

AT THE FOREFRONT OF KIDNEY RESEARCH

“You are at the intersection of the Division of Nephrology and Hypertension and the Kidney Institute,” Alan Yu, MD, tells a visitor to his office at the University of Kansas Medical Center (KUMC).

It’s more than just a figurative statement; the Kidney Institute, founded in 2000, and the Nephrology Division are housed in common space. The institute comprises 34 collaborating faculty investigators including 15 clinicians and 19 basic scientists and receives more than \$5 million per year in NIH funding. Dr. Yu is director of both entities.

The proximity has helped foster collaborations. Dr. Yu points out that his office is next door to a conference room used by both clinicians and scientists. The resulting synergies have led to translational research, the clinical applications of scientific discoveries.

Case in point: When Yu attended a research seminar on polycystic kidney disease (PKD) led by biochemistry professor James Calvet, PhD, Yu learned of a research finding showing an increased incidence of cancer in transplant patients. They decided to collaborate on a retrospective study of a national database of cancer patients to look for increased occurrence of cancer in kidney transplant patients with PKD.

When Yu came to KUMC in 2011, he considered it an “unparalleled opportunity,” thanks to KUMC’s reputation as one of the top kidney clinical and research centers in the country. Yu himself has impressive credentials, coming from the renowned Keck School of Medicine at the University of Southern California, where he served

as associate professor of medicine, physiology and biophysics. Before his tenure at Keck, he was an assistant professor of medicine at Harvard Medical School.

A major focal point for future research at KUMC will continue to be polycystic kidney disease, one of the most common life-threatening genetic diseases, afflicting 600,000 Americans. Patients with the disease develop cysts on their kidneys, eventually losing function.

Until now, dialysis and kidney transplants have been the only interventions. Yu is enthusiastic about a new drug called tolvaptan, which was investigated as part of a three-year clinical trial led by Jared Grantham, MD, at KUMC. It’s proven to be the first medication shown to slow the progression of PKD and is currently undergoing priority review at the FDA.

KUMC nephrologists will also be investigating new treatment for uncontrolled hypertension. Sri Yarlagadda, MD, is collaborating with Kamal Gupta, MD, in the Division of Cardiology to establish a new multidisciplinary hypertension clinic, and will be investigating a promising new device called a baroreceptor stimulator, which is implanted in the neck to regulate blood pressure.

The Nephrology Division is also doing great things to engage the community. In collaboration with the PKD Foundation, in 2013 the division held its first virtual conference, an educational event offered to patients with PKD as well as professionals. More than 200 people around the country registered for the

event, coming in person or attending via videoconference. Twenty-two PKD Foundation chapters participated.

The Nephrology Division also organized a half-day clinical symposium in 2012, inviting KUMC-trained and other community nephrologists to learn from researchers about new developments in the field.

Delivering state-of-the-art clinical care, conducting research into new treatments for patients with kidney disease, and educating and mentoring the next generation of nephrologists and kidney researchers are all in a day’s work for Dr. Yu and his colleagues.

“I look forward to coming in and working each day alongside bright and creative physicians and researchers,” says Yu. “People here at KUMC are all so committed to our mission and that’s why I love what I do.”



Alan Yu, MB, BChir