William L. Young, M.D. – 2009 Excellence in Research Award

Ronald D. Miller, M.D.

The ASA Excellence in Research Award is the highest honor our Society can bestow on an investigator. William L. Young, M.D., the James P. Livingston Endowed Chair in the Department of Anesthesia and Perioperative Care at the University of California, San Francisco (UCSF) is the 2009 recipient, and it is hard to imagine a more deserving colleague.

An accomplished anesthesiologist, Bill Young is also a prolific investigator whose work has had an impact on the scholarly development of neuroanesthesia as well as on our ability to understand the mechanisms, pathophysiology and care of patients with neurovascular disease. His establishment of the multidisciplinary UCSF Center for Cerebrovascular Research has provided the vehicle for extending the boundaries of our specialty's influence to include neurosurgery, radiology, neurology and other various neuroscience fields. When interviewed for our department's recent 50th anniversary, Bill said, "Ultimately, the current status of our specialty should be an effect – not a cause – of the questions we ask, and our reach should exceed our grasp." It is this approach that distinguishes his career – and which points the way for anesthesiology to continue to thrive.

Bill grew up in Munster, Indiana, and attended both undergraduate and medical school at Indiana University. In 1985, after clinical anesthesia training at New York University Medical Center, he joined the faculty at the Columbia University College of Physicians and Surgeons, where he had completed clinical and research fellowships. He quickly evolved into a productive and successful NIH-funded investigator in the specialty of anesthesiology. In 2000, he relocated to UCSF where he became the James P. Livingston Professor and Vice Chair of Anesthesia and Perioperative Care. His unwavering dedication to excellence has had an enormous impact on faculty members in our department and across the entire UCSF campus.

2009 ASA Excellence In Research Award recipient William L. Young, M.D.

For one, his productivity in research and NIH grant funding has been incredibly consistent. He has had continuous NIH funding since 1990, two concurrent NIH grants since 1994, and at least three, and up to five, NIH grants concurrently since 1999. He is the principal director of a program project grant, "Integrative Study of Brain Vascular Malformations," which was just renewed for a second five years. This remarkable run began when Bill was an early recipient of the FAER award system; his success supports the direction that FAER and the ASA pursued in those days. And, today, at a time of leadership change in our department, Bill's focus and calm dedication to excellence have been inspiring to me personally, and he serves as a role model for our entire faculty.

The substance of his research is even more impressive. After early studies on the cerebral effects of anesthetics, he gradually moved to more unexplored pathophysiological areas in anesthesia, neurocritical care and intraoperative neurosurgery. This led to the understanding of reperfusion hyperemia or perfusion pressure breakthrough, which is associated with AVM treatment. The work also led to epidemiological, clinical risk prediction and imaging studies. When he arrived at UCSF, Bill approached cerebrovascular biology of vascular remodeling and

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angiogenesis using molecular and genetic techniques. Studying patients with giant cerebral aneurysms, he used "network" models, including innovative collaborations with bioengineers and imaging scientists. Bill is also someone the NIH turns to when it needs leaders. Since 1997, he has served on various NIH review committees and, since 2005, he's been a member of the Clinical Neuroscience and Disease (CND) Study Section. In 2008, he was selected to co-chair the first-ever NINDS workshop on vascular malformations of the brain. The workshop, which took place in Madrid, involved an international roster of some 50 clinical and basic science experts.

In addition, Bill has been instrumental in expanding the number of anesthesiologists conducting high-level basic and clinical research – filling a critical need that has been well recognized by ASA leadership and several Rovenstine Lecturers. He has had remarkable success in helping junior faculty obtain career development awards, including serving as primary mentor on seven funded NIH K awards (K08, K23 and K25) and three American Heart Association development awards. He was one of the first to be recognized by the NIH for mentoring efforts by receipt of a K24 award in l999. Several of his trainees are faculty in institutions that include Columbia, Cornell and UCSF.

His editorial responsibilities also are extensive, serving on the editorial boards of the *Journal of the American Heart Association*, *Stroke* and *Neurosurgical Anesthesia* – and previously on the Associate Editorial Board of *Anesthesiology*. He also is co-editor of a major text titled *Cerebrovascular Disease* and is one of four consulting editors for the 7th edition of *Anesthesia*, for which I am the primary editor.

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Perhaps the most intriguing evidence of Bill's multifaceted approach to his work and his world is that he is a professional-grade jazz pianist. I have seen and heard him work easily into "jam sessions" with professional jazz musicians, and for our department's 50th anniversary party, with more than 300 attendees, he provided our post-dinner music. Why hire someone else when Bill could do the job as well as anyone?

I should also acknowledge Bill's wife, Chantal, who has provided remarkable support in what continues to be a remarkable career. By using the unique skill-sets gained from his training in anesthesia, Bill Young has made major contributions to understanding both the biology and management of neurovascular disorders that many anesthesiologists must manage. He would say, "If anesthesiologists take care of vascular disease patients, then we should strive to understand the totality of the disease process and not accept any a priori limitations to the nature of the questions we ask nor investigations we pursue." Indeed, his journey began at the bedside, thus instigating the most innovative and productive physiologic approach to understanding these disorders to date, which he now conducts at the level of program director of an NIH program project grant. Reaching the limits of current physiologic technology, Bill recognized real progress would only occur through a thoughtful laboratory and bedside approach. For all of these reasons and more, Bill Young clearly deserves our Society's highest honor in research: the Excellence in Research Award.