

Tributes from senior academics from the University of the Witwatersrand

T H BOTHWELL

Emeritus Professor of Medicine and Former Dean, Faculty of Medicine, University of the Witwatersrand, Johannesburg, South Africa

I wrote a short piece on Mike Kew's contributions when he retired 7 years ago from his post at the University of the Witwatersrand. This assessment, which is reproduced here, remains as relevant today as when originally written:

'When Mike Kew was an intern, the senior ward sister, Stella Welsh, a great admirer of his, called him Peter Pan, and over 40 years later, the title remains appropriate. Watching him hurry down a corridor, all energy and youthful drive, it is almost impossible to believe that he has reached retiring age. It is equally difficult to appreciate that someone as modest and unassuming as Mike could have produced such a formidable body of world-class research, and become such a major international leader in his field. His achievements are made all the more remarkable by the fact that he was working in isolation for a good deal of his research life, with the most modest of facilities available to him, and with ongoing clinical and teaching responsibilities, both of which he discharged with distinction. There must have been times in the turbulent past when Mike was tempted to pursue his career abroad, but he never did. Instead, he remained a most loyal and productive member of the Department of Internal Medicine for his whole working life, with his research focus directed solely at problems of major relevance to health in South Africa.

'Mike has always been reticent about his signal achievements and this reticence extends beyond the medical field. For example, it was only by chance that I learnt that Mike, a karate black belt, taught in Joe Robinson's studio to help pay for his undergraduate training. The fact that he is an avid reader, with a special interest in grammar, a trained builder who constructed single-handedly an extra bathroom in his home, an accomplished cyclist, and, until recently, a senior playing squash at the provincial level, gives a little insight into the range of Mike's interests.

Mike's departure will leave a gaping hole in the Department of Internal Medicine. He belongs to a rare species, the clinician-scientist, and is, in many ways, irreplaceable. All who have the Department's welfare at heart are saddened at his departure. But there is one ray of hope. Mike's research career will continue apace. He has been welcomed with open arms by the Department of Internal Medicine at the University of Cape Town and I'm sure he will be as productive as ever. Go well, old friend.'

After retiring from the University of the Witwatersrand, Mike took up a research post at the University of Cape Town, where he has been working up to the present time. This has given me the opportunity to observe at close quarters the latter years of his research career. Not surprisingly, his routine has altered little from its lifelong pattern – up at 3 am and off to the university, home at lunchtime, more work in his study until 4 pm, an hour or two cycling or gardening, 'and so to bed' at 7 pm. In passing, this demanding schedule has also posed a challenge to his loving wife, Daphne, whose forbearance and good humour have never faltered. During his time in Cape Town, Mike has continued to produce scholarly works of a uniformly high standard, and to supervise young researchers. In addition, he continues to be invited several times a year to organise and speak at international (including African) congresses, and to serve on learned committees. His standing in the general field of virology is vividly illustrated by his recent participation in the World Health Organization expert committee given the task of recommending the final steps needed for the total eradication of the smallpox virus. Having had the unique opportunity of following Mike's career from its earliest days right up to the present, I have no doubt that on a lifetime's evidence, he is arguably the most distinguished clinical scientist in the country – a man who has brought great kudos to his country, and who is also an important figure in the international field.

M VELLER

Professor and Dean, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

Mike Kew is truly one of Johannesburg's and the University of the Witwatersrand (Wits)' own. He was born in Johannesburg, was schooled at the Jeppe Preparatory and High Schools, and then studied at Wits. Here, over time, he obtained essentially all the degrees available in his branch of the medical field: an MB BCH with distinction (1961), an MD (1968), a PhD (Med) (1974) and finally a DSc in 1982. His studies at undergraduate level were distinguished by many awards, culminating in winning the Bronze Medal of the Southern Transvaal Branch of the Medical Association of South Africa (SA) for the most distinguished graduate in medicine. After obtaining the FCP(SA) from the College of Medicine of South Africa in 1965, he was appointed to the staff of Wits' Department of Medicine and the Johannesburg Teaching Hospitals. We are told that Mike rapidly became known for his dedication to his students

and his patients, and his remarkable devotion to the advancement of clinical science. He remained in the Department of Medicine until his retirement from the Dora Dart Chair in 2007, and is still today an Honorary Research Professor in Wits' Faculty of Health Sciences.

Mike's contribution to Wits, to SA and to medicine has been, and continues to be, immense and exceptional. Few others have made or will make the strides that can be attributed to his work. These are extensively highlighted in this festschrift, and he has been awarded numerous prizes and recognised widely. Possibly the most telling of these is the fact that he was the first clinical scientist in SA to achieve a National Research Foundation (NRF) A1 rating.

A read through the list of the numerous articles that Mike has published is like a look back into the history of research in our faculty. Among his co-authors are the names of many of the well-recognised

clinical researchers of the last 50 or so years: Wyndham, Seftel, Joffe, Dubb, Myburgh, Gear, Koornhof, Bothwell, Myers, Rosendorff, Allan, Torrence, Charlton, Beaton, Mendelsohn, Zwi, Isaacson, Rabson, McPhail, Metz, Cleaton-Jones, Lownie, Kalk, Rothberg, Schoub, Arbutnot, Ruff, Kramvis – most of these individuals have died, or

are retired. Mike Kew, however, continues to be active and productive, unstintingly promoting, as ever, excellence in clinical science and research.

Mike is an outstanding and distinguished Witsie, and we are immensely proud that he is one of ours.

G DUSHEIKO

Emeritus Professor of Medicine, University College London Medical School, Royal Free Hospital, London, UK



Professor Michael Kew received a singular honour when he was appointed physician to the State President, Nelson Mandela.

Professor Michael Kew can look back on a remarkable career in hepatology. He has both engendered and focused interest in hepatocellular carcinoma (HCC) in sub-Saharan Africans, and achieved a unique eminence in the field. His career began (following a South African (SA) Chamber of Mines Scholarship) with a fascinating miscellany of scientific studies, including heat stroke. His interest in hepatology, viral hepatitis and HCC was triggered by his sojourn as a Wellcome Research Fellow and Honorary Clinical Assistant to Sheila Sherlock at the Royal Free Hospital, in London. This coveted scholarship provided an entrance to the nascent clinical science of hepatology. His return to Johannesburg led to a natural shift in emphasis to studies of HCC. Since then, his numerous scientific endeavours and astonishing productivity have led to his well-deserved stature in the field.

His research and clinical and scientific observations are recognised as research of major public importance. He has conducted assiduous and intelligent 'hunter-gatherer' research, utilising the bedside for reverse

translational science to the bench. He has been gifted with an enquiring mind, and has contributed a combination of knowledge and exact thinking, coupled with an indefatigable commitment and enthusiasm to his research. These qualities, together with a gift for precise, rigorous and quick writing, have been the hallmarks of his career.

His strengths have been the ability to capitalise on the environment in which he has worked, to ensure high-quality research. Understanding the scale of the problem of HCC, he has promoted a continuous and fertile exchange of scientific ideas and technological expertise, to ensure international contacts and co-operation at a time of potential isolation for SA hepatology. He has used both interdisciplinary expertise in SA and a network of international researchers to ensure that science in hepatology could continue at the University of the Witwatersrand, against the odds. These efforts have led to a seminal understanding of the pathobiology of HCC – including articles in *Science*, and the very first article published on hepatology proving

the integration of the hepatitis B virus in the genome of HCC.

He has unparalleled experience in the field. His carefully archived and recorded scientific discoveries continue to be widely cited and relevant. He is an A-rated scientist, and has received numerous awards acknowledging his excellence in research and scholarship. His scholarship and scientific excellence have been widely recognised by several prestigious national and international awards. These include elected Fellowships to the Royal Society of SA, which fosters both pure and applied science, full membership of the Academy of Science of SA and as a finalist in 2010 for the *British Medical Journal* Awards for International Lifetime Achievement.

Mike has nurtured and fostered the careers of his research fellows; he was often the first to encourage them to acquire international training and exposure (the Liver Unit at the National Institutes of Health became a once-in-a-lifetime crucible for several of his fellows, including myself). In turn, recognising some inherent difficulties, Mike perceived that he needed to advance his own knowledge and expertise, and was thus awarded a Fogarty Visiting Scientist award to the Laboratory of Infectious Diseases, at the National Institutes of Health. His more recent training, coupled with the expertise of his molecular virology group, provided a deep understanding of the subgroups of the hepatitis B virus in SA.

Michael Kew is a piece of Africana; his studies have highlighted an African problem in Africa's peoples. Early in his career, he was selected as one of four outstanding young South Africans. Appreciation of his unique value to SA and his personal aptitudes culminated in his appointment as physician to the state President, Nelson Mandela – a unique accolade for a worthy South African. Mike gave his life to the careers of a number of his trainees, registrars and research fellows, who acknowledge the debt they owe by contributing to his festschrift. We hope that he and Daphne will enjoy the remembrances of this academic celebration.

A M DI BISCEGLIE

Chairman and Professor of Internal Medicine, Chief of Hepatology, Saint Louis University School of Medicine, USA

How Professor Kew changed my life. I had always known that I wanted to go to medical school, but after my acceptance there and my first couple of years, I still had no idea what I would do afterwards. I remember saying something like, 'Whatever it is, it should have nothing to do with microscopes,' presumably after a particularly rough day in microanatomy. I thought of myself as an average student, but began to come into my own when I joined a firm of fellow students in my 4th year. By chance, they happened to be very intelligent, talented and hard-working, and I began to do better on clinical rotations. It was perhaps in my 4th or 5th year of medical school that Professor Kew gave a lecture to us on cirrhosis. His lecture was so clear, organised and logical – it seemed like a body of knowledge that I could get my arms around and understand. I kept the lecture notes from that talk for many years, and now kick myself because I eventually discarded them, but I remember the key elements.

The definition of cirrhosis included three things – (i) nodules of regenerating hepatocytes that were (ii) surrounded by bands of fibrosis, and (iii) this process was diffuse throughout the liver. By explaining this, he clearly distinguished it from nodular regenerative hyperplasia (NRH), focal nodular hyperplasia (FNH) and partial nodular transformation.

Then, as a registrar at Baragwanath Hospital, I looked forward to Professor Kew's weekly visits, for which we would find interesting liver cases, and present them to him. I remember showing him a case of a patient with hepatocellular carcinoma (HCC) and the skin condition of pityriasis rotunda. He was very interested in this and we proceeded to make a formal study of this association, which led to the publication of two papers on this subject. As a result of this, when I had the opportunity to take up an elective as a registrar, I chose to go to the Johannesburg Hospital and work with Professor Kew (I actually worked in Geoff Dusheiko's lab, and Geoff's contribution to my career is another story). But under Professor Kew's tutelage, I began to learn more about HCC and how research was done, and this led me to the National Institutes of Health (NIH) to advance my research training. It was there that I was exposed to brilliant minds, great opportunities and prospects for making a career for myself in research and academic medicine. Professor Kew was instrumental in making the introductions needed for me to be accepted at the NIH as a fellow. In retrospect, I was very fortunate to have encountered Professor Kew early in my career, and to have been subject to his subtle mentoring; without his assistance I would not have had the successful and enjoyable career that I have had in the fascinating field of hepatology.

A KRAMVIS

Research Professor and Director: Hepatitis Virus Diversity Research Unit, University of the Witwatersrand, Johannesburg, South Africa

*If I have seen further it is by standing on the shoulders of giants –
Isaac Newton*

I was honoured and privileged to have stood on Mike Kew's shoulders as a mentee. His hepatology research, its fundamental findings and clinical implications have provided the cornerstone for hepatitis research in Africa, and continue to be revered by the scientific community.

I was very grateful to have worked so closely at his side, and to have learnt from him in the Molecular Hepatology Research Unit, University of the Witwatersrand, from 1994 to 2007. Together, we published 40 papers, with more to come. This gave me the honour

of being his most frequent co-author. Mike's contagious enthusiasm and passion for research, together with his exemplary work ethic, were transmitted to me. I have always worked with Mike's maxims in mind: never procrastinate, be focused and publish quickly! It is on these solid foundations that the Hepatitis Virus Diversity Research Unit was established, and is proudly continuing the work we initiated.

Professor Kew is a remarkable man, who left a great legacy and momentum of research activities. He exemplified the use of the Socratic method of questioning to initiate in others what he could not initiate himself and thus his legacy continues! Wishing you life's richest blessings.