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Obituary Joseph Vincent Brady

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With the death of Joseph Brady on 2 August 2011, the American College of Neuropsychopharmacology lost an important behavioral scientist and one of its most illustrious founding members and public figures. Obituaries in the major newspapers reported him as the researcher who sent trained monkeys and chimpanzees into orbit to prove that outer space was safe for astronauts. His 1958 publication in *Scientific American*, 'Ulcers in Executive Monkeys', vividly demonstrated the somatic effects of psychological stress and attracted similar public notice. These popular accounts, however, and even this brief tribute, cannot fully convey the impact of this fearless and remarkable man both on his colleagues and on neuropsychopharmacology.

Joe Brady was born on 28 March 1922 in New York City and educated in its Catholic parochial school system. After graduating from Fordham University in 1943, he served as a combat infantry platoon leader in World War II. After the war ended, he was reassigned to a military psychiatric hospital in Germany and as Brady said 'that is what changed my life' (Conversation with Joseph V Brady, 2005)—with no formal training, Lieutenant Brady became the hospital's self-taught psychologist and Rorschach test expert. In 1948 Joe was sent by the Army to the University of Chicago to earn his PhD on electroconvulsive shock and anxiety in rats with Howard Hunt. In 1951, while still in the Army, he was assigned to the Walter Reed Army Institute of Research, whose pioneering neuropsychiatric division under the beneficent leadership of David MacKenzie Rioch served as a forerunner of the National Institute of Mental Health (Conversation with Joseph V Brady, 2005).

At Walter Reed, Joe collaborated with psychologist Murray Sidman and anatomist Walle Nauta and others to produce a series of studies on the limbic system, endocrines, and behavioral stress. At the same time, with the appearance of the antipsychotic drugs, chlorpromazine and reserpine, Joe began his program in behavioral pharmacology. Congress had appropriated a large sum for psychopharmacological research, and a small *ad hoc* committee, including Lou Goodman, Seymour Kety,

Jonathan Cole, and Brady, reviewed several proposals. None were deemed worthy of support and—to avoid embarrassing the Surgeon General by returning the money—each committee member was invited to write a proper proposal (Conversation with Joseph V Brady, 2005). Brady had an academic appointment at the University of Maryland, which sponsored his own successful program project grant. This funding initiated the important drug self-administration research of students Charles Schuster and Travis Thompson, and later Nancy Ator and George Koob, and others.

Meanwhile, at Walter Reed, Joe benefited 'from a recruiting system you can't beat—the Korean War We drafted in all these guys and had a whole lab full of PhDs. Larry Stein was one of them, John Boren, George Heise, [Eliot Hearst, Bernard Beer], Dick Herrnstein' (Brady, 1998). This Army duty effectively served as a post-doctoral fellowship and, after discharge, many of Brady's recruits were sent off to jobs in academia or the pharmaceutical industry. Joe's position as the pivotal recruiting agent in industrial psychopharmacology started in the early 1950s after he had presented a seminar at Eli Lilly—research director KK Chen was impressed by the precision of Joe's behavioral methods and asked him to help Lilly set up an in-house laboratory. Karl Beyer at Merck had a similar request, and within a few years nearly all of the major drug firms had followed suit. Thanks largely to Brady, sophisticated behavioral screening methods, such as the 'conflict' procedure of Irving Geller (a Brady-trained PhD) for anti-anxiety agents, soon became the gold standard for psychotherapeutic drug discovery.

Brady was not an advocate of 'great man' theories, believing instead that scientific advances 'should be viewed as the product of an interaction between methodological developments and conceptual changes' (Conversation with Joseph V Brady, 2005). Joe always had a sharp eye for significant developments. Thus, after Olds and Milner had discovered in 1954 that rats would press a lever to obtain rewarding electrical stimulation of the septal area and other brain sites, Brady and his Walter Reed collaborators (Sidman, 1955) were the first to confirm this initially controversial finding, the first to show that positive brain stimulation could be used to impart conditioned reinforcement to originally neutral stimuli (Stein, 1956), and the first to demonstrate brain selfstimulation in cats as well as rats (Sidman, 1955). Significantly, the most reinforcing electrodes in Brady's cats were located in the dopamine-rich caudate nucleus. Although Joe himself never made the claim, this observation in 1955 gives him an early start in the competition for paternity of the Dopamine Reward Theory.

In 1970, Brady retired from the Army and established research centers both in Behavioral Biology and in Programmed Environments at Johns Hopkins. The outstanding contributions of both centers continue to this day. Joe was the recipient of many honors, but took greatest pride in his 2004 PB Dews Lifetime Achievement Award in Behavioral Pharmacology. He served on countless advisory panels and



review boards (including the very first NIMH study section on drug abuse, where he replaced Jerome Jaffe who had just assumed the position of White House drug czar). As noted, an unusually large number of researchers are the fortunate beneficiaries of Joe's advice and support. His own scientific hero, and the single exception to his rejection of the 'great man' hypothesis, was psychologist BF Skinner—the founder of the operant conditioning school. Of his first meeting with Skinner in 1951, Brady writes: 'That was the greatest moment of my life' (Brady, 1998). The two men were close throughout their careers, and Brady authored at least three of Skinner's obituaries. 'He and I were on the President's Science Advisory Commission during the Kennedy administration. We were convinced we could save the world but nobody cared, as usual.' (Brady, 1998).

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