

Charles F M Saint – South Africa’s original surgical pioneer

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Charles F M Saint, a 33-year-old graduate from the University of Durham, Newcastle upon Tyne, was appointed to establish the first department of surgery in South Africa (SA) at the University of Cape Town (UCT) in 1920. A mentee of the celebrated British surgeon, Prof. James Rutherford Morison, Saint’s distinguished surgical pedigree and exceptional academic and clinical achievements underpinned his astute leadership and legendary ability to inspire, essential qualities necessary for the founding professor of SA surgery. Saint’s imprimatur gave primacy to teaching and a priority to skilled, rigorous and fundamental undergraduate instruction, expounding the Morison-Saint philosophy, which made the department the seedbed of SA surgery. He was the first to introduce basic research programmes in clinical departments. During his tenure, Saint received wide international recognition and honours and when he retired in 1946, he had taught more than 1 300 students, trained 7 professors of surgery and over 40 specialist surgeons, instilling his distinctive brand of disciplined, caring surgery. In his 26 years at UCT and Groote Schuur Hospital, Saint laid the foundations and built a department of surgery with a global reach and an enduring legacy at the southern tip of Africa.

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Medical education in South Africa (SA) has a strong history of clinical training.^[1] An important milestone in this development was the establishment of a full medical faculty in Cape Town in 1920 with the arrival of three clinical professors, A W Falconer from Aberdeen (medicine), E C Crichton from Dublin (obstetrics and gynaecology) and C F M Saint (surgery) from Newcastle upon Tyne (Fig. 1).^[2] The first such faculty, which had only preclinical studies, had been started in 1912 at the University of Cape Town (UCT),^[2] and until 1920 students had to travel to the UK or Europe to complete their clinical years to graduate.

UCT’s 6-year MB ChB curriculum was modelled on the 5-year Edinburgh system and devoted the 1st year to premedical sciences, the 2nd and 3rd years to preclinical sciences, and the 4th - 6th years to clinical studies.^[3] The clinical teaching facilities for the newly established faculty were, however, not fit for purpose. Clinical training took place at Somerset Hospital, which had no facilities for teaching, necessitating the use of a ramshackle building on the Gardens campus as a lecture theatre.^[3] This was the unsatisfactory situation that welcomed the first professor of surgery upon arrival at the UCT’s Hiddingh Hall campus in the Gardens on 1 March 1920.

Born on 14 August 1886 in Bedlington, Northumberland, England, Charles F M Saint was educated at King Edward VI Grammar School, Morpeth, and the University of Durham, Newcastle upon Tyne.^[2] His academic record as a student was outstanding. When he graduated MBBS in 1908, he had to his credit 15 of 18 available prizes, all seven scholarships and honours in all the professional examinations, and received the degree with first-class honours. He had also won two medals for association football, with college colours.^[2] No wonder his teacher and mentor, James Rutherford Morison, referred to him as ‘one of the most, if not *the* most, distinguished student that has ever been in Newcastle’.^[4]

After graduation, Saint worked closely with Morison, first as a house surgeon and later as a surgical registrar and private assistant. During their personal collaboration, he spent much of his time preparing Morison’s later work for publication, in particular the well-known book, *An Introduction to Surgery*.^[2] Morison (1853 - 1939),

professor of surgery at Durham University and senior surgeon at the Royal Infirmary, Newcastle upon Tyne, is remembered as one of the great surgeons of his day and an outstanding teacher.^[2] Morison had served as dresser and clerk to Lister in Edinburgh; an ardent exponent of basic principles, his textbook, *An Introduction to Surgery*, became the basis of surgical teaching throughout the British Empire.^[2]

Saint completed his postgraduate surgical training remarkably quickly, obtaining the MD and MS with first-class honours in 1912, and the following year became a Fellow of the Royal College of Surgeons of England.^[5] Soon after the outbreak of World War I, he joined the Royal Army Medical Corps as a surgical specialist and was drafted to France, where he distinguished himself as a surgeon in charge of various forward surgical units.^[2] For his military work he was awarded the CBE and was decorated by the French Government with the *Medaille d’Honneur* in gold.^[5] After demobilisation in 1919, he returned with the rank of major and resumed his pre-war appointments.^[2]

Saint arrived in Cape Town at the age of 33 years with the monumental responsibility of establishing the first department of surgery in SA.^[5] In sponsoring this appointment, Rutherford Morison wrote: ‘I am satisfied that if the Cape Town University authorities secure his services, surgery in South Africa will soon occupy a first position’ – and how prescient he was.^[4] The Department of Surgery that Saint initially occupied, was rudimentary and consisted of two converted bedrooms and a small cupboard, the ownership of which was contested.^[6] The rapidly growing number of medical students accelerated the need for expansion, and in late 1920 UCT leased the northern end of the Groote Schuur site to the Province for 99 years at the princely sum of £1 per annum for the development of a medical school and hospital. Saint persevered – in 1927 the Department of Surgery moved to the new Medical School in Observatory, and in 1938 Groote Schuur Hospital opened its wards to the first patients (Fig. 2).^[2,3]

Charles Saint was a superb clinician and an outstanding surgeon.^[7] His operative workload was extraordinary – his lists ‘included removal of a knee cartilage, bone-plating, fixation of



Fig. 1. From left to right: Professors E C Crichton, A W Falconer and C F M Saint.^[2]



Fig. 2. Grootte Schuur Hospital, Cape Town, 1938.^[2]

a tuberculous spine and repair of cleft lip and palate, as well as the ordinary gastro-enterostomies, radical mastectomies, cholecystectomies and thyroidectomies.^[2] The welfare of his patients was always his first concern, for, said he, 'other peoples' lives are a serious responsibility, one's own frequently not. Do not get this mixed up.'^[4] His leadership and ability to inspire were legendary, and it was said that wherever he was – at the operating table, in the lecture hall, on a ward round or having a cup of tea – the air was alive with purpose and lightened with flashes of humour.^[4] He was revered by his students, who fondly referred to him as 'Charlie' (Fig. 3).^[8]

Saint rigorously followed Rutherford Morison's holistic approach in his teaching.^[9] The principles of surgery formed the basis of his approach to the practice and teaching of surgery, which were carefully elucidated in systematic lectures, and then their application was studied through clinical surgery and surgical pathology.^[9] His

lectures were thorough and didactic, while his clinical teaching put great emphasis on drawing logical conclusions from the two fundamentals, i.e. an accurate history and a thorough physical examination.^[9] Moreover, the rigorous procedures and standards Saint taught were pertinent, whatever field students chose; in that sense his classes were a very good introduction to medicine in general. Saint threw his all into teaching and practice.^[9]

'Teaching is essentially ego-centrifugal', he explained.^[10] 'The teacher must be generous, and ... give away what he knows ... It can be an exhausting process.' Teaching and practice reinforced one another, and he believed that together they were what the new Medical School (and his own career) required most in the 1920s.^[9] As he once made clear, '[T]o turn out efficient medical practitioners, ... it was ... necessary to give priority to teaching, as opposed to research.'^[9] The skilled teaching within the framework of a basic, rigorous approach



Fig. 3. Prof. C F M Saint.^[2]

expounding the Morison-Saint philosophy made the department the seedbed of SA surgery for over 30 years.^[9]

Saint had great powers of observation and developed a collection of aphorisms, which were printed and presented to the house surgeons.^[8] His ideas and thoughts on life, medicine and surgery were crystallised in these aphoristic expressions, characterised by simplicity, clarity, brevity and pithiness.^[10] Each aphorism was a gem with a purpose and contained pearls of wisdom for the benefit of students and house staff.^[8] Some of his favourite and most notable aphorisms included: 'The brain is like a muscle, it atrophies with disuse', 'Blinkers are not limited to horses', 'None so deaf as those who will not listen', 'The greater the emergency, the greater the calm required', 'Persuasion is always better than coercion', 'A fact is only half the truth, the rest is correct interpretation' and 'Early to bed, early to rise, work like hell and organise'.^[10]

Saint's triad (diverticulosis, gallstones and hiatus hernia) persists in the international surgical lexicon. His injunction that 'common things occur commonly' remains a cornerstone of clinical teaching, and memorable admonitions, such as a 'canary with spurs', when students suggested rare diagnoses first instead of more obvious and commonly occurring diseases, live on to this day on teaching ward rounds.

Although he gave top priority to teaching, research was not overlooked, and he was, in fact, the first to introduce basic research into the programmes of the clinical departments.^[4] While his own contributions to research were limited (curiously, he conducted a study on the removal of the pineal gland in ostriches), he laid the foundations for what today would be called a surgeon-scientist. The J S Marais Memorial Research Fund, established in 1935, offered a postgraduate scholarship for

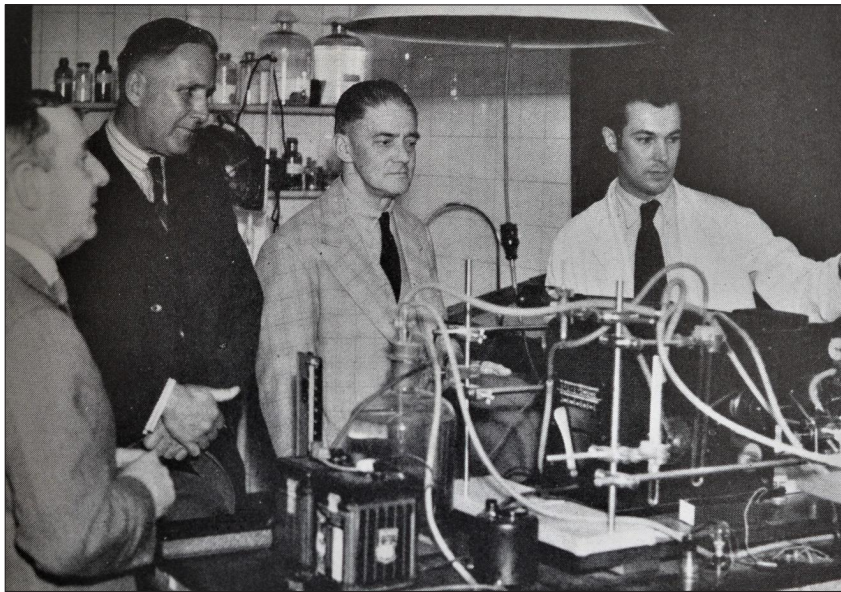


Fig. 4. From left to right: Prof. C F M Saint, Prof. A W Falconer, Lord Nuffield and Dr Robert Goetz, demonstrating the 6-channel photographic plethysmograph in the surgical research laboratory, 1940.^[2]

surgical research and Saint recruited Dr Robert Goetz, a German émigré working in Edinburgh (Fig. 4). Goetz, an acknowledged authority on peripheral vascular disease, established the surgical research programme that was to launch the career of another great surgeon-scientist in Christiaan Barnard.^[2]

Saint received international recognition and among the many honours conferred upon him were honorary fellowships of the Royal Australasian College of Surgeons, the Greek Surgical Society, the Royal Society of Medicine and the College of Surgeons of South Africa.^[4] In 1968, the Colleges of Medicine of South Africa awarded Saint an honorary fellowship. The citation read, 'He was a great man as well as a great surgeon; he handed on the spirit as well as the letter of his creed and became one of the great disseminators of surgical thought and makers of surgeons'.^[5] The citation epitomised the essence of the person he was – an outstanding scholar, a gifted teacher, a superb clinician and surgeon and a shrewd judge of the complex situation.

When Prof. Saint retired in 1946, he had taught more than 1 300 students.^[4] In his 26 years at UCT, he trained 7 SA professors of surgery and over 40 specialist surgeons, instilling his distinctive brand of disciplined, caring surgery.^[9] An outstanding role-model, he moulded and inspired surgical thinking for a quarter of a century, which spread far beyond Cape Town.^[5] At his retirement dinner, as a tangible gesture of appreciation, 700 doctors who had benefited from his teaching together donated a cheque for

£2 600, which was presented to Saint by Dr Louis Mirvish, one of the first two UCT MB ChB graduates in 1922. To this amount Saint himself added a further £2 400 to establish the Charles F M Saint Presentation Fund as a nucleus for a postgraduate institute in surgical research. In 1976, Prof. Jannie Louw initiated the use of this fund to establish the Charles F M Saint Chair of Paediatric Surgery at Red Cross War Memorial Children's Hospital, with Prof. Sidney Cywes the founding incumbent. Although Saint moved to the Channel Islands in 1960, he remained a great friend of SA and continued to take a keen interest in the Medical School and to offer wise counsel to many of his alumni.^[4]

As he grew older, more and more of Saint the philosopher and classical scholar became evident. His valedictory address entitled 'Looking around', given shortly before his retirement, showed his extensive knowledge of the humanities. In 1967, at the age of 81 years on a visit to SA, he delivered a stirring address entitled 'Another look around', in which he reiterated his lifelong philosophy of looking outwards, forwards and upwards, and through this achieving 'happiness which is the most important thing in life and is the hallmark of a successful life'.^[10] A deep thinker, he was conversant with the classics and wrote sagely on aspects of personality and character, stressing the moral and intellectual components, on the cultivation of the habit of work, on judgement and common sense, on human behaviour, on evolution and on the interpretation of Da Vinci and Hippocrates'

observations on ageing.^[10] Since that time until his death he worked continuously on his 'Promus', which reflected his profound understanding of human behaviour and his own deep humanism.^[4]

Remarkably, Saint retired completely from the surgical scene in 1946 at the age of 60 years while at the height of his powers, having laid the foundations and built a department of surgery with a global reach at the southern tip of Africa.^[8] In Cape Town, he had bought and lived with his wife in 'Stellenberg', a gracious Cape Dutch gabled home in Kenilworth, with a large and exquisite garden. In 1960, he moved to Sark in the Channel Islands. Here too, his humanism was evident. Such was his affection for and interest in the island and the residents that a bequest on his death 13 years later established the Saint Medical Trust for medical assistance and the cost of medication dispensed on the island.^[5]

In the century since Saint's appointment in 1920, the surgical landscape has changed profoundly.^[11] However, the Saint legacy endures and SA surgeons remain indebted to him for his unique contribution to the advancement of surgery in this country. Through Saint, the surgical precepts of Lister and Morison were established and disseminated throughout SA.^[2,9] Today, the excellence of academic surgery in this country, which enjoys international recognition, is a precious national treasure, to be nurtured and developed.^[12] Now, as with conception a century ago, academic departments that constitute the intellectual backbone and are the repositories of our surgical DNA, face critical constraints and challenges in attempting to provide the most appropriate care in the face of current economic realities.^[12] As confronted by Saint a century ago, the challenge to centres of excellence is to find the correct balance between pursuing research relevant to our context, delivering patient care and training the next generation of surgeons. The successful department of surgery of the future will meet this challenge through integrating critical thinking and technical innovation with our historical missions of patient care, teaching, community service and research.^[12]

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