ALLAN ELLIOTT ON HIS 80TH BIRTHDAY

Kenneth Allan Caldwell Elliott, Ph.D., D.Sc., F.R.S. (C). Emeritus Professor of Biochemistry at McGill University, celebrated his 80th birthday on August 24, 1983. This issue of Neurochemical Research is dedicated to him by his students, colleagues and friends whose papers follow, in recognition of this special occasion.

For those of us who have worked with him and treasured him as teacher, colleague, friend and counsellor, he is Allan Elliott, or usually just Allan. The records clearly establish that he is indeed 80, but we can scarcely credit that in our own experience, especially in talking with him today. Surely Allan Elliott has been blessed with good genes, because he looks and thinks and enjoys life like a far younger man.

Allan Elliott was born in 1903 in Kimberley, South Africa, the second son of Kenneth Caldwell Elliott, a broker, and Venetia Leppan Elliott, an accomplished gardener, both parents from long-established South African families. Allan’s childhood featured schooling at a “public” (boarding) school, St. Andrew’s College, at Grahamstown and vacations of riding and hunting on the farm where his mother was born. He attended Rhodes University College at Grahamstown, from which he graduated in 1923 with a B.Sc. in physics (first class) and chemistry, and continued for another year for an M.Sc. in organic chemistry (first class). Several jobs followed: first as a shift chemist in a pilot plant separating zinc from an extract of silicate ore at Broken Hill in Northern Rhodesia (now Kabwe, Zambia); and then as a junior chemist in a dynamite factory outside Johannesberg. Before leaving South Africa for Cambridge in 1926, Allan spent a few weeks back at Rhodes in research under J. L. B. Smith. The work was on the essential oil of the South African medicinal plant Agathosma microphylla and resulted in his first scientific publication (1).

At Cambridge, Allan became a research student, at Selwyn College, in the University Organic Chemistry Laboratory under W. H. Mills, F.R.S. Toward the end of his two-year stereochemistry project with Mills, he was attracted to the studies directed by Sir Frederick Gowland Hopkins at the Sir William Dunn Institute of Biochemistry. At Hoppy’s invitation he transferred in 1927 and worked there until 1933. His research included
studies on tissue respiration with Malcolm Dixon and on peroxidases with David Keilin (and briefly with Heinrich Wieland in Munich). He improved on Willstätter's preparation of horseradish peroxidase, then a procedure which began with Allan digging up the horseradish from Keilin's backyard and enduring the blinding fumes during his mincing of the roots. These and other studies led to a Ph.D. in 1930, with Hopkins and Mills as his examiners. During Allan's time at Cambridge, Hoppy's laboratories attracted many now familiar scientists: J. B. S. Haldane, Joseph Needham, Malcolm Dixon, David Keilin, J. H. Quastel, Albert Szent-Györgyi, Hans Krebs, C. A. Elvehjem, David Green and many more. It was a time that Allan enjoyed immensely. He was awarded a Beit Memorial Fellowship for Medical Research (1929–1933) and was elected a Fellow of Selwyn College.

With the offer of a research post in Philadelphia in the United States (and no prospects in South Africa), Allan Elliott moved on again, this time to America. As research biochemist in the Cancer Research Laboratory of the Graduate School of Medicine, University of Pennsylvania, he spent the next six years (1933–1939) studying the aerobic and anaerobic metabolism of a variety of substrates in normal and tumor tissues of the rat. Much of this work related to the citric acid cycle, just then conceptualized by Krebs and Johnson, and led to the first review of their work plus an account of his own, published in 1941 (2). He also published another review of biological oxidation-reduction catalysts that same year (3). There followed five years (1939–1944) in a modest biochemical laboratory at the Psychiatric Institute of the Pennsylvania Hospital, where he began to concentrate on the metabolism of slices and suspensions of brain tissue. In Philadelphia, Allan enjoyed the collaboration, among others, of Zelma Baker, Margaret Greig, Benjamin Libet, and his wife (since 1936) Frances Howland Elliott. And he developed friendships with Otto Meyerhoff, Stuart Mudd, William Stadie, Robert Chambers and many more. These were times of concern to one like Allan with a strong social conscience—the great Depression, the rise of Fascism and Naziism, racial and union unrests, and the advent of World War II. Being too old for military service, Allan volunteered for various civilian activities. Thus it was in the summer of 1944 while spending his vacation as a farm laborer in New York state that he received a telegram from Wilder Penfield and Herbert Jasper inviting him to go to Montreal to discuss research opportunities there.

The move to Montreal in late 1944 was his last major migration. Allan Elliott joined the Montreal Neurological Institute (MNI) with the title of “Neurochemist”, probably the first biochemist anywhere to be so designated; and continued his research there for the next 21 years. At first,