## HONORARY GRADUATE

## Cyril Wyndham

Cyril Wyndham was born in Maraisburg in 1916 of a mining family. He received his high school education at Maritzburg College, where he was an athlete of some repute. One of his form masters, and a lasting role model, was Alan Paton.

Cyril Wyndham read for the degree of Bachelor of Medicine and Bachelor of Surgery at the University of the Witwatersrand, and graduated in 1940, being awarded the Bronze Medal of the Southern Transvaal Branch of the Medicial Association as the best graduand of the year, the Craib Prize in Medicine and the Harwood-Nash Prize in Surgery, a performance which secured him the post of houseman to Professor W H Craib. Under Professor Craib's influence, he intended embarking on a career in cardiology, but the Second World War intervened.

After war service in Italy, Dr Wyndham took up postgraduate work at the Royal Postgraduate Medical School, London, with Dr Paul Wood and Sir John McMichael. He was admitted as a Member of the Royal College of Physicians in 1946; twenty-seven years later he was to be elected a Fellow. While in London, Cyril Wyndham realized that his real niche was in research, rather than medical practice, and he sought the guidance of Sir Basil Schonland, who had recently set up the South African Council for Scientific and Industrial Research. Sir Basil Schonland arranged for him to go to Oxford, to the Climatic and Working Efficiency Unit headed by the legendary Sir Wilfred Le Gros Clark.

Cyril Wyndham returned to South Africa in 1950, when Sir Basil Schonland hoped that he would address the problem of heat illness in the gold mines. At first, the Chamber of Mines denied that there was such a problem, but enthusiastic lobbying by Dr A J Orenstein, at Rand Mines, helped Cyril Wyndham set up what was to become the famous Human Sciences Laboratory of the Chamber of Mines Research Organization. The research of this laboratory has been described as the most successful exercise in applied physiology the world has known: it has enabled a third of a million men to work safely underground every day. Cyril Wyndham became acknowledged to be the leading international expert in human thermal physiology, and he travelled widely to study the indigenous people of the Kalahari Desert (with a grant of £18 from the CSIR), the Sahara Desert, and the Australian Desert.

Cyril Wyndham's contribution to applied physiology was recognized by this University in 1968, when he was awarded the degree of Doctor of Science, which is conferred for published work constituting a distinguished contribution to the advancement of knowledge. It was recognized by the South African scientific establishment in many ways. In 1962 he received the Simon Biesheuvel Medal of the South African Association for Advancement of Science, in 1968 the Gold Medal of the South African Institute of Mining and Metallurgy, and in 1972 the Silver Medal of the South African Mine Medical Officers' Association. He was elected a Fellow of the Royal Society of South Africa. He was appointed Chairman of the CSIR's Medical-physiological Committee for Research in Antarctica and Chairman of the CSIR's Human Adaptability Section of the International Biological Programme. In 1977 he was appointed to the Prime Minister's Scientific Advisory Committee and he serves on the Medical Research Council.

His contribution has also received international acclaim. He was appointed Adviser in Heat Physiology to the International Human Adaptability Section of the International Biological Programme in the years 1963 to 1974, and a member of the Expert Advisory Committee on Cardiovascular Diseases of the World Health Organization in the years 1974 to 1978. He was a foundation member of the Thermal Physiology Commission of the International Union of Physiological Sciences. In 1973 he was the W B Yant Memorial Lecturer of the American Industrial Hygiene Association and he has delivered invited lectures of the highest standing in all five continents.

By 1975 Cyril Wyndham had published over 250 papers in applied physiology, and contributed to twelve books. He left research for three years, to become the first Assistant Research Adviser of the Chamber of Mines Research Organization with responsibility for medical research. However, his research talents and inclinations were not to be suppressed, and at the age of 60 he took up a new research career, when he joined the Institute for Biostatistics of the South African Medical Research Council.

For many years Cyril Wyndham had been interested in using statistical procedures in the evaluation of health and of manpower. Indeed, more than twenty years ago he was one of the first to point out the likely consequences for the South African economy of the failure to train Black South Africans to assume skilled technical, administrative and managerial posts. In the political climate of the time, his scientific analysis was considered heretical, but his conclusions had been vindicated entirely.

Cyril Wyndham's work at the Institute for Biostatistics differs from the physiological research on which he built his reputation. His main research area over the past eight years has been the examination of mortality patterns in South African populations. This work has enormous implications for the planning of health services in South Africa, fulfilling the same role in local context that the Lalonde Report did for Canada, and the Surgeon-General's 'Healthy People' did for the United States. It is of fundamental medical importance, particularly in the demonstration of the high mortality rates for cardiovascular disease amongst South African Whites. In his new field, Cyril Wyndham has published another fifteen papers.

In 1962 and 1963 Cyril Wyndham served on secondment as Professor of Physiology at the University of the Witwatersrand. He was appointed Honorary Professor of Applied And Environmental Physiology in the Department of Physiology in 1971 and has held that post since. He has never held a full-time teaching appointment, but his contribution to tertiary education has been inestimable. He set up in his laboratory an environment in which young graduates could find their feet as researchers, and provided them with every encouragement. How successful he has been in launching academic careers is evident in the list of professors in South Africa and overseas who began their careers with him: Hugh Paterson (Zoology) and Duncan Mitchell (Physiology) at this university, J S Maritz (La Trobe, Australia), J Snellen (St Johns, Canada), H-G Wenzel (Dortmund, West Germany), W P Leary (Natal), the late N B Strydom (Potchefstroom), K Mauer (Unisa), H Loots (Pretoria) and J Booyens (Medunsa).

For his distinguished contribution to South African medical research in two fields, and for his contribution to training South African academics Professor Cyril Wyndham richtly deserves an honorary degree from his Alma Mater, which takes pride in the outstanding career and work of its illustrious son.