

ASA Award: John P. Kampine

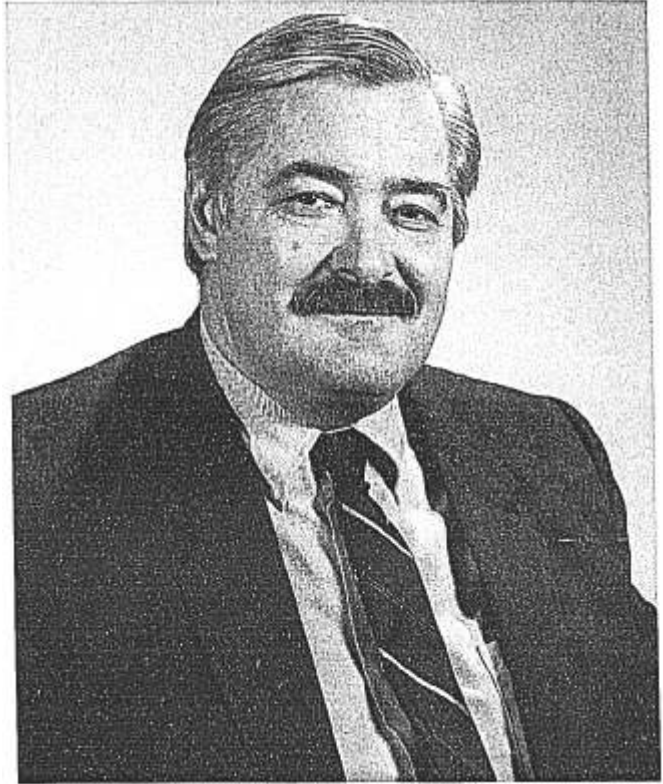
EACH YEAR THE American Society of Anesthesiologists Award for Excellence in Research is presented to an individual in recognition of meritorious and original research that has led to the advancement of the science and clinical practice of anesthesiology. The 1992 designee is John P. Kampine, M.D., Ph.D. His research, conducted over a span of 25 years, has continued to be both productive and creative. It is exceptional in that it has advanced and expanded the scientific foundation of anesthesiology. In addition, through a strong commitment to research training of residents, fellows, and young faculty, John has provided a solid framework for continued future discovery.

John Kampine was born October 4, 1934, the son of Dr. Clifford and Florence Kampine, and grew up in the small farming community of Marathon, in northern Wisconsin. John's father, a general practitioner, and his mother, a registered nurse, maintained an office in their home and served as the sole providers of health care for the entire Marathon area. A Wisconsin All-State football player, John also distinguished himself in the classroom, graduating as valedictorian of his high school class. He left Marathon after graduation and attended the University of Notre Dame and Marquette University on football scholarships, earning varsity letters in football and wrestling.

He received the M.D. degree in 1961 from Marquette University Medical School (now the Medical College of Wisconsin) and, after completing his internship, returned to graduate school at Marquette under the guidance of Dr. J. J. Smith, Professor and Chairman of the Physiology Department. This decision was a surprise to his father, who expected John to return to Marathon and join him in practice. As John had strong academic interests, though, his father wholeheartedly supported this decision.

John received the Ph.D. degree in physiology in 1965, and he continued research training as a postdoctoral fellow in the Laboratory of Neurochemistry at the National Institutes of Health, in Bethesda, Maryland. At the NIH, he worked in the laboratory of Dr. Roscoe O. Brady, who was involved in the pioneering work and discovery of specific enzyme defects associated with disorders of complex lipid metabolism in Gaucher's and Niemann-Pick disease. The close associations with Smith and Brady provided the foundation from which a meticulous and industrious basic scientist emerged.

Accepted for publication July 1, 1992.



John P. Kampine

John ultimately decided to pursue a career in anesthesiology because it was a branch of medicine heavily dependent on applied physiology and pharmacology and because of the breadth of organ systems involved in the practice of this specialty. After extended discussion with a close friend, Dr. E. O. Henschel, then Chairman of the Department of Anesthesiology at Marquette University Medical School, John chose to return to Milwaukee in 1967 for residency training. John also taught in the Physiology Department during his residency. In fact, he has continued to deliver the basic cardiac physiology lectures to freshman students over the tenures of two Physiology Department chairmen during the past 25 years. John also coauthored the widely read textbook for medical and other health professional students titled *Circulatory Physiology: The Essentials*.

After completion of residency training, John Kampine became a faculty member in both the Anesthesiology and the Physiology departments, where he has remained until the present. John's initial task was to create a research

base in an anesthesiology department that was primarily service oriented. In the intervening years, John Kampine has continued to work with basic scientists and clinicians and has developed a department that is heavily integrated with the Physiology and Pharmacology departments. During the time between completion of his residency in 1970 and selection as Department Chairman in 1979, he served as a major advisor for nine Ph.D. students and was a member of the dissertation committees of many other doctoral candidates in the departments of Physiology and Pharmacology. He also served as Associate Chief of Staff for Research at the Milwaukee Veterans Administration Medical Center and was instrumental in the formation of the Research Service and the first Animal Resource Center there. John certainly succeeded in the objective of bringing research to a fledgling department.

Following the untimely death of Dr. Henschel, John Kampine was the first individual interviewed by the Search Committee for a new department chairman. This committee was chaired by Dr. L. Bonchek, Professor and Chief of Cardiothoracic Surgery and an individual John had faced across the ether screen daily. Because of John's clinical forte and strong academic orientation with an emphasis on basic and clinical research, within a few days after his interview, the Search Committee was disbanded as they decided to look no further. Shortly thereafter John was elected President of the Faculty Assembly of the Medical College of Wisconsin.

John Kampine's early and sustained research interests have focused on reflex regulation of the cardiovascular system and the effects of anesthetic drugs on cardiovascular regulation. Many of his observations in the operating room made during cardiopulmonary bypass were brought to the laboratory for experimentation. In such a fashion, John determined the role of cardiopulmonary reflexes in control of the cardiovascular system. John's investigations have demonstrated how perturbations that lead to a change in arterial pressure are countered by reflex responses in cardiac output and total peripheral vascular resistance. Contributions from a number of neural pathways including carotid sinus afferents, low pressure baroreceptors, and cardiac parasympathetic and sympathetic efferent inputs were defined by his research. How general anesthetics impair this tightly regulated system has been and still is an area of active research. Evidence from his studies has indicated that general anesthetics, to various degrees, produce dysfunction of reflex regulation by afferent, efferent and central mechanisms. John continues his research today on reflex control of venous capacitance and is studying the influence of hypercarbia, hypoxia, and anesthetic agents on this largely ignored area.

Unsatisfied with phenomenologic research, John has continued to bring new and sophisticated, state-of-the-art technologies to the laboratory to better test his hypotheses.

Cellular and intracellular techniques now are used routinely in his laboratory to focus on mechanisms of action of anesthetic drugs. His research has been funded through the peer-review process and supported continuously since 1968 by grants from the NIH, the Veterans Administration, and the American Heart Association. This aggressive research effort has resulted in more than 200 original articles published in the highest quality journals. He continues to be impressively active in the laboratory and in 1991 published the results of more than 30 original investigations. His numerous lectureships and site visits to other institutions attest to the recognition of his accomplishments.

John has guaranteed that the research he started will continue in the future. His training of graduate and medical students, residents, and fellows is unparalleled. Several of his original group of graduate students and postdoctoral fellows have remained in the Department of Anesthesiology or related departments at the Medical College of Wisconsin and have developed other interests related to cardiovascular regulation, the autonomic nervous system, and control of respiration. At present there are nine M.D., Ph.D. clinical scientists, 11 Ph.D. scientists, and a large number of M.D. investigators holding primary appointments in the Department. Several members of the Department serve on editorial boards of anesthesiology and basic science journals. Strong research laboratories now within the Department contribute regularly to the literature in the fields of anesthesiology as well as the basic medical sciences.

To John Kampine, it seems only natural that bright, energetic young faculty interested in the basic sciences should also be intrigued by how anesthetics affect organ systems and the cellular or subcellular mechanisms of such actions. However, he recognized that during intensive medical training, clinicians do not often have the time, opportunity, or encouragement to become involved in research. Thus, John Kampine sought to create such opportunities to develop a cadre of clinician investigators who could practice anesthesiology with the highest skill and function equally as well in a research laboratory. He speculated early on that only this kind of training would advance the science of our specialty. John helped to organize and continues to participate in the Medical Scientist Training Program at the Medical College of Wisconsin in an effort to create an early research base among medical students. He also played a critical role as a stimulus for development of an NIH-funded Anesthesiology Research Training Grant at the Medical College. He provides clear direction and support for young faculty who have a strong interest in research and serves as a model for such individuals. During his chairmanship, John nourished the growth of his department, which now has 85 full-time faculty members (when he became chairman there were

fewer than 25), most of whom are engaged in some aspect of basic and/or clinical research.

John has served on two different NIH Study Sections to review grants and, despite a rather busy administrative schedule, has found the time to serve as President of the Society of Academic Anesthesia Chairman and President of the Association of University Anesthesiologists. He is also a senior examiner of the American Board of Anesthesiology, past President of the American Heart Association (Wisconsin affiliate), and honorary fellow of the Faculty of Anaesthetists of the Royal College of Surgeons in Ireland. Because of his contributions in research, John Kampine was selected during the past year to the prestigious Institute of Medicine of the National Academy of Sciences (only five anesthesiologists have been inducted previously).

The greatest source of enjoyment for John is discussion of the research findings and interpretation of results in both formal and informal meetings with various faculty, postdoctoral fellows, and students. Late afternoon meetings in the laboratory often have a way of extending into one of the "local nonacademic establishments" where science is not the usual order of the day. It is at these times that younger faculty and students may see John initially for what he truly is—a highly goal-oriented, motivated academician with a vision for his department and specialty, but also an extraordinarily warm and kind man who has a genuine interest and dedication to his people and their problems. Many of his faculty have offered that John

serves not only as an academic role model for them, but in various ways, as a "father figure." John certainly could not have accomplished all he has without the support and devotion of his lovely wife, Susan Kampine. She not only has raised five wonderful children but has somehow put up with John's penchant for high performance sport cars and football.

During John Kampine's Chairmanship, the Department of Anesthesiology has flourished in size and numbers. This has been accompanied by a significant increase in extramural research funding, publications, and development of investigators who are nationally recognized for the quality of their work. John has created an environment where such individuals can succeed and where the basic training of such individuals can occur. He is often heard asking how something works or why something reacts the way it does. This intellectual curiosity can be infectious, but only if it arises from the right individual. John Kampine is the right individual. He is well deserving of the recognition the American Society of Anesthesiologists has bestowed upon him for his enormous contributions to the science and clinical practice of anesthesiology.

DAVID C. WARLTIER, M.D., PH.D.
Professor of Anesthesiology, Cardiology, and Pharmacology
Vice Chairman for Research
Department of Anesthesiology
Medical College of Wisconsin
Milwaukee, Wisconsin 53226