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Multi-Million-Dollar Grant to Grow Kidney Research

With University of Alabama at Birmingham, renewed grant will expand research into acute kidney failure and acute kidney injury

Researchers at University of California San Diego School of Medicine and the University of Alabama at Birmingham School of Medicine (UAB) have received renewed grant funding from the National Institute of Diabetes and Digestive and Kidney Diseases to expand research into the areas of acute kidney failure and acute kidney injuries.

The 5-year, \$5.67 million will fund the [O'Brien Center for Acute Kidney Injury Research at UAB](#) and UC San Diego School of Medicine. The center is one of eight federally funded locations using state-of-the-art technologies and resources to train researchers in kidney diseases.

“We focus on understanding the relationship of acute kidney injury to development of chronic kidney disease and developing novel strategies to map the continuum of the disease for targeted interventions,” said Ravindra L. Mehta, MD, nephrologist and professor of medicine at UC San Diego School of Medicine. “The center offers several biomarker assays to evaluate kidney injury and function to improve diagnosis, identify targets for intervention and help decision-making for physicians managing patients with these diseases.”

Mehta and colleagues contribute significantly to all three core components of the center. The clinical component is led by Mehta and develops infrastructure and resources that translate basic research findings to clinical applications. The preclinical core is headed by UAB, but co-directed at UC San Diego School of Medicine by Volker Vallon, MD, professor of medicine and pharmacology. It develops experimental models



Ravindra L. Mehta, MD, nephrologist and professor of medicine at UC San Diego School of Medicine.

of acute kidney injury to understand underlying mechanisms and pathophysiology, and provides training workshops for investigators. Additionally, UC San Diego School of Medicine is home to a biomarker laboratory that supports and provides new research methodologies, biomarker assays and training through workshops and consultations.

“This new grant will allow both UC San Diego School of Medicine and UAB to be continued collaborators and leaders in this field,” said Joachim H. Ix, MD, chief of the Division of Nephrology-Hypertension, at UC San Diego School of Medicine. “The next five years will only build upon the great work that has been ongoing since 2008.”

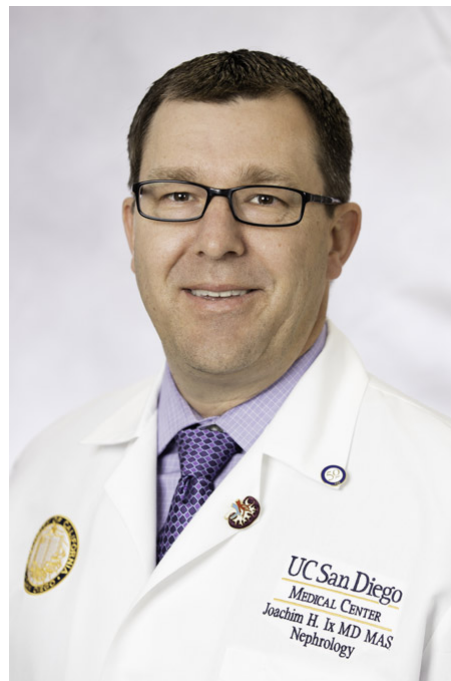
“Acute kidney injury causes more deaths per year than breast cancer, prostate cancer, heart failure and diabetes combined,” said Anupam Agarwal, MD, director of the Division of Nephrology at UAB and director of the O’Brien Center collaboration. “The center helps with our mission to improve the health of patients by fostering research that is centered on the prevention and treatment of acute kidney injury and its complications.”

Acute kidney failure and acute kidney injury affect approximately 1.2 million hospitalized patients per year. Both acute kidney failure and kidney injury are common in patients who are already hospitalized. Symptoms include decreased urine output, nausea and fatigue. In some cases, however, symptoms are minimal.

The network of O’Brien Centers were established in 1987 and named for George M. O’Brien, a member of the U.S. House of Representatives. All O’Brien Centers conduct interdisciplinary investigations that address basic, clinical and applied aspects of biomedical research in kidney physiology and pathophysiology. Most investigations emphasize kidney diseases of hypertension and diabetes, immune- and nonimmune-related mechanisms of kidney disease, nephrotoxins and cell injury.

About UC San Diego Health

UC San Diego Health, the region’s only academic health system, is dedicated to delivering outstanding patient care through commitment to community, groundbreaking research and inspired teaching. Its specialty care for serious and complex conditions is consistently ranked



Joachim H. Ix, MD, chief of the Division of Nephrology-Hypertension at UC San Diego School of Medicine.

among the nation's best by *U.S. News & World Report* and other organizations. The 808-bed academic health system, the largest in the University of California, includes UC San Diego Medical Center in Hillcrest and Jacobs Medical Center, Sulpizio Cardiovascular Center, Moores Cancer Center, Shiley Eye Institute, Koman Family Outpatient Pavilion and Altman Clinical and Translational Research Institute, all in La Jolla, as well as primary care and same-day services at clinics throughout Southern California. For more information, visit health.ucsd.edu

About UAB

Known for its innovative and interdisciplinary approach to education at both the graduate and undergraduate levels, the University of Alabama at Birmingham is the state of Alabama's largest employer and an internationally renowned research university and academic medical center; its professional schools and specialty patient-care programs are consistently ranked among the nation's top 50. UAB's Center for Clinical and Translational Science is advancing innovative discoveries for better health as a two-time recipient of the prestigious [Center for Translational Science Award](#). Find more information at www.uab.edu and www.uabmedicine.org

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