## Obituary



## Geoffrey H. Gold (1949-2000)

Dr Geoffrey H. Gold, Member of the Monell Chemical Senses Center, Philadelphia, PA, passed away on February 10, 2000, after a courageous battle with ALS. He was a member of the Association for Chemoreception Sciences, Association for Research in Vision and Ophthalmology, Biophysical Society, Society for Neuroscience and the David Mahoney Institute of Neurological Sciences, University of Pennsylvania. A native of Shaker Heights, OH, Geoff received his BS in Engineering Physics from Ohio State University in 1971. He earned his PhD in Physics from Harvard University in 1977, studying photoreceptor coupling in the retina with Dr John Dowling. His photoreceptor research continued from 1978 to 1981 with studies on transmembrane calcium fluxes in retinal rods with Dr Juan Korenbrot at UCSF, and from 1982 to 1988 as an Assistant Professor at Yale University.

It was at Yale that Geoff developed an interest in olfaction. Guided by the analogy with the mechanism of rod phototransduction, he made the landmark discovery that olfactory cilia contain a cyclic nucleotide-gated conductance which enables cyclic AMP to function as a second messenger in olfactory transduction. In 1988, Geoff moved his laboratory to Philadelphia to continue his pioneering work as an Associate Member of the Monell Chemical Senses

Center, an ideal setting to immerse himself in the expanding field of olfaction. During the subsequent years he laid a solid foundation for the cyclic AMP model of olfactory transduction. In addition, he made many other important contributions to the fundamental understanding of olfaction, including functional localization of the transduction apparatus; suppression of odor responses by odors; induction of odor sensitivity; signal amplification by a chloride conductance; noise and quantal detection during odor reception, and how gene targeting of transduction components affects the olfactory response during development. He was promoted from Associate Member to Full Member in 1994, and was awarded the Takasago Award for Outstanding Research in Olfaction in 1996.

In his work, Geoff always strove to attain the highest standards of scientific rigor and integrity. He was keenly aware of the need to guard against non-rigorous data and subjective interpretations that conveniently fit a personal theory. He realized that to coax Nature into revealing Her deepest secrets, a critical and uncompromising approach was needed. His goals were clarity, conciseness, elegance and completeness—ideals that he passed on to his students. More difficult to teach was his talent for identifying problems of fundamental significance. Perhaps this intuition was based on a physicist's conviction that no matter how complicated and messy a biological system might appear, at its core must lie principles and mechanisms that are simple but elegant. Geoff's serious side was always balanced with a healthy dose of humor and fun. He enjoyed the nuts and bolts of doing science as much as the theoretical aspects. He was as comfortable building micromanipulators in the machine shop as he was soldering circuits or designing patch clamp software in the lab. His students and post-doctoral fellows learned a great deal from his hands-on approach. Those that he mentored, as well as his other professional colleagues, will miss him greatly. Many of us carry fond memories of his kindness, friendship and support over the years. In his life, Geoff's singular quest for truth in science was surpassed only by his devotion to his family. He is survived by his wife, Leona, and two children, Simon and Susan.

> Graeme Lowe Monell Chemical Senses Center