**Les Lazarus obituary**

**VALE PROFESSOR LESLIE “LES” LAZARUS: 1929-2022**

**MBBS MRACP FAACB FRACP FRCPA AO**

The Australian endocrine community is mourning the loss of one its pioneers. Professor Leslie Lazarus, affectionately known as “Les”, was a founding member of the ESA serving on council for a number of years including vice president between 1972-4 with award of honorary life membership in 1982. Graduating from the University of Sydney Medical School in 1953 he went onto postgraduate training at St Vincent’s Hospital, Sydney and awarded fellowship of the Royal Australasian College of Physicians in 1958. Under the mentorship of one of the UK’s eminent endocrinologists, Sir John Nabarro, he completed a 2-year fellowship at Middlesex Hospital Medical School in London. Returning to his home city in  1962 he became St Vincent’s first full-time endocrinologist and set up Australia’s first endocrine laboratory with ambition to develop state-of-the-art hormone assays. Starting with just 1 chair, a desk and 2 metres of lab space in the Biochemistry Department he saw opportunity when the new Garvan building opened across the road in 1963. There he took up residence along with close collaborator of many years, Margaret Stuart. He became the Garvan Institute’s first sole Director in 1969, a position he held for more than 20 years.

His scientific insight saw his application of monoclonal antibody techniques to develop new immunoassays for a range of hormones, including growth hormone, LH, insulin, secretin and gastrin. He also conducted studies of aldosterone metabolism in heart failure. He established an outstanding hormone assay state reference service. Initially, his predominant research interest was in pituitary hormones and disease. He worked with Kevin Bleasel, neurosurgeon, on the cryogenic hypophysectomy technique although this was later abandoned. During the 1960s there was a major expansion of the human pituitary collection programme and Les went onto represent ESA on the Human Pituitary Advisory Committee becoming its chairman in 1968. In 1970 the program was collecting 8000 glands per year resulting in treatment of 65 patients with GH and 109 with FSH for infertility with 45 pregnancies. The programme was stopped in 1985 after US reports of Creutzfeld-Jakob disease in patients treated with pituitary-derived GH.

In the 1970s Les established a leading diabetes research group, the first to discover the benefit of low-dose insulin infusion for treatment of diabetic ketoacidosis which rapidly became internationally accepted management and remains standard of care today. His team went onto complete the first version of an artificial pancreas, a system taking up half a room. At the time there was a very negative research environment in Sydney with the ratio of NHMRC funding awarded to Melbourne versus Sydney research groups being 7:1 and many promising Sydney graduates migrating south of the border. Les rallied business groups and the State government with a successful visit to the Garvan by Paul Keating which ultimately resulted in key appointments to the Garvan in the 1980s including Rob Sutherland (cancer), John Eisman (bone), Ken Ho (pituitary) who supplemented the very active research activities of the diabetes program (Don Chisholm, Ted Kraegen). He also recruited John Shine who drove the application of molecular biology within the Institute and eventually took over directorship of the Garvan in 1990 when Les transferred over to head Sydpath (St Vincent’s Hospital pathology). Les collaborated and mentored successfully for many years resulting in key publications involving the regulation and action of growth hormone, prolactin and insulin as well as contributing to the understanding of the hormonal control of breast and prostate cancer. During his later years at the Garvan, Les worked with Paul Compton on the application of artificial intelligence to the interpretation and reporting of laboratory tests.

Les was awarded an Order of Australia in 1988 in recognition of his outstanding service to Australian research and clinical leadership. His 3 children, 6 grandchildren and 4 great grandchildren can be very proud of his remarkable career.

Ann McCormack

Acknowledging contributions from Don Chisholm and Lesley Campbell.