

BRIDGING THE SKILLS GAP FOR THE PHARMACEUTICAL INDUSTRY IN SOUTH AFRICA

Multi-Stakeholder Consultative Forum

Midrand Conference Centre, Midrand, Johannesburg; 27-28 May 2015



Wednesday, 27 May 2015	
08:30	Registration
09:00-09:45	<u>Plenary 1</u> : Human Resources for the Pharmaceutical Sector in South Africa – Setting the Stage Chair: Prof. David Katerere, Lecturer, Tshwane University of Technology
09:00-09:15	Opening Address Ms. Claudy Steyn, Chief Director - Department of Trade and Industry Mr. Juergen Reinhardt, Senior Industrial Development Officer, United Nations Industrial Development Organization
09:15-09:45	Keynote presentation: Human Capital Outlook Implications for Skills Development in the Pharmaceutical Sector Dr. Skhumbuzo Ngozwana, Metanoia Pharma Consulting
09:45-10:00	Tea/coffee break
10:00-13:00	Parallel Breakout Sessions <u>Working Group 1</u> : Clinical Research Chair: Prof. Mphahlele, Vice President of Research, Medical Research Council <u>Working Group 2</u> : Manufacturing Chair: Mr. Stavros Nicolaou, Senior Executive, Aspen Pharmacare <u>Working Group 3</u> : Quality Systems Chair: Dr. A. Koele, Executive, Cipla <u>Working Group 4</u> : Regulatory Systems Chair: Dr. J. Gouws, Registrar, MCC <u>Working Group 5</u> : Production of Raw Materials Chair: Prof. Douglas Oliver, Professor of Pharmacology, North-West University <u>Working Group 6</u> : Natural Sciences (Chemistry, Microbiology etc) Chair: Dr. Rolf Becker, Executive Director, South African Council for Natural Scientific Professions <u>Working Group 7</u> : Distribution Chair: Mr. Phasha Mogologolo, Chief Executive, PBM Pharmaceuticals
13:00-14:00	Networking Lunch
14:00-16:15	<u>Plenary 2</u> : Feedback from Working Groups Chair: Dr. Siya Ntutela, Director, Zanalytix Laboratories
14:00-14:30	WG 1: Clinical Research
14:30-15:00	WG 2: Manufacturing

15:00-15:15	Tea/coffee break
15:15-15:45	WG 3: Quality Systems
15:45-16:15	WG 4: Regulatory Systems
16:15-16:30	Summary and Closing Day 1: Mr. Godfrey Keele, National Project Coordinator, United Nations Industrial Development Organization
17:00-19:30	Networking Dinner



Thursday, 28 May 2015

09:25-11:00	<u>Plenary 2</u> : Feedback from Working Groups (cont'd) Chair: Prof. Andries Gous, Head of Department, Department of Pharmacy, Sefako Makgatho Health Sciences University
09:25-09:30	Opening Remarks
09:30-10:00	WG 5: Production of Raw Materials
10:00-10:30	WG 6: Natural Sciences (Chemistry, Microbiology etc)
10:30-11:00	WG 7: Distribution
11:00-11:15	Tea/coffee break
11:15-12:30	<u>Panel Discussion</u> : Bridging the Skills Gap – What next? <u>Moderator</u> : Ms. Brenda Ntombela, Head of Secretariat Human Resources Development Council <u>Panelists</u> : <ul style="list-style-type: none"> • Mr. Gavin Steele, Chief Director - Department of Health • Ms. Claudy Steyn, Chief Director - Department of Trade and Industry • Dr. Emelda van Staden, Chief Director - Department of Higher Education • Mr. Vivian Frittelli, CEO – National Association of Pharmaceutical Manufacturers • Ms. Miranda Viljoen, Executive Director - South African Association of Pharmacists in Industry • Prof. Eliangiringa Kaale, Professor - School of Pharmacy, Muhimbili University, Tanzania • Mrs. Salma Ismail, Chairperson - Southern African Pharmaceutical Regulatory Affairs Association • Dr. Judy Coates, Scientific and Regulatory Affairs Manager, Innovative Pharmaceutical Association of South Africa • Mr. Amos Masango, Registrar - South African Pharmacy Council • Prof. Shabir Banoo, Member of Council - Medicines Control Council
12:30-13:30	Networking Lunch
13:30-15:00	<u>Plenary 3</u> : Conclusion
13:30-14:45	Presentation of the Consolidated Report and Plan of Action Ms. Madelein Roos, Adcock Ingram/CHIETA
14:45-15:00	Closing Remarks <ul style="list-style-type: none"> • Mr. Juergen Reinhardt, Senior Industrial Development Officer, United Nations Industrial Development Organization • Mr. Gavin Steele, Chief Director - Department of Health

SPEAKER PROFILES

ABOFELE KHOELE (Dr.)

Born in Soweto, Dr Khoele is the youngest of three children. He attended schools in Johannesburg before studying medicine at the University of Cape Town. Following a clinical career that spanned seven years and two continents, he then joined the pharmaceutical industry at Novartis initially as a Medical Science Liaison, before gaining experience in Medical Affairs and Clinical Operations. He spent two years as Chief Scientific Officer and thereafter joined Adcock Ingram in 2010 as the Group Executive responsible for Drug Management and Development.

In this role he was responsible for Group Quality Assurance, Group Regulatory Affairs, Medical Affairs, Research & Development, Group Project Management and Group Quality Control.

Dr Khoele joined Cipla in October 2014 as the executive director responsible for regulatory affairs, medical affairs and quality assurance. In this role, he is key to ensuring that the proper regulatory pathways and quality plans are incorporated in product and business development processes at Cipla.

ANDRIES GOUS (Prof.)

Professor Andries Gous obtained his BPharm degree at Potchefstroom University and his Pharm D degree at the University of Tennessee, USA. He is registered with the SAPC as a specialist pharmacist (Clinical Pharmacokineticist). Prof Gous had worked for nine years as a clinical pharmacist at Chris Hani Baragwanath Hospital, focusing on intensive care, burns and adult medicine, before he joined the then School of Pharmacy at MEDUNSA in 1999. He is currently the Head of the Department of Pharmacy of the Sefako Makgatho Health Sciences University. More than 80 postgraduate students had graduated under his supervision. Infectious diseases, pharmacokinetics and adult medicine are his areas of interest. He is a co-founder and current chair of the South African Society of Clinical Pharmacy and a member of the South African Antibiotic Stewardship Programme steering committee. He is also a keen cyclist in his spare time.

BRENDA NTOMBELA (Ms.)

Brenda Ntombela is the Head of Secretariat: Human Resource Development Council. She is responsible for overall leadership and management of the Functions of the Secretariat. Brenda is a graduate of the University of the North (now Limpopo), where she received her Bachelor's Degree in B Cur (I et A) in 1983. She thereafter received her Master's Degree in Nursing from the University of South Africa. She has also completed various management courses.

Brenda has worked in various industries which include but are not limited to Higher Education where she was a Lecturer, ICT where she served as a Councillor for the Independent Communications Authority of South Africa (ICASA) and consulted in ICT policy making and regulations in Africa as well as in skills development. She is a board member of the Bertha Gxowa hospital and a Deputy Chairperson of the Public Sector Trainers' Forum of the National School of Government.

Brenda is an influential leader, with wealth of experience in strategic planning, policy and regulation formulation, research and conflict management to name but a few.

DAVID KATERERE (Prof.)

Prof David Katerere holds a Bpharm (Hons) degree from the University of Zimbabwe and PhD in Pharmacy from the University of Strathclyde, Scotland in the United Kingdom. He has 20 years post-qualification experience in all sectors of pharmacy including basic and clinical research. He has worked for the University of Pretoria, Farmov-Parexel CRO and SA Medical Research Council and has published over 40 peer reviewed articles, 3 book chapters and 1 book.

His areas of interest and expertise are analytical chemistry, regulatory science and pharmacognosy.

David is on the expert committees of SA Medicines Control Council (both P&A and CMC), an expert advisor / trainer on scientific matters to the South African Medical Research Council (MRC) Grants and Scholarships Division (GASD) and reviewer of grant proposals for the National Research Foundation (NRF) and Medical Research Council (MRC). He was the technical expert for the DTI Skills for the Pharmaceutical Industry report and consultant for the UNIDO / SAGMA Training Needs Analysis project. He is currently lead consultant for the SAPC programme to develop the MPharm (Industrial Pharmacy) course.

Currently he is Associate Professor of Pharmaceutical Sciences at Tshwane University of Technology where he teaches pharmaceutical chemistry and introduction to health systems and national drug policy.

DOUGLAS OLIVER (Prof.)

Douglas William Oliver, has specialized through obtaining two doctoral degrees, one in Pharmacology and one in Pharmaceutical and Medicinal Chemistry in the fields of in vivo cerebral perfusion pharmacology and in drug discovery, respectively. He held positions as head and Professor of Pharmaceutical Chemistry as well as head and Professor of Pharmacology. He was Research Director of Drug Research and Development and Director of Pharmacy at North-West University. He has trained more than 40 doctoral and master degree students in pharmacology and pharmaceutical and medicinal chemistry. He is author of some 110 publications, USA, European, South Africa, Japanese patents and involved in more than 250 national and international presentations in 25 countries. He has been active in medicine regulation since the late 1980s as an appointed expert in several committees of Medicine Control Council as member, chair and vice-chair (Pharmaceutical & Analytical, Scheduling); specialized task teams for biosimilars, non-substitutable medicines and complementary medicine. He has served as council member of Medicine Control Council until January 2015. His regulatory skills extend to the field of regulatory auditing, i.e. Active Pharmaceutical Ingredients (API) and Final Finished Products (FFP) and is also involved in regulatory training. He is certified European Council Active Pharmaceutical Ingredient auditor. He has served on committees and council of the South African Pharmacy Council. He served as executive committee member of International Union of Basic and Clinical Pharmacology (IUPHAR); He is the Founder and Chair: of "Pharmacology for Africa" involved in training and capacity building on the African continent; President (past): South African Society for Basic and Clinical Pharmacology; President: 17th World Congress of Pharmacology 2014 (WCP2014), Cape Town; He serves on several international scientific advisory boards.

He was a frequent marathon and Comrades runner, sky diver, bungee jumper. He is an advanced scuba diver and a keen underwater photographer. His hobbies are painting (oil and acrylic) and photography.

ELIAS KAALE (Prof.)

Prof. Kaale studied a Bachelor of Pharmacy course at the Faculty of Pharmacy of University of Dar es Salaam, obtained his Masters Pharmaceutical Quality Control and Quality Assurance, took his Ph.D. with a thesis on Development and validation of method for analysis of Aminoglycoside antibiotics using capillary electrophoresis at the Catholic University of Leuven, Belgium. Now a recipient of Alexander Von Humboldt Fellowship for Senior Researcher at The Institute of Pharmacy and Food Chemistry, Julius-Maximilian University of Wuerzburg, Germany.

GODFREY KEELE (Mr.)

Godfrey Keele has more than a decade of experience in the pharmaceutical industry in various technical roles and senior management. He holds a Master of Pharmacy degree and is completing a PhD degree at Wits University. He is the managing director of a pharmaceutical consultancy in regulatory affairs and quality management systems. Godfrey is currently contracted to the United Nations Industrial Development Organization (UNIDO) to oversee a number of capacity building interventions in the local pharmaceutical industry. His other roles include part-time lecturing at Sefako Makgatho Health Sciences University (former Medunsa), assessor and external evaluator for the South African Pharmacy Council (SAPC) and the Medicines Control Council (MCC) respectively. He was previously appointed by the Zambian Pharmaceutical Business Forum (ZAPBF) as a technical advisor. Godfrey is a member of the executive committee of the Southern African Pharmaceutical Regulatory Affairs Association (SAPRAA), further to this he sits on the pricing committee of the National Association of Pharmaceutical Manufacturers (NAPM). He is also a member of a technical committee of the South African Bureau of Standards (SABS) that is tasked with the ratification of ISO standards for local adoption into the South African National Standards (SANS) programme. He has made a number of contributions at scientific meetings both locally and abroad.

JEFFREY MPHAPHELE (Prof.)

Professor Jeffrey Mphahlele is currently the Vice President of Research at the South African Medical Research Council (SAMRC), the largest science council for funding and conducting health research in South Africa. He is concurrently the Co-Director of the SAMRC/Diarrhoeal Pathogens Research Unit, a WHO Rotavirus Regional Reference Laboratory for Africa based at Sefako Makgatho Health Sciences University (previously MEDUNSA) in Pretoria (2010 to present), and co-founder and Head of the South African Vaccination and Immunisation Centre (SAVIC) (2003 to present) at the same institution. He was previously Professor and Academic Chair of the Department of Virology, National Health Laboratory Service (NHLS) at Medunsa Campus (2009 to Sep 2014), and Visiting Research Fellow at the Institute of Virology, University of Glasgow, Scotland (1996 to 1997).

His research interests include prevention and control of human viral diseases, particularly vaccine-preventable diseases. He served on various committees of the World Health Organisation (WHO) in capacity as member of the Scientific Advisory Group of Experts (SAGE) on Hepatitis A Working Group (from March 2010 to 2012); Temporary Technical Advisor for Consultation on Best Practices and Tools for Documenting the Impact of Hepatitis B Immunization, Hong Kong SAR, China, 29-30 April 2010; and Certification of Polio Eradication in South Africa and southern block of the WHO AFRO region (2002 to present). He is currently a member of Oversight Committee of the Network for Education and Support in Immunisation (NESI) at the University of Antwerp, and appointed to several Ministerial Committees of the Republic of South Africa in capacity such as the Chairperson of the South African National Task Force (NTF) for Laboratory Containment of Wild and Potentially Infectious Poliovirus Materials (April 2006 to present); Member of the National Certification Committee for Eradication of Poliomyelitis in South Africa (2004 to present); Member of the National Advisory Group on Immunisation (NAGI); Member of the South African Veterinary Council (2004 to 2009) and Biological Medicines Committee of the Medicines Control Council of South Africa (2000 to 2010).

JOEY GOUWS (Dr.)

Joey Gouws is the registrar of the Medicines Control Council (MCC) as well as a chairperson of PIC/S. Her qualifications include: MBA (GIBS, University of Pretoria) PhD (University of Potchefstroom) MPharm (University of Potchefstroom) Honns BSc, Pharmacology (University of Potchefstroom) Bachelor of Pharmacy (University of Potchefstroom) Bachelor of Science, Zoology & Physiology (University of Potchefstroom). Her working experience includes all sectors of pharmacy across both the private and public sectors.

JUDY COATES (Dr.)

Judy Coates is the Scientific and Regulatory Affairs Manager at the Innovative Pharmaceutical Association South Africa (IPASA).

She is responsible for monitoring trends, issues, problems, opportunities and activities in the healthcare environment, with a specific focus on Scientific and Regulatory Affairs, in order to identify legislative issues that can affect the industry; developing IPASA positions on key issues in conjunction with members; and the overall coordination and support of a number of the IPASA Working Groups.

Judy has been in the Pharmaceutical industry for thirteen years, initially specializing in research and development and thereafter progressing into investment and now regulatory affairs.

Her career began with joining Mintek in 2003 after obtaining her PhD in Organic Chemistry at the University of Johannesburg (RAU).

Judy started her research career looking at the synthesis and biological activity of a variety of metal-based phosphine compounds in a secondment to University of Witwatersrand. During this time Judy went on a research visit to Heidelberg, Germany, where she investigated the gold labelling of neurologically active pentapeptides. Shortly after her return to South Africa she began heading up the Mintek AuTEK Biomedical Programme, along with taking on an honorary position at the University of Witwatersrand. Judy served as the head of the Biomedical Group at Mintek for a period of eight years.

In July 2011 Judy transferred from Head: Biomed to the Human Resources Division in the position of Head: Academic Support. The tenure in this role entailed the managing of Mintek's Learning and Development portfolio. In this role she established a number of frameworks and policies to administer and guide the way Mintek engaged with key stakeholders that fell within the Academic Support portfolio.

At the end of 2012 Judy joined the Technology Innovation Agency (TIA) in Pretoria as the General Manager: Health. She was responsible for the oversight and leadership of the TIA Health sector team; the development and implementation of the Health sector strategy, the management and growth of the Health investment portfolio and the management of various stakeholder relationships.

At the start of 2015 Judy joined the Innovative Pharmaceutical Association South Africa (IPASA).

JUERGEN REINHARDT (Dr.)

Senior Industrial Development Officer, Business, Investment and Technology Services Branch, United Nations Industrial Development Organization (UNIDO)

Juergen Reinhardt is a Project Manager at UNIDO, headquartered in Vienna, Austria. Having been responsible for an array of technical cooperation interventions mainly in the fields of private sector development, SME development, investment promotion and industrial policy in Asia and Africa, his current portfolio includes a number of interventions situated at the interface of public health and industrial development. These activities seek to improve access to essential generic medicines in developing and least developed countries. This objective is pursued through a combination of advisory and capacity building support aimed at the strengthening of local pharmaceutical production capacities, with a specific focus on sub-Saharan Africa. The joint preparation with the African Union Commission of a Business Plan for the AU Pharmaceutical Manufacturing Plan for Africa (PMPA) is one of the major outcomes of the lead global project to date.

Benefiting from Italian funding, another intervention in South Africa provides capacity-building assistance related to vaccines production, medicines regulatory training and manufacturing skills development.

Prior to joining UNIDO in 1992, Mr. Reinhardt, a German national, was a Research Assistant at the Institute of Development Research and Development Policy of the Ruhr University of Bochum, Germany, from where he obtained a Ph.D. in Economics.

MADELEIN ROOS (Ms.)

CAREER ACHIEVEMENTS: Developed curriculum for the National Diploma Chemical Engineering and BTech Chemical Engineering in collaboration with industry and other stakeholders when Vaal Triangle Technikon acted as the convener Technikon for these qualifications. Developed training material for UNISA (Previously Technikon SA) for the diploma chemical engineering and BTech qualifications (14 subjects). Act as tutor and moderator. Assisted Technikon to achieve accreditation. Developed, moderated and published study material for Eskom for 6 technical positions in the laboratory (1998).

Developed training material and project managed the training for Tiger Brands "Core Skills" programme for the Tiger Brands Academy. Over 600 operators and shift supervisors attended this training for 5 years. Designed, developed, implemented and managed the Sales and Marketing, Operations, Mining and Leadership Academy for PPC. Successfully project managed and delivered the e-learning compliance training for 365 employees at PPC.

WORK EXPERIENCE: Started career in 1984 in mining industry as chemist and also worked at SASOL in their analytical research laboratory. Worked as process engineer at Karbochem and AECI. Joined Vaal Triangle Technikon as part time lecturer in 1990 and by 1996 was head of department for Chemical engineering Department. From 2001 to 2006 consulted with various companies on skills development, strategy and performance management.

MIRANDA VILJOEN (Mrs.)

A Pharmacist by profession, Miranda has experience in community pharmacy, hospital pharmacy and industry. She has held managerial positions for multinational research based and generic pharmaceutical companies and managed her own consultancy business. She has been involved in the lecturing and training of pharmacists on regulatory affairs, quality assurance and other pharmacy related subjects in both South Africa and London.

Miranda has served on many professional committees and has represented the Commonwealth Pharmacists Association at a World Health Organisation Meeting in Geneva. She has served as an evaluator for the Medicines Control Council in their backlog program. Currently and for the past seven years she has been the Executive Director of SAAPI (South African Association of Pharmacists in Industry) representing pharmacists in industry, and has also been responsible for organizing short courses, workshops and colloquia as part of the continued professional development program for pharmacists in Industry. Miranda is a Fellow of the Pharmaceutical Society of South Africa.

MOGOLOGOLO PHASHA (Mr.)

Mogologolo is a Pharmacist, he started his career at Groothoek Hospital in Limpopo Province after which he joined Medical University of Southern Africa (Medunsa) and the Health Systems Trust as a research Intern. While working as a researcher he obtained his Msc (med) degree in Pharmacy from Medunsa. He is currently Chief Executive of Black IQ Pharma, which comprises of seventeen retail Pharmacies across Four Provinces of South Africa under the brand of Kalapeng Pharmacies and a Pharmaceutical wholesaler called PBM Pharmaceuticals. He studied various management development programmes including Managing a Business Turnaround from Wits Business School. Mogologolo is a chairman of ICPA (Independent Community Pharmacies Association) which has about 1200 Independent Pharmacies as Members across South Africa. He is also a chairman of Black Pharmacists Forum. He established Black IQ Training which was the first black owned Provider of Education and Training to be accredited by the South African Pharmacy Council.

ROLF BECKER (Dr.)

I am currently the Executive Director at the South African Council for Natural Scientific Professions (SACNASP), where I have been employed since 1 April 2011, following a sabbatical of three years in which I pursued personal research interests. Previously I was the Director of the School of Molecular and Life Sciences at the University of Limpopo (2001-2007), where I also held tenure as Professor of Biochemistry. I commenced my employment at UL on 1 July 1986 as lecturer in Physiology before moving to the Department of Biochemistry in 1987. I completed my junior degrees at the University of Port Elizabeth (now the Nelson Mandela Metropolitan University) and my PhD in Biochemistry at the University of the North (now University of Limpopo) in 1997, followed by a Bachelors in Business Administration (2005), concentrating on Strategic and Financial Management, through the University of South Africa.

I have authored or co-authored 17 scientific papers in national and international journals, written 8 book chapters, edited 3 books and written 9 popular science articles on my research specialities – the biochemistry of lithium and the taxonomy and distribution of southern African Euphorbia. While leading an internationally recognised research team I contributed significantly to local and international conferences with over 120 presentations between 1986 and 2002 before I scaled down research activities to concentrate on my managerial position. I am well established in academia and have served on a number of national and international bodies, including the Council of the Biochemistry and Molecular Biology Society of South Africa, the Education Committee of the South African Council for Natural Scientific Professions and the Board of Advisors for the International Society for Lithium Research, the Board of Trustees of the University of the North Provident and have consulted for an American firm on the viability of commercialising their patented technology in South Africa. More recently I served on the Accreditation Committee of the Council for Higher Education and the Board of the Institute of Certificated and Chartered Statisticians of South Africa.

SHABIR BANO (Prof.)

Shabir Banoo currently heads the Pharmaceutical Policy, Research and Services Support Unit within Right to Care, a donor-funded NGO linked to the University of the Witwatersrand, where he oversees the provision of technical assistance and support to the department of health at national and provincial levels. This technical assistance focus is aimed at strengthening pharmaceutical services in public health programmes to improve the management and care of patients with HIV and related diseases. Shabir graduated with a degree in pharmacy from Rhodes University in 1985, later obtaining a doctorate in pharmacology from Rhodes University in 1991. He has previously held senior positions in government as well as in the private and NGO sectors. He has also held positions in academia and research at the University of Witwatersrand and at Rhodes University as associate professor of pharmacology. Shabir has also worked as a technical consultant for the South African Ministry of Health and has served on a number of advisory panels and Banoo, Shabir Professor 2 task teams focusing on national drug policy, medicine regulation, pharmaceutical pricing and HIV/AIDS. He has actively contributed to the development of national standard treatment guidelines and management policies including those for HIV/AIDS, TB, maternal, child and woman's health (MCWH)

and malaria programs. Shabir has served as a member of the Medicines Control Council (MCC) of South Africa and currently serves on a number of its expert committees and task teams. He has contributed, in this role, to the modernization of the legislative framework for medicine regulation, streamlining procedures and processes for registration, and developing guidelines and policies to support the registration, regulation and control of medicines. He also serves as a member of the South African National AIDS Council (SANAC) Treatment Technical Task Team. He is a member of the Central Drug Authority (CDA) and has served on the National Essential Medicines List Committee (NEMLC). Shabir serves on a number of international panels and committees and is regularly called upon as a technical advisor to the World Health Organisation (WHO) and United Nations Drug Control Program (UNDCP). His technical areas of expertise include basic and clinical pharmacology; pharmacoepidemiology and drug safety in public health programmes; medicine regulation and control; evidence-based medicine and rational drug use; and pharmaceutical logistics and supply chain management.

SKHUMBUZU NGOZWANA (Dr.)

Dr Skhumbuzo Ngozwana has extensive experience in the healthcare and Pharma industries. He is a visionary and goal orientated strategic thinker who is passionate about the development of the African Pharmaceutical industry; and the provision of safe, accessible, affordable quality medicines to the people of the continent.

Skhumbuzo brings a nuanced understanding of issues facing the healthcare and pharmaceutical sectors on the continent, and globally, as the previous deputy CEO of Cipla Medpro, past Chairman of the National Association of Pharmaceutical Manufacturers (NAPM) of South Africa, the founding chairman of the Southern African Generic Medicines Association (SAGMA); and a founding member of the Federation of African Pharmaceutical Manufacturers Association (FAPMA). Skhumbuzo is a past member of the International Generic Pharmaceutical Association (IGPA) management committee and former Association/Regional advisor (Africa) to the editor of the Journal of Generic Medicines. He is an internationally recognized expert on African Pharma who has delivered presentations on the African Pharmaceutical industry, and on access to medicines at many leading regional and international pharmaceutical and public health conferences; and has built up an extensive network in the global pharmaceutical industry and within the international public health community.

Prior to rejoining Cipla Medpro in November, Skhumbuzo worked as the Lead Consultant for the United Nations Industrial Development Organization (UNIDO), working on the UNIDO - African Union Commission (AUC) partnership on the development of the strategic plan ('business plan') for the Pharmaceutical Manufacturing Plan for Africa (PMPA); a plan to promote local pharmaceutical production and the development of the pharmaceutical industry on the continent. Skhumbuzo holds qualifications in medicine, pharmacology and business administration.

STAVROS NICOLAOU (Mr.)

Nicolaou is Aspen's Group Senior Executive responsible for Strategic Trade. Previously he was CEO of Aspen's Export Division. Aspen is Africa's largest and the world's 9th largest generic Pharmaceutical Company by revenue ranking. He has been instrumental in introducing the first generic ARV's on the African Continent developed by Aspen, which has gone on to save hundreds of thousands of lives in South Africa and on the African Continent.

Nicolaou has over 24 years' experience in the South African and International Pharmaceutical Industry and is a previous winner of the SA Institute of Marketing Management (IMM) Health Care Marketer of the year Award, the most prestigious of its kind at the time. He was recently inducted as one of the youngest Fellow of the Pharmaceutical Society of South Africa (PSSA), one of the highest honours bestowed by the PSSA.

- He has previously and continues to serve on a number of Industry & Para-Government structures, some of which include:
- He serves as an alternate Director on the Board of Directors of Business Unity South Africa (BUSA), SA's apex organised business organisation.
- Is presently chairman of the Public Health Enhancement Fund (PHEF) – A joint collaboration between the Private Health Sector and the Ministry of Health.
- Appointed by the Minister of Public Enterprise as Chairman of the Board of SA Express Airways (2005-2009)
- Appointed by the Minister of Public Enterprises as a Non-Executive Director of Transnet Ltd, SA's second largest State owned Enterprise (2004-2010)
- Appointed by the Gauteng Province MEC for Economic Development as a Director of the Gauteng Economic

- Development Agency (GEDA) and Blue IQ,
- Appointed by the Premier of Gauteng as a Director of the Gauteng Growth and Development Agency (GGDA),
- Appointed by the Minister of Trade and Industry to the BRICS Business Council (2013 to present)
- Appointed by the President of the Republic of South Africa, President JG Zuma to the Board of Brand SA (2012 to present).
- He serves as a Director on the North West University Business School Advisory Board
- Has served on the WORLD BANK/IFC technical Advisory Board on the strengthening of African Health Systems.
- Has served as Member of the IBSA (India Brazil South Africa) CEO's Forum,
- Is presently Chairman of the South African local Pharmaceutical Producers (PHARMISA)
- Awarded the Order of the Lion of St Mark by the Greek Orthodox Pope and Patriarch, Theodoros II.
- Previously served as Vice-President of the International Pharmaceutical Students Federation (IPSF).

He has been a speaker at a number of conferences, including the Economist Roundtable, the World Economic Forum (WEF) and recently delivered a lecture on ARV developments at the Raigon Institute, a JV between Harvard Medical School and the Massachusetts General Hospital.

VIVIAN FRITTELLI (Mr.)

Vivian Frittelli is currently CEO of the National Association of Pharmaceutical Manufacturers (NAPM). He has worked in the pharmaceutical industry for 28 years. He headed Roche's Marketing and Sales Division in Southern Africa before doing a stint of three years as Country Manager for the company in Saudi Arabia. On his return to South Africa he took up a position with Sandoz to start their oncology division. Three years later he joined the NAPM where he has been involved for two years.

He is also a member of the Management committee of the International Generic Pharmaceutical Alliance (IGPA) and on the board of the Southern African Generic Medicines Association (SAGMA).



