Gastroenterology Foundation Liver Symposium: Hepatocellular cancer

A festschrift symposium in honour of Prof Michael C Kew
How does one begin to pay tribute to a man who has devoted his entire career to teaching, a man who has mentored so many, whilst pursuing a life-long commitment to medical research.

That this man, Professor Michael Kew, achieved this single handed, with little support, is the more admirable.

And it is the measure of the man that his international reputation and the formidable body of world class research that he has produced is accompanied by a profound humility.

As a young intern, his talents were quickly spotted and he developed them in an era at Wits medical school in the Department of Medicine under the tutorship of Professor’s Tom Bothwell and Harry Seftel. An era, widely regarded by many Wits graduates as the golden era - physicians dedicated to the task of excellence in clinic training.

The Gastroenterology Foundation of South Africa welcomes you to a Festschrift Symposium in honor of Prof Michael C Kew, retired Dora Dart Professor of Medicine at the University of the Witwatersrand and Director of the joint MRC/University Molecular Hepatology Research Unit.

“I enjoyed teaching, I really enjoyed teaching the transfer of knowledge to a young mind, when you look back on it, it is very rewarding. To go on a ward round with say six or eight chaps - you could talk to them and tell them so much in an hour. I just found it very enjoyable”
Professor Kew was born in South Africa in 1939 and qualified in Medicine at the University of the Witwatersrand in December 1961.

After completing his internship in the Johannesburg Teaching Hospital complex, he was appointed as a registrar in medicine in the same complex, serving in the unit of Professor Harry Seftel. After passing the F.C.P (SA) and the M.R.C.P examinations of the Royal College of Physicians of London and completing his medical registrarship, he was appointed as a physician in the Medical Unit of the Johannesburg General Hospital Complex, a position he occupied until his retirement at the age of 68 years.

Thereafter he continued in an honorary position until the present time. During the course of his post graduate career, he spent two years as Fogarty Scientist at the National Institute of Health in Bethesda, U.S.A.

Professor Kew’s research has involved mainly diseases in Black Africans, but particularly cancer of the liver, which occurs with higher frequency in the Black African population. He is the author of more than 400 articles in Medical and Scientific journals and books.

Professor Michael Kew is currently Emeritus Professor and Honorary Professor of the University of the Witwatersrand and Honorary Professor in the Department of Medicine at the Groote Schuur Hospital in Cape Town. He spent his career as a physician and hepatologist in Johannesburg (apart from short periods at the Royal Free Hospital in London and the National Institute of Health in Bethesda). Apart from his clinical and teaching duties, Professor Kew was actively involved in research. His early research interest was in heat stroke in the gold mining industry in the Transvaal, but his lifelong research interest was in hepatocellular carcinoma, a devastating cancer of the liver which occurs with great frequency in the sub-Saharan Black African population. He has written a text book of hepatocellular carcinoma as it occurs in the Black African and has written approximately 75 chapters on the tumour in books devoted to the diseases of the liver. He is the author of a great many articles in medical journals on the results of his research into cancer of the liver in the Black African.
I am director of the Liver Disease Research Branch in the Division of Digestive Diseases and Nutrition. As such, I oversee a research portfolio that examines the major causes of liver disease— including acute and chronic hepatitis C, hepatitis B, hepatitis D (delta), primary biliary cirrhosis, autoimmune hepatitis, hemochromatosis, and nonalcoholic steatohepatitis.

My responsibilities also include management of a clinical research portfolio. This research includes long-term studies of the natural history and pathogenesis of hepatitis and autoimmune liver diseases, clinical trials of promising new treatments, and pilot studies of innovative therapies. My work supports advancement of the Branch’s goals, which are to find the primary causes of liver diseases, to identify the factors that contribute to their progression, and to develop safe and effective means for their prevention and treatment.

Some of the clinical research networks that I am responsible for supervising include the Drug-Induced Liver Injury Network, the Hepatitis B Research Network, the Nonalcoholic Steatohepatitis Clinical Research Network, the Adult Acute Liver Failure Study Group, the Pediatric Acute Liver Failure Study Group, the Childhood Liver Disease Research and Education Network, and the Adult-to-Adult Living Donor Liver Transplant Cohort Study. I am also responsible for the LiverTox website on drug-induced liver injury (www.LiverTox.nih.gov) that is jointly sponsored by the NIDDK and the National Library of Medicine.

Prof Massimo Pinzani

I am the Sheila Sherlock Chair of Hepatology and Director of the Institute for Liver and Digestive Health at University College London.

Massimo Pinzani is a Professor of Medicine, clinical hepatologist, Director of the UCL Institute for Liver and Digestive Health and the Sheila Sherlock Chair of Hepatology at UCL. Current research interests are: 1) cell and molecular biology of fibrogenic disorders of the gastrointestinal tract, liver and intestinal fibrosis in particular; 2) alcohol and lipotoxicity-induced liver fibrosis; 3) pathophysiology of cirrhosis and portal hypertension with emphasis on tissue hypoxia, neo-metabolism and neo-angiogenesis; 4) liver regenerative medicine: from bio-scaffolds to cell re-population with iPSc; 5) liver stroma and cancer: mechanisms responsible for the development of primary liver cancer, particularly hepatocellular carcinoma and cholangiocarcinoma as a complication of chronic liver damage and inflammation; 6) diagnostic and prognostic tools for the assessment of the rate of progression of advanced chronic liver disease.

He has served in the governing and scientific boards of major international organization in the area of Hepatology and Gastroenterology, and as Associate Editor of top peer reviewed international journals in the area of Medicine. He is currently Editor in Chief of “Fibrogenesis&Tissue Repair”, an open access journal aimed at bringing new acquisitions in the area of fibrogenesis, repair and cancer across different areas of Medicine.
Prof Geoffrey Dusheiko

Geoffrey Dusheiko, MD, MB,BCh FCP(SA) FRCP FRCP (Edin) is Emeritus Professor of Medicine at the Royal Free Hospital and University College School of Medicine, London, UK. He earned his bachelor of medicine, bachelor of surgery degree from the University of Witwatersrand in Johannesburg, South Africa. After graduating, he completed his internship at Baragwanath Hospital in Johannesburg and his residency at Johannesburg Hospital. His fellowships were conducted at the Johannesburg Hospital Liver Unit and the National Institutes of Health in Maryland and the University of Minnesota (United States). Dr. Dusheiko’s research interests include the management and treatment of hepatitis B and C and small hepatocellular carcinoma; he has a special interest in research in viral hepatitis, focused on viral genotyping, applied molecular virology, the natural history of chronic viral hepatitis, and antiviral therapies. He has served on editorial boards for the Journal of Viral Hepatitis, Hepatology, and Best Practice and Research: Clinical Gastroenterology, GUT among others, and is the author of more than 330 published articles. He is currently a co-editor of Alimentary Pharmacology and Therapeutics and on the editorial board of the Journal of Viral Eradication. A member of several organizations, including IASL, AASLD, and EASL, he is a fellow of the Royal College of Physicians, the Royal College of Physicians of South Africa, and the Royal College of Physicians of Edinburgh. He served as Educational Councilor on the Governing Board of the European Association for the Study of the Liver for 4 years and was the recipient of the EASL recognition award in 2015. He is a guidelines writer for the WHO, a director of the Skipton Fund and has advised the National Institute of Clinical Excellence in the UK.

Dr Adrian Di Bisceglie

Dr Di Bisceglie completed his medical training at the University of the Witwatersrand in Johannesburg South Africa. After completing internal medicine residency in that country he came to the Liver Diseases Section of the National Institutes of Health (NIH) for a research fellowship and went on to become a senior Investigator and Chief of the Liver Diseases Section. In 1994 he joined the faculty of Saint Louis University as Associate Chairman of the Department of Internal Medicine and went on to become chairman of the department in 2006. He is currently the holder of the Bander Endowed Chair in Internal Medicine.

Dr Di Bisceglie has been involved in research into viral hepatitis since 1983 and was a member, in South Africa, of the first team to use recombinant alpha interferon to treat hepatitis B. At the NIH he worked with Dr Jay Hoofnagle, who developed alpha interferon as a therapy for chronic hepatitis C. Dr Di Bisceglie was the first to test ribavirin as therapy for chronic hepatitis C. He continued his research at Saint Louis University where his laboratory has been funded to study various aspects of the virology of HCV. He served as Chairman for the Steering Committee of the HALT-C Trial from 1999 to 2011 and is currently site PI. for the Hepatitis B Research Network (HBRN), an NIH-funded network studying patients with chronic hepatitis B viral infection. Dr Di Bisceglie has published more than 300 peer-reviewed articles and another 200 book chapters and review articles. Dr Di Bisceglie has served as an advisor to NIH, the FDA and CDC. He served on the governing board of AASLD between 2010 and 2015 and was President in 2014. As president, he received a White House Certificate of Appreciation in recognition of leadership in prevention and treatment of viral hepatitis on World Hepatitis Day 2014.
Dr Lewis Roberts

Dr. Lewis R. Roberts is the Peter and Frances Georgeson Prof in Gastroenterology Cancer Research and a Consultant in the Division of Gastroenterology and Hepatology at the Mayo Clinic, where he is Director of the Hepatobiliary Neoplasia Clinic, Associate Director of Pre-Doctoral Programs in the Center for Clinical and Translational Sciences, and Director for Research at Mayo Medical School. Dr. Roberts earned his medical degree from the University of Ghana Medical School and a PhD in Physiology and Biophysics from The University of Iowa. Subsequently, Dr. Roberts completed postgraduate training in Internal Medicine, Gastroenterology and Hepatology, and Cancer Genetics at Mayo Clinic.

Dr. Roberts maintains a clinical practice focused on liver and bile duct cancers and gastrointestinal endoscopy. His research interests include studies of the molecular mechanisms of liver and biliary carcinogenesis; development of biomarkers and clinical tests to improve the diagnosis and treatment of liver, bile duct and pancreas cancers; and improvements in prevention, diagnosis and treatment of hepatitis and liver cancer in Africa as well as in immigrant African communities in the USA. His research has been funded by the National Institutes of Health, The Robert Wood Johnson Foundation, and the AGA Foundation for Digestive Health and Nutrition. He has authored over 200 articles, book chapters, abstracts and letters.

Dr. Roberts has served as Associate Editor of Clinical Gastroenterology and Hepatology and currently serves on the Editorial Boards of Hepatology, Liver Cancer and Hepatic Oncology. He also serves as President of Africa Partners Medical, a non-profit organization focused on improving healthcare delivery in Africa through medical education, practical skills training, and provision of medical equipment and supplies.

Local Speakers

Prof Anna Kramvis

Professor Anna Kramvis, is a Research Professor and Director of the Hepatitis Virus Diversity Research Unit (HVDRU- www.wits.ac.za/health/hvdru), in the Department of Internal Medicine, University of the Witwatersrand, Johannesburg, South Africa. The South African National Research Foundation has rated her as an internationally recognized scientist. She is a Fellow of the Academy of Science of South Africa (ASSaf) and an Honorary Research Associate of the Victorian Infectious Diseases Reference Laboratory in Melbourne Australia. As a molecular virologist, the impetus of her research is the molecular virology of the hepatitis B virus (HBV), focusing on uniquely African strains of the virus. In 2009, HBV infection was again placed on the list of top 10 infectious diseases, by the WHO. She is a member of the European Association for the Study of the Liver and sits on various international committees including the Hepatitis Transformative Science Group, International HBV Genotype Nomenclature and the Global Primate Hepadnavirus Surveillance Network. No infectious disease research in Africa can neglect the AIDS pandemic scourging our continent, so, in addition to HBV-mono-infection; her team is researching HBV/HIV co-infection. She has published over 70 articles in international journals. She has supervised and successfully graduated 10 PhD, 8 Masters and 19 Honours students and hosted two post-doctoral fellows from India. Her current team consists of 3 postdoctoral fellows, 1 PhD and 7 Masters students. Professor Kramvis has established extensive, ongoing, national and international collaborative networks with laboratories in South Africa, Kenya, Sudan, Zimbabwe, China, India, Japan, Belgium, Germany, Greece, Sweden, Australia, Brazil and the United States of America, proof of the importance of hepatitis virus research and its national and international relevance. The HVDRU has hosted interns from Sudan, Kenya and Brazil for training and to facilitate their postgraduate studies, both at the PhD and Masters levels. She is regularly invited to present keynote/plenary talks and to chair sessions at international meetings. Together with her international collaborators she has organized three international meetings in 2007, 2008 and 2011. She is passionate about mentoring and loves to initiate in young people what she cannot initiate in herself!
Prof Wendy Spearman

Wendy Spearman is Head of the Division of Hepatology, Department of Medicine, Faculty of Health Sciences, University of Cape Town. She is Head of the Liver and Liver Transplant clinics at Groote Schuur Hospital and Lead Clinician of the Paediatric Liver Transplantation Programme at Red Cross Children’s Hospital. She completed her 2 year Hepatology Fellowship under Professors Ralph Kirsch and Simon Robson at the UCT/MRC Liver Research Centre in 1991 and obtained her PhD in 2008 from the University of Cape Town on “The effect of two novel C-type lectins, Ba100 and Ba25, isolated from the venom of the puff adder, Bitis arietans on T lymphocyte proliferative responses.” She was recently appointed as the lead consultant to develop National Guidelines on the management and prevention of viral hepatitis in South Africa. Her research interests include viral hepatitis, liver transplantation, drug-induced liver injuries and novel immunosuppressants.

Prof Mark Sonderup

Mark Sonderup was born and schooled in the Eastern Cape. He obtained a B Pharm degree from the University of Port Elizabeth (now NMMU) in 1990 and an MBChB from the University of Cape Town in 1995. His internship training was in Port Elizabeth at Livingstone Hospital and his postgraduate training was at UCT and Groote Schuur Hospital where he obtained a FCP (SA) in 2002. He completed a 2 year fellowship in Hepatology in 2004 at the UCT/MRC Liver Research Centre and Liver Clinic at Groote Schuur Hospital in 2004. He briefly worked in the UK before being appointed as a Senior Specialist in the Department of Medicine and Division of Hepatology at UCT and Groote Schuur Hospital. His research interests include HIV/AIDS associated liver disease, viral hepatitis, drug induced liver injuries and the porphyrias.

Dr Mashiko Setshedhi

Mashiko Setshedhi completed her Gastroenterology training at the University of Cape Town in 2008. Her PhD thesis examined signaling pathways implicated in the progression of chronic hepatitis to HCC in animal models and humans. Currently she is based at the University of Oxford as a Nuffield Post-Doctoral Fellow and is working on the metabolic profile of myeloid cells and their effects in the tumour microenvironment. She is a budding clinician scientist with an interest in the molecular and immunological mechanisms of HBV and HCC. Upon completion of her research fellowship she plans to return to South Africa to practice and continue her research.

Prof Jose Ramos

President of the Hepato-Pancreato-Biliary Association of South Africa (HPBASA) and Head of HPB Surgery at the Wits University Donald Gordon Medical Centre.

Professor Jose Ramos was born in Mozambique and immigrated to South Africa in 1963. He graduated from University of the Witwatersrand with an MBChB and obtained the FRCS Primary at the College of Physicians and Surgeons of Glasgow in 1985 and before training as a surgeon at the Johannesburg Hospital from 1986 to 1991. He obtained an FCS(SA) in 1991. He was then a consultant and later unit head at the Johannesburg Hospital from 1992 to 2001. During this time he was head of HPB Surgery and joint head of Surgical Gastroenterology. He attained sub-specialty registration as a Surgical Gastroenterologist in 1995. He did postgraduate fellowship training in Los Angeles, Rennes and Paris, having been awarded the Michael and Janie Miller Fellowship and later the Hoechst-Marrion-Roussel Fellowship. He has been in full-time private practice since 2001 first at the Linksfield Park Clinic and then from 2006 at the University of the Witwatersrand Donald Gordon Medical Centre. He is a Senior Lecturer at the University of the Witwatersrand and an Honorary Consultant at the Johannesburg Hospital. He has been associated with the Dept of Surgery, University of the Witwatersrand since 1992 as Lecturer and Senior Lecturer (Honorary). His medical interests are surgical gastroenterology and HPB surgery. In May 2010 he was promoted to Adjunct Professor by the University of the Witwatersrand.

Prof Jean Botha

After his surgical training in South Africa Professor Botha completed his Fellowship in Transplantation at the University of Nebraska College of Medicine in 2002. Until 2012 he worked as an Associate Professor of Surgery at the University of Nebraska Medical Centre where he headed up the Living Donor Liver Transplant programme, the Islet Cell transplant programme and the Hepatobiliary surgical unit.

He has been a keen proponent for medical education and research receiving multiple honours for both clinical work and research, contributing regularly to peer reviewed journal publications. Professor Botha joined the Wits Donald Gordon Medical Centre’s Transplant Unit in 2012 and is head of the Liver Transplant Program.
**Monday, 8 August 2016**

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I am pleased and honored to be asked to contribute to this Festschrift in honor of Michael Kew.

I first met Professor Kew in 1978, at the 2nd International Symposium on Viral Hepatitis, held in San Francisco. I had just finished my training in Gastroenterology-Hepatology with Leonard Seeff (another South African) at the Washington DC VA Hospital and gave a talk on hepatitis B serology. Mike gave the keynote talk on hepatitis B and liver cancer. It was immediately obvious then, and has remained clear since, that here was someone who knew of what he spoke. The talk was clear, concise and convincing (and given in that crisp, distinctive South African accent). The listeners could tell that this was a speaker who had seen and taken care of patients with liver cancer: a speaker who was also a scholar and careful thinker; and on top of that, a scientist and experimentalist. Previous speakers at international meetings on hepatocellular carcinoma were epidemiologists, or pathologists or cell biologists or clinicians. Michael was all of those things and brought both a freshness and excitement to the topic. He represented a very complete approach to understanding liver cancer and the role of hepatitis viruses, viral genes, host genes, race, age and environmental factors: what we might do about prevention, early detection and even treatment. After that 1978 meeting, Michael was an invariable presence at international symposia on viral hepatitis, asked to speak not just to provide data from South Africa or the African continent, but also to provide an overview and balanced synthesis of understanding of this important cancer and most dreaded complication of viral hepatitis. And we learned many things from these many presentations. From early days: the close association of rates of hepatitis B antigen and hepatocellular cancer in populations worldwide, the significance of serum alphafetoprotein levels in patients with HCC, the unusual presentation of this cancer in South African blacks where it was a disease of young men, not middle-aged or elderly, and was the major cause of death in young adulthood in many parts of Africa. Later, Michael in his many collaborators world-wide contributed to our knowledge of the pathogenesis of HCC, molecular biology of hepatitis B in relationship to carcinogenesis, the role of environmental cofactors, the abysmal results of conventional cancer chemotherapy in HCC, the roles of the hepatitis C and D virus and their interactions with chronic hepatitis B, the potential of therapy of chronic hepatitis B as a means of decreasing the risk of HCC, the changing epidemiology of hepatitis B and HCC worldwide.

I have personally benefitted greatly from my association with Michael Kew and must pay tribute to his important role as a mentor of young physicians, attracting the best and the brightest into the field of hepatology and viral hepatitis research. At the Liver Diseases section of the NIH in the 1980s and 90s, Michael sent us three of his best trainees. All three were stars. Geoff Dusheiko was the first hepatology fellow who came to our group after I joined the NIH. He got us started in hepatitis B immunology and set up assays for HBV DNA polymerase that was the bedrock of much that we did in hepatitis B in ensuing years. Geoff returned to South Africa, worked with Michael Kew starting trials of therapy of hepatitis B in South Africa and five years later moved to London to become Professor of Medicine and chief of the Hepatology Section at the Royal Free Hospital.

Adrian Di Bisceglie was our second Kew trainee. Adrian quickly showed his expertise, sound judgment and maturity and was kept at the NIH: appointed a senior staff physician within 2 years of arriving, later being made chief of the Hepatitis Section. In the lab, he developed assays for HBV DNA in serum and liver and helped us embark on studies of therapy of chronic hepatitis B and what was then known as “non-A, non-B” hepatitis using recombinant human interferon alpha. Adrian later went on to become Chief of Hepatology and Chairman of Medicine at St Louis University and a president of the AASLD.

The third Kew trainee was Chris Kassianides who developed the duck HBV model in our lab and participated in our early trials of therapy of hepatitis B, C and D. Chris became a close friend and a frequent visitor even after he left to finish specialty GI training and later returned to South Africa where he has been a champion in advanced hepatology and gastroenterology training in South Africa and the African subcontinent and Founder and Chairman of the Gastroenterology Foundation of South Africa. Chris was also the originator of having this Festschrift and has done a magnificent job of organizing it.

I am speaking of many things that occurred 20, 30 and even 40 years ago. I have achieved the age where I realized that one’s contribution to biomedical science is not only in your number of papers, or invitations to speak, or research discoveries, but also, and perhaps more importantly, in what you leave behind, your trainees, mentorees, your children in whom you foster a love and commitment of science and medicine and who then pass on this enthusiasm and commitment to future generations. Professor Kew has been successful in all these respects and a leading source in the growing light that has surrounded the darkness of viral hepatitis and the disease burden that it causes. I am proud to have been asked to contribute to this Festschrift for this most deserving physician, scholar, researcher, teacher and mentor. Mike, congratulations for a sterling and successful career.

“At the NIH, I had a very good stimulating two year spell. It was a liver unit that I went to. It was not particularly liver cancer. They did not have the cancer that I’d had seen, but it was full of well-known people, liver disease people. It was a very good two year period for me learning another aspect as a different approach to my approach. It was molecular, but they were having different disease problems than what I had. I worked with Jay. He had a good name already.”

I mean Jay was Jay!
It is a great honour for me to contribute to the Festschrift celebration of Professor Michael Kew. I have had the pleasure to study Professor Kew’s pioneering work in Hepatology when I was a trainee and I had even more pleasure meeting him in Cape Town a few years ago. I am currently the Sheila Sherlock Chair of Hepatology at the Royal Free Hospital in London and it is therefore a particular pleasure to me that I can, in the great tradition of the Royal Free, offer a tribute to Michael Kew, one of the most successful fellows of Dame Sheila Sherlock.

Best regards and thanks for all
Massimo

“"It was a fantastic time, we went for a year and Shiela Sherlok was there the whole time. She was on leave. She was there, we had her for the whole year and the material you can imagine, any old problem was sent to her from all over.

The material was good because Sheila was the draw card, people would send from all over, England and in fact from Europe. To Sheila Sherlok no case was a difficult case. She was an international figure. She was a wonderful teacher. She had these Wednesday afternoon sessions where she would herself give a talk and then she would have every week another visitor from America or somewhere and he would give a talk.

Clinical knowledge, good clinician, and then she encouraged research. At that time you didn't have all these fancy stuff as you have now, but she would encourage you to do research. She wanted you to do research into why and how to treat them and so on. There were always papers coming out."

Prof Geoffrey Dusheiko
Emeritus Professor of Medicine
University College London Medical School
Royal Free Hospital

Professor Michael Kew can look back on a remarkable career in hepatology. He has engendered and focussed interest in hepatocellular carcinoma (HCC) in sub Saharan Africans and achieved a unique eminence in the field. His career began (following a South African 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. The Royal Free Hospital provided a coveted scholarship and 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 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 brought a combination of knowledge and exact thinking coupled with an indefatigable commitment and enthusiasm to his research. Those qualities together with a gift for precise, rigorous and quick writing have been the hallmarks of his career.

His strengths have been 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 cooperation at a time of potential isolation of South African Hepatology. He has used both interdisciplinary expertise in South Africa and a network of international researchers to ensure that science in Hepatology could continue at the University of the Witwatersrand, despite the odds. These efforts have led to a seminal understanding of the pathobiology of HCC – including papers in Science, and the very first article published in Hepatology proving the integration of 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 South Africa which fosters both pure and applied science, full membership of the Academy of Science of South Africa and 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 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 NIH. His more recent training coupled with the expertise of his molecular virology group provided a deep understanding of subgroups of hepatitis B virus in South Africa.

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 South Africa, and of 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 life to the careers of a number of his trainees, registrars and research fellows, who acknowledge the debt they owe by being present at his Festschrift. We hope that he and Daphne will enjoy the day.

Dr Adrian M. Di Bisceglie
M.D., FACP, FAASLD
Chairman and Professor of Internal Medicine
Chief of Hepatology
Saint Louis University School of Medicine

HOW PROFESSOR KEW CHANGED MY LIFE

I had always known I wanted to go to medical school but after acceptance there and my first couple of years of medical school, 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 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 4th or 5th year of medical school that Prof Kew gave a lecture to us on Cirrhosis. His lecture was so clear, organized 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 – 1) nodules of regenerating hepatocytes 2) surrounded by bands of fibrosis and 3) 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 Prof Kew’s weekly visits where 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. Because of this, when I had the opportunity to do an elective as a registrar I chose to go to the Johannesburg Hospital and work with Prof. Kew (I actually worked in Geoff Dusheiko’s lab and Geoff’s contribution to my career is another whole story). But under Prof. Kew’s tutelage, I began to learn more about HCC and how research was done and this led me to going to the NIH to advance my research training and it was there that I was exposed to brilliant minds, great opportunities and the prospects for making a career for myself in research and academic medicine. Prof 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 Prof 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.
Dr Chris Kassianides  
Chairman and Founder, Gastroenterology Foundation of South Africa

From the moment I came into contact with Professor Michael Kew on an early morning ward round, as they always were, in the 5th year of medical school, it suddenly became very clear. You wanted to be part of it all - the clarity, the thought, the discipline, the skill, the attention, the dedication, the brilliance, and most of all the humor. It was serious and it was clever and it simply looked so easy.

Hepatology was interesting but it was Mike Kew that made it alluring. Soon after joining the Liver Unit I arrived at work one morning to find a note attached to the door of my office asking me to see him. I hurried to Mike’s office and before I was seated he looked up and asked me if I wanted to join Jay Hoofnagle’s liver unit at the NIH in Bethesda, Maryland – if so I had a couple of months to get there. Blushing, I replied that I would love to go but I had a wedding planned. Excellent, he replied, that gives enough time to get married in a few weeks before you leave.

A project to accompany me to the NIH quickly came to mind – go and find out about the duck hepatitis B virus, it’s a good model to pursue. Ducks! I never knew the Hepatitis B virus existed in ducks. Soon I found myself with Mike, driving to a duck farm, at an unearthly hour of the morning. There, we stood together, white coats, gloved with outstretched hands, holding onto vials attempting to catch every drop of blood from every slaughtered duck. At the NIH, the duck model became a useful one for the screening of antiviral agents directed against the Hepatitis B virus.

Many years later I returned to South Africa and despite not joining the liver unit we remained in close contact.

He embraced the establishment of the Gastroenterology Foundation 10 years ago with great enthusiasm and he has been a consistent source of moral and intellectual support – a man you can rely on, a true trustee, my ethics tsar.

With his retirement to Cape Town, we have over the last few years had the opportunity of spending more time with him, and with Daphne, his supportive wife, and this has given us enormous pleasure.

Two years ago whilst visiting Jay Hoofnagle in Bethesda, Maryland I suggested we organize a Festschrift to honor Mike Kew. Jay’s face lit up and that was the signal to steam ahead.
How to Write. I remember in detail his clear instructions, clever aphorisms and Kewisms in his talk. He said: “Good writing is a craft, not an art” and that revision was the essence of “getting the words right” and was inseparable from good writing. He also stressed that the secret of revising a paper was to marshall one’s thoughts in the right order, to get rid of “clutter”, and to perfect and streamline the prose. Make what you have written accurate, precise and readable was Mike’s editorial injunction to lesser mortals and novice authors. A favorite Kewism was “Write in haste and revise at leisure”. He emphasized that the first few sentences were important and should persuade the reader to read on. All this from a master wordsmith and the pearls of writing wisdom were doubly appreciated, both by fellows and faculty.

Many of us set out, like Odysseus returning from Troy, on quests, either real or representative, and embark, sometimes indifferently and without a compass, on life’s unrelenting voyage of self discovery. As the Greek poet Constantine Cavafy, inspired by the Homeric return journey in the Odyssey, wrote in “Ithaca”: “When you set out on your journey to Ithaca, pray that the road is long, full of adventure, full of knowledge….”. Going on a lengthy journey (and a career) is as much about the process as the destination and involves unexpected surprises, challenges, setbacks, and rewards. Mike’s journey has been one of Homeric proportions and achievements. This symposium is therefore an opportunity to reflect on the life and work of a legend who has embodied the highest values of medicine. We pay tribute to a man of quiet dignity and towering achievement whose accomplishments and whose steadfast belief in work and industry show how one person can make a difference in the lives of many. Mike has demonstrated that an academic life can be richly rewarding and satisfying and that he has led a life that can be described only in superlatives – as a person, doctor, clinician, researcher and scientist and teacher. We wish you well in your ultimate retirement. Humba Kahle, Mike.

Prof Sandie Thomson
Trustee

In my 21 years at the Department of Surgery UKZN I knew of Mike and his reputation as a leading researcher into the scourge of the Hepatitis B virus on the African continent. In those years I had interacted with him only briefly at congresses where liver resection was also on the agenda. Over the last 6 years our professional relationship has grown. I would like to relate three personal encounters during this time which attest to the attributes of this remarkable man.

The first encounter was at the Gastro Foundation Fellows Weekend at Spier. At that weekend we indulged in team building activities. One of the games we played as part of these exercises was croquet. I was the “expert” and had to educate the fellows and faculty on the rules and the finer points of strategy. My most avid pupil was Mike who mastered the strategy and led his team to victory.

My next encounter was after he migrated as an honorary Professor to the Department of Medicine at UCT. I had just taken up the Chair of Gastroenterology at UCT in 2010 when he approached me walking down the main hospital corridor. His build was that of a wiry Scotsman, his demeanor unassuming and his friendliness natural and engaging. He started the conversation by telling me that he really enjoyed my presentation to the Faculty at the time of the selection process and that they had chosen the right man to succeed in the job. This was just the fillip I required to dust myself down from what had been a very harrowing transition time in my academic career and get on with my new job.

My third encounter was when I went to visit him in hospital after his bicycle accident. I was somewhat apprehensive as to how the interaction might go given the seriousness of his injury. I am pleased to report my fears were unfounded. Bruised battered yet entirely lucid his first words to me were “It so kind of you to come and visit me” A fast learner, a leader, a mentor and a gentleman, an academic par excellence.
Prof Reid Ally
Trustee

I came to know Prof Kew in 1978, being a fifth year medical student in his unit at the then NEH Hospital. NEH was regarded as “THE” training academic medical facility, the heads being Prof’s Kew, Seftel and Joffe. In 1978 Prof Kew served as the Dora Dart Professor in Medicine and in 1994 as the Honorary Director of the South African Medical Research Council at Wits.

My first case presentation to him lead to absolute fear as he told me to stop playing the xylophone instead of percussing the chest! With time this fear lead to total admiration as he taught us medicine and inspired us to become not only good and insightful doctors, but to be caring and compassionate human beings.

Later, our interactions were much more “amicable” as he did ward rounds at the Liver Clinic at Baragwanath Hospital. The memory I have of him at that time, was this amazing doctor looking for patients with liver cancer and always having a liver biopsy needle in his white coat pocket!

Prof Kew was not only a doctor and scientist, he was in great physical shape playing squash, running and cycling. He was as fearsome on the squash court as he was on his ward rounds!

Prof Kew educated and inspired me. Even though I am not a “hepatologist”, it is because of my association with him, that I appreciate the immense importance of this organ.

Prof Jose Ramos
Trustee

I first remember Prof Kew when I was a medical student at Wits in the early 1980’s. To us students, he seemed a distant figure, one of the many Prof’s we encountered and heard about. It was only as an intern and then Surgical Registrar that I began to have a better appreciation of who he was and what he did. The latter was somewhat esoteric as we really had no idea of what the field of Hepatology was all about… I recall him doing rounds leading a posse of consultants and students who all stood in awe of him. We were all acutely aware however, that whenever we had a difficult hepatology problem in the surgical ward, he was the undisputed expert. As a consultant in Prof Myburgh’s unit I was able to better appreciate his brilliance in his field and his work ethic.

Prof Kew epitomised the superb clinician-scientists that we were graced with at Wits in the 70’s, 80’s and 90’s. He, together with Profs Myburgh, Bothwell, Barlow and many others were true greats, able to combine intelligence, knowledge, experience and clinical acumen to solve the complex clinical problems we were presented with. This in an era when investigations which we today take for granted, were not yet available. They were leaders who educated a generation of doctors and allowed them to achieve greatness.

As a trustee of the Gastro Foundation, I was able to interact with Prof Kew on other levels and my admiration and respect for him grew even greater. He is a true scientist with vast knowledge and expertise. Despite this, he is warm and humble, always prepared to advise and contribute. We have all been enriched by this special person and pay our tribute to him with this special celebration.
Prof T H Bothwell
Emeritus Professor of Medicine and
Former Dean, Faculty of Medicine,
University of the Witwatersrand

I wrote a short piece on Mike Kew's contributions when he retired seven years ago from his post at the University of Witwatersrand. This assessment, which is appended below, remains as relevant today as it was when it was written.

“When Mike Kew was an intern, the senior ward sister, Stella Welsh, a great admirer of his, called him Peter Pan, and over forty 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 life-long pattern – up at 3.30 am and off to the University, home at lunchtime, more work in his study until 4.00 pm, an hour or two cycling or gardening, ‘and so to bed’ at 7.00 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 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 WHO 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.

“Elliot was getting on you know, and then I worked with Bothwell who was very stimulating, an encouraging model as a man to follow. His record was excellent He was constantly doing research and looking for new research avenues. So this was very stimulating to me, anyway, and working with Bothwell.”

Prof Bothwell and Prof Kew at his retirement farewell.
Prof Harry Seftel  
Professor of Medicine  
University of Witwatersrand  
Johannesburg

"A great teacher, a warm personality, encouraged research, encouraged you to write things up. He was the ideal boss. He really was a fantastic boss. It was a small place: male ward, female ward, outpatients every day. Harry was the boss, I was the registrar and there were housemen - a small intimate group and lots of opportunity. There was always those wonderful cases going through, opportunities to write them up and so on. He was really good at it."

Prof Anna Kramvis  
Research Professor  
Director: Hepatitis Virus Diversity Research Unit  
University of the Witwatersrand

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

I am very honoured and privileged to be included among your mentees. Your 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 am very grateful to have worked so closely by your side and to learn from you in the Molecular Hepatology Research Unit, University of the Witwatersrand from 1994 - 2007. Together we have published 40 papers and more to come, giving me the honour of being your most frequent co-author. Your contagious enthusiasm and passion for research, together with your exemplary work ethic have been transmitted to me. I have always worked with your maxims in mind: never procrastinate, be focused and publish quickly! It is on these solid foundations that the Hepatitis Virus Diversity Research Unit has been established and we are proudly continuing the work we initiated.

Professor Kew you are a remarkable man, who has left a great legacy and momentum of research questions.

By using the Socratic method of questioning we can initiate in others what we cannot initiate in ourselves and thus your legacy continues!

Wishing you life’s richest blessings
Prof Mark Sonderup

Mike Kew is a giant in the annals of South African academia. His seminal contributions to our understanding of amongst others, hepatocellular carcinoma, changed the global view of the disease and deeply enriched our understanding. More importantly it provided the understanding on how to prevent and even eradicate this disease in Africa. The most fitting tribute we can pay to Professor Kew is to finally act on what we now know needs to be done and eradicate hepatitis B and HCC.

Prof Wendy Spearman

Professor Mike Kew is a giant in the field of Hepatocellular carcinoma and has been a mentor to many eminent international Hepatologists. His lifelong research continuing well into retirement has been on the epidemiology and pathogenesis of hepatocellular carcinoma. He continues to be a prolific writer and has always been generous in sharing his knowledge. Most importantly his lifelong research into hepatocellular carcinoma has been performed in South Africa and this is to be applauded. It has been a privilege to know Professor Kew and this Festschrift is a fitting tribute to his research career.
**Dr Mashiko Setshedi**

It was singular pleasure and honour to have met you because it changed my life, literally. Thank you not just for encouraging me to pursue my PhD, but for connecting me with your collaborator Dr Jack Wands, based at Brown University, in whose laboratory I spent 3 years. You were a nurturing and fiercely supportive supervisor, and for this I remain indebted to you. Thank you for the knowledge you imparted to me and the lesson I learned by watching you work i.e. the virtue of working hard; your work ethic is second to none. I must admit I attempted to emulate you, but failed miserably – I simply could not get to work at 4 am!

For the contribution you have made to the understanding of HBV-related cirrhosis and HCC in South Africa, on behalf of all of us and the patients I thank and congratulate you. Well done for putting South Africa on the research map globally through your several hundred peer-reviewed publications, what a tour de force!

In the next chapter of your life I wish you on-going success, joy and peace.

With much respect,

Mashiko Setshedi

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**Dr Lewis Roberts**

Gastroenterology and Hepatology /Cancer centre

Rochester

Minnesota

Professor Michael Kew has been an inspiration and support to a whole generation of investigators in the field of liver disease and more specifically of liver cancer research, particularly in Africa. His publications, covering many aspects of the clinical presentation, epidemiology, risk factors, and pathogenesis of liver disease and liver cancer in Africa as well as on other continents, have helped to improve our understanding of these diseases as well as to increase global awareness of the burden of illness and death from liver cancer in Africa.

Dr. Kew has also demonstrated an unwavering commitment to the training of a new generation of investigators from Africa, training a number of investigators both from South and West Africa, including Drs. William Owiredu and George Asare, both of whom continue active scientific careers in Ghana.

Personally, I have been deeply grateful for Professor Kew’s encouragement and support of efforts to develop regional and Africa-wide collaborations to improve the evidence base for the epidemiology of liver cancer, which are critical to influence global and national health policy. In 2009 Professor Kew was gracious enough to give the Keynote Address at one of the early meetings of the Africa Network for Research and Training in Gastrointestinal and Liver Diseases, which we held in conjunction with the Africa Partners Medical Advances in Medicine Continuing Medical Education conference in Kumasi, Ghana. Characteristically, Professor Kew provided his own financial support for the meeting. At this same meeting, we held a key workshop on Implementing Liver Disease Registries in West Africa, which was facilitated by Drs. Ebrima Bah from the Gambia Hepatitis Project of IARC and Dr. Douglas LaBrecque representing the World Gastroenterological Organization. This meeting and workshop were critical in encouraging early efforts to develop registries and hepatitis and liver cancer clinics in a number of West African countries and these efforts are now bearing fruit as we complete initial publications including cohorts of patients with liver cancer assembled from centers throughout Africa.

It will be an honor to be present at the festschrift honoring Professor Kew and to celebrate his dedication, creativity, and wonderful spirit of friendship and collaboration which have anchored a truly illustrious career.
Prof Martin Veller  
Dean: Health Science Faculty, Wits

Mike Kew is truly one of Johannesburg’s and 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: a MBBCh with distinction (1961), a 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 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, 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 today still is an Honorary Research Professor in Wits’ Faculty of Health Sciences.

Mike’s contribution to Wits, to South Africa and to medicine has been, and continues to be, immense and exceptional. Few others have made and will make the strides that can be attributed to his work. These will be extensively highlighted in this festschrift and for which he has been awarded numerous prizes and recognized widely. Possibly the most telling of these being the fact that he was the first clinical scientist in South Africa 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 in 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; Arbuthnot; 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.

SAGES

On behalf of SAGES I wish to extend our good wishes to Professor Mike Kew on this auspicious meeting in his honour. Professor Kew’s contribution to Hepatology in South Africa and beyond has reached legendary proportions and this is borne out by the status of the faculty who has gathered here to honour him.

We wish Professor Kew all the best and long may he continue to bestride the field of hepatology like the colossus he is.

Keith Newton  
SAGES President
Do you recall Mandela with great affection

“Ah yes, Mandela was such a wonderful person. His initial physician was the cardiologist, John Barlow. He came to me and said would you come and join me, which was very surprising because Barlow was Barlow, I was high up, but I wasn’t Barlow. I said that I would love to however that we would need to check this with the State Presidency. They would not want me walking in saying “hi”. Barlow took me, introduced me, and said that he would like me to join him in the interest of coverage. He was very nice about it and said yes of course. John and I would see him together at the hospital. He’d come in at the Johannesburg Hospital as an outpatient.”

“John retired and felt he should hand over to someone. I would go to his big home in Houghton. He had this big double storey. It was always very pleasant.”

“I looked after him for close to ten, nine or ten years. It was a very long time.”

“Early on hospital visits and occasionally house visits but latterly after he had retired, house visits.”

“It would be interesting when you would go in there and the phone would ring and he would say just excuse me, it’s Liz.”

“Queen Elizabeth. The Queen!”

“Yes and I would be sitting there. A wonderful guy”
“Liver Cancer, you can imagine, there were just cases and cases of liver cancer and I could be very selective. It was not as though you had to take what came because we did outpatients. We could select from the outpatients who came into the ward. We could look at liver cancer in whichever way you wanted to.” Prof Michael C Kew