

## *George Venn Quicke (1924–2011)*

PROFESSOR George Venn Quicke, well known as the founding Professor of Biochemistry at the University of Natal, Pietermaritzburg, was born on 28 February 1924 in Eshowe, Zululand, where his parents ran a tearoom/barber

shop. He was named after his mother's brother, George Venn, who had died of malaria in Rhodesia at the age of 21. His grandfather Venn and his father instilled in him the importance of being honest and honourable in his

dealings with others, a value which he lived up to throughout his life.

He attended the Eshowe Government Intermediate School, commencing Class 1 in 1930 and matriculating in 1940. In Standard 6 he had an inspiring English and class teacher, Miss Joyce Cheesman. Throughout his life Quicke was very articulate and an excellent speaker and writer: perhaps this can be partly ascribed to the influence of Miss Cheesman. In Eshowe he was introduced to two further activities, the Church and Scouting, which were to have a great influence on his life.

In 1941 he was a first year student at Natal University College, Pietermaritzburg, where he was awarded the Class Medal for Zoology I. In 1942 he proceeded to the University of Pretoria as a second year student in the Faculty of Agriculture. He graduated *cum laude* with Biochemistry as major subject in 1944, was awarded the George Farrar Scholarship for postgraduate study and completed a Master's degree in 1946.

As a student he was well accepted by his peers and, although the only English-speaking student in his residence, Voortrekker Tehuis, he was elected as chairman of the House Committee for 1945. He also served as chairman of the Students' Central Socials Committee and, in 1947, was a member of the Students' Representative Council. Throughout his years at the university he played 1st XI hockey.

In August 1945, while still a postgraduate student, he was appointed as a Temporary Assistant Professional Officer (Lecturer in Biochemistry) in the Faculty of Agriculture. The following year he was appointed to the permanent staff and served as lecturer in Biochemistry until December 1947,



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when he resigned the lectureship to take up a Department of Agriculture overseas study bursary. This took him to the University of Wisconsin, Madison, Wisconsin, USA, where he worked as a doctoral candidate under Professor Paul Phillips, graduating in June 1950. In Wisconsin he was president of the International Club for 1949/50 and also served on the Wisconsin Student Union Directorate.

On his return to South Africa he was appointed Lecturer in Biochemistry in what was then the Department of Agricultural Chemistry and Biochemistry in the Faculty of Agriculture, University of Natal, Pietermaritzburg. In this capacity, and later as Senior Lecturer, he was responsible for building up the sub-department of Biochemistry to the point, in 1955, at which it attained the status of an independent department. In 1958 he was appointed Professor and Head of Department and served in this capacity until his retirement on 31 December 1984 when he was awarded the title of emeritus professor. In recognition of his services to the

department a student laboratory was named after him.

On 25 April 1952 he married Madeleine Blanc, five children (three boys and two girls), being born of this marriage. They were married for just over 22 years when, on 15 July 1974, Madeleine died of leukaemia. George subsequently married Margaret Anne Reid Cox, née Fleming, a widow with four daughters, on 28 September 1975.

As an academic he was supervisor or co-supervisor of 43 masters and 12 doctoral candidates. He was a member of the Boards of the Faculty of Agriculture and the Faculty of Science, twice serving as Dean of the Agriculture Faculty (1962-64; 1973-75). As a member of the University Senate from 1955 to 1984, he was for many years senate representative on the University Research Committee. He was also the council-nominated representative on the boards of control of the Institute of Parasitology, Durban, (eight years, 1969-76) and the Wattle Research Institute, Pietermaritzburg (11 years, 1972-82).

He authored or co-authored 58 papers in scientific journals and, at different times, served on the editorial boards of the *South African Journal of Agricultural Science* and the *South African Journal of Nutrition*. He was a founder member of both the South African Biochemical Society and the South African Society for Natural Scientists and served as a member of the National Committee for International Relations in Biochemistry. A past-president of the South African Biochemical Society, he was later awarded honorary life membership of both that society and the Nutrition Society of South Africa. On several occasions he served as

adviser to the Division of Biological Chemistry and to the Division of Food Chemistry of the CSIR. From 1973 to 1976 he served as the universities' representative for Agricultural Sciences on the Scientific Advisory Council of the Prime Minister.

### **Research**

The focus of Quicke's research was nutritional Biochemistry, starting with his studies on poultry nutrition for his master's degree and on ruminant nutrition for his PhD and a subsequent sabbatical with O.G. Bentley at Wooster, Ohio. He retained an interest in ruminant nutrition, but gradually, together with his first Ph.D. student, Hector De Muelenaere, changed his focus to human nutrition, especially to alleviating malnutrition in the poorer sections of South African society.

Dr Noel Mann, senior paediatric consultant at the university's medical school, had realised that the primary human nutritional problem in South Africa concerned the adequate nutrition of poor mothers and their neonates. In humans, brain development occurs rapidly in the first few years after birth and malnutrition at this stage of life can irreversibly compromise brain development, with life-long consequences.

Mann approached Phillip Hind of the food company, Hind Bros. (Pty) Ltd, to see if they could produce a low-cost, nutritionally balanced food. Hind got their chief chemist, Dr Ernst Waldberger, to start research on the project. It would appear that Waldberger turned to Quicke and thus a research collaboration was established between the Biochemistry Department and Hind Bros., aimed at the formulation of an inexpensive, but nutritionally balanced food, which

could be distributed inexpensively to poor people through agencies such as Kupugani.

It was soon realised that what poor people lack is protein, both in quantity and quality. One outcome was a focus on legume seeds (beans) as these have the highest protein content of any plant-derived food but, in their raw state, also contain a number of toxins. Another outcome was a focus on methods of analysing the amino acid composition of food proteins as its amino acid balance determines the nutritional value (quality) of a protein. To this end the department acquired an automatic amino acid analyser.

The amino acid lysine is the limiting amino acid in plant-derived foodstuffs, so research was further focused on this amino acid. This led to a collaboration with Dr H.O. Gevers, who was involved in breeding a high-lysine variety of maize.

It is interesting to note that the aim of a low-cost, balanced food for poor people was not realised through Kupugani, as poor people did not buy the product. Instead researchers from the department, Dr W.A. (Binkie) Lourens and, later, Dr Hector De Muelenaere, left to join Hind Bros., where the product was commercialised as “ProNutro”. Unfortunately, the entire top management of Hind Bros., including Philip Hind and Dr Lourens, were killed in a crash of their corporate aircraft, and the company was subsequently taken over by the Food Corporation.<sup>1</sup>

This whole episode served to illustrate that the nutrition of poor people has as much to do with economics and politics as it does with scientific knowledge.

In fact, Quicke’s whole scientific

career was to some extent blighted by the baleful influence of politics and the fact that he worked during the apartheid era. This was a time when South African scientists were not welcome abroad and foreign scientists were loath to come to South Africa or to interact with South African scientists. Quicke himself was thwarted in his efforts to attend conferences abroad – on one occasion his visa being issued only after the conference had come and gone. As a result, the department became somewhat inward-looking and parochial, with few interactions with the wider world.

Nevertheless, it is to the great credit of scholars such as Quicke that they maintained a high quality in their students so that graduates of the department, and indeed of the university as a whole, could go abroad and hold their own with the world’s best.

Quicke supervised my own Ph.D. studies and my impression of him was of a somewhat stern disciplinarian, of absolute integrity, and with an enviable command of the English language in both its written and spoken forms. His expression was at once rigorously logical, yet elegant and economical and, in consequence, forceful also. This made him an excellent lecturer.

In those times, theses were written by hand and I remember my dismay at receiving the drafts back, covered with red ink. Yet, with each iteration, the red ink grew less and less until ultimately “my” thesis was something I could be proud of. Without realising it, I was learning “how to write”, and that clarity of thought comes before clarity of expression, a knowledge that has been invaluable in my subsequent life. For this I, and his other graduate

students, owe Quicke a great debt of gratitude.

### **Christian faith**

It is not for nothing that a Ph.D. is called a Doctorate in Philosophy, regardless of the specific discipline. This is a time in a student's life when, having mastered the body of knowledge constituting the discipline, they start to think for themselves, perhaps for the first time, and set out to make their own contribution to that body of knowledge, while developing their own philosophy of existence. In science this involves perpetual questioning, designing of experiments to answer the questions and interpretation of the data. One must be wary of prejudice and allow the data to "speak for itself", regardless of what any prior "authority" may say about the matter.

Consequently in any postgraduate school a particular ethos prevails – one of endless questioning and debate. However, as we postgraduate students soon learned, Quicke had another influence on his philosophy, that of his deeply-held Christian faith. This operated on different principles, which did not permit of questioning beyond a certain limit. We learned that Faith just *is* and draws strength from flying in the face of logic or evidence. Like Quicke, some students could, at once, hold contradictory philosophies in their minds, but not all could do this, leading to some tensions in their relationship with him.

George Quicke's Christian faith had its origins in Eshowe, where he was brought up. He was baptised in the Eshowe Methodist Church on 12 May 1924 and attended Sunday School from the age of three until, at the age of 16, he became one of the teachers. He was confirmed on 1 December 1940.

During his student years he retained his membership of the Eshowe Methodist church.

While overseas he became estranged from the Church, but in August 1962 he and his wife Madeleine recommitted their lives to Jesus Christ at the first African Enterprise Mission to Pietermaritzburg. They joined the Presbyterian Church of Pietermaritzburg and on 2 May 1965 George was inducted to the eldership.

In June 1965, as two of the 66 founder members, George and Madeleine were transferred to the roll of the newly constituted Scottsville Preaching Station which became an Extension Charge towards the end of 1967. George, with seven other elders, was inducted to the newly constituted Session on 17 December 1967. The congregation was granted full status in February 1972 and George continued to serve on the Session (as Clerk from 1977 to 1985) until he retired from active eldership. He was for several years Presbytery Elder in the Presbytery of Natal and later in the Presbytery of the Drakensberg. He was Presbyterial representative at both the Bulawayo and Bedfordview Assemblies.

As an active member, closely involved in all phases of the development of the Scottsville Presbyterian Church, he served on the Board of Management, initially of the Extension Charge and later of the congregation after it acquired full status. He was admitted to the Order of Lay Preachers on 22 November 1970. For several years he was a training instructor for the Bethel Series and in 1986 joined Margaret in leading the Quicke Home Group.

George was active in the Sunday School, serving as Bible Class teacher

from 1962 to 1972 and Superintendent/teacher from 1985 to 1988. Drawn into the Pietermaritzburg Branch of the South African National Sunday School Association (Sanssa), he became a teacher trainer and served as branch chairman for 10 years. During this time he was a member of the Natal/KZN Regional Committee and on several occasions a representative of the latter on the Sanssa National Committee. In acknowledgement of his services to the Scottsville Presbyterian Sunday School and the wider Sunday School community he was awarded the Sanssa Arnold Matthews Memorial Award.

**Other Christian activities:**

1964: Chairman, Organising Committee of the African Enterprise Mission to the Pietermaritzburg campus of the University of Natal.

1965-73: Honorary President of the Students' Christian Association, Pietermaritzburg.

1972-84: Member of Council of the Bible Memory Association, South Africa.

1985-89: Member, and later chairman of the Advisory Committee for the Student YMCA on the Pietermaritzburg campus, University of Natal.

**Scouting**

George joined the Eshowe Cub Pack in 1932 and the Scout Troop in 1935. In 1936 he was one of only three scouts from Zululand to attend the first South African Scout Jamboree in East London. He went on to become a King's Scout and troop leader. When, for lack of a scoutmaster, the troop collapsed in 1940, he and his friend Donald Livingstone continued as Lone Scouts. In his matric year he resuscitated the cub pack, which had been dormant for

several years and was given the rank of cub instructor.

In 1941, on entering men's residence on the PMB campus of the Natal University College, the warden, Professor A.F. Hattersley, who was also Lone Scout Commissioner, persuaded him to join the 3rd Maritzburg (Scoutholm) troop where, for one year, he served as troop leader. His involvement with scouting was renewed when, several years later, his three sons became members of the 3rd Maritzburg (Scoutholm) group. George served as a member of the Group Committee from 1963-73 (secretary from 1963-1969) and again from 1980-1985, as Treasurer. On Baden Powell Sunday, 4 January 1988, he was awarded the Scout Bronze Medal for his services to Scouting.

George Quicke's death on 13 January 2011 brought to a close significant chapters in the histories of Biochemistry, the Church and Scouting in Pietermaritzburg, though his legacy in all of these fields will live for many years to come. In the words of one of his past students, "George Quicke made many contributions and impacted society significantly, not only through his own work but through the work of the many students, colleagues and associates whom he helped and nurtured over the course of many decades. He was a good and decent man and shall be remembered by all who had the honour and privilege of knowing him".

CLIVE DENNISON

- 1 Hind Brothers became Food Corporation, then Cerebos Food Corporation and was finally incorporated into National Brands/Anglovaal Industries.