History of the Department of Surgery, Nelson R. Mandela School of Medicine, University of KwaZulu-Natal

Department of Surgery, Nelson R. Mandela School of Medicine, University of KwaZulu-Natal, Durban

The history of the Medical School at the University of KwaZulu-Natal is steeped in political controversy, and until relatively recent times the Medical School was struggling for survival as an institution.

The founding of a medical school to train black doctors in Durban was first suggested in 1921. Mission doctors John McCord and Alan Taylor set up a private medical school exclusively for black students, but this closed within the year as approval could not be obtained from the government.

In 1944 a National Health Service Commission under the Chairmanship of Dr H. Gluckman decided that Durban should be the site of a medical school for ‘non-whites’, and those whose object was to serve that community.

In 1947, Prime Minister J. C. Smuts approved the development of a medical school under the aegis of the then University of Natal. Government would meet all costs for this venture. In 1948, with the United Party Government replaced by the National Party, this process was delayed, but the school was eventually opened at the beginning of 1951.

The Medical School remained a political ‘hot potato’ and in 1966 the government attempted to transfer control from the University of Natal to the Department of Bantu Affairs. This was strongly resisted by the University and the decision was reversed. The initial medical school was housed in a disused army barracks in Wentworth, Durban, for the initial preclinical classes. The school then moved to its current premises on Umbilo Road 3 years later in 1953.

Students were accepted from disparate backgrounds, often severely disadvantaged, and as a result the Medical School became a hub of political activity and resistance to the apartheid regime, from which emerged student leaders such as Steve Biko and others. The Alan Taylor Residence in Wentworth was frequently raided by the security branch, and many students were incarcerated. The Medical School was also the victim of inequitable state funding and for most of its existence has been handicapped by shortage of resources.

The official teaching hospital was King Edward VIII Hospital (KEH), which was completed in 1936 as a ‘new hospital for non-Europeans’. (This is in fact the only institution in the world named after that particular monarch before his abdication.) It was the major hospital for the black and Indian communities in Natal, and it took on all comers. At any one time there were in excess of 2 000 patients; whether they lay in beds or on the floor, no patient was ever turned away. At one stage it was calculated that if all the babies born in one year were placed head to foot, they would reach Pietermaritzburg 110 km away! It is only because of the dedicated efforts of full-time doctors who have given their professional lives to the institution that services have developed and high standards of practice have been maintained.

Against this backdrop the Medical School has grown and established itself on both the national and international scenes. On the occasion of the celebration of its 50th anniversary in 2000 the Medical School was renamed the Nelson R. Mandela School of Medicine. The University of Natal became known as the University of KwaZulu-Natal (KZN) after it joined with the University of Durban-Westville in 2004.

During the 1970s a new academic teaching hospital was proposed for the University, together with a new medical school. This concept was initially shelved, but eventually approval was given for the new hospital and in 2003 the Inkosi Albert Luthuli Central Hospital (IALCH) was opened. The University has a significant presence there, although IALCH is not designated as the official teaching hospital. The Medical School functions as a multi-site campus spread over a number of hospitals for clinical teaching. IALCH is one of the most modern hospitals in the world and for those who have laboured in the rather inhospitable conditions at KEH, it has been a dream come true. The major function of the new hospital is to serve as a quaternary referral centre for highly specialised patient care.

The Medical School itself has remained at its present site and has been redeveloped, with expansion of the campus onto the former University of Durban-Westville site.
Department of Surgery

The first Professor of Surgery and Head of Department was Alan Kark and the first surgical trainees were Dr C. N. Pillay who had qualified at the University of the Witwatersrand, Dr A. B. Mohamed from the University of Cape Town, and Dr A. Mistry who had qualified in India. At that stage the Department was probably the only site in South Africa where people of colour could specialise.

Professor David Chapman took over the headship of Surgery in 1961 and the first graduates from the University of Natal entered the surgical training programme. These were Dr Vasant (‘Bony’) Govind, Dr Haroon Ameen and Dr J. R. (‘Joe’) Domingo. They obtained their higher surgical qualifications in the UK in 1970. It is also of note that in this period, during the early stages of their clinical development, professors Carl Franz and ‘Boet’ van Rensburg spent time working at KEH.

Professor Chapman practised with missionary zeal and his attention to detail was the subject of many apochryphal stories. Saturday morning post-intake ward rounds would take most of the day. He was a fine role model who showed that under all circumstances one should attempt to apply basic clinical principles with thorough application of clinical observation and attention to physical signs.

In 1967, Professor Lynne Baker took over as Professor and Head of Department. This was a period of expansion and growth. Sub-departments of Paediatric Surgery, Urology and Plastic Surgery emerged and became independent with their own heads and professorships.

The first appointment to the Paediatric Surgical Chair was Bob Mickel, an innovative and resourceful surgeon. The criterion for admission to a paediatric surgical bed was that the patient be shorter than the ‘Mickel stick’, irrespective of age! Urology came of age with the appointment of Johan Naudé as Professor and Head. More recently, the first Plastic and Reconstructive Surgery Professorship was awarded to the present incumbent, Anil Madaree. Before this, Chairs had already been created for Orthopaedics, Neurosurgery and Cardiothoracic Surgery, headed by professors T. L. Sarkin, Mauritius Joubert and Ben le Roux respectively.

At the request of the provincial authorities the concept of a metropolitan surgical service was developed and Addington, R. K. Khan and Wentworth hospitals, and Clairwood as a convalescent hospital, came on stream. Edendale and Grey’s hospitals in Pietermaritzburg enjoyed satellite status.

While the postgraduate staff comprised predominantly people of colour, this programme has never been closed to any race group. However, it was difficult to staff the entire metropolitan region because of difficulties with the group areas scenario, and as such the Department pioneered the placement of registrars of colour in exclusively white hospital environments. There was initially considerable resistance to the concept, but eventually junior staff consented to participate. Although strictly against the law this worked very well, with no problems within the respective communities.

During this period major contributions in developing the Department were made by Dr Leslie Linder, whose prodigious memory was legendary. He was a radio quiz champion whose greatest feat was beating the ‘Brain of Britain’ in head-to-head combat.

Professor Bunny Angorn, whose sardonic wit and intellect was appreciated by many on the national scene, also played a major role in developing the academic side of departmental activities. Part-time surgeons also played a major role, among them Edward Barker, whose ability to persuade patients that their postoperative symptoms were non-existent is well known. He was also a superb hard-working role
and culminated in the building of the new hospital, named after Inkosi Albert Luthuli. Full teaching status has been granted to the Pietermaritzburg complex, while Empangeni has taken on satellite status. In the beginning there was one professor and three registrars. The current status within the Durban complex is that there are 63 general surgical registrars, 32 full-time consultants and 10 part-time consultants, while Pietermaritzburg has 10 registrars, 6 full-time consultants and 2 part-timers, and Empangeni 2 full-time consultants and 4 registrars. The entire complement affiliated to the University department comprises 77 registrars, 42 full-time consultants, and 14 part-time consultants.

**Training and academia**

From its inception the Department was committed to training people of colour. However, major contributions have been made by foreign graduates who have spent time in the Department. They have come mainly from the UK, the USA, Belgium, Germany, Australasia and Eastern Europe, particularly Poland. Some, such as professors David Muckart and Sandie Thomson, have remained and made a major clinical and academic contribution.

Since 1953, 180 trainees have completed their specialist examinations (Fellowship): 97 Indians, 56 whites, 24 blacks and 3 coloureds. Seventy-seven per cent of these graduates have remained in South Africa. Of the black graduates, 16 were South Africans, 6 from the Southern African Development Community (SADEC) region, and 2 from outside this area.

Initially the graduates finished with the Royal College examinations, largely because the South African College was seen as a white-dominated body. The first specialist graduates of colour were Domingo, Ameen and Govind. The first black doctors to specialise in general surgery were Fred Luvuno, Zulu Mtshali and Donald Luswazi. The first from this Department to complete the F.C.S. (S.A.) was Espiran Reddy in 1981, closely followed by Bhugwan Singh. The first black woman to pass the South African College Fellowship was Veronica Wilson in 1988. Three women have subsequently been successful, namely Moneera Jangda, Ines Buccimazza and Babongile Zulu. The latter is the first Zulu woman to do so (2003).
Graduates include leading academics in South Africa, such as Professor Lizo Mazwai, currently President of the Colleges of Medicine, and professors Taole Mokoena, Zulu Mtshali, Thandinkosi Madiba, Andy Mogotlane, Etienne Theron, Larry Hadley and Bhugwan ('Bugsy') Singh. Professor Charles Modiba of the Medical University of Southern Africa (now Limpopo) completed his undergraduate training in KwaZulu-Natal.

T. E. ('Dibs') Madiba enjoys the distinction of being the first black KZN graduate to be awarded an Associate Professorship for academic excellence in 1996, and he has subsequently been promoted to full Professorship ad hominem. This is a landmark achievement.

Outside this country Warwick Peacock (USA), Prega Pillay (Australia), and David Watters (Papua New Guinea) have filled Chairs.

In terms of academic activity the Department has always tried to play to its strength, which is that of experience with high-volume clinical turnover. The major output has been in the areas of clinical audit and descriptive studies in trauma, infectious diseases, vascular disease and aspects of gastroenterology. Epidemiological studies have also been a major focus, comparing disease patterns in the different population groups. The Department has also featured widely in clinical trial work, particularly in the antibiotic arena. An Oesophageal Cancer Unit was established in conjunction with the thoracic surgeons, and has not only been productive academically but has made a significant contribution to management of this disease. Currently there is expansion into research at a molecular level, particularly into HIV infections related to vasculopathies. This forms the basis of a Ph.D. project in collaboration with the University of Pittsburgh undertaken by Dr Nelson Moodley.

The Department has produced in excess of 1 000 peer-reviewed articles and at least 65 chapters in textbooks. It has also featured prominently in academic meetings both in South Africa and on the international stage.

Additional academic recognition has come to the Department in the form of 3 Fellowships of the University of Natal, 4 ad hominem full professorships and 5 associate professorships. Fourteen doctorates and masters degrees have been obtained by thesis.

Bearing in mind the enormous clinical workload we can be justly proud of this achievement.

By virtue of its international recognition and standing, the Department has drawn postgraduates on secondment from their own universities for specialist training in vascular surgery, trauma and critical care. These students have come from Scandinavia, the UK, the USA and SADEC countries. Surgical skills training has become a focus, in keeping with worldwide trends. Professor Baker had established a microsurgical training facility and in recent years, on the initiative of Professor B. Singh, the facility has been expanded to include basic and advanced skills training, with laparoscopic surgery and catheter-based interventions.

Tribute at this stage should be paid to 'Jumbo' Natasen, who served the Department as a technician for 4 decades. His initial job description was to bottle pathological specimens and function as general factotum. He evolved into a skilled laboratory microsurgeon who trained many 'big names' in this country in these skills. His other great talent was his ability to fix anything, with an uncanny ability to resurrect seemingly extinct household appliances.

The Department prides itself in its involvement in outside activities. This includes active participation and bearing of office in the Colleges of Medicine and the Association of Surgeons. The academic societies have also been well supported at both academic and administrative level. This includes the South African Societies for Surgical Research (SRS), Vascular Surgery (VASSA), Gastroenterology (SAGES), Endoscopic Surgery (SASES), Trauma, Critical Care, Transplantation and Nutrition. In each grouping members of the Department have served in both the Secretariat and the Presidency and this continues to the present time.

Finally, space must be found to commend the long-suffering secretarial and administrative staff. It is fortunate that staff turnover has not been rapid and we have been loyally served by Betty Slater, Paras Ramlal, Sagree Reddy and Beena Heeraman, whose duration of service averages 23 years. Their monumental contribution and loyalty have been an essential component in the development of the Department.

In compiling a report of this nature much has depended on discussion with senior colleagues as little has been committed to paper over the years. As such specific dates have not been stated in many instances.

From humble beginnings the Department has grown and developed into a major player on the national scene, and enjoys international recognition. Challenges for the future are to address demographic issues and in particular to train and retain local graduates, particularly at middle-management level. Academic excellence must be maintained and developed with focus on the training programme. In the research arena the most difficult step is to extend activities from the purely clinical to the laboratory.

Another particular challenge is to break the 'chains of parochialism' and for individuals to seek academic excellence elsewhere, both nationally and abroad, and for our institution to create an environment that makes returning home an attractive and compelling proposition. This may well be the greatest challenge of all.