Alan E. Fisher (1926–1983)

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ALAN E. FISHER died in December, 1983. He was one of the pioneers of modern behavioral neurochemistry, and enjoyed a distinguished career in research and administration. These accomplishments, and some more personal memories, were shared by his former students and associates at a University of Pittsburgh Psychobiology "retreat" in October, 1984.

Fisher received his Ph.D. from Pennsylvania State University in 1955, and went on to do postdoctoral work at two of the premier labs of that era, first with Donald Hebb at McGill and then with Harry Harlow at Wisconsin. It was at McGill that Fisher made what was probably the major discovery of his career. Influenced by Geoffrey Harris' pioneering work in neuroendocrinology and by Bengt Andersson's finding that direct application of NaCl to the brain induced drinking, Fisher (amidst a chorus of skepticism and ridicule) was the first to demonstrate that direct application of sex steroids to restricted areas of the brain could induce sexual behavior in rats [3]. With this characteristic stroke of innovation and ingenuity he opened a new area of research which continues to stimulate thought and experimentation 30 years later.

His own interests shifted to the neural control of thirst and sodium appetite and he was one of the first to emphasize the importance of circumventricular structures as sites of action for angiotensin II in brain [2], and the role of this hormone in sodium appetite. Many of these ideas were proposed in a masterful chapter [4] published in 1973, and the novel ideas expressed therein (not always appreciated or acknowledged by his peers) predicted the themes of current research in the area. This chapter is also an excellent example of the care with which he crafted his written work (his one time ambition was to be a poet).

Fisher was also interested in the neurochemistry of reward [5], and this evolved into the new paradigm of tail pressure-induced behaviors in rats. The unexpected finding that mild tail pinch induces goal-directed behaviors was discovered serendipitously in the Fisher laboratory thanks to the virtually limitless freedom of though and action that he gave to his assistants. He encouraged development of the paradigm and himself pursued thirst aspects of this problem. His interest in new and challenging problems is well characterized by his comment in discussing the issue ". . tail pinch

Alan Fisher was a man of few words and outward emotions although he had a tremendous zest for life, and in particular food (one of his unfulfilled dreams was to open a . . .however wrong-ended it seems, may hold more promise for further elucidation of brain function than brain stimulation itself." [1].

Alan Fisher was a man of exceptional imagination, always seeking "To Dream the Impossible Dream" (one of his favorite songs). One such dream, initiated soon after he joined the Psychology faculty at the University of Pittsburgh in 1957, was to establish an interdisciplinary graduate training program in the developing area of neural and behavioral science. This Psychobiology program, which involved faculty with common interests from areas including psychology, pharmacology, psychiatry and biology, has continued to expand and flourish. In 1978 he was appointed Associate Provost of the University of Pittsburgh and the first Director of the Office of Research. In this capacity, he was involved in the inception of several campus-wide scientific research and training projects, including a Center for Neuroscience. gourmet restaurant). He rarely initiated a dialogue (a trait which often unnerved students and colleagues), but was a

good and careful listener and a copious note-taker. All of his associates remember lab meetings during which Fisher would silently puff on his pipe for the entire proceedings then, after a silence, would ask a penetrating question or crystallise a new hypothesis in a few words. In this same vein, his experimental work was characterized by a few meticulous and critical experiments. Fisher was also a gambler both in the literal (a fine poker player) and figurative sense. He took chances with people of diverse and sometimes unusual backgrounds to experiment with novel syntheses of thought and technique. There were successes and failures in these adventures, but life in the Fisher lab was never dull or predictable. He had the strength and generosity to allow individuals to test themselves and try to emerge as independent and creative scientists. We hope that some of his scientific curiostiy, integrity, and conviction rubbed of on all of us. The pipe may be out, but the aroma lingers.

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