

In Memoriam: Stephen B. Edwards (1942-1982)

Stephen B. Edwards, a friend and colleague of many readers of this journal, died on Monday, February 1, 1982, from leukemia at the age of 39. He is survived by his wife, Judy, and his young daughters, Jennifer and Kristen. At the time of his death, he was Associate Professor of Anatomy at the University of Virginia.



Although his career was sadly brief, his scientific contributions are significant. Steve focused on the problem of understanding neuronal pathways in the cat's reticular formation and visual system, particularly those in the brainstem involved in sensorimotor integration. He was a skilled neuroanatomist, who mastered and helped to pioneer the use of anterograde transport of tritiated amino acids to trace fiber connections. His published work (see list below) serves as an outstanding example of how these techniques could and should be applied.

Steve did his undergraduate work at Bates College, where he met his wife; his career in neuroscience began with his graduate studies at Yale University, in the laboratory of Dr. John Flynn, on the neural mechanisms of centrally elicited attack in the cat. For this work, he received a Ph.D. in Neurobiology and Anatomy in 1970.

His main research interest had always been the anatomical substrate of function, and toward the end of his predoctorate studies, he decided that the visual system offered an excellent opportunity to explore his interest. Accordingly, Steve spent 1970-1972 at the Anatomy Department of the University of Pennsylvania pursuing his postdoctoral training. His colleagues in that department included Alan Rosenquist, Peter Sterling, and James Sprague among the faculty, plus other postdoctoral students, such as Larry Palmer, Murray Sherman, Inglis Miller, and Tom Norton. While at Penn, Steve not only independently and single-handedly developed the autoradiographic tracing technique, including a microinjector (Edwards and Shalna, '74), but he also showed how it could be used to advantage to untangle the confusing web of controversy surrounding two contemporary questions that are plagued by the "fiber of passage" problem. First, using autoradiography, he showed that the red nucleus does not project to VL/VA; and second, he, together with Rosenquist and Palmer, described the cortical projections of the dorsal lateral geniculate nucleus.

In 1972, Steve accepted a position as Assistant Professor of Anatomy at the University of Virginia and established his own laboratory there. He became Associate Pro-

fessor in 1976. His research style reflected his approach and dedication to science. High-quality research was his goal, not publicity, administration, or the establishment of an empire. Accordingly, he seldom had more than a single assistant to help him with his work, although he did collaborate with workers in other laboratories (Barry Stein, Anita Hendrickson, Robert Spencer, Steve Kitai, and Alan Rosenquist).

Soon after arriving at Virginia, the direction of his research shifted slightly, and this shift exemplifies Steve's thoughtful approach to science. He recognized a vast gulf in our understanding of the complex but most important pathways subserving visuomotor integration in the brainstem. He set out to describe these pathways in the cat, and his approach bore fruit. At his untimely death, Steve had just begun to unravel the complicated neural circuitry involved. We hope that his publications of his early work will inspire other neuroscientists to continue this demanding but important line of research.

While Steve's research accomplishments alone justify our sense of loss at his death, we shall miss him for much more than that. He was a warm friend with an optimistic outlook and a marvelous sense of humor. His interest in and constructive criticism of our own work inspired us. Finally, Steve was a dedicated and superb teacher of neurosciences at Virginia. He instilled in many of the medical and graduate students there an exciting sense of functional neuroanatomy.

Although his illness was diagnosed in 1975, he continued in good health until the fall of 1981 and throughout that period of time he pursued an active career in research and teaching with undiminished vigor and humor. The courage and philosophical calm with which he conducted his life was a wonder and inspiration to all of those close to him. Steve's tragic death is a great personal and scientific loss to us all.

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