

Harry Bradford (1938–2016)

Following a fall at home, Harry Bradford passed away after a long hospitalization on the David Marsden ward at King's College Hospital at Denmark Hill, located across Camberwell Road from the Maudsley Hospital where Harry worked towards his PhD degree.

I met Harry in 1962. I had just finished my neurological training, and came to London for research training in neurochemistry under Professor Henry McIlwain at the Institute of Psychiatry located at the Maudsley Hospital in Denmark Hill. I was told to spend some time with a young graduate student, Harry Bradford, who taught me how to stun a guinea pig and remove its brain and to fractionate the brain material into what are called subcellular fractions. Harry helped me a lot and we became friends. Not only did he teach me some neurochemical techniques, he introduced me to cockney rhyming slang, and when to use the phrase "Bob's your Uncle". He introduced me to historical scientists such as Charles Darwin and TH Huxley and to the seventeenth century archivist and Naval administrator Samuel Pepys.

After my training I returned to the States, but always kept in contact with Harry and his family, and we often visited one another, and kept in frequent email and telephone touch.

Harry received his PhD from University of London in 1964, followed by an MRC Postdoctoral fellowship to learn neurophysiological techniques in the same laboratory.

In October 1965, Harry joined the biochemistry department at Imperial College as Lecturer under the direction of Professor Sir Ernst Chain, Nobel Laureate for his work on the purification of penicillin. Harry rose to the rank of full Professor and finally Emeritus Professor status upon his retirement in 2003. He became internationally recognized in his chosen field, which was the mechanisms involved in neurotransmitter formation and release. Harry used pinched-off nerve endings called synaptosomes to study transmitters and how they relate to diseases such as epilepsy and Parkinson's disease. He was first interested in the amino acid glutamate, a major excitatory transmitter that is important in epilepsy. Another neurotransmitter, called dopamine, is critically reduced in Parkinson's disease. Harry not only studied normal brain tissue, but also studied animal models of Parkinson's disease and epilepsy and devised ways of turning cells that used one kind of transmitter into ones that used only dopamine. He

could put the new dopamine cells into 'Parkinsonian animals' and correct their condition.

If he had chosen, he could have become Head of Department, but he preferred to continue his research and trained many important scientists such as Jacqueline De Belleruche and John Hardy. In 2006 some of his students produced a Festschrift in Harry's honour. He has earned a number of honours including a Bronze Medal for contributions to neurochemistry from the University of Okinawa, Sandoz Medal Lectures at London University and the Silver Jubilee Lecture and Medal in Calcutta, India.

Harry was a great organizer of scientific meetings on behalf of Biochemical Society in the 1970s and 80s. He had a great interest in the history of science, and as the Society's Honorary Archivist (1988-1995), Harry developed a programme of 35 in-depth video-interviews with eminent biochemists. I observed one of these interviews in Vancouver and it was very professionally done. Among those interviewed were great scientists such as Fred Sanger, Max Perutz, Dorothy Hodgkin and Joseph Needham. As Features Editor and later as General Editor of *The Biochemist* (1989-1992) Harry also commissioned several historical articles for the magazine.

After formal retirement, Harry kept very actively involved in science. He has given invited lectures in US, Argentina, Japan, India, Singapore and Canada.

Harry had wide interests and a sense of adventure. He showed me many places in London and Kent, including the church where Samuel Pepys worshipped; Michael Faraday's laboratory at the Royal Institution; Eltham Palace; and Down House, Darwin's home, where we were once shooed away by a woman with a broom when we tried to peer in a window when the home was closed. We played Poohsticks on Poohsticks bridge, visited Churchill's home at Chartwell, antique shops in Brasted, went to plays and operas in London and Seattle and, in recent years, thrift shops in Palm Springs, where Harry would usually find a biography of a Hollywood star.

The Harry I knew was not only an extremely knowledgeable and productive scientist, but also a warm, warm friend. He is profoundly missed by his wife Mary-Therese, his children Sonya and Daniel and his five grandchildren. ■

By Phillip Swanson

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