seattle being the second session.

Our researchers, staff and supporters came together in early September at the Columbia Tower in Seattle to celebrate the institute's successes from the last 10 years. A common message discussed at the event was that while the KRI has done tremendous work in helping treat and prevent kidney disease, there is still more work to be done. We encourage all supporters of the KRI to stay involved and remain up to date on our research as we work towards our vision for every person affected by kidney disease to be informed about, participate in and benefit from our research.

**TRANSFORMING LIVES THROUGH
INNOVATION AND DISCOVERY**

KIDNEY RESEARCH INSTITUTE

Mailing Address:
Box 359606
325 9th Avenue
Seattle, WA 98104

206-616-8574
info@kri.washington.edu

kri.washington.edu



Kidney Research Institute hosts KidneyX listening session, takes part in information gathering to inform innovation accelerator

The Kidney Research Institute, along with the University of Washington Center for Dialysis Innovation, was selected by the Department of Health & Human Services and the American Society of Nephrology to host a listening session for the Kidney Innovation Accelerator — commonly known as KidneyX — in Seattle on Aug. 22. Held at Northwest Kidney Centers, attendees heard from presenters from HHS, ASN and the National Institute of Health, as well as Congresswoman Suzan DelBene (WA).

KidneyX is a public-private partnership and innovation accelerator that aims to seed, incentivize and accelerate breakthroughs in kidney care; to bridge the gap between research and market-ready products, and to provide merit-based, non-dilutive funding to promising innovators selected through a competitive process.

“KidneyX will work to improve the lives of people affected by kidney diseases by accelerating the development of drugs, devices and other therapies across the spectrum of kidney care including diagnostics, prevention and treatment,” says Glenda Roberts, director of external relations and patient engagement at the Kidney Research Institute.

The listening session provided an opportunity for patients, start-up companies, investors, area nephrologists, technology leaders, staff

and students to provide input on current KidneyX plans and ways it hopes to innovate the kidney space.

“A great mix of people with varied interests in the industry attended,” says Glenda. “It was very interesting to hear their feedback and the direction they’d like to see kidney care take in the future.”

KidneyX hosted three listening sessions across the country to gain insight before its showcase at ASN’s 2018 Kidney Week in late October.



TOP: Ron Howell, CEO of Washington Research Foundation, a science and medicine venture fund, and Rich Bloch, principal at Business Learning Incorporated, share their insights on barriers to innovation in nephrology. BOTTOM: Congresswoman Suzan DelBene speaks to attendees.

TOP to BOTTOM: Sandra Driscoll provides feedback; Tami Sadusky, member of the KRI Patient Advisory Committee, weighs in; Congresswoman Suzan DelBene with Dr. Jonathan Himmelfarb, director of the Kidney Research Institute; Dr. Suzanne Watnick, Northwest Kidney Centers’ chief medical officer, facilitates an audience group discussion.

Retired couple focus on giving back — through research

For Diane Penttila and Jack Martin, years working in health services showed them the importance of research.

“I’d heard about research studies,” says Diane, who worked for years as a medical technologist at the University of Oregon Health Sciences Center, “and I love the opportunity to learn new things.”

A decade ago, Jack, now retired from a career as a rehabilitation counselor at Virginia Mason, went on the UW Medicine website and saw studies seeking healthy volunteers. He signed up as an interested participant and since then has been involved in 10 studies, including four through the Kidney Research Institute. Diane follows closely behind—she’s completed three studies through the KRI.

“With each study, there’s very good disclosure,” Diane says. “There are never any surprises. There’s a number to call if you have more questions and you always have the option to opt out at any time.”

“There’s a really thorough screening process,” adds Jack, “and the research coordinators clearly describe what the study is and what’s expected of you.”

As ‘healthy controls’ in kidney studies, Jack and Diane provide data that’s compared to data from people with kidney disease. Blood draws, urine collections, food journals, questionnaires and speed walking are just some of the activities the couple has completed in studies.

“Being in a research study—it’s really a useful activity,” says Jack. “Research is difficult. They need funding. There’s a lot to be gained by being involved in research.”



Diane Penttila and Jack Martin.

“We’re retired, so it’s especially easy for us to be involved,” says Diane.

Jack and Diane reside in Edmonds and place a big emphasis on their own health, staying fit with biking, backpacking, hiking and more.

“There’s a great need for research—it’s great to have more information about ways to be healthy,” says Diane, who hiked the Pacific Crest Trail in Washington State solo when she was in her 50s. “There’s a satisfaction in completing a study, in knowing they got all the data they needed. That’s why I participate.”

Investigator’s research shows a link between heroin and kidney disease



Dr. Bryan Kestenbaum.

often leads to dialysis and death.

The results, published June 15 in *CJASN*, showed that among 38 patients diagnosed with AA-type amyloidosis, 35 had a previous history of heroin use. Data was gathered from patients seen at Harborview & UW Medical Centers in Seattle between 2005 and 2015.

New research results from Kidney Research Institute investigator Dr. Bryan Kestenbaum and colleagues show that heroin use in the Pacific Northwest is linked to a rare but incurable kidney disease. The research results, recently published in the *Clinical Journal of the American Society of Nephrology*, strongly associate the use of intravenous heroin, in particular the black tar variety popular in the Puget Sound area, with an untreatable kidney disease — AA-type amyloidosis — that

“We certainly see that [AA-amyloidosis and injection-drug use] relationship here clinically but had never measured it like this,” says Bryan. “To see such a high proportion of people with a disease have one consistent risk factor makes a strong case for a causal relationship.”

Amyloidosis is caused by the body’s inability to process certain proteins, and the proteins are then deposited into kidneys and other organs. Amyloid-filled kidneys lose their ability to function correctly and stop filtering waste from the blood. Currently no effective therapies exist from the disease and affected patients often rapidly progress to dialysis and death.

Although this research shows a connection between heroin use and AA-amyloidosis, the disease is still considered rare, even among injection-drug users.

“If you use heroin in the Pacific Northwest, it is unlikely that you will develop this disease,” says Bryan. “But this study indicates that such a user is more than 100 times more likely to develop the disease than an otherwise similar person who does not use heroin.”

Visit kri.washington.edu to read more about this research; access the full publication in at cjasn.asnjournals.org.

RETURN SERVICE REQUESTED

IN THIS ISSUE:

Director's message
PAGE 1

Kidney Research Institute hosts
KidneyX listening session
PAGE 2

Investigator's research shows a link
between heroin and kidney disease
PAGE 3

Join us on social media!

 [facebook.com/
KidneyResearchInstitute](https://www.facebook.com/KidneyResearchInstitute)

 @KidneyResInst

 @KidneyResearchInstitute

 [linkedin.com/company/
KidneyResearchInstitute](https://www.linkedin.com/company/KidneyResearchInstitute)



'I am currently interested in comprehensively evaluating kidney function in order to improve diagnostic and therapeutic interventions for patients with kidney disease.'

Fellow Ke Wang named a recipient of a prestigious grant

Kidney Research Institute research fellow Dr. Ke Wang was recently awarded a fellowship grant from the ASN Foundation for Kidney Research. As a recipient of a Ben J. Lipps Research Fellowship Program Grant, Ke will be able to continue her research on proximal tubular secretion and its clinical significance in chronic kidney disease.

"Motivated by my desire to fully comprehend the kidney's diverse functions beyond glomerular filtration, I am currently interested in comprehensively evaluating kidney function in order to improve diagnostic and therapeutic interventions for patients with kidney disease," says Ke.

"I'm delighted to have been awarded this grant as it will allow me the protected time to investigate the physiologic and clinical relevance of kidney tubular functions in chronic kidney disease and potentially propose a novel marker of kidney function to improve disease diagnosis and prognosis."

A third-year research fellow, Ke has an

interest in evaluating kidney disease by examining essential kidney functions beyond glomerular filtration, including tubular secretion and hormone synthesis.

The goal of the Ben J. Lipps Research Fellowship Program is to fund nephrology fellows to conduct original, meritorious research projects. This program fosters the training of fellows, under the direction of a sponsor, who are highly motivated to make contributions to the understanding of kidney biology and disease.

Since ASN began funding grants in 1996, 59 Ben J. Lipps Research fellowships have been awarded to young investigators, with ten new research applicants and ten continuing applications annually. The foundation itself has awarded more than \$35 million to support research and travel awards.

Congratulations, Ke, on receiving this prominent grant and continuing your research endeavors.