ANNOUNCEMENT

2017 Robert W. Berliner Award for Excellence in Renal Physiology

The Robert W. Berliner Award for Excellence in Renal Physiology recognizes distinguished lifetime achievement in renal physiology research. This year’s recipient is Roland C. Blantz, M.D., of the University of California, San Diego (UCSD). Dr. Blantz was honored at the 2017 Renal Dinner and participated in the Renal Section’s Posters and Professors Reception at EB 2017 in Chicago, Illinois.

Born and raised in Portland, Oregon, Dr. Blantz attended the Johns Hopkins University, where he received his A.B. and M.D. degrees. This was followed by an Internal Medicine residency at the University of Colorado, two years of service in the US Air Force, and a Nephrology fellowship at the University of Texas Southwestern with Drs. Floyd Rector and Donald Seldin. Upon completing fellowship training in 1972, Dr. Blantz was recruited to join the medical faculty at UCSD and to serve as Renal Section Chief at the San Diego Veterans Affairs (VA), where he established his laboratory and became immediately productive. By 1980, he was promoted to Full Professor, and in 1988 he became Head of the UCSD Division of Nephrology-Hypertension, a position he held until 2013.

Dr. Blantz is a visionary physician-scientist who has contributed much to the fields of renal physiology and pathophysiology. His initial foray into research took place during a fellowship in Dallas, where he made combined use of radioactive microspheres and anti-GBM antibodies to study redistribution of blood flow within the renal cortex during saline diuresis. But given the opportunity to establish his own laboratory in San Diego, he chose to focus on methods of renal micropuncture, which would allow him to delve into multiple aspects of glomerular and tubular function at the single-nephron level. He correctly anticipated that a number of key questions would arise in kidney physiology that could only be answered by micropuncture and that this would justify the considerable time and effort required to master the technique. He also was fortunate to have the combination of cognitive and manual skills necessary to design and perform high-quality micropuncture experiments and to interpret the results. After 45 years of experience, new questions continue to arise that are most amenable to be answered by data from renal micropuncture experiments, and the laboratory that Dr. Blantz founded at the San Diego VA remains busy refining the method to answer such questions with funding from the National Institutes of Health, VA, and private industry.

His early studies provided new insights into the physical determinants of glomerular ultrafiltration, peritubular capillary uptake of proximal reabsorbate, and glomerular-tubular balance. This, and later work included seminal studies on the role of angiotensin II, the adrenergic system, and arginine metabolites on glomerular hemodynamics and tubular reabsorption in normal physiology. Dr. Blantz also was a pioneer in the study of tubuloglomerular feedback (TGF) and contributed many refinements to our understanding of this phenomenon, the existence of which was originally demonstrated by Schnerrmann and Thurau. His work also extends to pathophysiology, and he has defined glomerular hemodynamics and tubular mechanisms in a variety of disease models including ischemic acute renal failure, sepsis, pigment-induced renal failure, several forms of glomerular immune injury, obstructive nephropathy, volume depletion and expansion, cyclosporine nephrotoxicity, early diabetes, and experimental hypertension.

The fruit of Dr. Blantz’s research efforts include more than 200 peer-reviewed papers and review articles in respected journals including the American Journal of Physiology-Renal Physiology, Journal of the American Society of Nephrology, Kidney International, and Journal of Clinical Investigation, as well as 37 book chapters including chapters for The Kidney: Physiology and Pathophysiology (5th Edition), edited by R. J. Alpern and S. C. Hebert, 2013, and for Comprehensive Physiology.
Moreover, Dr. Blantz has received several prestigious awards for his outstanding success in research, including election to the American Society of Clinical Investigation, Association of American Physicians, and the American Clinical and Climatological Association. He received the Donald B. Seldin Distinguished Professor award from the National Kidney Foundation (2005), the William S. Middleton award for Research Excellence from the Veterans Administration (2006), and the John P. Peters award of the American Society of Nephrology (2010).

In service to the field of Renal Physiology, Dr. Blantz has been President of the American Society of Nephrology and the Council of American Kidney Societies. He has spoken many times and moderated many sessions at academic meetings both nationally and internationally. He has been active in the American Physiological Society (APS) symposia at APS/Federation of American Societies for Experimental Biology (FASEB) meetings. He was one of the original organizers of the FASEB Summer Conference on Renal Hemodynamics in Saxtons River, VT, in the 1980s. This conference series continues to present day. Dr. Blantz was Associate Editor of the American Journal of Physiology-Renal Physiology for a period of six years in the 1990s, Associate Editor of Journal of Clinical Investigation, and co-editor of Current Opinions in Nephrology-Hypertension. Most recently, he was invited for the online video interview series, The APS Living History of Physiology Project.

At UCSD, Dr. Blantz has represented the discipline of Physiology on the Faculty of Basic Biomedical Sciences, and as a member of the UCSD Bioengineering Institute, and as Director of T32 training grants from the National Institute of Diabetes and Digestive and Kidney Diseases and the National Heart, Lung, and Blood Institute. He has also hosted PhD and M.D. fellows in his lab dating to 1975. Many former fellows came from outside the United States, including Israel, Italy, China, Japan, Germany, Sweden, Denmark, Spain, Argentina, Canada, Mexico, and India. Most fellows generated publications in high-quality journals out of their experience. Over a dozen former fellows are full Professors and/or division heads in the United States or in their home countries.

While the above facts speak for themselves, for those of us who work with Dr. Blantz most closely, it is his constant drive to better understand how the kidney works, his clinical-translational-integrative understanding of kidney physiology, and his constant readiness to discuss and share his knowledge and new ideas that make him a role model. In summary, Roland Blantz epitomizes the classical renal physiologist and is most deserving of the prestigious Robert W. Berliner Award for Excellence in Renal Physiology.