



Australia Awards

**AAUN** AUSTRALIA AFRICA  
UNIVERSITIES NETWORK



THE UNIVERSITY OF  
**SYDNEY**



University of Nairobi

# 2015 Joint AAUN Australia Awards Agricultural Research Symposium

25 November 2015  
Nairobi, Kenya



# Agenda

Wednesday 25 November, 2015	
8.45am	<b>Arrival, Take Seats</b>
9.00am	<b>Opening Ceremony</b>
	<p><b>Australia's Engagement with Africa in Agriculture: Partnering to Address Joint Challenges</b>  <b>Prof George Chemining'wa</b>, Chairman of the Department of Plant Science and Crop Protection, University of Nairobi  <b>A/Prof Robyn McConchie</b>, Head, Department of Plant and Food Sciences, Faculty of Agriculture and Environment, University of Sydney, delivering the welcome from the Australia Africa Universities Network  <b>Prof Peter Mulwa Felix Mbithi</b>, Vice-Chancellor, University of Nairobi  <b>HE John Feakes</b>, Australian High Commissioner to Kenya  <b>Dr Johnston Irungu</b>, Director, Crops Resources, Agribusiness and Market Development, State Department of Agriculture                      Vote of Thanks: <b>Prof Charles M. Mulei</b>, Ag. Principal College of Agriculture and Veterinary Sciences, University of Nairobi</p>
9.45am	<b>Break</b>
10.30am	<p><b>AAUN Panel 1: Nutrition Sensitive Agricultural Interventions</b>  <b>Prof Mavis Mulaudzi</b>, University of Pretoria  <b>A/Prof Mu Li</b>, University of Sydney  <b>A/Prof Robyn Alders AO</b>, University of Sydney</p>
11.00am	<p><b>AAUN Panel 2: Postharvest Management</b>  <b>Dr Casper Madakadze</b>, University of Pretoria  <b>Dr George Abong</b>, University of Nairobi  <b>A/Prof Robyn McConchie</b>, University of Sydney</p>
11.30am	<p><b>AAUN Panel 3: Agro-biodiversity in the Context of Climate Variability</b>  <b>Dr Peter Johnston</b>, University of Cape Town  <b>Dr Casper Madakadze</b>, University of Pretoria  <b>Prof Ngugi Robinson Kinuthia</b>, University of Nairobi</p>
12.00pm	<p><b>IDIAR Awardees Lightning Presentations</b>                      Australia Awards Africa Short Course participants present one-slide 'lightening' presentations on their current projects and plans</p>
1.00pm	<b>Lunch plus Networking</b>
2.30pm	<p><b>Working Group Session</b>                      Break into thematic workshop groups to investigate potential collaborations using innovative solutions to increase impact.</p> <ul style="list-style-type: none"> <li>- Agriculture and Nutrition</li> <li>- Value Chain Research</li> <li>- Agriculture, Biodiversity and Climate Change</li> <li>- Postharvest Management</li> </ul>
3.45pm	<b>Break</b>
4.15pm	<b>Working Group Report Backs</b>
4.45pm	<b>Way Forward and Summary</b>
5.00pm	<b>Vote of Thanks, Close</b>

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## Background to Presenters

### George Ooko Abong'

*Lecturer, Department of Food Science, Nutrition and Technology, University of Nairobi*

Dr Abong' holds a bachelors, masters and doctorate degrees in Food Science and Technology from the University of Nairobi (UoN), Kenya, where he currently lectures. He has worked at the UoN for the last seven years with major roles being teaching, research, tutorials and consultancy. He has been involved in several consultancies including practical training on food handling and hygiene in slaughter house and laboratory analysis/operationalization; expert/professional member in ASARECA and Kenya Bureau of Standards (Kebs) technical committee towards harmonization of the East African Standards for Cassava and potato products. He has also been trained and has vast knowledge in proposal writing, e-content development and scientific writing and communication. At masters and PhD levels, he did extensive work on potato processing and how the major potato products impact on nutrition, safety and human health. He especially focused on French fries and potato crisps, major snacks in Kenyan urban centres, where he is widely published - 18 peer reviewed publications and three book chapters. He is currently involved in research in several areas including safe processing of potatoes and sweet potatoes, cassava, groundnuts and aflatoxin and human nutrition related issues. He is a trained food safety expert with vast knowledge in quality assurance and risk analysis from the University of Ghent, Belgium.

Dr Abong' is currently a co-chair of the communication working group of the Global Food Safety Partnership, an initiative being championed by the World Bank to ensure food safety worldwide. He chairs the oils and fats technical committee of the Kenya Bureau of Standards, which develops safety standards in related industries. He is also a dedicated reviewer with several journals in the areas of Food science, Agriculture and Nutrition.

### George N. Chemining'wa

*Head, Department of Plant Science and Crop Protection, University of Nairobi*

Associate Professor George N. Chemining'wa is an agricultural scientist specialised in agronomy. He has B.Sc. Agriculture (University of Nairobi), M.Sc. Agronomy (University of Nairobi) and PhD (University of Manitoba). He has coordinated and collaborated in 18 projects dealing with crop management, crop improvement, value chains, postharvest handling, wetlands, rural innovation and integrated agricultural research for development (IAR4D).

For the last six years, his research has focused on developing technologies for enhancing productivity of beans. He is experienced in facilitating rural innovation processes, having jointly implemented an EDULINK project (2008-2012) on "strengthening of university capacity for promoting, facilitating and teaching rural innovation processes" (SUCAPRI). He has partnered with officials from the Ministry of Agriculture, Livestock Development and Fisheries in technology development and dissemination as well as policy development. He worked as an Agricultural Extension Officer in the same ministry for three years before joining the University of Nairobi as a lecturer in 1995.

Currently, he serves as the Assistant Secretary of the Forum for Agricultural Advisory Services - Kenya (KeFAAS) whose main objective is to improve the delivery and quality of agricultural advisory services in Kenya. He was a member of the national taskforce that spearheaded the development of the current national agricultural research policy. He has made over 65 scientific contributions in refereed journals, conference proceedings, and books in the areas of agronomy, horticulture, integrated nutrient management, integrated pest management and rural innovation processes. He has been an active contributor in his profession, being a core member of Integrated Agricultural Research for Development National Initiative since 2005, and a reviewer for many journals including the Horticultural Association of Kenya Journal, the East African Agricultural and Forestry Journal, the KARI Biennial Scientific conference and Soil Science Society of East Africa.

### **HE John Feakes**

*Australian High Commissioner to Kenya*

His Excellency John Feakes commenced as Australian High Commissioner to Kenya on 6 January 2015. He had most recently been Chargé d'Affaires in Lebanon and before that in Jordan. Prior to this, he was Senior Civilian Representative in Tarin Kowt, Afghanistan (January-May 2013). He has previously served overseas as Deputy Head of Mission, Australian High Commission, Port Moresby (2008-2012); Minister-Counsellor (Office of National Assessment Liaison), Australian Embassy, Washington DC (2004-2007); First Secretary later Counsellor, Australian High Commission, Port Moresby (2000-2003); and First Secretary, Australian Embassy, Manila (1996-1998).

In Canberra, he has served as Assistant Secretary, Policy Planning Branch (February-October 2012); Assistant Secretary, Strategic Affairs Branch (2007-2008); Director, Solomon Islands Section (2003-2004); and Executive Officer, Middle East and Africa Branch (1994-1996).

He served as an Adviser at the International Division of the Department of the Prime Minister and Cabinet (1998-2000), while on secondment from the Department of Foreign Affairs and Trade (DFAT). Prior to joining DFAT, he worked at the Department of Defence (1992-1994). He holds a Bachelor of Arts (Honours) degree from the University of New South Wales. He is married with three children.

### **Peter Johnston**

*Researcher, Climate Science, University of Cape Town*

Dr Peter Johnston is a climate scientist at the University of Cape Town. His research focuses on the applications and impacts of climate variability and change on various user sectors. He specialises in agriculture and water related activities with special emphasis on vulnerability and adaptation options. He has worked closely with the Western Cape Government in developing a climate change vulnerability study and this was followed by a strategy and action plan. He is also involved in the African centre for cities looking at adaptation frameworks for both Cape Town and Johannesburg. His interests and involvements have taken him to many African countries to learn from and contribute to other water and agricultural adaptive practices to climate change and variability. Current research includes the application of models to determine the sustainable adaptation options for agriculture under climate change scenarios for commercial and small scale farmers. His latest work is focused on the climate risks and decision-making time frames associated with agriculture and food security to assist with a new response strategy for Western Cape Department of Agriculture. He is PI of a current AAUN Proposal Development titled "Agro-diverse farming systems in Africa: potential for improving Food and Nutritional Security in the context of climate variability and change" involving parallel case studies in South Africa, Malawi, Nigeria and Western Australia.

Dr Johnston has given many public presentations to governmental, educational, agricultural, water related and general interest groups. He has numerous publications and co-authored the South African chapter of Southern African Agriculture and Climate Change. He is also the co-author of several school science and geography text books.

### **Ngugi Robinson Kinuthia**

*Associate Professor (Range Management), College of Agriculture & Veterinary Sciences, Department of Land Resources Management & Agricultural Technology, University of Nairobi.*

Associate Professor Kinuthia was previously Head of Department and Acting Dean, University of Nairobi. He is the holder of PhD (Range Management) from the University of Wyoming, USA (1990); MSc (Range Management), Texas A&M University (1982); and Bachelor of Science (Agriculture), University of Nairobi. He is Principal, Co-Principal or Investigator in several externally funded research projects including: Making the Best of Climate: Adapting Agriculture to Climate Variability supported by Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA); Creating Wealth For Smallholder Farmers in Arid Areas of Kenya: The Case of Mukau (*Melia Volkensii*) funded by Government of Kenya/European Union through the Kenya Agricultural Productivity Programme of Kenya and Foe or Friend: Management and Utilization of *Prosopis juliflora* in Kenya, funded by Government of Kenya and European Union through the Kenya Agricultural Productivity Programme of Kenya. Dr Kinuthia is a representative of the University Steering Committee of the National Environmental Management Authority (NEMA), and in the Management Board of the Wangari Maathai Institute of Peace and Environment (WMI). Research interests include; integrated livestock production/management, climate change and agricultural adaptation in dry lands. He has over 20 years' experience in teaching, research and community outreach at the University of Nairobi and has initiated and implemented over 15 collaborative partnerships and projects between the university and local, regional and international organizations. He has supervised over 30 Masters and PhD students and published over 40 papers in internationally refereed journals.

### **Mu Li**

*Associate Professor in International Public Health at the Sydney School of Public Health, and Director of Public Health Strategic Program, China Studies Centre, the University of Sydney.*

Dr Mu Li's main research and teaching interests are in public health nutrition, including maternal and child nutrition, micronutrient deficiency disorders, childhood obesity prevention; and public health program evaluation. She has a reputation in iodine deficiency disorders and iodine excess related public health problems research and program implementation, is the current Board Director of the Iodine Global Network (IGN, formerly International Council for the Control of Iodine Deficiency Disorders, ICCIDD) and the co-convenor of the Science Council. Dr Li has been invited by UNICEF, WHO and Australian Aid Program as a consultant in external evaluation of public health programs in the Asia Pacific Region (China, Malaysia, the Philippines, Thailand, Timor Leste and Vanuatu). She is invited as a Global Health Technical Expert in the Asia Pacific Rim Universities (APRU) Global Health Group in the areas of maternal child health and nutrition, and public health program evaluation.

Dr Li was a recipient of the Australian Government Endeavour Executive Fellowship program in 2014, invited to work in Peking University Health Science Centre and Human Nutrition Department, Swiss Institute of Technology, Zurich. She is a chief investigator of a numbers of large international collaborative research projects in China, Indonesia, Tanzania and Zambia. Currently, Dr Li supervises/co-supervises six higher research degree students, their research projects across Bhutan, Cambodia, China, Indonesia, Myanmar and Timor Leste.

### **Ignacio Casper Madakadze**

*Senior Lecturer, Department of Plant Production and Soil Science, University of Pretoria.*

Dr Madakadze holds a BScAgric(Hons) degree in Animal Science from University of Zimbabwe; an MSc Grassland Science from Reading University, and a PhD in Agronomy from McGill University. He conducts research on various aspects of smallholder crop-livestock systems; and management, physiology and ecology of pasture and forage crops. Current research projects include: 1) Supporting smallholder farmers in Southern Africa to better manage climate related risks to crop production 2) Evaluation of various agroforestry species for ruminant nutrition and soil fertility 3) Use of secondary metabolites (tannins in particular) in reducing methane emission from ruminants 4) Grass and woody biomass production and evaluation for industrial utilization 5) Rangeland bush encroachment and control.

**Peter M.F. Mbithi**

*Vice-Chancellor, University of Nairobi*

Professor Peter Mulwa Felix Mbithi is the Vice-Chancellor and Professor of Veterinary Surgery, University Of Nairobi (UoN). Born in 1956, Prof Mbithi graduated from the UoN with a Bachelor of Veterinary Medicine (BVM) in 1983 and MSc. in Clinical Studies in 1985. In 1995 he completed his PhD at UoN. Between 1995 and 2003 he was Chairman, Department of Clinical Studies; in 2003 he was elected as the Dean, Faculty of Veterinary Medicine until he was appointed as the Principal, College of Agriculture and Veterinary Sciences in 2004. In 2005 he was competitively appointed as Deputy Vice-Chancellor, Administration and Finance, a position he held until 2015. He was appointed the Vice Chancellor UoN in January 2015.

**Robyn McConchie**

*Head, Department of Plant and Food Sciences, Faculty of Agriculture and Environment, University of Sydney*

Associate Professor Robyn McConchie is Head of the Department of Plant and Food Sciences in the Faculty of Agriculture and Environment at the University of Sydney. She has been involved in postharvest research and education for over 30 years working on minimising pesticide use, and more recently food safety, grain storage and development of functional foods from waste. Dr McConchie has led many international research and capacity building projects in postharvest and linking farmers to markets across SE Asia, the Pacific and Africa. For the past three years she has been working to address food security issues across 22 African countries, through improved storage and safety of grains.

From 2006 - 2010 she was Director of the University's Research Institute for Asia and the Pacific. She is currently a nonexecutive Director of the Royal Botanic Gardens and Domain Trust, a Director of the Fresh Produce Safety Centre and is immediate past chair of the Education, Research Training and Consultancy Commission of the International Society for Horticultural Science.

**Fhumulani Mavis Mulaudzi**

*Head, Department of Nursing Science at the University of Pretoria.*

Associate Professor Mulaudzi completed her doctoral studies at the University of South Africa in 2004 and has held teaching positions at the University of South Africa, University of North West and University of Pretoria. Based on her contribution in nursing scholarship, she is also one of the founder members of the fellows of Academy of Nursing in South Africa (ANSA). Prof Mulaudzi is a preeminent international scholar in the field of Indigenous Knowledge Systems (IKS) and Healing as it is applied to nursing science. She has chosen IKS as her research focus and has contributed significantly to the advancement of IKS in health care. She is known among her peers as an advocate and a pioneer of Indigenous knowledge, she is currently advocating for mainstreaming of the healing traditions in the nursing curriculum. In a relatively short time, she has contributed a much needed perspective on the integration of Ubuntu philosophy and indigenous healing from which many nurses around the globe have benefited through her keynotes addresses in esteemed international nursing conferences.

She has also been instrumental in assisting in the development of the international Bamboo Bridge community, an international community of nurses dedicated to the development of integrative nursing practice, scholarship, and community programs based on a philosophical foundation of cultural diplomacy. Her International work on healing traditions was also acknowledged by the World Health Organization in 2009. She received an award as for the distinguished women in Science (Indigenous Knowledge System 2011) for her outstanding contribution to building South Africa's scientific and research knowledge base. She is the vice chairperson of the Forum for University Nursing Departments in South Africa (FUNDISA). She is a member of the CSIR ethics committee. She served as a board member of the Indigenous Knowledge system of South Africa trust (IKSSA) from 2005-current. She is the author of an extensive list of peer reviewed manuscripts.

**Charles M. Mulei**

*Dean of the Faculty of Veterinary Medicine,  
University of Nairobi*

Charles M. Mulei is a professor of Veterinary Internal Medicine and Dean of the Faculty of Veterinary Medicine, University of Nairobi. He has been in academia for the last 34 years rising from an assistant lecturer in 1979 to a full professor in 2003. He is an academic member of staff in the Department of Clinical Studies, where he teaches Clinical Veterinary Medicine, Animal Health Management (Herd Health) and Veterinary Clinical Pathology and Chemistry. He has demonstrable professional skills in field veterinary work, teaching of both undergraduate and postgraduate students at the University, scientific publications and extension services. He has a great deal of experience in teaching and supervision of both undergraduate and postgraduate student's research projects. He has supervised and examined many Master and PhD theses of both local and international students. He has also been an external examiner in various universities in the region; Makerere University (Uganda), Sokoine University of Agriculture (Tanzania) and University of Zimbabwe (Zimbabwe).

Professor Mulei has published widely in referred scientific journals. He has published a total of 115 scientific papers; 80 in peer-referred scientific journals and 35 in proceedings of scientific conferences and workshops. He has also co-authored nine scholarly books; four for university level and five for secondary school agriculture. Before becoming Dean of the Faculty of Veterinary Medicine, Professor Mulei was the Chairman of Clinical Studies Department for four years. He was an acting Dean for one year before he was voted in as a substantive Dean in December 2012.

