Noted renin-angiotensin-aldosterone system investigator to receive Tigerstedt Award

The American Society of Hypertension honors one of its original members this year with the 2013 ASH Distinguished Scientist Award. Ernesto L. Schiffrin, CM, MD, PhD, FRSC, FRCP, FACP, FAHA, will receive The Robert Tigerstedt Award as part of Friday afternoon’s Plenary Session II that honors ASH awards recipients. The Tigerstedt Award is named for the physiologist and scientist best known for discovering the renin-angiotensin system, so it’s fitting that the Tigerstedt Award goes to Dr. Schiffrin, who has focused much of his 35-year research career on the renin-angiotensin-aldosterone system.

During today’s award lecture, Dr. Schiffrin, Physician-in-Chief at Jewish General Hospital in Montreal and Professor and vice-chair of the Department of Medicine at McGill University, will talk about his work in recent years involving the renin-angiotensin-aldosterone system and related mechanisms involved in blood pressure elevation. He will present new hypertension in humans,” he said.

His research also has attempted to identify how the endothelin system and both the innate and adaptive immune systems may influence vessel remodeling in hypertension, cardio-metabolic disease and chronic kidney disease.

Dr. Schiffrin, who was a founding member of ASH and served for five years as secretary of ASH, said he felt grateful to be honored by his peers. He has known the ASH leadership for many years and also has exchanged scientific information and collaborated with many ASH members.

Honors such as the Tigerstedt Award recognize not only his work, Dr. Schiffrin said, but also the efforts of his collaborators through the decades, many who have made their own marks in research.

“My greatest gratification, I must say, is to see some of our trainees go on to develop careers of their own successfully in research in cardiovascular disease, high blood pressure and connected diseases and conditions, making contributions themselves to advances in the field after they’ve left my laboratory, and hopefully improving the outcomes to our patients,” he said.

While completing his medical training and starting his career in his native Argentina, Dr. Schiffrin was influenced by the work of the University of Buenos Aires scientists who discovered — almost simultaneously with the Cleveland Clinic — angiotensin, the major effector of the renin-angiotensin-aldosterone system. He went to Canada in the mid-1970s to continue his research training before settling there, working at the University of Montreal for many years before moving across the city to McGill University almost eight years ago.

Today, Dr. Schiffrin continues his research work while remaining a leader on many hypertension fronts. He currently serves as an editor for Hypertension and as president of the International Society of Hypertension.

Much of the latest hypertension science crosses Dr. Schiffrin’s desk in his role with Hypertension. He said the future for hypertension science looks bright.

“We may be in one of those periods in which we’re not seeing so many new agents being developed, but at the same time, we are making progress in our understanding of mechanism, and that will provide us with new tools to improve the outcomes of our hypertensive patients,” he said.

Dr. Schiffrin, in his role as ISH president, wants to make sure the hypertension community shares his concern about challenges in controlling blood pressure in low- and middle-income nations. But he also points out that the developed nations also struggle with
data, from both humans and experimental models, about mechanisms involved in the vasculature remodeling and also discuss approaches that can be used to improve the structural and functional remodeling of vessels.

"We have worked in this field for many years, attempting to establish what potential targets may be drugged in order to improve the structure and function for small arteries in patients with hypertension, with hypertension complicated by diabetes and chronic kidney disease, and establish what the mechanisms are that lead to the changes that result in increased peripheral resistance, which is a hallmark of essential combating hypertension, and points out that a recent *Lancet* review put hypertension at No. 1 on the global burden of disease list and that the World Health Organization dedicated this year's World Health Day, held last month, to hypertension.

"I have no doubt that we have a lot of questions to answer at very different levels — at the level of basic, clinical, health services, epidemiology, population science — in hypertension," he said. "I've been primarily a translational researcher, but in the other areas are just as important and require just as much effort to advance the science of hypertension and improve outcomes for our patients."

— Ernesto L. Schiffrin, CM, MD, PhD, FRSC, FRCP, FACP, FAHA

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