WORKSHOP ON GLOBAL HARMONIZATION OF METHODOLOGICAL APPROACHES TO NUTRIENT INTAKE RECOMMENDATIONS

Speaker Biographies

Seth Adu-Afarwuah, PhD (Invited Speaker) is a Senior Lecturer at the Department of Nutrition and Food Science, University of Ghana, Legon. He obtained his PhD in International Nutrition from the University of California in Davis. Before joining the University of Ghana, Dr. Adu-Afarwuah worked with the United Nations Children’s Fund.

Dr. Adu-Afarwuah’s research is in the area of maternal and infant nutrition, with a focus on the prevention and treatment of undernutrition. He has been involved in some of the pioneering research on the use of small-quantity lipid-based nutrient supplements (SQ-LNSs) for improving the nutrient intakes of women and children in low-income settings. Since 2009, Dr. Adu-Afarwuah has been a member of the International Lipid-based Nutrient Supplements (iLiNS) Team which developed the SQ-LNSs, and has contributed to many publications on the impact of pre- and post-natal SQ-LNS supplementation on child growth and development. In the iLiNS Project, Dr. Adu-Afarwuah was formerly the Project Manager for the Ghana site, and is currently the PI for the Ghana site.

Lindsay Allen, PhD (Moderator) has been the Center Director of the USDA, ARS Western Human Nutrition Research Center since 2004. She was formerly a Professor in the Department of Nutrition at The University of California, Davis, where she is now an adjunct Research Professor. Dr. Allen’s research focuses on the prevalence, causes and consequences of micronutrient deficiencies, primarily in developing countries. She has evaluated interventions with micronutrient supplements, food fortification and food-based approaches to improve nutritional status, pregnancy outcome and child development, resulting in over two hundred publications from many countries. One of her most important achievements has been to document the widespread high prevalence of vitamin B12 deficiency. Her research investigates the adverse functional consequences of this deficiency on infants, children and women in developing countries and elderly in the USA, and the effects of different interventions to alleviate this deficiency. These interventions have included supplements for lactating women, infants and children, animal source foods (meat and milk), and intramuscular injection of high doses. She is part of a team testing the use of 14C-vitamin B12, measured by accelerator mass spectrometry, for measuring vitamin B12 absorption and bioavailability in various conditions. Her laboratory is currently collaborating in the development and evaluation of a new combined indicator of vitamin B12 status, cB12. Dr. Allen’s laboratory has recently developed efficient mass spectrometry and HPLC methods for the measurement of multiple vitamins simultaneously in human milk. Application of these methods is revealing poor breast milk micronutrient content in some populations consuming poor quality diets, and enabling assessment of the impact of maternal supplementation on breast milk quality. Dr. Allen has served on ten committees of the Food and Nutrition Board, Institute of Medicine, including the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. She has advised many national, bilateral and international organizations including WHO, UNICEF, the Asian Development Bank, the World Bank, PAHO and FAO. She is principal author of the book "What Works? A Review of the Efficacy and Effectiveness of Nutrition Interventions", and of WHO's "Guidelines on Food Fortification with Micronutrients". She served as President of the American Society of Nutritional Sciences and the Society for International Nutrition Research, and Vice President of the International Union of Nutritional Sciences. From the American Society for Nutrition she received the Kellogg Prize for International Nutrition, the Conrad A. Elvehjem Award for Public Service in Nutrition and the McCollum International Lectureship. Dr. Allen is currently a member of the steering committee of the Micronutrient Forum and the International Nutrition Foundation, and Chair of the NIH's Biomarkers in Nutrition and Development Expert Panel on Vitamin B12.

Stephanie Atkinson, PhD, DSc (Hon), FCAHS (Workshop Planning Committee Chair) is tenured Professor and Nutrition Clinician-Scientist in the Department of Pediatrics, and Associate Member, Department of Biochemistry and Biomedical Sciences, Faculty of Health Sciences, McMaster University, as well as Professional Staff in McMaster Children's Hospital, Hamilton, ON, Canada. Her research has focused on pediatric nutrition particularly in relation to skeletal development in premature and term infants and in children with boney morbidity secondary to
disease process and/or drug therapy (e.g., steroids) in diseases such as lymphoblastic leukemia, nephrosis, rheumatoid disorders, cystic fibrosis or epilepsy. Current research encompasses clinical trial and epidemiological investigations beginning in pregnancy that explore the environmental (nutrition), genetic and biochemical factors during fetal, neonatal and early childhood life that play a role in defining the offspring phenotype and as risk determinants for non-communicable diseases. Professionally, Dr. Atkinson has and continues to serve on various grant review panels in Canada and Europe as well as expert and advisory panels struck by the National Academies of Science, Engineering, and Medicine (Food & Nutrition Board), the Office of Dietary Supplements of NIH or Health Canada that relate to development of the Dietary Reference Intakes (DRI) and Dietary Guidelines for Americans. She is Chair of the Board of Directors of the Maternal, Infant, Child and Youth Health Research Network (MICYRN) and co-lead of the MICYRN Canadian Birth Cohort Coalition to harmonize data from Canadian birth cohort studies. Her professional service and achievements in nutrition research have been recognized through receipt of many national awards including election as a Fellow in the Canadian Academy of Health Sciences and the American Society for Nutrition, the Governor General of Canada’s award of the Queen Elizabeth II Diamond Jubilee Medal and an Honorary Doctor of Science from her alma mater Western University.

Peter Clifton, PhD (Invited Speaker) is Professor of Nutrition, University of South Australia, Research Fellow Baker IDI Heart and Diabetes Institute. He is an internationally respected leader in the field of cardiovascular disease, nutrition and health. To date, Peter has contributed to informing scientific opinion through publication of 164 journal articles, more than 100 of these in the last 10 years, 6 book chapters and many scientific presentations. Peter actively contributes to the provision of scientific leadership to the food industry sector and has positively influenced the health of Australians through his high profile in publications such as the Total Wellbeing Diet whilst at CSIRO and more recently the Diabetes, Diet and Lifestyle Plan (Penguin 2011).

Umi Fahmida, PhD (Invited Speaker) is Deputy Director for Program at the Southeast Asian Ministers of Education Organization Regional Center for Food and Nutrition (SEAMEO RECFON) at Universitas Indonesia, Jakarta. At SEAMEO RECFON, she performs research-teaching-consultancy activities in community nutrition. She also teaches post-graduate (MSc and PhD) students at Nutrition Study Program, Faculty of Medicine Universitas Indonesia. She earned her bachelor from Faculty of Agriculture Technology, Bogor Agriculture University, her MSc in Community Nutrition and PhD in Nutrition from Faculty of Medicine, Universitas Indonesia. She received a postdoctoral research award from SPIN-KNAW Netherlands for her nutrigenomics/nutrigenetics study on the role of LC-PUFA and iron on young child cognition. Her research interest is on the use of linear/goal programming to develop and evaluate food-based recommendations and on effect of nutrient and non-nutrient (psychosocial stimulation, gene) interaction on infant and child growth and development. Dr. Fahmida and her team have done extensive work on the use of linear/goal programming to develop and evaluate complementary feeding recommendations in Indonesia, Cambodia, Lao PDR and Myanmar and advised post-graduate students from Cambodia, Indonesia, Malaysia, Myanmar and Philippines in this topic. She is also member of the Editorial Board of Malaysian Journal of Nutrition.

Susan Fairweather-Tait, PhD (Moderator) is a Professor at Norwich Medical School at the University of East Anglia (UEA) and a fellow of the American Society for Nutrition. After she received her PhD at King’s College London (formerly Queen Elizabeth College), she worked in the food industry and then the Institute of Food Research, Norwich, initially as a Senior Research Scientist and latterly as Head of the Nutrition Division and Programme Leader for Micronutrients. In 2007 she was appointed Professor of Human Nutrition (Mineral Metabolism) at UEA. Dr. Fairweather-Tait’s research expertise is in micronutrients, in particular iron bioavailability, and mineral requirements for optimal health. Using a combination of cell/in vitro models and human studies she has undertaken collaborative research on nutrition with colleagues both nationally and internationally. Her current teaching activity is focused on undergraduate medical degree students (nutrition, diet and health and preventive medicine) and post-graduate students. In 2009 she was an appointed a member of the Scientific Panel on Nutrition, Dietetic Foods and Allergy of the European Food Safety Authority (EFSA) and is also currently a member of the Working Groups on Dietary Reference Values (Minerals) and Health Claims.
Rosalind Gibson, PhD, MSPH (Workshop Planning Committee Member) is an Emeritus professor in the Department of Human Nutrition, University of Otago, Dunedin, New Zealand. She has an MS in Public Health (Nutrition) from the School of Public Health, University of California, Los Angeles, USA and a PhD in Nutrition from the University of London, UK. She has had a life-long interest in international nutrition, initially working in the Ethio-Swedish Children’s Nutrition Unit in Ethiopia for three years, and subsequently in collaborative research studies on micronutrients in Papua New Guinea, Guatemala, Ghana, Malawi, Zambia, and Ethiopia as well as Thailand, Mongolia and more recently Cambodia, NE Brazil, and Indonesia. Before joining the University of Otago, she was a faculty member in the Division of Applied Nutrition, University of Guelph. Professor Gibson is a member of the International Zinc Nutrition Collaborative Group (IZiNCG), a fellow of the American Society of Nutrition, and a fellow of the Royal Society of New Zealand. She is the author of a standard reference text, *Principles of Nutritional Assessment* published by Oxford University Press and regularly teaches short courses on this topic in Indonesia and Ethiopia, and formerly in Thailand and South Africa. She has been co-Director of the World Health Organization Collaborating Centre for Nutrition in the Western Pacific Region in the department until 2017 and is the recipient of the McHenry Award by the Canadian Society of Nutritional Sciences, the Rank Prize from the British Nutrition Society, and the Kellogg International Prize by the American Society of Nutrition. Her research interests focus on: Etiology and impact of micronutrient deficiencies on growth, development, and health and emphasizes sustainable food-based strategies to combat micro-nutrient deficiencies.

Hasan Hutchinson, PhD, ND (Invited Speaker) is the Director General of the Office of Nutrition Policy and Promotion at Health Canada. As the focal point for public health nutrition within the federal government, the office strives to promote the nutritional health and well-being of Canadians. The Office's main functions include dietary guidance, food and nutrition surveillance, research and data analysis, health promotion and public health nutrition policy.

Hasan is co-chair of Canada’s Dietary Reference Intakes Steering Committee and of the Federal/Provincial/Territorial Group on Nutrition. He serves on a number of nutrition-related committees at the World Health Organization, the Pan American Health Organization and the World Cancer Research Fund International and has served on health-related committees both at the Organization for Economic Co-operation and Development and at the United Nations. He served as chair of the Multi-Stakeholder Working Group which produced the *Sodium Reduction Strategy for Canada* and of the multi-sectoral Network on Healthy Eating.

Previous to his current role, Hasan was Associate Director of the Institute of Nutrition, Metabolism and Diabetes at the Canadian Institutes of Health Research (CIHR).

Before working in the public service, Hasan was a faculty member in the Department of Neurology and Neurosurgery at McGill University. His formal education includes a PhD in Quantitative Genetics and an ND in Naturopathic Medicine.

Janet King, PhD (Invited Speaker) is Senior Scientist, CHORI (Children’s Hospital Oakland Research Institute) and Professor Emerita of Nutrition at the University of California, at Berkeley and Davis. Throughout a long and distinguished career, Dr. King has made substantive contributions to the body of human nutrition research, application, and policy development. In recognition of her national and international reputation, she was elected to the National Academy of Medicine in 1994, and in 2007, she was inducted into the USDA Research Hall of Fame. She directed the USDA Western Human Nutrition Research Center at the University of California, Davis (1995-2002) and chaired the Department of Nutritional Sciences, University of California, Berkeley (1988-1994). Dr. King’s research focuses on metabolic adjustments to changes in nutrient intakes in humans; she is especially interested in metabolism and nutrient utilization of pregnant and lactating women and how dietary zinc influences metabolism. Dr. King’s impact on the field of human nutrition extends well beyond her research accomplishments. For example, she chaired the U.S. Department of Agriculture (USDA)/U.S. Health and Human Services (USHHSS) Dietary Guidelines Advisory Committee. The committee’s work resulted in the publication of the Dietary Guidelines for Americans 2005 that had a significant impact on what Americans eat. When Dr. King was the Chair
of the Institute of Medicine, Food and Nutrition Board in 1994, the paradigm for the then new Dietary Reference Intakes was established. She recently chaired a United Nations University, Food and Agriculture Organization, World Health Organization Joint Committee on Dietary Harmonization and is the Director of the United Nations International Zinc Nutrition Consultative Group.

Anura Kurpad, MD, PhD (Workshop Planning Committee Member) is Professor and Head of Physiology and Nutrition, at St John’s Medical College, Bangalore, India, and was the Founding Dean of St John’s Research Institute, Bangalore, India. He is presently the Head of the first IAEA Collaborating Centre on Nutrition, located at St John’s, and is the Past-President of the Nutrition Society of India. He is a Fellow of the National Academy of Medical Sciences; Fellow of the International Union of Nutritional Sciences, and Margdarshi Fellow of the Wellcome Trust-DBT India Alliance. He has published 350 papers, and is co-author of the Asian Edition of Guyton’s Textbook of Physiology, Co-Editor of the Asia Pacific Journal of Clinical Nutrition, and Associate Editor of the European Journal of Clinical Nutrition. He is the Chairman of the Scientific Advisory Group of the Nutrition Division of the Indian Council of Medical Research (ICMR); Scientific Advisory Committee of the National Institute of Nutrition; ICMR Expert Committee on Tolerable Upper Limits of Nutrients; ICMR Task Force on Improving health and nutritional status of vulnerable segments of the population; ICMR Task Force on Indian Comprehensive Health and Nutrition Survey; the Protein Quality Group at the Nevin Scrimshaw International Nutrition Foundation; and the Ethics Committee of the National Institute of Mental Health and Neurosciences, Bangalore.

Anna Lartey, PhD, MSc (Workshop Partner) is the President of the International Union of Nutritional Sciences (2013-2017) and Director of Nutrition at the Food and Agriculture Organization of the United Nations, Rome, Italy (October 2013- Present); She was a Professor of Nutrition at the University of Ghana (1986-2013). Dr. Lartey attended the University of California, Davis as a Fulbright student and received her Ph.D. in International nutrition. She received her MSc and BSc degrees from the University of Guelph, and the University of Ottawa, Canada. Subsequent to this she worked as a researcher in Sub-Saharan Africa for 27 years. Her research focused on maternal child nutrition. She has received several awards among these are: the University of Ghana’s “Best Researcher Award for 2004”; the International Development Research Center (IDRC, Canada) Research Chair in Nutrition for Health and Socioeconomic Development in sub-Saharan Africa (2009-2014); African Nutrition Society award (2014) for contribution to nutrition research and capacity building; Ghana Women of Excellence Award (2012) for contribution to science and nutrition research in Ghana; “Yokama” (Ideal Woman) from the Manya Krobo Traditional Council for contribution to the development of the District; and she is the recipient of the Sight and Life Nutrition Leadership Award for 2014. During her tenure as IUNS President, the Statues and Rules of the organization have been completely re-written to bring them in line with practices of a modern scientific society.

Joseph Lau, MD (Invited Speaker) is Professor Emeritus at Brown University, Providence, Rhode Island, USA. He was co-director of the Center for Evidence-based Medicine (now Center for Evidence Synthesis in Health) and co-director of the Agency for Healthcare Research and Quality (AHRQ) designated Brown Evidence-based Practice Center (EPC). Prior to relocating to Brown in 2012, he was Professor of Medicine and Professor of Clinical and Translational Science at the Institute for Clinical Research and Health Policy Studies at the Tufts Medical Center in Boston. He directed the Boston Branch of the US Cochrane Center from 1996 to 2007. He was the director of the Tufts EPC from 1997 until 2012. He also served as the methodological director of the National Kidney Foundation’s KDIGO evidence-based clinical practice guidelines programs from 1999 until 2010. His research covers meta-analysis, evidence-based medicine and development of clinical practice guidelines. He has published over 240 peer reviewed articles on the methodologies of meta-analysis as well as numerous systematic reviews across a wide variety of biomedical, nutrition, and healthcare topics. Examples of nutrition systematic reviews he has published include effects of omega-3 fatty acids on cardiovascular health, and vitamin D and health outcomes. The 2009 vitamin D report was used to inform an update of the Institute of Medicine (IOM) Dietary Reference Intake on vitamin D. He has served on many editorial boards including the Journal of Nutrition. He has served as a member of an FDA advisory committee, and as a member of an FAO/WHO workshop to develop a framework to
perform nutrient risk assessment. He was a member of an IOM committee to establish a framework to evaluate the safety of dietary supplements, and a member of an IOM Committee establishing the standards for clinical practice guidelines. He is currently a member of the National Academy of Medicine committee that conducted a study on improving the process of developing Dietary Guidelines for Americans.

Catherine Leclercq, PhD (Invited Speaker) is a nutritionist and expert of food consumption studies and dietary assessment. She was previously a senior researcher at the Italian Council for Agricultural Research and Analysis of Agricultural Economics (CREA). She was a Member of the Steering Committee for the last two revisions of the Italian Recommended Nutrient Intakes (LARN) and of the Italian Food Based Dietary Guidelines. She served for more than ten years as Member of a Panel of the European Food Safety Authority and on FAO/WHO expert Committees as expert of dietary exposure to food chemicals. She joined the Nutrition and Food Systems Division (ESN) at the Head Quarters of the Food and Agriculture Organization of the United Nations in August 2013. Dr. Leclercq is leading the development of FAO/WHO GIFT (FAO/WHO Global Individual Food consumption Tool), a tool aimed at dramatically enhancing the use of existing quantitative individual food consumption data for nutrition and food safety purposes worldwide. This tool will answer key information needs of policy makers at country, regional and global levels in the field of nutrition and food safety.

Thingnganging Longvah, PhD (Invited Speaker) is Senior Deputy Director of the Food Chemistry Division and Deputy Director of the National Institute of Nutrition, India. His team is responsible for the Indian Food Composition Database. Dr. Longvah works closely with the FAO and he is the regional coordinator for SAARCFoods a regional body under the INFOODS/FAO. Dr. Longvah is a member of the IUNS task force on Indigenous foods and nutrition as well as IUNS task force on food composition. His interest is biodiversity in foods and its link to agricultural and horticultural products to help combat the rising chronic degenerative diseases, micronutrient deficiencies and malnutrition especially in developing countries.

Amanda MacFarlane, PhD (Invited Speaker) is a Research Scientist and Head of the Micronutrient Research Section in the Nutrition Research Division at Health Canada. She is an Adjunct Professor in the Dept. of Biochemistry, Microbiology and Immunology at the University of Ottawa and the Dept. of Biology at Carleton University. She received her Ph.D. in Biochemistry in 2004 at the University of Ottawa for which she won the 2003 Ron Oelbaum Award for an Outstanding Canadian Research Scientist under the age of 35 from the Juvenile Diabetes Research Foundation. She did her Post-Doctoral research with Dr. Patrick Stover at Cornell University where she examined the effect of altered folate metabolism on genome stability and gene expression in models of colon cancer. She joined Health Canada in 2008 where she examines the impact of maternal and paternal folate intake on germline genomic and epigenomic stability, and its effect on offspring health and disease. She also uses national health survey data to identify the socioeconomic, dietary and genetic determinants of folate and B vitamin status of Canadians. She is the Canadian lead and chair of the Joint Canada-US Dietary Reference Intakes Working Group. She was the Project Co-Director for the expert panel and workshop “Options for Addressing Consideration of Chronic Disease Endpoints for Dietary Reference Intakes (DRIs)”.

Christophe Matthys, PhD (Invited Speaker) is Assistant Professor in Human Nutrition at the KU Leuven, Belgium, and Scientific Coordinator of the clinical nutrition unit of the University Hospital Leuven, Belgium. Dr. Matthys has international research experience in the different domains of human nutrition (e.g. food consumption and nutrition surveys, nutrition policy and public health nutrition, nutritional epidemiology, experimental studies in nutritional epidemiology, food safety). He is an active member of the Belgian Nutrition Society and the European Nutrition Leadership Platform. He is currently a member of the Scientific Committee of the Belgian Federal Agency for the Safety of the Food Chain.

Helle Margrete Meltzer, PhD (Invited Speaker) is Research Director of the Norwegian Institute of Public Health. She has more than 30 years of experience in the fields of nutrition and toxicology. Her main research comprises biomarkers of dietary nutrient and environmental contaminant intake. She has been deeply involved in diet and mother and child health through the Norwegian Mother and Child Cohort Study. She participated in the working
group of the two latest revisions of the Nordic Nutrition recommendations. She was a member of the Norwegian Scientific Committee for Food Safety (VKM), Panel on contaminants for 3 years, Panel of nutrition, new food products, and allergy for 11 years. In recent years she has become deeply engaged in issues connected to food, health and sustainability.

Suzanne Murphy, PhD, RD (Workshop Planning Committee Member) is a Researcher Emeritus at the University of Hawaii Cancer Center in Honolulu. Dr. Murphy’s research interests are both national and international, and include dietary assessment methodology, food and supplement composition databases, development and use of nutrient standards, and the nutritional epidemiology of chronic diseases. Dr. Murphy was elected Treasurer of the International Union of Nutritional Sciences for two terms and co-chaired two IUNS task forces: International Network of Food Data Systems (INFOODS), and Dietary Quality Indicators. She has served on several Institute of Medicine (now National Academy of Medicine) panels including the Subcommittee on Interpretation and Uses of Dietary Reference Intakes (as chair then member); the Subcommittee on Upper Safe Reference Levels of Nutrients (as member) and the Panel on Calcium and Related Nutrients (as member). She chaired the Committee to Review the WIC Food Packages and the Committee to Review Child and Adult Care Food Programs, and was a member of the Committee to Review the School Meals Programs. She is a member of the National Academy of Medicine and a Fellow of the American Society for Nutrition. Dr. Murphy earned an M.S. in molecular biology from San Francisco State University, and a Ph.D. degree in nutrition from the University of California—Berkeley.

John Muyonga, PhD (Workshop Planning Committee Member) is a professor in the Department of Food Technology and Human Nutrition at Makerere University, Uganda and current Dean of the School of Food Technology, Nutrition and Bioengineering. He is widely published and cited in the fields of food science and nutrition. His research covers aspects of nutritional and nutraceutical properties of understudied foods, food processing and processing waste valorization. He has also worked on determination of nutrition and food security status in different areas in Uganda, as well as on aspects of management of malnutrition. As university leader, he has been at the forefront of promoting research application.

Chizuru Nishida, PhD (Workshop Partner) is the Coordinator of the Nutrition Policy and Scientific Advice Unit (NPU) in the Department of Nutrition for Health and Development (NHD) at the WHO Headquarters (WHO/HQ) in Geneva. Her career in WHO began in 1984 in the Maternal and Child Health Programme in the WHO/HQ where she worked on the WHO's research project on infant and young child feeding and rearing practices developed as part of the Joint UNICEF/WHO Nutrition Support Programme (JNSP). She also worked in the WHO Regional Office for the Western Pacific and on several country office programmes. In 1990, she moved back to WHO/HQ to serve as the WHO Secretariat for the 1992 International Conference on Nutrition (ICN) which adopted the World Declaration and Plan of Action for Nutrition, a blueprint for Member States in developing their nutrition policies and action plans. In 2014, she also served as a WHO Secretariat of the 2nd International Conference on Nutrition (ICN2) which adopted the Rome Declaration on Nutrition and Framework for Action and led to the proclamation of the Decade of Action on Nutrition (2016 – 2025) by the UN General Assembly in April 2016. As the Coordinator NPU, currently she leads the work on: 1) development, updating and dissemination of science-based guidelines and policy actions for preventing obesity and diet-related NCDs; and 2) provision of guidance and support to the Regions and countries in translating WHO guidelines into policy and programme interventions through developing operational tools (including nutrient profile models, nutrition labelling) and providing capacity building training to address all forms of malnutrition throughout lifecourse. She also represents WHO at several Codex Committees, particular those related to nutrition and food labelling.

Caryl Nowson, PhD (Invited Speaker) is Professor of Nutrition and Ageing at Deakin University’s School of Exercise and Nutrition. She teaches at undergraduate and postgraduate level and also supervises higher degree students. Caryl is a member of the Centre for Physical Activity and Nutrition Research (C-PAN) and has a specific focus on reducing risk of cardiovascular disease and osteoporosis through preventive strategies that extend throughout the lifespan. Caryl’s research primarily centers on nutrition related to hypertension and bone health. In
addition to conducting a range of dietary and lifestyle intervention studies, she has recently focused on informing and changing policy to reduce risk of chronic disease, specifically cardiovascular disease and osteoporosis.

**James Ntambi, PhD** (Invited Speaker) is professor of biochemistry and Steenbock professor of nutritional sciences at the University of Wisconsin-Madison, USA. Ntambi received his BSc and MSc degrees in Biochemistry and Chemistry from Makerere University, Kampala, Uganda, and his PhD in Biochemistry and Molecular Biology from the Johns Hopkins University School of Medicine in Baltimore, MD, USA, where he started his work on the molecular biology of parasites and the regulation of genes and lipid metabolism. Ntambi has made distinguished contributions to the field of nutritional biochemistry and his pioneering work on the genetic regulation of the stearoyl-CoA desaturase has recently led to many new insights on the importance of this enzyme in metabolism and in disease states such as obesity, diabetes, atherosclerosis, inflammation and cancer. His pioneering work will help explain the complex aspects of the “metabolic syndrome” and to advance our understanding of nutrient gene interactions. Ntambi has published more than 180 peer-reviewed scientific papers. Ntambi is also involved in international research and teaching efforts and student and faculty exchange programs between Makerere University, Uganda and the University of Wisconsin-Madison, USA. He has received numerous awards including the Federal Republic of Germany (DAAD) fellowship, Fulbright Fellowship, Nutritional Sciences Osborne and Mendel award, Steenbock Career Development award, the NIH/Forgarty International Biomedical Research award, the Fulbright research award, the Arthur J. Maurer Extra Mile Award, excellence in international activities award, the distinguished chancellor’s teaching award and the American Society for Biochemistry and Molecular Biology (ASBMB) Exemplary Contribution to Education award. Ntambi serves on the USA National Institutes of Health (NIH) study sections and is a member of the US National Academies of Sciences, Engineering, and Medicine/Food and Nutrition Board. He also serves on the NIH/National Institutes of Alcohol and Alcohol Abuse (NIAAA) Board of Scientific Counselors. He has served on numerous journal review boards such as JBC, JLR and BBRC. He has been invited to present seminars on obesity and diabetes research conferences in the USA and other countries and serves on numerous scientific committees and advisory to government agencies. Ntambi has been inducted in the Uganda National Academy of Sciences.

**Hee Young Paik, ScD** (Workshop Planning Committee Member) currently serves as the Director of the Center for Gendered Innovations in Science and Technology Research, Korea Federation of Women’s Science and Technology Associations (KOFWST) in Korea and Professor Emeritus of Seoul National University. Dr. Paik received a Doctor of Science in Nutrition from Harvard School of Public Health in Boston, Massachusetts, USA. After receiving her doctoral degree, she worked as a faculty member at Sookmyung Women’s University and then as Seoul National University in Korea until February 2016. She worked in various professional organizations including Presidents of the Korean Home Economics Association in 2013, the Korean Nutrition Society in 2015, and KOFWST in 2014-2016. She was the Chair of the Korean DRIs Committee from 2002-2005, when the Dietary Reference Intakes for Koreans were newly developed in Korea. She was a member of the IUNS Council from 2005-2009, and received several honors including Excellent Research Awards in Science (2005), National Honor for High Achievements in Science (2008), Asia-Pacific Clinical Nutrition Award (2009) and Blue Ribbon National Medal for Public Service (2012). Dr. Paik served as the Minister of Gender Equality and Family, Republic of Korea, from 2009-2011.

**Ann Prentice, OBE, PhD, DUS HonFRCPCH, HonFNS, FMedSci, FAfN, FRSB** (Workshop Planning Committee Member) is the Director at MRC Elsie Widdowson Laboratory (EWL), as well as Head of the Nutrition and Bone Health Group. Her research focuses on nutrient requirements for bone health, encompassing the nutritional problems of both affluent and developing societies. She is currently involved in projects studying pregnant and lactating women, children, adolescents and older people in the UK, West Africa, Bangladesh, South Africa and China. Ann is Chair of the UK Scientific Advisory Committee on Nutrition and a member of a number of other advisory committees. She is a Fellow of the Academy of Medical Science and the Society of Biology, an Honorary Fellow of the Royal College of Paediatrics and Child Health, an Honorary Professor of the University of Witwatersrand, South Africa, and Shenyang Medical College, China, and a Visiting Professor of Nutritional Science
at the University of Southampton. Ann was awarded the British Nutrition Foundation Prize in 2011, the Laureate de Le Prix Scientifique, Institut Candia, France in 1998, the Robert and Edna Langholz Award for International Nutrition in 2004 and an Honorary Doctorate from the University of Surrey in 2014. She was President of The Nutrition Society between 2004 and 2007, and appointed an OBE in the Birthday Honours List 2006.

**Hildegard Przyrembel, MD, PhD** (Invited Speaker) started her career at the University Children's Hospital Ulm working on a project financed by the German Society for Research on the amino acid requirement of premature infants, combining analytical laboratory work with a clinical education in paediatrics, with special emphasis on inborn errors of metabolism.

After moving to the University Children's Hospital Düsseldorf for the continuation of her specialisation in paediatrics, Dr. Przyrembel was, in addition, head of the laboratory for inborn errors of metabolism. This work, in cooperation with the metabolic laboratories of the Hammersmith Hospital, London, and the University Children's Hospital in Utrecht, led to the discovery and definition of two new inborn errors of lysine metabolism. This was also the basis of her inaugural dissertation in 1979.

In 1980, Dr. Przyrembel moved to the University Children's Hospital Rotterdam and the Department of Cell Biology and Clinical Genetics of the Erasmus-University, Rotterdam, to become head of the Unit for Metabolic Disorders and of the Metabolic Laboratory. In cooperation with the Department of Biochemistry, the emphasis of her work shifted to defects in fatty acid oxidation and of the mitochondrial respiratory chain and their accessability to therapeutic measures. During this period she spent three months at the J.F. Kennedy Institute for Basic Research in Mental Retardation in Denver, Colorado, USA. She was a member of the Dutch Guidance Committee for the Treatment of Phenylketonuria and contributed chapters to Dutch textbooks on paediatrics and medical genetics.

In 1990, Dr. Przyrembel accepted a position as Director and Professor at the Federal Institute of Health at Berlin. She worked predominantly as a consultant in infant and child nutrition and dietetic therapy, both on national and international panels. Since the foundation of the Federal Institute for Risk Assessment in November 2002, Dr. Przyrembel's tasks were on the assessment of both benefits and risks in connection with dietary habits, including breastfeeding, and connected with the use of ingredients, nutrients, whole foods and with residues (if the latter occur in human milk or foods for infants and children). She was chairman of the German National Breastfeeding Committee for ten years and lecturer in Paediatrics at the University Children’s Hospital Berlin (Charité) until retirement in 2007.

In 2000, Dr. Przyrembel started as an expert and rapporteur in the working groups on Upper Levels of Vitamins and Minerals, on Infant Formula Composition, and on Food Additives (Nutrient Compounds) of the Scientific Committee on Food of the European Commission.

Dr. Przyrembel was appointed a member of the Scientific Panel on Nutrition, Dietetic Foods and Allergy of the European Food Safety Authority (EFSA) in May 2003. Recent and actual tasks for EFSA include setting nutrient reference values, including upper levels for minerals and vitamins, safety of new ingredients in infant formula, safety of trans-fatty acids, safety and benefits of fish consumption, assessment of the scientific justification of claims in connection with nutrients/foods and nutritional effects of foods consisting of or derived from genetically modified organisms (contribution to >400 EFSA Opinions).

**Kostas Stamoulis, PhD** (Workshop Partner) is currently the Assistant Director-General a.i. of the Economic and Social Development Department at the Food and Agriculture Organization of the United Nations.

He served as Director, Strategic Programme Leader, Food Security and Nutrition in FAO. He led through 2015 the design and provided strategic guidance of FAO’s Strategic Programme on Food Security and Nutrition which cuts across several disciplines and geographical regions.

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Between 2008 and 2015 he was the Director of the Agricultural Development Economics Division of FAO. ESA carries out the bulk of analytical and evidence-based policy work of FAO with about 150 staff members.

From 2007 to 2015 he has been the Secretary of the Committee on World Food Security (CFS) and played a key role in the reform of the committee.

Since joining FAO he has held progressively responsible technical and management positions.

Before joining FAO in 1989, he was Assistant Professor of Agricultural Economics at the University of Illinois in Urbana Champaign. From 1985 to 1987 he was a post-doctoral fellow at the University of California at Berkeley. His work includes issues related to the role of agriculture in rural development and rural poverty reduction in developing countries; the impact of changes in food systems on smallholder farmers and on rural poverty; the linkages between the agricultural sector and the rural non-farm economy and the integration of food security and nutrition in sectorial policies and programs.

He has also carried out work on the assessment of the role of macroeconomic and exchange-rate policies on agriculture and the rural sector and the interdependence between exchange rate, financial and commodity markets. He has published a large number of papers, articles, books and monographs on a variety of subjects.

He holds a degree in Economics from the Economics University of Athens (Greece), a Master’s Degree in Agricultural Economics from the University of Georgia (USA) and a Ph.D. in Agricultural and Resource Economics from the University of California at Berkeley.

**Patrick J. Stover, PhD** (Invited Speaker) is Professor and Director of the Division of Nutritional Sciences at Cornell University. He graduated from Saint Joseph’s University with a BS degree in Chemistry and was awarded the Molloy Chemistry Award at graduation. He received a PhD degree in Biochemistry and Molecular Biophysics from the Medical College of Virginia and performed his postdoctoral studies in Nutritional Sciences at the University of California at Berkeley. Patrick Stover teaches three classes for graduate students: Grant Writing; Translational Research and Evidence-based Policy and Practice in Nutrition; and the B-vitamin metabolism section of Micronutrients: Function, Homeostasis, and Assessment. In 2015, he was elected as a member of the National Academy of Sciences, and in 2014 was elected as a Fellow of the American Association for the Advancement of Science. In 2014, he received the SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities, and the Osborne and Mendel Award for outstanding recent basic research accomplishments in nutrition from the American Society for Nutrition, and a MERIT award from NIDDK-NIH. In 1996 he received the Presidential Early Career Award for Scientists and Engineers from President Clinton, the highest honor bestowed by the U.S. government on outstanding scientists and engineers beginning their independent careers. He has been selected as an Outstanding Educator four times by Cornell Merrill Presidential Scholars. He is editor of the Annual Reviews of Nutrition.

The Stover research group investigates the fundamental chemical, biochemical, genetic and epigenetic mechanisms, and the associated pathways within the one-carbon metabolic network, that underlie the relationships among nutrition, metabolism and risk for birth defects, cancer and neurodegenerative diseases. Our research is revealing the causal role of nuclear dTMP synthesis in folate- and vitamin B12 responsive pathologies, and informing novel nutritional strategies for the prevention and management of human pathologies.

**Emorn Udomkesmalee, PhD** (Invited Speaker) is the Senior Advisor and Former Director of the Institute of Nutrition, Mahidol University, Thailand. She holds a current position of Adjunct Associate Professor in the Department of International Health, Bloomberg School of Public Health, Johns Hopkins University. Her research interests include micronutrient assessment, bioavailability and metabolism; efficacy of food-based interventions to address micronutrient deficiencies; maternal and child nutrition policy and program implementation. She is currently a member of several international and national committees: Scientific Council – Institut de Recherche
pour le Developpement (IRD), France; The New York Academy of Sciences/Sackler Institute for Nutrition Science Board; International Food Policy Research Institute (IFPRI) Board of Trustees; Sight and Life Foundation Board; Co-Chair of Independent Expert Group for Global Nutrition Report; Advisor to the Scaling Up Nutrition (SUN) Movement Capacity Strengthening Initiative; Steering Committee of the Micronutrient Forum; Founding member of the Society for Implementation Science in Nutrition (SISN); Scientific Director of ILSI South East Asia Region; Ajinomoto Foundation/Thailand Board; Steering Committee and International Advisor of FoodInnopolis/Thailand.

**Hans Verhagen, PhD** (Invited Speaker) is Head of EFSA’s Risk Assessment and Scientific Assistance Department (RASA). The Department organises and relies on the work of the Scientific Committee on cross-cutting scientific issues and supports the Scientific Panels to carry out risk assessments on general health and safety priorities in areas such as biological hazards, chemical contaminants, plant health, and animal health and welfare. Its units also provide specialised support on data collection, emerging risks, exposure assessment and risk assessment methodologies. Prof. Verhagen has 34 years of professional experience, both in the public and private sector. Before joining EFSA, he held management positions at the National Institute for Public Health and the Environment (RIVM) and TNO Nutrition and Food Research Institute, both in the Netherlands. He also worked in Unilever Research and at the Universities of Maastricht and Nijmegen, in the Netherlands. He was a member of EFSA’s NDA Panel from 2006 until June 2015. He was editor in chief at “Food & Chemical Toxicology” and the “European Journal of Nutrition & Food Safety”. Prof. Verhagen has published widely on subjects related to toxicology and nutrition. He studied chemistry (University Nijmegen, The Netherlands and Université de Paris VII, France). He obtained his PhD from the University of Maastricht, The Netherlands. He is a board-certified toxicologist and a board-certified nutritionist (Foundation for Biomedical Scientific Research Training, the Netherlands). He is a visiting professor at the University of Ulster in Northern Ireland.

**George Wells, PhD** (Invited Speaker) is Director of the Cardiovascular Research Methods Centre at the University of Ottawa Heart Institute and Professor in the School of Epidemiology, Public Health and Preventive Medicine at the University of Ottawa. Also at the University of Ottawa, he serves as Professor in the Department of Medicine and Senior Scientist Affiliate at the Ottawa Hospital Research Institute. Dr. Wells has worked extensively with national and international government and non-government research organizations, as well as private pharmaceutical and biotechnology industries. He has been on the executive and steering committees of national and international research programs as well as on committees with the following focus: external safety and efficacy monitoring, scientific grant review, editorial, and scientific advisory. He is currently an Associate Editor of the Journal of Clinical Epidemiology and on the Editorial Committee for the Canadian Medical Association Journal. Dr. Wells received the University of Ottawa Excellence in Research Award in 2014 and the Canadian Society for Clinical Investigation Distinguished Scientist Award in 2007.