

### Nobel Laureate to Speak on Circadian Rhythms



Michael Young, PhD

A winner of the Nobel Prize in Physiology or Medicine will give a state-of-the-art lecture titled “Genes Controlling Sleep and Circadian Rhythms” at the plenary session on Friday, Nov. 8.

The speaker, Michael Young, PhD, is Richard and Jeanne Fisher Professor and head of the genetics laboratory at The Rockefeller University in New York City. He is also the university’s vice president for academic affairs.

In the late 1970s, Dr. Young began to use the fruit fly, *Drosophila*, to explore the molecular bases of circadian rhythms. His laboratory used molecular and genetic screens to identify

six genes involved in the formation of a biochemical oscillator with a periodicity close to 24 hours. Interactions among these genes and their proteins contribute to a network of molecular oscillations within most tissues at the level of single cells.

Most of the “clock genes” Dr. Young and his colleagues discovered in *Drosophila* are also central to the circadian pathways in vertebrates. Mutations in any of these “clock” genes can lengthen or shorten the period of behavioral, physiological, and molecular circadian rhythms, or abolish the rhythms altogether.

Recently, Dr. Young’s laboratory showed that a prevalent human sleep disorder is caused by dysfunction of such a well-conserved circadian clock gene. The researchers identified a gene variant associated with the most commonly diagnosed type of circadian rhythm disorder—delayed sleep phase disorder—which is characterized by a persistent and intractable delay of sleep onset and offset times relative to the societal norm.

Dr. Young has served on many study sections and advisory panels for the National Institutes of Health and National Science Foundation. He is associate editor of the *Journal of Biological Rhythms*, was associate editor of *Neuron*, and served on the editorial board of *Molecular and Cellular Biology*.

Dr. Young’s elected memberships include the National Academy of Sciences, American Philosophical Society, President’s Council of the New York Academy of Sciences, American Academy of Microbiology, and Physiological Society, London (Honorary).

Along with colleagues Jeffrey Hall and Michael Rosbash, he received the 2017 Nobel Prize in Physiology or Medicine for discoveries of molecular mechanisms that control circadian rhythms. He has also received the Neuroscience Prize of the Gruber Foundation, Horwitz Prize from Columbia University, Canada Gairdner International Award, Massry Prize from the University of Southern California, Wiley Prize in Biomedical Sciences, Shaw Prize in Life Science and Medicine, and Hayaishi Prize from the University of Tokyo.

Dr. Young received a PhD in genetics from the University of Texas, Austin. His graduate work examined gene sizes and distributions in the chromosomes of *Drosophila*. After postdoctoral work on transposable elements at the Stanford University School of Medicine, he joined Rockefeller in 1978.

### John Peters Award to Honor Vicente E. Torres



Vicente E. Torres, MD, PhD

ASN will recognize the wide-ranging contributions of Vicente E. Torres, MD, PhD, with the presentation of the John P. Peters Award on Friday, Nov. 8.

The John P. Peters Award is given for outstanding contributions to improving the lives of patients and to furthering the understanding of the kidney in health and disease.

Dr. Torres is director of the Mayo Translational Polycystic Kidney Disease Center at the Mayo Clinic in Rochester, Minn.

His research has focused on polycystic kidney disease (PKD) and related diseases for three decades. He has published on wide-ranging topics related to these diseases, including their epidemiology, phenotypic characterization, natural history, and clinical management. He has also worked to identify responsible genes as well as the expression and function of their encoded proteins. He has led preclinical and clinical therapeutic trials as well as translational studies aimed at improving treatment for autosomal dominant PKD.

He has been the principal investigator for the National Institutes of Health (NIH)-funded CRISP imaging study, the recently completed HALT-PKD clinical trial, and industry-funded clinical trials of vasopressin V2 receptor antagonists. His research has led to publication of 350 articles, three books or monographs, 50 book chapters, and 400 abstracts.

He has been active on NIH study sections and advisory panels in his research area and on the scientific advisory board of the PKD Foundation. He has organized many meetings on PKD, including the first Kidney Disease: Improving Global Outcomes (KDIGO) controversies conference dedicated to PKD and the 2017 Federation of American Societies for Experimental Biology science research conference on PKD.

Dr. Torres has served on the editorial boards of *Kidney*, *Kidney International*, *American Journal of Kidney Diseases*, *NephSAP*, *CJASN*, and *JASN*.

His contributions to PKD research have been recognized by the Lillian Jean Kaplan International Prize for Advancement in the Understanding of PKD and by Mayo naming him to the Robert M. and Billie J. Pirnie Professorship in Kidney Research.

Dr. Torres received medical and doctoral degrees from the University of Barcelona in Spain and moved to the Mayo Clinic in 1972 for research fellowships and residencies in internal medicine and nephrology. He joined the faculty there in 1979 and became professor of medicine in 1991. He served for five years as chair of the division of nephrology and hypertension and for eight years as director of the kidney disease research training grant program at the Mayo Clinic.

Dr. Torres received medical and doctoral degrees from the University of Barcelona in Spain and moved to the Mayo Clinic in 1972 for research fellowships and residencies in internal medicine and nephrology. He joined the faculty there in 1979 and became professor of medicine in 1991. He served for five years as chair of the division of nephrology and hypertension and for eight years as director of the kidney disease research training grant program at the Mayo Clinic.

### Young Investigator Recognized for Insights into Acute Kidney Injury



Samir M. Parikh, MD

The Donald W. Seldin Young Investigator Award will be presented to Samir M. Parikh, MD, who will speak on “Prospects for NAD+ Based Therapies in Acute Kidney Injury” on Friday, Nov. 8.

Dr. Parikh is associate professor of medicine and associate vice chair for research at Harvard Medical School. He is also director of the Center for Vascular Biology Research at Beth Israel Deaconess Medical Center.

His research is focused on molecular mechanisms underlying acute kidney injury and sepsis. In recent studies, the Parikh laboratory has implicated mitochondrial maintenance via PGC1 $\alpha$  and NAD+ as a novel pathway for resilience against acute kidney injury. Ongoing studies are examining mechanistic links between acute kidney injury, chronic kidney disease, and aging and how NAD+ metabolism impacts injury in other organs.

Dr. Parikh has served as the principal investigator on research grants from the National Institutes of Health, ASN, American Heart Association, and American Diabetes Association.

He has served ASN as a member of the ASN Highlights faculty,

a member of the Kidney Self-Assessment Program committee, reviewer of abstracts for Kidney Week, chair of AKI abstracts review for Kidney Week, member of the Kidney Week program committee, member of the “Securing the Future” capital campaign committee, member of the *JASN* editorial board, and associate editor for ASN’s newest journal, *Kidney360*.

He served on the committee on acute kidney injury of the International Society of Nephrology and on the editorial boards of the *Public Library of Science* and *JASN*.

An elected member of the American Society of Clinical Investigation, Dr. Parikh has received the outstanding investigator award from the National Heart, Lung, and Blood Institute; the Sir William Osler Young Investigator Award from the Interurban Clinical Club; and the Carl Gottschalk Award from ASN.

He received the founder’s medal for highest academic standing from Vanderbilt University School of Medicine and completed postgraduate medical training and a fellowship in nephrology at Beth Israel Deaconess Medical Center and Harvard Medical School.