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# Professor Bongani Mayosi Head of Medicine

2014 marks 20 years of freedom in South Africa. It is an opportunity to reflect on what has been achieved over this period, and cast our eyes to the future. We as the Department of Medicine at Groote Schuur Hospital and the University of Cape Town have decided to celebrate this momentous occasion in the life of the nation by telling the story of what we do, what we have achieved, the main challenges of our work, our legacy and our future.

his story is told through the lens of a photographer, Eric Bosch, who spent the first week of December 2013 with us, taking photographs of our varied activities. This photo-essay – 'A Week in the Life of the UCT/GSH Department of Medicine – Preparing for the Next 100 Years' – is the result.

It has been a pleasure and privilege for me to serve as Head of the UCT/GSH Department of Medicine. Established on 20 February 1920, it is the oldest Department of Medicine in Africa. I took over the leadership of the department eight

years ago and I would like to describe our story in terms of seven Ps: the People, the Patients, the Pupils, the Programmes, the Papers, the Pounds and the Prizes.

## ■ The People

The medical, nursing and administrative staff of the Department of Medicine are the people who make the institution a special place of service and care for the sick. And academically, we are arguably the best department of medicine in Africa. In 2012, to mark the launch of the UCT Faculty of Health Sciences' centenary celebrations, the Department of Medicine hosted a special dinner to celebrate the members of the department who had one or more publications that had been cited by others at least 100 times. Such a publication (called a citation classic) represents a seminal contribution to medical science and is a rare achievement among academic physicians working in African medical schools. In the Department of Medicine, no less than 39 of the 60 academic physicians and scientists had at least one citation classic. It was said at the time that "this concentration of high achievers in one medical department is unprecedented on the African continent."

#### ■ The Patients

The excellent people who work in the Department of Medicine are consumed by one priority: the patient. The patient is the beginning and the end of our work - be it in service provision, research, teaching or administration. The primacy of the patient in our work has been illustrated by our opposition to the proposed cut in hospital beds in February 2007, which led to a public outcry in Cape Town and an editorial comment in the Weekend Argus. These proposed cuts in services for the poor and indigent were not only reversed, but the numbers of beds had increased steadily over the past five years, resulting in the opening of two new medical wards. When it was observed that the mortality of medical inpatients was increasing year-on-year from 2004 to 2009 (South African Medical Journal 2013; 103:28-35), we restored the team-based Firm System in General Medicine, which is designed to improve the patient experience and health outcomes.

### ■ The Pupils

Our students benefit greatly from the environment of excellence in patient care that is delivered by the leading academic physicians in Africa. We continue the fine tradition of clinical teaching that we are known for the world over, at both undergraduate and postgraduate levels through the University of Cape Town (UCT). In addition, we have extended our postgraduate training programmes to benefit no less than 73 registrars and senior registrars from 16 African countries, with the majority coming from Nigeria, Libya and Botswana (see **Figure 1**). Sixty two percent of our African trainees are in General Internal Medicine, with the rest represented in almost all of the 12 sub-specialities of medicine.

### ■ The Programmes

In addition to the Supernumerary Registrar Programme, the Department of Medicine has initiated a number of programmes to strengthen clinical research in the Faculty of Health Sciences at UCT. We have worked in collaboration with colleagues from other departments to establish the intercalated MBChB/Bsc Med (Hons) and the MBChB/PhD programmes (in collaboration with the Department of Clinical Laboratory Sciences), the Clinical Research Methods Course and the master's degree in Public Health - Clinical Research stream (in collaboration with the School of Public Health and Family Medicine), the UCT Clinical Research Centre at Groote Schuur Hospital (as a joint venture with the Faculty of Health Sciences), and the acquisition of the new Whole-Body 3-Tesla Magnetic Resonance machine that will be dedicated to research. These programmes, and a myriad of other efforts and initiatives by members of the Department of Medicine, have arrested the decline in research activity that occurred in the



This emblem at the entrance to the new Mitchell's Plain District Hospital epitomises our commitment to the art of healing.

first 10 years of the new South Africa, and have ushered in a renaissance in academic activity in our department.

# ■ The Papers

The record of papers published per year by members of the Department of Medicine is a testament to the renaissance that is under way. The number of publications per year has increased from 136 in 2006 to 377 in 2013 - a 177% increase in productivity (see Figure 2). We are proud of the fact that members of the Department of Medicine are regularly published in the best medical journals of the world, including Circulation, PLoS Medicine, The Lancet, and the New England Journal of Medicine. There have been many seminal contributions from members of the department over the past few years, one of which was from Dr Chris Kenyon, the first senior registrar to train in infectious diseases (from 2008 to 2010), who discovered a new fungal cause of disseminated infection in people with AIDS. This seminal observation has opened up a new field of research in infectious disease that will ultimately improve patient care.

#### ■ The Pounds

There can be no great achievements without the 'pounds'. I learnt early in my tenure as Head of Department (from a colleague and friend, Michael Bennish) that strong departments are built through grants. The research income of the Department of Medicine has increased from R23 million in 2006 to R66 million in 2013 (see **Figure 3**), excluding income flowing directly to large research units such as the UCT Lung Institute and the Desmond Tutu HIV Centre.

#### ■ The Prizes

We are gaining national and international recognition for contributions to clinical science and medical education. The performance of members of the Department of Medicine has been recognised by many prizes over the years (see **Table 1**). The *Lancet* has featured biographies of four members of the Department of Medicine (Linda-Gail Bekker [2010], Bongani Mayosi [2012], Keertan Dheda [2014], and Karen Sliwa [2014]) thus solidifying the global reach of the influence of members of the department.

We have taken key steps on the journey to become one of the top departments of medicine in the world, in this the African century. How do we achieve sustainable and successful growth in ideas and influence into this future? The answer lies in the advice of Winston Churchill, who said: "there is no finer investment for any community than putting milk into babies." We need to invest in the best and brightest physicians that we train in the department. This will require the creation of new university posts in all current and new divisions that will augment the existing posts that are primarily funded by the provincial department. Our future will be guaranteed by the quality and vision of the leaders that we leave behind as our legacy.

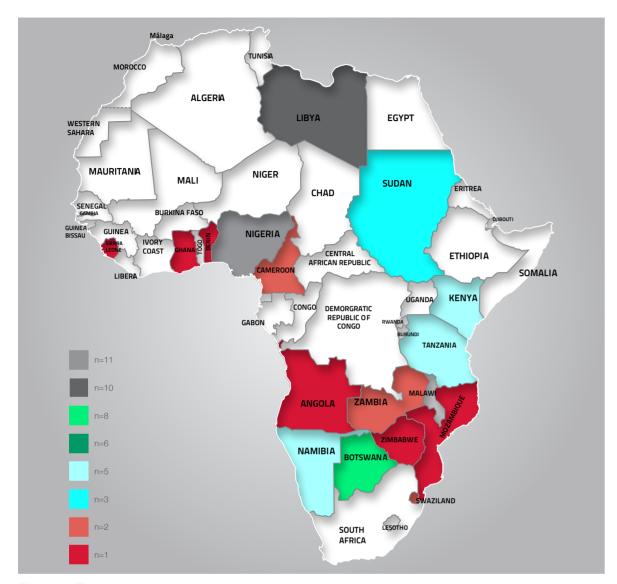


Figure 1: The number of supernumerary registrars from 16 African countries, who have trained in the Department of Medicine.

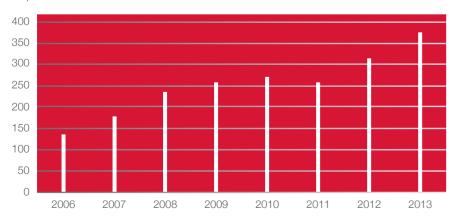


Figure 2: The rising number of scientific publications by members of the Department of Medicine.

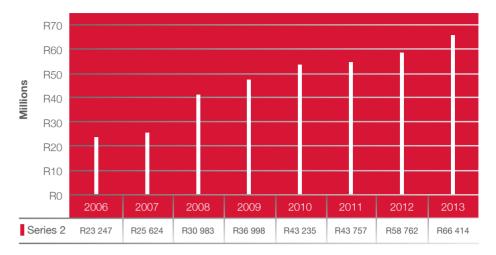


Figure 3: Research income from 2006 to 2013.

Year	Name	Prize
2014	Professor Robin Wood A/Professor Brian Rayner	National Research Foundation A-rating World Hypertension League Notable Achievement in Hypertension Award
2013	Professor Eric Bateman Professor Keertan Dheda A/Professor Graeme Meintjes Professor Karen Sliwa	Medical Research Council Platinum Award Medical Research Council Gold Award Medical Research Council Silver Award Paul Morawitz Award
2012	Professor Eric Bateman Professor Bongani Mayosi	European Respiratory Society President's Award and Alan Pifer Award National Science and Technology Foundation – BHP Billiton Award: To an individual for outstanding contribution to Science Engineering Technology and Innovation through Management and related activities over the previous five to 10 years or less
2011	Professor Bongani Mayosi Professor Lionel Opie	National Research Foundation Transformation of the Science Cohort Award National Science and Technology Foundation BHP Billiton Award to an Individual over a Lifetime
2010	Professor Keertan Dheda	Union Scientific Award of the International Union Against Tuberculosis and Lung Disease
2009	Professor Eric Bateman Professor Linda-Gail Bekker Professor Vanessa Burch Professor Bongani Mayosi Professor Robin Wood	National Research Foundation A-rating United Kingdom Royal Society Pfizer Award National Excellence in Teaching and Learning Award Order of Mapungubwe in Silver UCT Fellowship
2008	Professor Robin Wood	South African Medical Association Special Service Award
2006	Professor Lionel Opie	Order of Mapungubwe in Silver

Table 1: Major prizes awarded to members of the Department of Medicine – 2006 to first half of 2014.