

■ SPECIAL ANNOUNCEMENT

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Richard J. Traystman

A Personal Story

RICHARD J. Traystman, Ph.D., has been selected as the recipient of the 1997 American Society of Anesthesiologists Excellence in Research Award. This award symbolizes the important role that Dr. Traystman has played in anesthesiology research as a clinical physiologist and a basic scientist. This past year, Dr. Traystman also received an equivalently important honor from the American Physiological Society (the Robert M. Berne Distinguished Lectureship) that recognized his important contributions to cardiovascular physiology; several years ago, he was also the first recipient of the Laerdal Memo-

rial Lectureship for the Society of Critical Care Medicine. These awards emphasize the broad recognition accorded Dr. Traystman by the basic science community and within our own field of anesthesiology and critical care medicine.

A native of New York, Dr. Traystman received his B.S. and M.S. degrees from Long Island University. In 1971 he received his Ph.D. from Johns Hopkins University, where he began important work in the heart and pulmonary circulation. In the same year, he pursued postdoctoral training at Bowman Gray School of Medicine with H. D. Green and C. E. Rapela, pioneers in the field of cerebral circulation. In 1972, he returned to Johns Hopkins as an assistant professor, then associate professor, of Environmental Health Sciences in the School of Hygiene and Public Health. Within the next 8 yr, Dr. Traystman became well known for his work in cerebrovascular physiology and for his insights into regulation of pulmonary vessels and airways. In 1980, Dr. Traystman moved across the street to the Johns Hopkins University School of Medicine as associate professor of anesthesiology and critical care medicine. In addition, he was appointed director of the department's research laboratories by the then-chair, Mark C. Rogers, M.D., and began to build a unique multidisciplinary research program. In 1985, Dr. Traystman was promoted to full professor with secondary appointments as professor of medicine, and of environmental health sciences in the School of Hygiene and Public Health. In 1989, he assumed the University Distinguished Research Professor chair in anesthesiology and critical care medicine. He was appointed vice chair for research in our department in 1991 and remains as senior vice chair today.

Dr. Traystman has retained over the years an interest in the physiology of the lung, and his work spans areas such as collateral ventilation and integrative cardiopulmonary function. However, he is most well known for a long and distinguished career in the field of brain blood flow and cerebrovascular regulation in health and disease. He has made major contributions to our understanding of how the brain and its circulation responds to clinical disease states such as stroke, cardiac arrest, hyperammonemia, hypoxia, and intracranial hypertension. With more than 300 published manuscripts and



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80 book chapters, Dr. Traystman's science is striking for its breadth and application to the adult, pediatric, and neonatal brain. His work has been recognized by nearly 25 yr of active support from the National Institutes of Health (NINDS, NHLBI, NIEHS, and NIDA) and includes a program project of which he has been principal investigator since 1983. His service on study sections and scientific review committees has been extraordinary. He has served on study sections for NINDS, NHLBI, and AHA, and on research review committees for the Veterans Administration and for the ASA and the Society of Critical Care Medicine.

He was one of the first researchers to describe the effects of cardiopulmonary resuscitation on cerebral blood flow and brain metabolism. He examined the role of carotid and aortic baroreceptors in the cerebrovascular response to hypoxia and how changes in arterial oxygen modulated regional cerebral blood flow. These studies and many other findings built a framework for our understanding of vascular responsiveness in the brain. Much of his recent work has focused on the area of neuroprotection. His publications on oxygen radical-mediated brain injury and on the role of nitric oxide are recognized as pivotal to the area of neuroanesthesia. He is truly one of a handful of investigators recognized throughout the world as a leader in the area of cerebral circulation and metabolism.

Dr. Traystman is not only a superb scientist but also an accomplished teacher, mentor, and leader. He is one of the few persons who has successfully woven basic science and *in vivo* physiology into a clinical department's research mission. How he has done this is highly instructive and serves as a model for many other clinical departments. Working equally well with clinicians and Ph.D.s, he has built a unique, shared laboratory system that emphasizes collaboration and productivity. Laboratories under his direction do not have names on the doors. Core facilities and support personnel are distributed so that the clinician's time may be maximized

whenever that person is in the laboratory. Projects are well conceived and planned before implementation to serve science but also the teaching and clinical missions of the department. Physicians and doctoral researchers attend clinical lectures, grand rounds, and research conferences. All of this is by design so that the research faculty and clinical anesthesiologists can appreciate and exploit each other's intellectual properties and capabilities and design joint experiments. Real problems of clinical relevance are discussed, and real solutions are sought through research. For example, cerebral protection and its anesthetic implications and mechanisms are practical goals and an ongoing high priority.

Over and above these organizational gifts, Dr. Traystman is a superb mentor for young persons. He has trained more than 75 residents, fellows, post-docs, and students in his laboratories. He regularly reviews their careers, manuscripts, grant applications, and their experiments in detail. It is not uncommon to see Dr. Traystman reading a grant proposal, line by line, with a ruler. He is critical; he is blunt. But he cares deeply about the young investigators with whom he works. The fact that the Johns Hopkins Department of Anesthesiology and Critical Care Medicine is number one in National Institutes of Health funding is, certainly, due in great measure to the efforts of Dr. Traystman.

I am pleased, therefore, that the ASA has bestowed this honor on Dr. Traystman. He has made impressive contributions to the anesthesiology literature; equally important, he has bridged basic science with anesthesiology and critical care medicine. Further, he approaches his responsibility for mentoring young physicians and scientists with utmost energy and enthusiasm. Dr. Traystman's dedication has well served our specialty and anesthesiology research.

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