

**Inaugural Lecture**  
**12 May 2010**  
**Professor Chris Whiteley**

Deputy Vice-Chancellors, Deans, Heads of Department, colleagues, students, members of the Whiteley family, ladies and gentlemen.

Welcome to this Inaugural Lecture, which at Rhodes is associated with the University conferring the status of full professor on an academic.

It is also a public celebration of the intellectual and scholarly achievements of an academic by peers, students, family and friends and the wider public.

This evening's inaugural lecture by Professor Christopher Whiteley of the Department Biochemistry, Microbiology and Biotechnology, will be no exception.

Christopher George Whiteley was born in Manchester in the United Kingdom, where his father was a bus driver. In 1953 his family

immigrated to Zimbabwe, then called Southern Rhodesia. His father took up a position as a manager of a country hotel in Karoi, 130 miles north west of Harare, known at the time as Salisbury.

Newspaper cuttings from the *Manchester Guardian* from those days read: "Family of five to brave Darkest Africa" and "Mother of three to track David Livingstone into Southern Rhodesia".

Embarking on a journey to a country town that was completely other to the city world that they had been accustomed to, Chris and his family were indeed in for a massive culture shock as hinted at by these rather sensationalist newspaper headlines – albeit on a less dramatic scale.

Newly uprooted from Manchester city, Chris began attending Karoi Junior School which was a single-roomed Church Hall. There he was taught to read and write Arithmetic, English, Biology, Geography

and Art by a single person, a never-to-be-forgotten Mrs Mac McDonald.

Prince Edward High School in Salisbury where Chris completed his 'A' levels in Chemistry, Physics and Biology in 1965, became the next educational stopover.

'A' levels were followed in quick succession by a Bachelor of Science, Honours, Master's and finally a Doctoral degree in Bio-Organic Chemistry, all of which he had completed at the then University of Natal, Pietermaritzburg, by 1976. From 1975 to 1976 he also worked as a junior lecturer at the same University of Natal.

Chris was to prove as capable on the sports field as he was in the academic environment and he played first-team rugby at high school and university. Around the age of 30 he discovered the enjoyment of long distance road running, obtaining his Eastern Province colours for the Marathon and

finishing third in the South African National Marathon championships. At one stage he held all four Eastern Province road-running records for 10km, 15km, the half-marathon and the marathon. He has also won the Annual Settlers Marathon between Grahamstown and Port Alfred on a couple of occasions and finished the grueling 92.5km Comrades Marathon in 23<sup>rd</sup> place in a time of 6 hours 16 minutes.

Nowadays he confesses that the 'elixir' of youth is no longer there and his hip goes out more than he does. Nevertheless, the sporting successes of his youth have more than proven that sheer grit and determination are a part of Chris's character.

After his time in Pietermaritzburg, a stint of post-doctoral work at the Kananaskis Environmental Research Station in the Rocky Mountains outside Calgary, Alberta, in Canada was a dream come true for Chris. The researchers were stationed in the mountains and lived in a log cabin at the

research centre. During winter it was quite normal to put on skis and 'ski' down to the laboratory about 300 yards away, to go to work as it were. Unfortunately for him, there were often days when the team would be snowed in and couldn't leave the centre until snow ploughs came to their rescue.

Since Alberta had many sulphur gas wells and tar sands, and timber was one of Canada's leading exports, he worked on the enzymology of sulphur containing enzymes extracted from the Douglas Fir – which was thus very much an environmentally associated project. Here Chris was promoted from Research Associate to Project Leader during his three years on the project. Little did he realise that 20 years later he would again get involved in sulphur research at Rhodes which would involve collaborative Biotechnology work with Professor Peter Rose.

Chris came to Rhodes in 1979 as a Lecturer in Organic Chemistry under the watchful eye of the late Professors John Nunn and Doug Rivett, and immediately became involved in teaching Biological Chemistry to Chemistry 2 and 3 students. What started out as 42 lectures per year became the embryo of a fully fledged Biochemistry Department – such was the popularity of the courses that the 1982 crop of 15 Biochemistry 2 students “demanded” they be allowed to complete their degree in Biochemistry.

Biochemistry 3 was thus offered for the first time in 1983 with only Chris and John Duncan to drive it, with Biochemistry Honours following the year after. John was later to become the first Professor of Biochemistry at Rhodes. Chris was promoted to Senior Lecturer of Organic Chemistry in 1983 and an Associate Professor of Biochemistry in 1988.

The 1984 Honours students approached the South African industry for funding, to launch the annual

Whiteley/Duncan prizes for promising (Rhodes) Biochemistry students. Today the Department encompasses Biochemistry, Microbiology & Biotechnology.

Chris was appointed Head of Department for the period 2001 to 2004 and has since been made a Professor of Biochemistry.

He has trained six PhD students and 18 Masters students during his 32 years at Rhodes. He has been a visiting professor and research scientist at Yang Ming University and the National Taiwan University, Taipei, as well as a visiting professor of Organic Synthesis and Enzymology at the University of British Columbia, Vancouver, Canada and Oregon State University, Corvallis, Oregon, United States of America.

Chris spent 11 enjoyable years as a Hall Warden of Drostdy from 1988 to 1999 while at the same time serving as the Chairman of the University Sports

Council. During this time he remained active on the road running scene and became a familiar sight to students and Grahamstown residents as he pounded the tarmac with his faithful Canadian-imported Alaskan Malamute or Husky called n'Duma.

Noel Coward wrote that "Only mad dogs and Englishmen go out in the midday sun". It seems that Chris quite agreed, particularly with regard to his training for Comrades. While training for the marathon it was customary to go on a few 60km training runs about six weeks before the event. This usually happened on a Saturday morning – except for this one weekend when he and his running partner had planned to go away. They decided to go for the long run on Friday morning.

Not wanting to be "seen" running around Grahamstown during a working day – they decided to leave at 3am. A 60km training run would take about five hours so they would be well home by



the start of work. As we know, it is still pitch dark at this time of the morning in May – so they ran a 15km route around the streets of Grahamstown in a clockwise direction, followed by the same route again, this time in an anti-clockwise direction. By this time it was getting light so they headed out to Stones Hill, then back to town and out to Table Farm on the Cradock Road.

Chris married Sue Crowe, who is a chief professional nurse, in 1992. Together they have four children from their first marriages, all of whom are qualified in various degrees and living throughout the world. This, of course, makes it all rather difficult to regularly see all of them and the grandchildren.

In the professional arena Chris is a member of several societies and institutes in his area of expertise. These include: The South African Chemical Institute, the Royal Chemical Society of London, the International Society of

Neurochemists and the International Brain Research Organisation. He is currently an executive member of the Environmental Biotechnology committee of the International Water Association and has served as an executive member of the South African Society of Biochemistry and Molecular Biology. In addition he has consulted for various members of the industrial sector, including Anglo Platinum, a number of chemical companies, the Chicory Board (SA) and MINTEK South Africa.

In his research capacity, Chris serves on the review boards for 20 international peer-reviewed journals and on the editorial board for three of them, including the *Journal of Medicinal Chemistry & Enzyme Inhibition* and *Biotechnology Letters*. He was also the chief English editor for the Journal of the Chinese Institute of Chemical Engineers for three years. He has 80 publications to his name and has presented research papers at 34 international conferences. He has also given

several invited lectures presented in Taiwan, China, South Korea and the United Kingdom.

Over the years his research has encompassed Nanotechnology, Chicory, Environmental Enzymology & Biotechnology, protein structure and disease, and Medicinal Biochemistry & Enzymology of Neurological Disorders. Also holding a National Research Foundation/China research programme grant, he has research students at School Bioscience & Bioengineering, South China University Technology, Guangzhou, China where he was made a Professor of Enzymology. He recently became the Project Leader for a multimillion rand research project with Stellenbosch University and PlantBio Initiative and is the Strategic Manager of the Metagenomics Platform at the University of the Free State/BioPad.

It is my pleasure to introduce Professor Chris Whiteley whose lecture tonight is entitled "Trojan Horses, Queens Messengers and Iron Maidens: Biochemical Weaponry".