ILSI Health and Environmental Sciences Institute

ILSI International Food Biotechnology Committee

FOOD ALLERGY AND SAFETY ASSESSMENT WORKSHOP

15-16 April 2013
Guangxi Hotel
Beijing, China

SPEAKER BIOGRAPHIES

Professor Barbara K. Ballmer-Weber

Prof. Barbara Ballmer-Weber is Associate Professor of the Medical Faculty, University Zürich, and Co-chair of the Allergy Unit and Head of the Epicutaneous Laboratory, Department of Dermatology, University Hospital Zürich, Switzerland. She participates in regular lectureship at the University Zürich and the Swiss Federal Institute of Technology (ETH) Zürich; the Department of Food Technology, Life Sciences and Facility Management (ZHAW), Wädenswil; the School for Nutritionists, Zürich; and other national and international scientific or educational meetings. She also participates in lecture cycles on pathophysiology and clinic of skin diseases (main lecture cycle in Dermatology); pathophysiology and clinic of the gastrointestinal tract (main lecture cycle in Gastroenterology); courses and group trainings for medical students in Dermatology and Allergology; and educational allergy ward rounds.

Prof. Ballmer-Weber's research and scientific activities are focused on food allergy. She has participated in five European Union-funded projects on food allergy: "Adverse Reactions to Food" (FAIR-97-3224), FAREDAT (QLK4-CT-2001-00301), REDALL (QLK1-CT-2002-02687), EuroPrevall (FOOD-CT-2005-514000), and IFFAM. Current research activities include molecular allergy research on pollen-mediated food allergy by characterisation of cross-reactive allergens, component resolved diagnosis using recombinant or purified native food allergens, risk assessment in food allergy such as determination of threshold doses for elicitation of the allergic response, and determination of allergenicity of genetically modified food and novel foods.

Professor Andrew Bartholomaeus

Andrew Bartholomaeus, B.Pharm, PhD, Cert Ag (III), obtained a bachelor's degree in pharmacy from the University of Sydney and, following professional practice in pharmaceutical manufacturing, hospital and

military pharmacy, completed a PhD in toxicology at RMIT University in Melbourne. Over the past 18 years, Dr. Bartholomaeus has worked as a toxicologist across a broad range of chemical regulatory areas including agricultural, veterinary and industrial chemicals, complementary medicines, and gene technology products. Prior to June 2008, he held the position of Chief Toxicologist with the Prescription Medicines area of the Therapeutic Goods Administration (TGA) in Australia with responsibilities in the area of preclinical assessment and in leading the TGA's response to the Australian National Nanotechnology Strategy. Dr. Bartholomaeus subsequently took up the position of General Manager of the Risk Assessment Branch at Food Standards Australia New Zealand. Dr. Bartholomaeus retired from FSANZ in 2012 to establish his own consultancy and to devote more time to research and teaching. He currently holds extramural appointments with the University of Queensland Medical School as an Adjunct Professor, the University of Canberra as an Adjunct Professor of Toxicology and Pharmacy, and is a member of the ILSI IFBiC Steering Group. In June 2009, Dr. Bartholomaeus chaired the FAO/WHO Expert Consultation on the Application of Nanotechnologies in the Food and Agriculture Sectors: Potential Food Safety Implications. Dr. Bartholomaeus is a member of the Society of Toxicology and ACTRA.

Dr. Xiaoyun He

Dr. Xiaoyun He, lecturer, majored in food safety and nutrition assessment and obtained her bachelor degree in Biology Engineering (2004) and doctoral degree in Food Science (2009) from College of Food Science & Nutritional Engineering at China Agricultural University. From 2009 to 2011, Dr. He worked as a post-doc in College of Food Science & Nutritional Engineering at China Agricultural University, and then worked as a lecturer from 2012 to present. Her main research is focused on the nutrition, toxicity and allergenicity assessment of genetically modified organisms. Meanwhile, as the quality supervisor and testing faculty of Toxicity and Allergenicity Testing Room of Inspection and Testing Center for Food Safety Assessment of Genetically Modified Organisms, Ministry of Agriculture (Beijing), she is responsible for the technical activities of toxicity and allergenicity testing. Dr. He has participated in developing six Chinese standards on the safety assessment of GMOs, and has published more than 20 papers in this field.

Professor Junshi Chen

China National Centre for Food Safety Risk Assessment

Director, ILSI Focal Point in China

Wendelyn Jones, PhD

Dr. Wendelyn Jones serves as the Director of Global Regulatory Policy and Scientific Affairs for DuPont Pioneer. In this role, she is responsible for guiding and coordinating biotechnology, trade, and science advocacy efforts that support agricultural biotechnology adoption in North America, Europe, Latin

America, Asia, China, and Africa. Previously, she served as Director of Global Registration and Regulatory Affairs for DuPont Pioneer.

Dr. Jones has also held various positions relating to safety/risk assessments and biotechnology policy. She has worked in international policy coordination and promoted science-based regulations in both the industrial and the government sectors. Dr. Jones was part of the FAO/WHO Expert Consultation on the Safety Assessment of Foods Derived from Genetically Modified Animals. She has extensive experience in international negotiations and served on various delegations including the Convention on Biological Diversity; the Codex Alimentarius Commission Ad-Hoc Intergovernmental Task Force on Foods Derived from Biotechnology; and the OECD Working Group on Harmonization of Regulatory Oversight in Biotechnology.

Dr. Jones has been an invited speaker on topics including food safety and risk assessment and served on grant review committees.

Dr. Jones has a bachelor's degree in chemistry and earned a doctorate in molecular toxicology from Vanderbilt University; she was a post-doctoral fellow at the Massachusetts Institute of Technology.

Gregory S. Ladics, PhD, DABT, ATS

Gregory S. Ladics received his Bachelor of Science cum laude in Toxicology from the Philadelphia College of Pharmacy and Science in 1987. In 1991, he received his Doctor of Philosophy in Pharmacology and Toxicology from the Medical College of Virginia/Virginia Commonwealth University. He has been employed by the DuPont Co. for over 21 years where he is presently a Research Fellow. In 1999, Dr. Ladics became a Diplomate of the American Board of Toxicology, and a Fellow of the Academy of Toxicological Sciences (ATS) in 2012. He serves on the International Life Sciences Institute (ILSI) Health and Environmental Sciences Institute's (HESI) Protein Allergenicity Technical Committee as Co-Chair and the HESI Immunotoxicology Technical Committee. Dr. Ladics is also Chair of the Crop Life International Protein Allergenicity Team and is currently President of the Society of Toxicology Immunotoxicology Specialty Section. He is a member of the Editorial Boards for the *Journal of Immunotoxicology*, the *International Journal of Toxicology*, *Dataset Papers in Biology*, and the *ISRN Biotechnology Journal*. Current research activities involve the evaluation and validation of test methods to assess protein allergenicity potential and research to address issues and further refine bioinformatic/protein modeling approaches for assessing potential protein allergenicity. Dr. Ladics has over 140 abstract, journal, and book chapter publications in the field of Immunotoxicology and Allergy.

Dr. Petra Lutter

Petra LUTTER is a Research Specialist at Nestlé Research Center, Lausanne Switzerland. She has over 15 years experience in protein analytics, therein 8 years in GMP/GLP compliant protein analysis in biotechnological and nutritional industry. She holds a doctoral degree in biochemistry, obtained at the University of Bochum, Germany. At Protagen AG, Bochum, Germany she focused on application of proteomics techniques including 2D gel electrophoresis and mass spectrometry and specialized as study director for GMP compliant protein analytics for pharmaceutical and biotechnological industry (2000 - 2008). In 2008 she joined Nestlé at the Nestlé Research Center in Lausanne, Switzerland and she works on method development and validation for allergen quantification in foods, food authenticity testing, and protein quality control. Petra LUTTER is a member of CEN working group 12 (food allergens), IDF, AOAC, and expert panel member at US Pharmacopoeia/Food Chemical Codex.

Scott McClain, PhD

Scott McClain's academic background is in animal physiology and environmental toxicology having received his MS and PhD degrees at the Center for Environmental Toxicology and Statistics at Miami University, Oxford, OH. Prior to returning to a graduate PhD degree after finishing his MS, he started his professional career by working for 7 years as a research immunologist and protein biochemist developing bioactive food ingredients. Dr. McClain's professional background is in the biotechnology sector, and his training and experience is in immunology and clinical allergy diagnostics, product efficacy, and product safety testing for novel food and neutraceutical technologies. The last 7 years have been spent in the product safety and regulatory divisions of the agricultural biotechnology sector with an emphasis on conducting and communicating the allergy and toxicology safety of novel food and feed crop products. Currently, Dr. McClain is employed with Syngenta Crop Protection, LLC. He co-chairs the HESI Protein Allergenicity Technical Committee, and participates on the Crop Life International Allergy Expert Team.

Lars K. Poulsen, PhD, Dr. Med.

Prof. Lars K. Poulsen (PhD 1988, Dr. Med. 2000) is Clinical Professor of Basic Allergology at the University of Copenhagen, Medical Faculty, since 2009. He received a MSc in Chemistry at the Danish Technical University in 1984 and a Diploma of Business Administration at the Copenhagen Business School in 1997. Following his PhD at the Medical Faculty at the University of Copenhagen, he was a post-doc at the Johns Hopkins University Medical School in 1989. Since 2002, he is Head of Allergy Research at the Gentofte Hospital (formerly National University Hospital). Prof. Poulsen has supervised 31 PhD students, 65 graduate students, and was opponent/censor for 19 PhD students and 20 graduate students. He regularly reviews grants and positions for the EU Commission, the National Medical Research Councils in Austria, Singapore, Switzerland, Spain, the Austrian National Bank Foundation, and the Danish Universities. In 2010, he served as a consultant for the Danish Food Institute and the European Food Safety Authority (EFSA). Prof. Poulsen has been the Scientific Programme Coordinator

of the European Academy of Allergy and Clinical Immunology (EAACI) 2010-12, and will be chairing the 2014 EAACI Annual Congress in Copenhagen.

Professor Alan Raybould

Alan Raybould is a Science and Technology Fellow in the Product Safety department at Syngenta's Jealott's Hill International Research Centre in the United Kingdom. He is also a visiting Professor in the School of Biological Sciences at the University of Southampton where he lectures on applied ecology. Prof. Raybould joined Syngenta in November 2001. His current job involves leading the preparation of environmental risk assessments as part of worldwide regulatory submissions for Syngenta's transgenic crops. His research interests include the development of efficient and effective environmental risk assessments for transgenic crops with stacked traits, predictive ecological modeling of the effects of agricultural management on ecosystem services, and the development of regulatory policies that encourage agricultural innovation and environmental protection.

Before joining Syngenta, Prof. Raybould was a Principal Scientific Officer at the UK's Centre for Ecology and Hydrology, where he led a research group developing methods for estimating gene flow among populations of wild plants, and studying the ecological genetics of insect and virus resistance in wild relatives of crops.

Professor Ronald van Ree

Ronald van Ree was originally educated in history but switched to biochemistry and immunology, the field in which he defended his thesis at the University of Amsterdam in 1994 on the topic of grass pollen allergens and their interaction with the immune system. From 1994 until 2005, he headed the Allergy Research Laboratory at Sanquin Blood Supply Foundation in Amsterdam. In July 2005, he moved to the Academic Medical Center in Amsterdam where he was appointed as Associate Professor at the Department of Experimental Immunology. There he is head of the Laboratory for Allergy Research. In June 2009, Ronald van Ree was appointed as Full Professor of Molecular and Translational Allergology. In 2010, Ronald van Ree started working as a consultant for one day a week at HAL Allergy BV in Leiden, where he is advising the management on their R&D program. During 2011, he *ad interim* headed the Department of Experimental Immunology. The main areas of interest of the Allergy Research group are:

- Protein-chemistry and molecular biology of respiratory and food allergens: what makes an allergen an allergen?
- Innovative approaches for in vitro and in vivo diagnosis of IgE-mediated allergy: from allergen extracts to molecular diagnostics.
- Innovative biopharmaceutical approaches for allergen-specific immunotherapy: recombinant technology, novel adjuvants, and administration routes.

- Immuno-epidemiology of respiratory and food allergies: the role of allergen exposure, environment, diet, infections, and lifestyle in the development of allergy.
- Mouse models of allergy and asthma: how are sensitization and disease expression regulated?

Prof. van Ree has participated in many EU Framework Program projects, including as vice-coordinator in the Integrated Project on Food Allergy, EuroPrevall, in the GLOFAL project aiming at integrating food allergy research in developing countries in the EU framework program, and most recently as co-ordinator of the ongoing project on immunotherapy for food allergy (2008-2015). He is a Member-at-Large of the Executive Committee of the European Academy of Allergy and Clinical Immunology, and recently joined the HESI Protein Allergenicity Technical Committee as co-chair from academia. He is on the editorial board of several leading journals in the field of allergology, and is associate editor of *International Archives of Allergy and Immunology*. Ronald van Ree has published over 200 papers in peer-reviewed journals, and several book chapters.

Wang Lianglu, MD

Dr. Wang Lianglu is Deputy Director and Associate Professor of the Department of Allergy, Peking Union Medical College hospital. He graduated from Peking Union Medical Colleges and was conferred PUMC MD degree in 1993. Now he is a board member of the Chinese Society of Allergology, and vice president of the Beijing Society of Allergology. He is Associate Chief Editor of the Chinese *Journal of Allergology and Clinical Immunology*, editor of the Chinese *Journal of Microbiology and Immunology,* and several peer-reviewed academic journals. He is mainly interested in the clinical and basic research work in the field of specific diagnosis, especially in vitro test of allergic diseases, SIT, aerobiology, hay fever with food allergy, and fungi allergy. He has published more than 10 original papers in peer-reviewed academic journals in the field mentioned above. He has finished the *Colorful Atlas of Airborne Pollens and Their Plants in China* (both in Chinese and English) and *Colorful Atlas of Airborne Fungi in China* (in Chinese) as the deputy editor in chief, and also finished chapters as author in another three academic books in the field of allergy.

Wang Xue, PhD

Wang Xue serves as Deputy Director of the National Center for Safety Evaluation of Drugs (NCSED), National Institute for Food and Drug Control (NIFDC), Beijing, China.

Wang Xue holds a bachelor of sciences (1983) and master of sciences (1986) from Harbin Normal University in biology and genetics. He earned his doctorate in molecular genetics from the Tohoku University of Japan in 1996. From 1996 to 1999, he conducted research on safety evaluation for food and drugs in National Institute of Health Sciences, Japan. In 1999 he returned to China, and from then on, he was in charge of experiment and research work on safety evaluation for drugs in NIFDC. At the

same time he participated in the preparatory work on the establishment of JICA cooperation projects for NCSED.

Dr. Wang has extensive experience in toxicology and molecular biology. Since the 1990s, with several experiment systems included E. coli endogenous gene tonB, transgenic mice (BigBlue & MutaMouse) and single-stranded phage (M13mp2 phage), his research focused on DNA molecular mechanisms, identifying gene mutations induced by multiple carcinogens, radiation, and anti-cancer drugs. He is now committed to developing new technology and methods on toxicology. Wang Xue is a GLP inspector for State Food and Drug Administration and a reviewer for HEREDITAS (Beijing). He is also a member of the third and fourth National AG GMOs Biosafety Committee.

Jason M. Ward, PhD

Dr. Jason Ward is currently the Molecular Characterization and Allergy lead at Monsanto Company in Saint Louis, Missouri, USA. Dr. Ward is a member of the ILSI Health and Environmental Sciences Institute's Protein Allergenicity Technical Committee. He is also a member of the Crop Life International Expert Allergy Team. Dr. Ward received his Bachelor of Sciences degree in Biology from Truman State University and received his PhD in Plant Molecular Biology from Washington University in St. Louis. As a postdoctoral researcher at the University of Chicago, he worked to identify new allergens from the surface of pollen grains. Dr. Ward joined Monsanto Company in 2007 and currently leads the Molecular Characterization and Allergy safety studies within the Monsanto Regulatory Product Characterization Center.

Prof. Gary WK Wong

Professor Gary Wong obtained his undergraduate medical education from the University of Alberta, Canada. He subsequently received fellowship training at the University of British Columbia, and Children's Hospital of British Columbia, Canada, and a visiting Fellowship at the Children's Hospital at Munich, Germany. He then returned to Hong Kong to teach at the Chinese University of Hong Kong. Dr. Wong is currently Professor and honorary consultant, Department of Paediatrics and School of Public Health, Faculty of Medicine, Chinese University of Hong Kong, Hong Kong.

Dr Wong's main research interests include different aspects of allergic conditions, respiratory diseases, and nutritionally related disorders. In particular, he is interested in the epidemiology and environmental determinants of asthma, food allergies, wheezing illness, and related allergic disorders. He is currently a member of the board of directors of the Global Initiative for Asthma (GINA). He is an active member of the INFlame research network under the World University Network to investigate the early origins of allergic and nutritionally related disorders. He has published over 200 original articles, review papers, and book chapters. He is the current President of the Asia-Pacific Association of Pediatric Allergy, Respirology and

Immunology (APAPARI). Among other duties, he serves on several editorial boards, and is one of the Section Editors of *Pediatric Allergy and Immunology* and the Associate Editor of *Pediatric Pulmonology*.

Professor Yongning Wu

Chief Expert, China National Centre for Food Safety Risk Assessment

Director, China Key Laboratory on Food Safety Risk Assessment

Professor Haibin Xu

China National Centre for Food Safety Risk Assessment

Prof. dr. Maria Yazdanbakhsh

Prof. Maria Yazdanbakhsh is head of Parasitology at Leiden University Medical Center in the Netherlands. She also leads a research group that focuses on cellular immunology of host pathogen interaction with special emphasis on Th2 mediated diseases. Collaborations set up, for more than a decade, with research groups in Indonesia, Gabon and Ghana, have paved the way for conducting studies to characterize the immune system of subjects living in areas undergoing epidemiologic transition from a traditional to a modern life style. This is studied at the population level using immunoepidemiological methods in in vitro studies where dendritic cells and regulatory T and B cells are investigated at the molecular level. The question of how chronic parasitic infections modify responses to third party antigens has been studied by analyzing their effect on allergic diseases, vaccination, and more recently metabolic parameters. With respect to allergy, one of the issues that has been investigated in some depth, has been the high levels of allergen-specific antibodies that are seen in rural areas of developing countries with no evidence of clinical allergic symptoms. The group has, in collaboration with biochemists, identified modulatory molecules derived from parasites that might have potential for therapeutic interventions. The characterization of such molecules in terms of their interaction with receptors on immune cells or with antibodies generated has led to promising avenues for therapeutic interventions.

Professor Gao Zhong-shan

Gao Zhong-shan, PhD, is a Professor at the Department of Horticulture and Allergy Research Center, Zhejiang University. He studied Fruit Science at Shanxi Agricultural University from 1981 to 1988 for his Master's degree. In 2005, he obtained his PhD in Plant Science at Wageningen University, The Netherlands. Since 2001, he has worked on genomics of fruit allergens by participating in the EU-SAFE (apple allergy) project. In 2006, he was appointed Professor at the Department of Horticulture, Zhejiang University, and in 2007, initiated and coordinated a consortium of allergy research at Zhejiang University. He organized a Sino-Dutch allergy symposium in 2008 and 2012. He received research grants from the China Natural Science Foundation, Ministry of Agriculture, Ministry of Science and Technology, and

European Commission. His major scientific achievements include work on genomics of apple and peach allergens (published in the journals *Theoretical and Applied Genetics*, *BMC Genomics*, *BMC Plant Biology* and *Tree Genetics and Genomics*), identification of mugwort lipid transfer protein as a primary sensitizer for peach allergy in North China (*Journal of Allergy and Clinical Immunology*, 2013, 131(1): 224-226); the first report of Chinese Bayberry fruit allergy (*Zhejiang University Sciences B,* 2012, 13(10):851-854). He edited a book “Multidisciplinary Approaches to Allergies” published by Zhejiang University Press and Springer in 2012.