APEC POLICY DIALOGUE AND WORKSHOP ON
ATTAINING A SAFE AND SUSTAINABLE
BLOOD SUPPLY CHAIN

Asian Institute of Management
Manila, Philippines
30 September – 1 October 2014

APEC Life Sciences Innovation Forum
APEC POLICY DIALOGUE AND WORKSHOP ON
ATTAINING A SAFE AND SUSTAINABLE BLOOD SUPPLY CHAIN
Asian Institute of Management, Manila, Philippines
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Asia-Pacific Economic Cooperation (APEC) is an intergovernmental forum of 21 “member economies” that operates on the basis of non-binding commitments and open dialogue to strengthen intra-regional economic growth. Founded in 1989, APEC facilitates trade liberalization and investment through mutual cooperation. The organization maintains nearly 40 permanent sub-fora with responsibilities that span most economic sectors. These groups manage short and long-term initiatives that facilitate policy alignment as well as economic and technical cooperation. APEC encourages participation by the business community, academia and civil society and is chaired by a different economy each year. The chair has notable influence over the priority issues as well as determines the annual location of the APEC CEO Summit, APEC Ministers Meeting, and APEC Leaders Meeting (heads of state).

APEC member economies include Australia, Brunei Darussalam, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States, and Vietnam.


HOW APEC OPERATES

APEC operates as a multi-lateral economic forum that provides equal weight to the views of all 21 member economies without legally binding obligations. It is a structured organization with regular participation (at mid and high levels of seniority) by thousands of government ministries and non-government stakeholders from all 21 member economies.

APEC also maintains a strict reporting and endorsement channel. Activities undertaken and recommendations made each year at the working level advance to policy level bodies for review and consideration. APEC’s working level activities and projects are guided by APEC Senior Officials (one from each member economies). Nearly 40 permanent sub-fora (working groups) report to four high-level committees. These committees report to APEC Senior Officials. APEC Senior Officials report to APEC Ministers at the policy level. APEC Leaders (heads of state), who convene each year and set the policy agenda, will consider the annual recommendations of APEC Ministers, APEC Sectoral Ministerial Meetings, and the APEC Business Advisory Council (ABAC).

The chair economy is responsible for holding the annual APEC Economic Leaders’ Meeting, selected Ministerial Meetings, Senior Officials Meetings, ABAC and hundreds of working level meetings. The Chair has considerable influence over the themes and priority issues each year. This can result in shifts in APEC’s policy focus from year-to-year. However, the priorities of APEC’s working level bodies are preserved and provide continuity for most initiatives.
BACKGROUND

Transfusion of blood and blood products helps save millions of lives every year. Blood transfusion can help patients suffering from life-threatening conditions live longer and with higher quality of life, supports complex medical and surgical procedures, and has an essential, life-saving role in maternal and perinatal care.

The demand for human blood is increasing at a rapid rate throughout the Asia-Pacific region. Growth in demand is driven by rising incidence of disease and sickness, population growth, government focus on developing the healthcare infrastructure, steadily growing base of affluent middle-class population, and increasing healthcare spending.

Despite the growing demand, wide disparities in access to safe and reliable blood exist and blood supplies in many developing economies in the region are rarely sufficient to meet local demand and existing international quality and safety standards. Where blood is available, the blood and blood products supply chain and quality systems may fail to ensure on-time access to safe blood. As of 2013, only 13 of the 21 APEC economies report collecting 100% of their blood supplies from voluntary unpaid donors.

Every stop along the blood supply chain is critical – from the point of collection to providing product to the recipient. The complicated process requires synergy of multiple factors ranging from quality systems, blood processing, testing strategies, and distribution to patient blood management and adequate volunteer blood donors. The vein-to-vein (donor-to-patient) synergy also requires collaboration of many stakeholders including blood banks, hospitals, ministries of health, and national regulatory authorities.

Many challenges obstruct the path of APEC economies’ efforts to improve the safety and sustainability of the blood supply chain to achieve a well-organized, nationally-coordinated blood transfusion service. Challenges can be found in all areas including the capacity of their blood services, appropriate infrastructure, governance and the achievement of international safety and quality standards for blood.

However each challenge also offers an opportunity for improvement. For example, many national governments prioritize improving access to blood collected from regular, voluntary non-remunerated blood donors to ensure blood is available when needed. Additional opportunities for improvement include process control through quality systems and infrastructure improvements for collection and processing of blood and blood products to development of the appropriate testing strategy to match the risk of disease.

Success by APEC economies to recognize these challenges as opportunities to improve the national transfusion services is enhanced through heightened collaboration among all stakeholders, including private, academic, community, health and non-health public sectors.
Multi-sectoral, multi-lateral collaborations and model public-private partnerships – built on best and innovative practices appropriate to local environments – support the ability of all APEC economies to operate a fully centralized National Blood Service with consistent quality standards to provide optimal blood safety for improved patient outcomes. Through increased collaboration, patients are assured timely access to blood, as well as confidence that the transfusion is free from infectious viruses such as hepatitis and HIV. National governments also benefit from the economic impact of a healthy individual who leaves the hospital to return to the workforce and actively contribute to society.

On 4 July 2013, the APEC Life Sciences Innovation Forum (LSIF) and APEC Health Working Group (HWG) convened in Medan, Indonesia to discuss Healthcare Acquired Infections (HAIs). It was during this dialogue that APEC economies’ leadership discussed the important challenge of blood-borne infections from transfusions. Due to interest in the health and economic impact of transfusion transmitted infections such as HIV, hepatitis B and hepatitis C, APEC approved funding to fully explore the safety and sustainability of blood supply chains in developing economies across the region.

The APEC Policy Dialogue and Workshop on Attaining a Safe and Sustainable Blood Supply Chain is scheduled for Sept 30 to Oct 1 in Manila, Philippines. The Workshop will convene senior leaders from government, academic institutions, the private sector, civil society, and international organizations to identify how APEC economies can work together to build the capacity of their blood services, infrastructure, and governance and promote the achievement of international safety and quality standards for blood.

Following the outcome of the 2014 workshop, action will focus on developing and implementing the “APEC 2020 Blood Supply Chain Roadmap”, included in the overall scope of the APEC project. The roadmap will focus on four key areas: 1) promoting harmonization and implementation of international standards for blood and blood products; 2) optimizing the efficiency of the blood supply chain through capacity building for blood processing, testing, and distribution systems; 3) sharing best practices to improve the safety and quality of the blood supply and the sustainability of the blood system; 4) identifying strategies for optimizing clinical transfusion practices and patient blood management in both developed and developing economies; and 5) building the capacity of APEC economies to develop and export plasma, which can help sustain blood systems in APEC economies.
Day Zero • 29 September

Location: New World Hotel, Gallery I

Pre-Workshop Briefing for Speakers and Moderators ................................................... 16:00 – 17:30

Location: New World Hotel, Conference Room A (3rd floor)

Welcome Reception............................................................................................................. 17:30 – 19:30

Location: New World Hotel, Gallery I

Welcome Remarks

- Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines
- Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States
Day One • 30 September
Location: Asian Institute of Management (AIM), Fuller Hall, AIM Main Building

Registration ........................................................................................................................................................................07:45 – 08:30

OPENING SESSION

Introduction..................................................................................................................................................................................08:30 – 08:40

- Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States
- Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines

Welcome Remarks and Introduction of Keynote Speaker .........................................................08:40 – 08:45

- Dr. Steven J. DeKrey, PhD, President, Asian Institute of Management

Keynote Remarks........................................................................................................................................................................08:45 – 09:00

- Dr. Enrique Ona, Secretary of Health, Philippines

PART ONE: BLOOD SAFETY AND SUSTAINABILITY IN THE ASIA PACIFIC

Session I: An Overview of Blood Systems in the Asia Pacific .................................................09:00 – 10:00

Representatives from the World Health Organization and other regional and international health organizations will provide an overview of the status of blood systems in the Asia-Pacific region. Public health and economic considerations for addressing blood safety and sustainability will also be addressed.

- Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore
- Dr. Geni Neumann, Regional Advisor for Blood Services, Pan-American Health Organization
- Dr. Masahiro Satake, Deputy Director General of Central Blood Institute, Blood Service Headquarters, Japanese Red Cross Society, Japan
- Prof. Elizabeth Arcellana-Nuqui, Consultant Specialist, Department of Health, Philippines
Coffee/Tea Break and Group Photo ................................................................. 10:00 – 10:30

Session II: Challenges to Implementing a National Blood Program .............. 10:30 – 11:30

Representatives from APEC member economies will discuss challenges to developing safe and sustainable blood systems within their economies and identify common challenges. An analysis of aggregated data and information collected from the pre-workshop surveys will also be presented.

- Dato’ Dr. Faraizah Dato’ Haji Abdul Karim, Director, National Blood Centre, Ministry of Health, Malaysia
- Dr. Maria Victoria Abesamis, OIC Executive Director, Philippine Blood Disease and Transfusion Center, Department of Health, Philippines
- Dra. Jimena Morales Ayala, Deputy Director of Research and Development, National Center of Blood Transfusion, Ministry of Health, Mexico
- Dr. Merilyn Mathias, Manager, National Blood Transfusion Service, Ministry of Health, Papua New Guinea
- Moderator: Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore

Part One Q&A and Discussion ........................................................................... 11:30 – 11:50

- Moderator: Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore

Establishing an APEC Network of Excellence for Blood Safety ..................... 11:50 – 12:10

- Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States

Lunch .................................................................................................................. 12:10 – 13:30

PART TWO: BUILDING QUALITY SYSTEMS

Session III: The Pillars of Quality Systems ...................................................... 13:30 – 14:30

Quality systems are essential to ensuring the safety and sustainability of the blood supply. APEC economies will discuss the key elements of quality systems and share strategies and best practices for building and/or implementing them.
Ms. Meredith Smith, Quality Manager, New Zealand Blood Service, New Zealand

Dr. Dao Nguyen Minh, Vice Head of Quality Management Bureau, Administration Medical Services, Ministry of Health, Viet Nam

Dr. Che-Kit Lin, Chief Executive and Medical Director, Hong Kong Red Cross Blood Transfusion Service, Hong Kong, China

Moderator: Dr. Paul Strengers, Executive President, International Plasma Fractionation Association

Session IV: Breakout Groups on Quality Systems........................................................... 14:30 – 16:00

Group A (1/4 of Fuller Hall)

Moderator: Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore

Group B (Korean Caseroom)

Moderator: Ms. Meredith Smith, Quality Manager, New Zealand Blood Service, New Zealand

Group C (Indonesian Caseroom)

Moderator: Prof Elizabeth Arcellana-Nuqui, Consultant Specialist, Department of Health, Philippines

Group D (DVM Caseroom)

Moderator: Dr. Jerry Holmberg, Director, Scientific Affairs, Grifols

Coffee/Tea Break ............................................................................................................... 16:00 – 16:20

Session V: Reports from Breakout Sessions and Discussion........................................... 16:20 – 16:45

Location: Plenary

Moderator: Dr. Paul Strengers, Executive President, International Plasma Fractionation Association
PART THREE: IMPROVING BLOOD PROCESSING

Session VI: Centralization and Regionalization............................................................... 16:45 – 18:00

This session will be in a round table format. Participants will explore the need for centralizing or regionalizing blood processing and testing facilities to build sustainable blood systems. APEC delegates will discuss how centralization creates economies of scale and improves safety and quality standards and whether centralization works in all environments and various obstacles confronted when centralizing the blood system and if and how those obstacles were overcome.

- Dr. Ina-Noelia Pérez-Huaynalaya, Regional Director Americas, International Society of Blood Transfusion
- Dr. Yuyun SM Soedarmono, Director of Central Blood Centre, Indonesian Red Cross, Indonesia
- Ms. Tasanne Sakuldamrongpanich, Deputy Director, National Blood Centre, Thai Red Cross Society, Thailand
- Dr. Maria Victoria Abesamis, OIC Executive Director, Philippine Blood Disease and Transfusion Center, Department of Health, Philippines
- Dr. Pham Tuan Duong, Deputy Director, National Institute of Hematology and Blood Transfusion, Ministry of Health, Viet Nam
- Dra. Jimena Morales Ayala, Deputy Director of Research and Development, National Center of Blood Transfusion, Ministry of Health, Mexico
- Moderator: Dr. Jean-Claude Faber, CEO, LuxConsulTrans

Day One Wrap-up .............................................................................................................. 18:00 – 18:20

- Moderator: Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States

Shuttles Depart for New World Hotel .............................................................................. 18:30

EVENING ACTIVITIES

Gala Dinner ......................................................................................................................... 19:00 – 21:30

Location: New World Hotel, Glasshouse I

Keynote Speakers
- Dr. Celso Bianco, President, International Society of Blood Transfusion
- Mr. Richard “Dick” Gordon, Chairman and CEO, Philippines Red Cross
Day Two ▪ 1 October
Location: Asian Institute of Management (AIM), Fuller Hall, AIM Main Building

**DAY TWO OPENING SESSION**

Overview of Day Two ......................................................................................................... 08:30 – 08:40
- Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States
- Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines

Day Two Opening Remarks and Introduction of Keynote Speaker .............................. 08:40 – 08:50
- Dr. Gwendolyn Pang, Secretary General, Philippine Red Cross

Day Two Keynote Remarks ............................................................................................... 08:50 – 09:20
- Dr. Norma Martinez Ona, Hematologist, Victor R. Potenciano Medical Center, Philippines

**PART THREE: IMPROVING BLOOD PROCESSING (continued…)**


Rigorous screening of all donated blood is required to ensure the safety of the blood supply. APEC delegates will share and discuss testing strategies for achieving optimized blood processing.

- Dr. Masahiro Satake, Deputy Director General, Central Blood Institute, Blood Service Headquarters, Japanese Red Cross Society, Japan
- Dr. Yasmin Ayob, Visiting Consultant, National Blood Centre, Kuala Lumpur Malaysia
- Dr. Pavel Trakhtman, Head, Department of Transfusion Medicine and Stem Cell Bank, Federal Research Center for Hematology, Oncology, and Immunology, Russian Federation
- Mr. Ravi Reddy, Chief Operations Officer, South African National Blood Service, South Africa
- Moderator: Dr. Celso Bianco, President, International Society of Blood Transfusion

Coffee/Tea Break ............................................................................................................... 10:30 – 10:50
Session VIII: Economics of Testing ................................................................. 10:50 – 12:00

Case investigations into the economics of blood testing will be presented.

- Dr. Hilton Lam, Director, Institute of Health Policy and Development Studies-National Institutes for Health, University of the Philippines, Philippines
- Dr. Brian Custer, Associate Investigator, Epidemiology and Health Outcomes Research, Blood Systems Research Institute, United States
- Dr. Yuyun SM Soedarmono, Director of Central Blood Centre, Indonesian Red Cross, Indonesia
- Ms. Eleanor Saunders, Senior Consultant in Health Economics, TI Salud
- Moderator: Dr. Yasmin Ayob, Visiting Consultant, National Blood Centre, Kuala Lumpur Malaysia

Lunch ......................................................................................................................... 12:00 – 13:00

PART FOUR: OPTIMIZING CLINICAL TRANSFUSION PRACTICES

Session IX: Clinical Transfusion and Patient Blood Management ................. 13:00 – 14:00

The session will examine strategies for optimizing clinical transfusion practices and patient blood management in both developed and developing economies. Topics to be discussed will include: the cost savings and benefits that are expected to be achieved with a successful PBM program; an overview of policies and protocols that have been implemented in developed economies.

- Dr. Aryeh Shander, Chief, Department of Anesthesiology, Critical Care Medicine, Pain Management and Hyperbaric Medicine, Englewood Hospital and Medical Center, United States; Clinical Prof. of Anesthesiology Medicine and Surgery, Mount Sinai School of Medicine, Mount Sinai Hospital, United States of America
- Dr. Axel Hofmann, Adjunct Associate Prof., School of Surgery, Faculty of Medicine Dentistry and Health Science, University of Western Australia; Adjunct Associate Prof., Faculty of Health Sciences, Curtin University, Western Australia; Visiting Prof., Institute of Anesthesiology, University Hospital Zurich, Switzerland
- Dr. Kerry Gunn, Specialist Anaesthetist, Auckland City Hospital, New Zealand; Chair, Auckland District Health Board Blood Transfusion Committee

Session IX Q&A and Discussion .............................................................. 14:00 – 14:30

Singapore’s Perspective

- Dr. Ang Ai Leen, Deputy Group Director, Blood Services Group, Health Sciences Authority, Singapore
PART FIVE: ENSURING SUSTAINABLE BLOOD SYSTEMS

Session X: Meeting the Needs of Plasma Products .......................................................... 14:30 – 16:00

- Mr. Jan M. Bult, President & CEO, Plasma Protein Therapeutics Association
- Dr. Paul Strengers, Executive President, International Plasma Fractionation Association
- Mr. Ravi Reddy, Chief Operations Officer, South African National Blood Service, South Africa
- Mr. Ahmad Farizal Abdul Karim, Chief Executive Officer, Strovi Tel Dsn Bhd, Malaysia
- Moderator: Dr. Celso Bianco, President, International Society of Blood Transfusion

Session X Q&A and Discussion ...................................................................................... 16:00 – 16:30

- Moderator: Dr. Celso Bianco, President, International Society of Blood Transfusion

Coffee/Tea Break ......................................................................................................... 16:30 – 16:45

Session XI: Building Partnerships and Leveraging Resources................................. 16:45 – 17:15

- Mr. Luke Ifland, President, Global Healing, United States
- Dr. Geni Neumann, Regional Advisor for Blood Services, Pan-American Health Organization
- Moderator: Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines
CLOSING SESSION

Session XII: Development of Recommendations ............................................................... 17:15 – 17:50

- Dr. Geni Neumann, Regional Advisor for Blood Services, Pan-American Health Organization
- Dr. Yasmin Ayob, Visiting Consultant, National Blood Centre, Kuala Lumpur Malaysia
- Dr. Jean-Claude Faber, CEO, LuxConsulTrans
- Dr. Che-Kit Lin, Chief Executive and Medical Director, Hong Kong Red Cross Blood Transfusion Service, Hong Kong, China
- Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore
- Dr. Celso Bianco, President, International Society of Blood Transfusion
- Dr. Aryeh Shander, Chief, Department of Anesthesiology, Critical Care Medicine, Pain Management and Hyperbaric Medicine, Englewood Hospital and Medical Center, United States; Clinical Prof. of Anesthesiology Medicine and Surgery, Mount Sinai School of Medicine, Mount Sinai Hospital, United States of America

Closing Remarks ................................................................................................................. 17:50 – 18:00

- Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States
- Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines
Prof. Maureen Goodenow, Workshop Chair, Department of State and the University of Florida, United States

Maureen M. Goodenow, Ph.D. is Professor of Pathology, Immunology, and Laboratory Medicine in the College of Medicine at the University of Florida. She holds the Stephany W. Holloway Endowed Chair for HIV/AIDS Research and is the Director of the Center for Research in Pediatric Immune Deficiency. Professor Goodenow has a research program in molecular epidemiology, pathogenesis, and vaccines for HIV-1 and related viruses, such as human papillomaviruses that cause cancer. Her research involves implementation of technology, including high-throughput next generation genomics, bioinformatics and systems biology, to solve problems of human-pathogen interactions from a global health perspective. Her interests include the role of governments in developing and implementing global health policies and how security and economics influence global health policy and programs.

Professor Goodenow received a Ph.D. in molecular genetics from the Sue Golding Graduate School at the Albert Einstein College of Medicine in New York. Following a postdoctoral fellowship in molecular oncology at the Sloan Kettering Institute in New York, she was a visiting scientist at the Pasteur Institute in Paris before accepting a faculty position at the University of Florida in the College of Medicine. She has published over 100 articles and book chapters, serves on the editorial boards of numerous journals, was appointed as a special advisor to the Vice Chancellor of Research for the City University of New York, advises the NIH on merits of scientific proposals and the Trans-NIH Plan for HIV-Related Research in the Office of AIDS Research, and is a former member of the AIDS Research Advisory Committee for the Division of AIDS in the National Institute of Allergy and Infectious Diseases at NIH. She provided advice to the combined program between NIH and Department of State for enhancing research between US and Russian scientists, as well as to Fogarty Programs in India and Kazakhstan and to medical fellowship training programs in Brazil.

In 2012, Dr. Goodenow was selected as a Jefferson Science Fellow, a prestigious program for senior academic scientists to provide advice at the Department of State and the National Academies of Sciences. Currently she continues as a Senior Advisor for Health, Science, Technology, and Innovation at the Department of State in the Office of Economic Policy in the Bureau of East Asia Pacific Affairs [EAP/EP], the lead office for US engagement in APEC [Asia Pacific Economic Cooperation], where her expertise is applied to a portfolio of projects related to the economics of health and universal health care, higher education, science/technology and innovation, as well as economic advantages for increasing roles for women and facilitating travel mobility for business, research, and higher education. Her APEC-related activities included organizing interagency working groups, participating in bilateral meetings with APEC economies, serving as US government lead at High Level Meetings for Health and the Economy attended by ministers of health from Asia Pacific region, and co-organizing international policy dialogues on HIV-1, health-care associated infections, multi-drug resistance tuberculosis, mental health, and cervical cancer. During her year at the Department of State, Professor Goodenow presented in the Jefferson Science Fellow Lecture Series a lecture about PEPFAR as a model for global health diplomacy.
Dr. Kenneth Hartigan-Go, Acting Director General, Food and Drug Administration, Department of Health, Philippines

On August 23, 2012, Dr. Kenneth Y. Hartigan-Go was appointed Director IV of the Food and Drug Administration by H. E. Benigno Simeon C. Aquino. Dr. Hartigan-Go has more than 20 years of experience as a clinician, professor, and manager of health programs. Dr. Hartigan-Go also has over ten years’ experience in management positions—as executive director of the Zuellig Foundation, a major health foundation which focuses on health leadership and management, community health partnerships, health governance and health policy, and as deputy director of the Philippine Department of Health Bureau of Food and Drug and National Drug Policy units. Dr. Hartigan-Go maintains extensive links into the Philippine and international business and health governance communities. Dr. Hartigan-Go has served as an advisor and consultant to USAID, the WHO and the European Community.
Speaker Biographies (listed alphabetically by last name)

Dr. Maria Victoria Abesamis, OIC Executive Director, Philippine Blood Disease and Transfusion Center, Department of Health, Philippines

Dr. Ang Ai Leen, Deputy Group Director, Blood Services Group, Health Sciences Authority, Singapore

Dr. Ang received her medical education at the National University of Singapore. After graduating in 2001, she continued to receive her Basic Specialist Training (Internal medicine) and Advanced Specialist Training (Haematology) in Singapore. She was granted registration as a specialist in Haematology by the Specialist Accreditation Board (Singapore) since 2008.

Dr. Ang has keen interests in promoting safe and effective clinical transfusion, and is active in the promotion of Patient Blood Management in Singapore. She also holds concurrent position as a Consultant at the Department of Haematology in Singapore General Hospital where she serves in its Hospital Transfusion Committee. She is actively involved in the undergraduate education of Yong Loo Lin School of Medicine as well as postgraduate education for Dukes-NUS Graduate Medical School, Haematology Residency and Advanced Specialist Traineeship, especially in the fields of clinical transfusion and red cell haematology.

Prof Elizabeth Arcellana-Nuqui, Consultant Specialist, Department of Health, Philippines

Doctor of Medicine: University of the Philippines
PROFESSIONAL LICENSURES:
Philippine Board of Medicine
   Education Council for Foreign Medical Graduates (ECFMG), 1970
   US Federal Licensure Examination (FLEX) (State of New York), 1976
SPECIALTY BOARDS:
   Diplomate, Anatomic and Clinical Pathology
   American Board of Pathology, November 1975
   Diplomate, Anatomic and Clinical Pathology
   Philippine Board of Pathology, January 1977
PROFESSIONAL ORGANIZATIONS:
   Fellow, College of American Pathologists since 1982
   Fellow, Philippine Society of Pathologists, since 1981
Fellow, Philippine Society of Oncologists  
Fellow, International Academy of Pathology  
Affiliate Fellow, Society of Gynecologic Oncologists of the Philippines  
Member, American Association of Blood Banks, 1999, 2000, 2001, 2004

SOME RECENT AND CURRENT POSITIONS:
Professor of Pathology, College of Medicine, University of the Philippines, 1997 – 2011 (retired)  
Chairperson, Department of Pathology, College of Medicine, University of the Philippines, 1994 – 1998  
President, Philippine Society of Oncologists, 2003  
Chair, Committee on Professional Education, National Council for Blood Services, since 2005  
Consultant, Department of Health, National Voluntary Blood Services Program, since 2000  
Vice-President, Philippine Council for Quality Assurance of Clinical Laboratories. 2013- present

Dr. Yasmin Ayob, Visiting Consultant, National Blood Centre, Kuala Lumpur Malaysia

Currently, Dr Yasmin Ayob serves as a visiting consultant at the National Blood Centre in Kuala Lumpur and the National Heart Institute as well as Honorary Lecturer at the Advance Medical and Dental Institute, Universiti Sains Malaysia(AMDI/USM).

She was the first Director of the National Blood Centre from 2000 to 2008. During that time she helped reorganized the blood programme, set up the first public cord blood bank, introduced NAT testing, established Transfusion Medicine as a stand alone speciality, and initiated the Masters Programme in Transfusion Medicine and Transfusion Science at AMDI/USM.

She is on the Panel of Expert in Transfusion Medicine of the World Health Organisation since 2000, which includes serving as Temporary Advisor in various countries. She was also on the editorial board of Transfusion Medicine. She has also served as member of the Board of Director of the International Society of Blood Transfusion (ISBT) in 2000-2006.

She is currently the President of the Malaysian Blood Transfusion Society and Vice-President of the Haemohilia Society of Malaysia.

For contribution, she has been given awards nationally and internationally, that include the ISBT Award in 2009.
Dr. Celso Bianco, President, International Society of Blood Transfusion

Celso Bianco, MD is currently the president of the International Society of Blood Transfusion (ISBT). Dr. Bianco was born and grew up in São Paulo, Brazil and received his medical degree from the Medical School of São Paulo in 1966. In 1969, after residency in Internal Medicine, he became a fellow in Immunology at the New York University School of Medicine, N.Y., USA. He continued his research career at Rockefeller University in New York City and later at the State University of New York, where he became a Professor of Pathology. In 1982 he joined the New York Blood Center as the Director of Science and Technology and focused his work on infectious diseases of relevance for transfusion, donor screening, donor notification and counseling, and laboratory follow up of infected donors. In 1992, he assumed the position of Vice President, Medical Affairs of the New York Blood Center. In October 2000, after a term as volunteer President of America’s Blood Centers (ABC), a not-for-profit association on independent blood centers in the U.S. and Canada, he joined the organization as Executive Vice President and became deeply involved in national and international medical policy-making related to blood banking and transfusion medicine. He retired from ABC in September 2012. He has been a member of advisory boards such as the HHS Advisory Committee on Blood Safety and Availability and the FDA Blood Products Advisory Committee, and the ISBT Transfusion Transmitted Infectious Diseases Working Party. He is currently a member of the Scientific Research Advisory Committee of Canadian Blood Services, and the Transfusion Transmitted Diseases committee of AABB and the Board of Directors of ICCBBA, the organization that manages the ISBT 128 information standard for medical products of human origin.

Mr. Jan M. Bult, President & CEO, Plasma Protein Therapeutics Association

PPTA is a global organization and represents manufacturers of plasma protein therapies made from human plasma and through alternative (recombinant) technologies. PPTA also represents source plasma collection centers in both the USA and Europe. PPTA is active in many regions of the world.

Mr. Bult holds his current position since January 1998. Before this he was the Executive Director of the European Division. Prior to joining the Association in 1995 he worked in the pharmaceutical industry for CIBA-GEIGY, Schering AG, Rhone-Poulenc and Biotest since 1974. The positions he held were in sales, marketing, research and development, training and business management. His responsibilities today include oversight of all Association operations, outreach to stakeholders, acting as industry spokesperson, and the global coordination of all PPTA activities.

After his military duty in The Netherlands, he attended medical school at Nijmegen University and law school at a private institute in Utrecht. He subsequently completed an intensive 18 month course of study in business management in Zeist, The Netherlands.
Mr. Bult played competitive handball in The Netherlands until his late 30’s. He relaxes with scuba diving, cycling and collecting model trains. He is also an FAA licensed pilot. He and his wife Rose are the loving parents of five children and six grandchildren.

**Dr. Brian Custer, Associate Investigator, Epidemiology and Health Outcomes Research, Blood Systems Research Institute, United States**

The two primary concentrations of my research program are epidemiology and health policy studies of the donated blood supply and transfusion medicine interventions. Health outcomes and modeling research methods provide important insights into blood supply safety and the implications of transfusion policies. My research program uses these methods to contribute constructive information to blood centers, regulators and the healthcare system in the United States and other countries. My current research activities are concentrated in four areas; first, multiple Recipient Epidemiology and Donor Evaluation Study (REDS-III) studies in Brazil including the development of a large sickle disease cohort study to understand disease outcomes and transfusion patterns, a transfusion-transmission study of Dengue, and monitoring HIV risk factors and virus characteristics in donors. Second, a large case control study of risk factors for HIV, HBV, HCV, and HTLV infections in blood donors in US, and a related study in South Africa focused on incident HIV and HBV infections. Third, studies of donor eligibility policies in the US including the current policy that does not allow men who have sex with men to donate blood. Fourth, international cost-effectiveness analyses of blood safety screening technologies such as pathogen reduction/inactivation. Most of these projects lead to the development of large-scale blood donor/donation databases directly linked to donor specimens, thus providing unique opportunities to contribute to healthcare policy making in transfusion medicine. A combined epidemiological and molecular understanding of infections and disease outcomes in blood donors and recipients is critical for reducing the risk of transfusion-transmission of infections in multiple countries.

In addition, mentoring and development, particularly of international scholars, is very important to me and I been an instructor for a two-week intensive short-course version of a Training in Clinical Research course developed at UCSF. Approximately 12 trainees participate in each course, and I have taught nine courses in Brazil, South Africa and Kenya since 2007. In additional mentees from this course have come to San Francisco for additional longer-term training at BSRI and UCSF as part of the International Training in AIDS Prevention Studies (ITAPS) program in the UCSF Department of Global Health.
Dr. Dao Nguyen Minh, Vice Head of Quality Management Bureau, Administration Medical Services, Ministry of Health, Viet Nam

Occupation: Medical Doctor

Degrees and qualifications:
- Graduated from Ha Noi Medical University in 1996.
- Got the Bachelor of Finance from Ha Noi economical University in 2000 Have the Public Health Master Certificate from the Ha Noi Medical University
- Certificate for Hematology and blood bank management in Japan

Other training
- Quality Management Systems for Laboratory Leadership

Employment record and experiences:
- 2009 up to now, working for Quality Managemnt Bureau, Viet Nam Administration of Medical Service, Ministry of Health

Management/ Scientific activities:
- Follow up, manage activities of hematology, blood transfusion
- Compile strategy for medical laboratory system of Vietnam, strategy for voluntary blood donor donation and some others circular and law. Viet Nam Blood donors attitude for non-remunerate blood donation
- Building state management activities of hospital quality management /medical laboratory quality management/ standards and regulations
- I'm a policy maker of VAMS - MoH, edit or issue circulars for management on activities of medical services (examination and treatment)
- I'm working at Hospital quality management bureau, under Vietnam Administration for Medical Services, Ministry of Health, in charge of the development regulations and standards component for medical facilities: planning, developing Oversee and monitor.
- Management for hematology, system of blood bank, secure for hematology/blood transfusion program, and laboratory activities under Ministry of Health.
- Working with standards, metrology and quality compliance with Viet Nam current laws and regulations, planning, improve, modify guideline to fit with current laws.
- Build and compile strategies on related issues of medical services
- Take part in Manage, supervise and guidance on all medical services of activities, mainly on quality management.
- Take part in building National Laboratory Strategic Plan from 2011 to 2020 and The Strengthening Laboratory Systems in the Socialist Republic of Vietnam under the President’s Emergency Plan for AIDS Relief (PEPFAR), project collaboration between VAMS and CDC office in Vietnam.
- Taking part in building/developing draft on National regulation on medical laboratory.
Dr. Steven J. DeKrey, PhD, President, Asian Institute of Management

Steven J. DeKrey assumed office as the ninth president of AIM on August 20, 2012.

Prior to joining AIM, he served as the senior associate dean, director of masters program, and adjunct professor of management at the Hong Kong University of Science and Technology (HKUST) School of Business and Management.

Dr. DeKrey obtained his PhD in School and Sport Psychology from the University of Iowa (1982), his MBA from the Kellogg School of Management at Northwestern University (1985), his MS in School Psychology (1977) from the University of Wisconsin, and BA degree (1975, cum laude) in Psychology from Bemidji State.

His expertise include: leadership development, educational leadership, psycho-social assessments and management. He has more than 30 years of experience in education and leadership development. Beginning as a school psychologist, he consulted with parents, teachers, and students in Iowa. At Kellogg, he served as dean of admissions and taught MBA classes, and at the University of Florida, he directed MBA programs and taught strategy classes.

For 16 years, he helped build HKUST Business School into one of Asia's leading management education institutions. He helped lead the ascent of HKUST from a new and unknown business school with local enrolment to a school of international prominence and student body, attaining consistently high recognition for the world-class standards he helped establish. As a result, Dr. DeKrey's teams achieved for HKUST's full-time MBA program and the Kellog-HKUST EMBA program a consistent ranking among the world's top 10, according to the Financial Times, with the EMBA at No. 1.

A former American Chamber chairman, he is a frequent speaker, teacher, and writer on leadership topics. He has edited two Asian leadership books (Leadership Experiences in Asia with Kellogg professor David Messick and Learning from Leaders), with two more coming out soon. He is an annual program reviewer for the Society for Industrial and Organizational Psychology and has reviewed five leadership books for Wiley, pre-publication. Former consulting and training clients include several Asian AmChams, many Rotary Clubs, The Bank of China, ExxonMobil, GMAC, MTR Co, Gammon, PepsiCo, Southern Fund China, UBS, JP Morgan, FedEx, Jardine Matheson, John Clements and Wal-Mart.

Dr. DeKrey is often invited to sit on Asia-wide judging panels for awards selection. He is certified to deliver Hogan Assessments and is a Leadership Architect certified by Korn/Ferry. He is a member of Beta Gamma Sigma Business Honorary Society, and he holds a Master Diving rating from PADI.
Dr. Jean-Claude Faber, CEO, LuxConsulTrans

Membership in organisations:
- World Health Organisation (WHO): member of the Expert Advisory Panel on Transfusion Medicine, since 2010
- International Haemovigilance Network (IHN): founding president of the EHN in 1998;
- treasurer, 2000-2011; president, 2011-2013; immediate past-president, member of the Executive
- Council of Europe (CofE): member of the Group of Experts in Blood Transfusion and Immunohaematology 1986 – 2008; president of the group for 2 years, non renewable term
- Luxembourg Association of Haemophiliacs: president, since March 1983
- National AIDS Surveillance Committee in Luxembourg: member, since 1985

Positions:
- Former position: Blood Transfusion Service, Luxembourg Red Cross: medical director (01.01.1985-29.02.2008)
- Actual Function: retired since March 1st, 2008

Main interests:
- Haemovigilance
- Quality Management in blood establishments
- Self-sufficiency concepts (blood and plasma/fractionation)
- Voluntary non-remunerated donors
- Blood transfusion in the European Union
- Projects in blood transfusion in the context of bilateral Cooperation / Humanitarian Aid
- Blood cold chain
Mr. Richard “Dick” Gordon, Chairman and CEO, Philippines Red Cross

EDUCATION
1975 Bachelor of Laws
University of the Philippines

1966 A.B. History and Government
Ateneo de Manila University

POSITIONS HELD
2004 to present
Chairman and C.E.O., Philippine Red Cross
• 2013 to present Member, Governing Board
  International Federation of Red Cross and Red Crescent
  Societies (IFRC)

01 July 2004 to 30 June 2010
Senator, Republic of the Philippines 13th and 14th Congress
• Chair, Senate Committee on Accountability of Public Officers
  and Investigations
• Chair, Senate Committee on Tourism
• Chair, Senate Committee on Constitutional Amendments
• Chair, Senate Committee on Government Corporations and
  Public Enterprises
• Member, Commission on Appointments

29 Jan 2001 to 05 Jan 2004
Cabinet Secretary, Department of Tourism
• Chair, Philippine Tourism Authority (ex-officio)
• Chair, Philippine Convention & Visitors Corporation (ex-officio)
• Chair, Intramuros Administration (ex-officio)
• Chair, National Parks Development Committee (ex-officio)
• Chair, Philippine Commission on Sports Scuba Diving (ex-officio)
• Member, Manila International Airport Authority (ex-officio)
• Member, Mactan-Cebu International Airport Authority (ex-officio)
• Member, Board of Trustees, Philippine Retirement Authority
• CORD Region III

1992 to 1998
Founding Chairman and Administrator, Subic Bay Metropolitan Authority (SBMA)

1988 to 6/30/93
City Mayor of Olongapo
Dr. Kerry Gunn, Specialist Anaesthetist, Auckland City Hospital, New Zealand; Chair, Auckland District Health Board Blood Transfusion Committee

I have subspeciality responsibilities in Liver transplant and trauma anaesthesia, which has led to an interest in coagulopathy and massive haemorrhage management. I Chair The Auckland Blood transfusion Committee. We have introduced a systematic change in blood product use throughout our hospitals, with guidelines on Massive Transfusion, TEG and coagulation management, red cell use and quality systems to reduce error and waste. We have adopted Lean Six Sigma Methodology to achieve change.

We are currently looking at the effectiveness of systems and education to change blood prescribing practices and reducing inappropriate transfusion.

I am on the NZ National Council of Australian and NZ College of Anaesthetists (ANZCA), the CPD Committee of ANZCA, and Chair of the NZ Anaesthesia Education Committee. I am a Final Examinier for ANZCA.

Dr. Axel Hofmann, Adjunct Associate Prof., School of Surgery, Faculty of Medicine Dentistry and Health Science, University of Western Australia; Adjunct Associate Prof., Faculty of Health Sciences, Curtin University, Western Australia; Visiting Prof., Institute of Anesthesiology, University Hospital Zurich, Switzerland

Axel Hofmann is a Doctor of Medical Science and holds a Master’s Degree in Economics. He is a Visiting Professor at the Institute of Anaesthesiology at the University Hospital Zurich, Switzerland, an Adjunct Associate Professor at the School of Surgery, Faculty of Medicine Dentistry and Health Sciences, University of Western Australia and an Adjunct Associate Professor at the Centre for Population Health Research at Curtin University in Western Australia.

With his background in health economics and outcomes research, he has specialized in the field of Patient Blood Management (PBM). His main activity is related to the implementation of PBM programs in the public health sector and large hospital systems, for instance in Australia and the European Union. He is also a leader in outcomes research of PBM and related medical disciplines.

Dr. Hofmann is well published in international peer-reviewed journals and an invited speaker at numerous universities, medical schools, government agencies and international symposia. He is also a consultant to major pharmaceutical corporations and NGOs particularly in the field of PBM.

He is a founding member of the Society for the Advancement of Blood Management where he served on the Board of Directors from 2001-2004, and a co-founder of the Medical Society for Blood Management where he serves as a board member. He is also a member of the Austrian Society for Anesthesiology, Intensive Care and Reanimation.
Dr. Jerry Holmberg, Director, Scientific Affairs, Grifols

Dr. Jerry Holmberg is the Director, Scientific Affairs at Grifols Diagnostic Solutions, Inc. (GDS) where he oversees global scientific affairs in GDS’ core business is blood safety through nucleic acid testing and blood group genomics. He has more than 30 years in all areas of laboratory medicine with a concentration on blood bank operations, research, education, and policy.

His personal vision has developed based on over 30 years of professional experience in the field. That vision, based on his core value, has been dedicated to improvement of blood safety in both the developed and the developing world through various strategies including understanding problems, bringing key stakeholders together to solve those problems, and identification of resources. Those stakeholders have includes professional communities, patient communities, industry, and various branches of government.

Dr. Holmberg served twenty years in the U.S. Navy, achieving the rank of Commander. During his military career he held various positions directing blood banks, blood donor centers, frozen blood bank depots, blood bank computer systems and policy development within the Navy Blood Program. His military career included two tours of duty at the National Naval Medical Center, U.S. Pacific Command Joint Blood Program Office in Okinawa, Japan, Functional Program Manager for the Defense Blood Standard System, Head of Navy Blood Program, and Laboratory Chief of the Blood Bank Branch of the Joint Readiness Clinical Advisory Board. Upon leaving the military Dr. Holmberg held positions at Haemonetics Corporation involving medical devices for blood collection and cell processing of frozen blood within a closed system for extended storage.

For over eight years, Dr. Holmberg served the U.S. again in public health at the Federal level. He served under two political administrations as the Senior Advisor for Blood Policy and the Executive Secretary for the Advisory Committee on Blood Safety and Availability for the U. S. Secretary of the Department of Health and Human Service (HHS). As a public servant, he served three Secretaries of HHS and three Assistant Secretaries for Health as their Senior Advisor for Blood Policy.

During his tenure, he led the Department in a review of the blood donor deferral for men who have had sex with other men (MSM) policy, pathogen reduction technology, Hepatitis Action Plan, Biovigilance, blood inventory management and disaster planning.

His concern and dedication to serve the underserved has motivated him to actively participate in the President’s Emergency Plan for AIDS Relief (PEPFAR). Eliminating the risk of transfusion transmitted diseases, especially HIV, in the blood supply has been a personal goal. He has traveled to many developing countries in Africa, South America, Central Asia Republics and Asia Pacific to provide technical assistance in blood safety and availability.

In 2009, Dr. Holmberg received the AABB President’s award for his activities in Biovigilance. He is a leader in both national and international biovigilance activities.

Dr. Holmberg received his B.S. in Biology from Saginaw Valley State College, his Medical Technology training at St. Luke’s Hospital in Saginaw, Michigan and M.S. in the Department of Pathology, Clinical Laboratory Science
Mr. Luke Ifland, President, Global Healing, United States

Luke Ifland is the president of Global Healing, a San Francisco Bay Area nonprofit organization devoted to providing modern medical solutions in the developing world. Luke has been at Global Healing since 2007, when he joined the organization as a program manager. During his time at Global Healing, Luke has personally been responsible for the successful completion of seven blood safety projects, managing budgets, coordinating volunteers and liaising directly with the local team in the local language. He has also directly overseen palliative care, pediatrics, emergency medicine, post-disaster response, clinical laboratory medicine, health informatics and medical research programs in six countries in Latin America, the Caribbean and Eastern Europe.

In 2011, Luke attended the Stanford Graduate School of Business Educational Program for Nonprofit Leaders. He graduated from the University of California, Berkeley cum laude with a bachelor's degree in Russian Language, Literature and Political Science having completed an honors thesis analyzing post-Soviet democratization in Ukraine and Belarus.

Mr. Ahmad Farizal Abdul Karim, Chief Executive Officer, Strovi Tel Dsn Bhd, Malaysia

Ahmad Farizal bin Dato’ Abdul Karim graduated with a Bachelor of Arts in Accounting & Economics (Hons) from University of Kent at Canterbury, United Kingdom. Prior to setting his own business, he was attached with various organizations such as Chung Kiaw Bank, Malaysian Airline Systems Berhad, Amanah Merchant Bank Berhad, Tongkah Holdings in which he held various management positions. He has a wide experience in planning and financing for corporate expansion, foreign currency and money market, treasury matters for private companies, capital raising exercise using various debt instruments and corporate finance matters.

Since 1999, the entrepreneurial spirit in Ahmad Farizal has led him to venture into various industries which included the blood banking industry, having a company dealing with various medical lab distributorship. Under his stewardship, the business ventures has grown from strength to strength. In 2009, along with strategic partners Strovi Tel Sdn Bhd was set up and a private public partnership proposal to build a plasma fractionation plant was tabled to the government of Malaysia. After more than 4 years of convincing the government, a 20 year contractual agreement was signed with the government of Malaysia on
20th September 2013. Ahmad Farizal was appointed Director and Chief Executive Officer of Strovi Tel Sdn Bhd in 2009 and has since concentrated full-time on Strovi Tel Sdn Bhd. to ensure it’s success.

Since 2010, Ahmad Farizal has attended and spoken at various international conferences on blood banking, sharing his vast experience in the industry as well as his successful negotiation with the Malaysian Government for the setting up of Malaysian plasma fractionation facility.

Dato 'Dr. Faraizah Bt Dato 'Abd Karim, Director, National Blood Centre, Ministry of Health, Malaysia

Post Graduate Qualification:

Diploma in Clinical Pathology (DCP), 1992 (Royal Postgraduate Medical school, University of London)

Masters of Science (Haematology) (Imperial College School of Medicine) London, 1997


Present Appointment:

Deputy Director 1 and Senior Consultant Pathologist (Haematology/Transfusion), National Blood Centre Kuala Lumpur

Professional Experience:

2001 – Present: Deputy Director 1, Senior Consultant Pathologist (Haematology/Transfusion), National Blood Centre, Kuala Lumpur

2000 – 1998: Deputy Director, Consultant Pathologist, Blood Services Centre, Hospital Kuala Lumpur

1996-1997: Training at Imperial College School of Medicine, North London Blood transfusion service and Hammersmith Hospital, London in Transfusion Medicine and Haematology

1995-1996: Pathologist, Blood Services Centre, Hospital Kuala Lumpur

1994 – 1995: Clinical Specialist (Pathology), Pathology Department, Hospital Kuala Lumpur

1991-1993: Training at Hammersmith Hospital, London in Haematology, Chemical Pathology and Microbiology.

1991: Medical Officer, Pathology Department, Hospital Kuala Lumpur
Dr. Hilton Lam, Director, Institute of Health Policy and Development Studies-National Institutes for Health, University of the Philippines, Philippines

Hilton Lam’s field of expertise is in Health Economics and Policy. He earned his Bachelors degree in Economics, and in Biology from Whittier College, USA, his Master in Hospital Administration from the College of Public Health, University of the Philippines, Manila, and his PhD in Health Economics from the University of Tokyo, Japan.

At present he is the Director of the Institute of Health Policy and Development Studies (IHPS) of the University of the Philippines National Institutes of Health (UP NIH). He is also a member of the Philippine National Formulary’s (PNF) Formulary Executive Council (FEC) which reviews all medicines to be included and excluded from the national formulary. At the same time, he is the current Program Coordinator of the MetroManila Health Research and Development Consortium (MMHRDC) of the Philippine Council for Health Research and Development (PCHRD). He also teaches Clinical Economics, Health Policy Tools, and Research Design at the UP College of Medicine, Department of Clinical Epidemiology.

Hilton led the team which completed the 2011 program evaluation of the National Voluntary Blood Services Program of the Department of Health.

Dr. Che-Kit Lin, Chief Executive and Medical Director, Hong Kong Red Cross Blood Transfusion Service, Hong Kong, China

Dr Che-Kit Lin is the Chief Executive & Medical Director of the Hong Kong Red Cross Blood Transfusion Service and Adjunct Associate Professor, Department of Anatomical and Cellular Pathology, Chinese University of Hong Kong. He obtained the Australasia Royal College of Pathologists Fellowship in 1989 and MBA in UK in 2000. He has been a WHO Blood Safety Expert and has chaired the Asia Pacific Blood Network (APBN) from 2009 to 2013. Dr Lin has published many papers in transfusion medicine in various international journals.

Dr. Merilyn Mathias, Manager, National Blood Transfusion Service, Ministry of Health, Papua New Guinea

Mid 2011, asked by the Secretary of Health to oversee the Blood Transfusion Service of PNG. 2011 and 2012 selected to participate in short management courses offered by the Australian Red Cross Blood Service. Married with three young children.

**Dr. Geni Neumann, Regional Advisor for Blood Services, Pan-American Health Organization**

Current Consultant for Blood Services and Organ Transplants, Medicines and Health Technologies in the Department of Health Systems and Services at Pan American Health Organization – PAHO/WHO

In 2002 concluded her Master degree at University of Brasilia, Brazil. Major study was on Genotyping of human papillomavirus - HPV - the Federal District: Prevalence of HPV types in women with pre-neoplastic and neoplastic cervical lesions and in men with squamous cell carcinoma of the penis.

Chief of Unit Biovigilance and Haemovigilance at the Core Management System of National Notification and Research in Health Surveillance – Brazilian Health Surveillance Agency (ANVISA), Ministry of Health (MOH), Brazil - 2007-2009; 2012-2014.


Has worked as Technical Consultant Core Management of the National Reporting System in Health Surveillance and Research - ANVISA/ MOH, BRAZIL, 2006.


Published several papers on molecular epidemiology of rotavirus, papillomavirus virus, Hepatitis C Virus and HIV.

Before 2002:

- Head of the Center for Virology, Management of Medical Biology, Institute of Health of the Federal District, Brasilia, Brazil, 1991 to 1997.
- Coordinator of Deployment Project for Public Laboratory Network for Measles Control in Brazil, National Health Foundation, Ministry of Health, Brazil, 1992.
- Consultant for the area of Virology, Coordination Laboratory, DEOPE / National Health Foundation, Ministry of Health, Brazil, 1992.
- Medical Biology Staff at Institute of Health of the Federal District, Brasilia, Brazil, 1983 to 2000.
Dr. Enrique Ona, Secretary of Health, Philippines

Secretary Enrique T. Ona was appointed to Secretary of Health by President Benigno Aquino III on June 29, 2010.

Before the Health secretary post, Ona was the executive director of the National Kidney and Transplant Institute, a post he held for 11 years. He has been the president of the Transplantation Society of the Philippines since 1989. He also holds a medical license in the state of Massachusetts in the United States. Secretary Ona received his M.D. from the University of the Philippines.

Dr. Norma Martinez Ona, Hematologist, Victor R. Potenciano Medical Center, Philippines

Dra. Jimena Morales Ayala, Deputy Director of Research and Development, National Center of Blood Transfusion, Ministry of Health, Mexico

Born in Leon, Guanajuato, in 1980. I completed basic and high school education studies in my hometown, I moved to Mexico City to pursue a degree in Medicine in the University Autonomous Metropolitan (2004). Upon completion of the Bachelor (2009), begin work of Research at the National Institute of Neurology and Neurosurgery simultaneously, I practiced as a doctor in protocols Research application of Hematopoietic Progenitor Cells in neurodegenerative diseases, in several hospitals to private level (Medical South, ABC Medical Center). Then I join the team of the Government of the State of Guerrero (2011), Health Ministry advises. I studied Masters in Cell Therapy and Regenerative Medicine in Barcelona Autonomous University in Spain (2012). I currently serve as Sub director of Research and Development Regulations of the Blood of the National Center of Blood Transfusion for the Federal Health Ministry.

Dr. Gwendolyn Pang, Secretary General, Philippine Red Cross

Devotedly and passionately leads in achieving the Red Cross mission to reduce vulnerability of Filipinos for 17 years of dedicated work, her catalytic leadership seeks to advance the humanitarian programs of the Philippine Red Cross through effective and strong resource mobilization that enable the organization to serve the most vulnerable.

Before becoming Secretary General, she spent her 12 years with the Philippine Red Cross, first as a youth volunteer of PRC Sulu Chapter, and then
as officer of the Youth, Social Service and Fund Raising Departments at the PRC National Headquarters. Armed with her commitment to serve the most vulnerable, she then became Director of Fund Generation, Assistant Secretary General, and Deputy Secretary General prior to becoming the youngest PRC Secretary General appointed in 2009 and is also one of the youngest, if not the youngest, leaders of the Red Cross Movement today. She is also regarded as a thought leader in resource mobilization in the Red Cross Movement and was Chair, and now Advisor of the Asia Pacific Fundraisers Network (APFN). A nurse by profession, she received her honorary degree in Doctor of Humanities from the Lyceum Northwestern University in 2013.

Dr. Ina-Noelia Pérez-Huaynalaya, Regional Director Americas, International Society of Blood Transfusion

Clinical Pathologist
Faculty in Transfusional Medicine
Blood Bank from Edgardo Rebagliati Hospital – Peruvian Social Security Health Services
8 years of experience in Blood banking, Transfusional Medicine and Cell Therapies.
Board Member of International Society of Blood Transfusion for Latinoamerica
Board Member for Cooperative Group of Transfusional Medicine,(GCIAMT)
President of Medicine Transfusion Educative Association. (ASMET)

Dr. Tuan Duong Pham, Deputy Director, National Institute of Hematology and Blood Transfusion, Ministry of Health, Viet Nam
Mr. Ravi Reddy, Chief Operations Officer, South African National Blood Service, South Africa

Positions and Employment
1990 – 1991: Medical Technologist, NBTS
1991 – 1993: Laboratory Supervisor, Paternity and Reference Labs, NBTS
1993 – 1997: Section Supervisor, Immunohaematology, NBTS
1998 – 2001: Manager, Laboratory Services Department, NBTS
2001 – 2002: Head, Operations, NBTS
2002 - 2006: Director, Technical Services, S A National Blood Service
2005 - 2006: Acting Director, Donor Services, S A National Blood Service
2006 to Current: Chief Operations Officer, S A National Blood Service

Current Responsibilities
- Developing the strategy, business plans and budgets for the Operations Division of SANBS (annual budget of R1.45 billion or US$ 145 million)
- Ensuring effective systems and processes are in place for effective delivery and managing critical contracts with vendors.
- Direct the Management of education, recruitment of donors and collection of approximately 830 000 units of whole blood and 18 000 units of apheresis platelets.
- Responsible for implementing improved donor education and recruitment programmes to attract and retain donors at low-risk for HIV infection
- Direct the activities related to the testing of all blood donations for transfusion transmitted infections. This includes individual donation nucleic testing for HIV-1, HBV and HCV.
- Direct the activities related to the Processing, Cross-match and Issue of approximately 920 000 blood products to patients.
- Responsible for alignment of tests and rationalisation/standardisation of processes within SANBS
- 29 years’ experience in Blood Transfusion field, 15 years as Senior manager/Executive

Ms. Tasanne Sakuldamrongpanich, Deputy Director, National Blood Centre, Thai Red Cross Society, Thailand

Education Qualification
Certificate in Mini MBA in Health
MSc (Medical Microbiology) Faculty of Medicine, Chulalongkorn University

Professional experience:
1. Experiences in Blood group serology especially preparation of blood grouping reagents and standard cells and in donor screening laboratory for transfusion transmitted infectious testing.
2. WHO short term consultant for a short training course in the field of blood group serology in Myanmar, Vietnam, Republic of Maldives, Timor Leste and etc.
3. Facilitator for WHO Training Course on Quality Assurance in Immunohematology and Transfusion Transmissible Infections, WHO Inter-regional workshop on Quality systems for Blood Transfusion Laboratory & External Quality Assurance (EQA) Schemes for Blood Group Serology.

Present responsibility:
1. Responsible for management of 12 Regional Blood Centres throughout Thailand.
2. Supervise the donor screening laboratories for TTIs and Blood group serology both for National and Regional Blood centres.
3. Supervise the reagent preparation department.

Dr. Masahiro Satake, Deputy Director General of Central Blood Institute, Blood Service Headquarters, Japanese Red Cross Society, Japan

Academic educations and titles
Doctor of Medicine: 1978 Tohoku University School of Medicine
Doctor of Philosophy: 1989 Tohoku University School of Medicine

Careers
1978-1980 Training course for general surgery at Yamagata city hospital,
1981-1984 Blood Transfusion Service at Tokyo Women’s Medical College
1984-1988 Department of surgery at Tohoku University School of Medicine
1988-1990 Director of surgery division at Ishinomaki Red Cross Hospital,
1990-1994 Visiting researcher at Karolinska institute (Stockholm) (specialty: xenotransplantation, transplantation immunology)
1994-1997 Instructor at the Department of surgery, Tohoku University School of Medicine,
1997-2001 JRC Central Blood Center
2001-2007 JRC Tokyo Metropolitan Blood Center
2007-2012 Director of JRC Tokyo Metropolitan West Blood Center
2012- Vice Director of JRC Central Blood Institute

Specialty
Kidney transplantation, Liver transplantation, Transfusion medicine,
Transplantation immunology

Status
A member of the board of directors of International Society of Blood Transfusion (ISBT) (Regional Director Western Pacific)
A member of working party for ISBT-Transfusion-Transmitted Infectious Disease (TTID)
A member of American Association of Blood Banks (AABB)
A member of Japan Society of Surgery

Ms. Eleanor Saunders, Senior Consultant in Health Economics, TI Salud

Eleanor Saunders is a Senior Consultant at TI Salud, a Mexican consultancy that specializes in health economics and cost-effective evaluations in Mexico. Her work focuses on analyzing new pharmaceutical products for submission to the Ministry of Health’s Health Technology Appraisal evaluation process. She holds a Masters of International Health Policy (2009) from the London School of Economics. Previous to consulting, Eleanor worked in the Mexican Ministry of Health, supporting the integration of public health institutions. Before focusing specifically on health, she worked with a number of public organizations in Brussels and the OECD headquarters.
APEC POLICY DIALOGUE AND WORKSHOP ON
ATTAINING A SAFE AND SUSTAINABLE BLOOD SUPPLY CHAIN
Asian Institute of Management, Manila, Philippines
30 September – 1 October 2014

Dr. Aryeh Shander, Chief, Department of Anesthesiology, Critical Care Medicine, Pain Management and Hyperbaric Medicine, Englewood Hospital and Medical Center, United States; Clinical Prof. of Anesthesiology Medicine and Surgery, Mount Sinai School of Medicine, Mount Sinai Hospital, United States of America

Aryeh Shander, M.D., FCCM, FCCP, is the Chief of the Department of Anesthesiology, Critical Care Medicine, Pain Management and Hyperbaric Medicine at Englewood Hospital & Medical Center in Englewood, NJ. He is also a Clinical Professor of Anesthesiology, Medicine & Surgery at Icahn School of Medicine at Mount Sinai in New York City, Executive Medical Director of The Institute for Patient Blood Management and Bloodless Medicine and Surgery at Englewood Hospital.


Dr. Shander is a reviewer for the journals Critical Care Medicine, Anesthesiology, Anesthesia and Analgesia, and Transfusion among others.

He serves as Immediate Past President for the Society for the Advancement of Blood Management (SABM) and is a Fellow of the American College of Critical Care Medicine and the American College of Chest Physicians. Dr. Shander is a founding member of the Board of Directors and was a Past President for National Anemia Action Council (NAAC). Dr. Shander is also a founding member and President-Elect of the Society of Critical Care Anesthesiologists (SOCCA) formerly, ASCCA where he serves on committees, both locally and nationally, and in addition, is a member of the American Association of Blood Banks (AABB), American Society of Anesthesiologists.
(ASA) where he serves as Chair of Committee on Patient Blood Management. In 1997 Dr. Shander was recognized by Time magazine as one of America's "Heroes of Medicine." Dr. Shander is the Executive Medical Director of the Institute for Patient Blood Management & Blood Medicine and Surgery at Englewood Hospital, which under his direction, received the NJBIZ Magazine's 2010 Healthcare Hero Award.

Ms. Meredith Smith, Quality Manager, New Zealand Blood Service, New Zealand

Meredith Smith has been the National Manager Quality and Regulatory Systems for the New Zealand Blood Service (NZBS) for ten years. Her entire career has been devoted to blood, starting out as a laboratory scientist in biochemistry and haematology and progressing to a specialisation in transfusion science. After many years in hospital laboratories in Australia and the UK, she spent twelve years with the Australian Red Cross Blood Service in manufacturing and quality. She was the Quality Manager for Victoria for three years before moving to the National Quality role in New Zealand Blood Service in 2004. One of her achievements has been to reduce the amount of paper that inevitably comes with compliance programmes by implementing an electronic quality management system. This system has hugely simplified and streamlined compliance management and has enabled NZBS to manage document control, corrective actions, deviations, complaints, change control, audits, equipment maintenance, and training & competency records in a single electronic system, giving all the relevant people the visibility they need.

Dr. Yuyun SM Soedarmono, Director of Central Blood Centre, Indonesian Red Cross, Indonesia

Educational Background related to expertise:
PhD in Biomedics, Faculty of Medicine, University of Indonesia, Jakarta. Title of Dissertation: "Safety of blood transfusion against hepatitis B virus in Indonesia: Failure in serological detection and its molecular basis". (2010).

Medical Doctor, Faculty of Medicine, Padjadjaran University, Bandung - West Java, Indonesia. (1988).

Career:
1989 - 1992: Head of the Carita Primary Health Center, Pandeglang, West Java. Responsible for provision of health services for a sub-district of 45,000 people.
1992 - 1994: Staff of the Rancakek Primary Health Center, Bandung, West Java. Responsible for provision of health services for a sub-district of 60,000 people.
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1994 - 1996: Head of the Transfusion Transmitted Diseases Section, Central Blood Transfusion Services, Indonesian Red Cross, Jakarta. Responsible for screening referred donor’s blood for HBsAg, Anti-HCV, Anti-HIV and Syphilis.

1997 - 2003: Head of the Reagent and Blood Component Production Division, Central Blood Transfusion Services, Indonesian Red Cross, Jakarta. Responsible for producing blood grouping antisera and blood component.


1998 - Now: Director of the Undergraduate Diploma School in Blood Transfusion Technology (PTTD), Indonesian Red Cross, Jakarta.

2004 - Now: Director of the Central Blood Transfusion Service, Indonesian Red Cross. Responsible for monitoring, evaluation, and training of all (211) branches of Blood Transfusion Units throughout Indonesia.

2011 - Now: Coordinator of the Master Program on Biomedics Specialty in Transfusion Science, Faculty of Medicine, Indonesian University

Membership to Professional Association related to expertise:
Indonesian Association of Transfusion Medicine (PDTDI).
International Society of Blood Transfusion (ISBT).
American Association of Blood Bank (AABB).
Adviser of Indonesian Association of Blood Technician (ITTDI).

Dr. Paul Strengers, Executive President, International Plasma Fractionation Association

Dr. Paul Strengers obtained his Medical Degree from the University of Leiden, The Netherlands in 1982. He started his medical career in organ transplantation as transplantation coordinator at the Academic Medical Centre in Amsterdam. In 1986, he joined the Central Laboratory of the Netherlands Red Cross Blood Transfusion Service (CLB) as Head Medical Department. In 1992, post-graduate training in Transfusion Medicine was followed in Edinburgh, Scotland, and in Clinical Epidemiology at Leiden University. He was Medical Director of CLB Blood Bank from 1999-2003, and became Chief Medical Officer to Sanquin Blood Supply Foundation – CLB in 2001. Currently, he is Director Medical Affairs and Product Development at Sanquin Blood Supply, Division of Plasma Products, in Amsterdam and CAF-DCF in Brussels, Belgium.

The field of research and activities in blood transfusion medicine at Sanquin brought him active in clinical transfusion medicine and sciences i.a. haemophilia and inhibitors to factor VIII, coagulation and the reversal of anti-coagulant therapy, intravenous immunoglobulins and its indications, haemovigilance and pharmacovigilance, and blood transfusion quality, ethics and organization.
He is Executive President of the International Plasma Fractionation Association; Chairman of the Netherlands Red Cross, district of Amsterdam; Fellow at the Faculty of Pharmaceutical Medicine of the Royal Colleges of Physicians, UK; and member of several national and international advisory boards, and international editorial boards of a number of scientific journals. He was Secretary-General of the International Society of Blood Transfusion, Vice-Chairman of the Expert Committee on Biological Standardization, section Blood, of the World Health Organization, and President of the International Haemovigilance Network.

He received the Willem Kolff Medal of the Netherlands Kidney Foundation; the Recognition Award of the Netherlands Foundation on Organ and Tissue Donor Recruitment; and the Certificate of Merit of the European Transplant Coordinators Organization. He is Honorary Member of the International Society of Blood Transfusion; and Corresponding Member of the Deutschen Gesellschaft für Transfusionsmedizin und Immunhämatoonkologie (DGTI).

Dr. Diana Teo, Senior Director, Blood Services Group, Health Sciences Authority, Singapore

Present appointment:
Senior Consultant & Senior Director, Blood Services Group, Health Sciences Authority; and Chairman, Professional Board, Health Sciences Authority

Worked in the blood service in Singapore since 1983, and as the Director from 2003 to 2012. Blood Services Group is the national blood service in Singapore, AABB accredited in blood banking and transfusion medicine, ASHI accredited in tissue typing, and WHO Collaborating Centre for Transfusion Medicine.

Qualifications:
M.B.,B.S., National University of Singapore, 1982
Master of Science (Medical Immunology), University of London, 1988
Member of the Royal College of Pathologists (Immunology), UK, 1993
Fellow of the Royal College of Pathologists (Immunology), UK, 2001

Professional Accreditations:
UK General Medical Council Specialist Register, Speciality of Immunology, 3 Jun 1998.
Certificate of Specialist Accreditation, Ministry of Health, Speciality of Pathology, 1 Sep 1998

Special Awards:

Other Current Appointments:
Vice President of the International Society of Blood Transfusion for the term 2012-2016. Director for the Western Pacific Region, ISBT Board of Directors from 2006-2012
Member, Advisory Committee, ISBT Foundation 2008 and 2009
Member, Vox Sanguinis Standing Committee
Member, WHO Expert Advisory Panel for Transfusion Medicine
Vice Chair, Asia Pacific Blood Network from 2009-2011
Member, Board of Directors, ICCBBA, Vice-Chair from 2014, Chair for the term 2015-2016
Member, Residency Advisory Committee (Haematology), Singapore
Technical Assessor, Singapore Accreditation Council - Medical Testing Technical Committee
Member, Editorial Board, Asian Journal of Transfusion Science
Actively involved in global blood safety initiatives including facilitating WHO Quality Management programmes, organised regional QMT and bi-regional WPR/SEAR workshops on management of national blood programmes, provided technical assistance and expert advice to blood services particularly those in Western Pacific and South East Asia Regions.

Membership in other Societies:
Royal Society of Medicine, London
Royal College of Pathologists, UK
Singapore Medical Association
International Society of Blood Transfusion
AABB

Dr. Pavel Trakhtman, Head, Department of Transfusion Medicine and Stem Cell Bank, Federal Research Center for Hematology, Oncology, and Immunology, Russian Federation

1989-1995 Under-graduate training in Medical Science at Russian State Medical University, Moscow; 1995 MD in Medical Biophysics obtained from the same University; 1995-1998 Post-graduate training in Pediatric Medicine at Russian State Medical University; 1998 MD in Pediatric Medicine at Russian State Medical University. 1999-2001 Fellow training at Russian State Medical University, Moscow “Pediatric Hematology/Oncology”
2001 PhD degree, the title of PhD thesis “Impairment of Oxidative Balance in Patients with Fanconi’s Anemia”.
2000 – 2009 attending physician, senior physician at Russian Clinical Hospital for Sick Children, Moscow; Bone Marrow Transplantation Department.
Since 2009 - head, Department of Transfusion Medicine and Stem Cell Bank at

Main field of interest: Stem cell collection and processing, quality management, pathogen-inactivation.
APEC POLICY DIALOGUE AND WORKSHOP ON ATTAINING A SAFE AND SUSTAINABLE BLOOD SUPPLY CHAIN

Asian Institute of Management, Manila, Philippines

30 September – 1 October 2014

Participant List

APEC Life Sciences Innovation Forum

Prof. Maureen Goodenow
Workshop Chair

Mr. Michael Schmitz
Workshop Coordinator

Australia

Mr. Peter O'Halloran
Executive Director and Chief Information Officer
National Blood Authority

Brunei Darussalam

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Chief Scientific Officer - Department of Laboratory Services
Ministry of Health

Dr. Osmali Osman
Acting Director - Department of Laboratory Services
Ministry of Health

Dr. Noorainun Yusof
Consultant Haematologist
RIPAS Hospital Ministry of Health

Canada

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Acting Director, Office of Policy and International Collaboration, Health Products and Food Branch
Health Canada

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First Officer, Office of Medical and Blood Safety Bureau of Medical Administration
National Health and Family Planning Commission

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The Institute of Blood Transfusion, Chinese Academy of Medicine Sciences

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University of Western Australia

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Hong Kong Red Cross Blood Transfusion Service

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Technical staff in Directorate of Basic Health Care
Ministry of Health

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Indonesian Red Cross

Mr. Bayu Wibisono
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Badan POM / NADFC

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Japanese Red Cross Society

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# Participant List

<table>
<thead>
<tr>
<th>Korea</th>
<th>New Zealand</th>
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</thead>
<tbody>
<tr>
<td>Dr. Kwang Huh</td>
<td>Dr. Kerry Gunn</td>
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<tr>
<td>Director of Blood Safety Bureau</td>
<td>Specialist Anaesthetist, Auckland City Hospital</td>
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<tr>
<td>The Republic of Korea National Red Cross Blood Services</td>
<td>Chair, Auckland District Health Board Blood Transfusion Committee</td>
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<tr>
<td>Mr. Hae Seong Jeon</td>
<td>Dr. Meredith Smith</td>
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<tr>
<td>Assistant Director</td>
<td>National Manager Quality and Regulatory Systems</td>
</tr>
<tr>
<td>Ministry of Health &amp; Welfare</td>
<td>New Zealand Blood Service</td>
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<tr>
<th>Luxembourg*</th>
<th>Papua New Guinea</th>
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<tbody>
<tr>
<td>Dr. Jean-Claude Faber</td>
<td>Dr. Merilyn Mathias</td>
</tr>
<tr>
<td>CEO</td>
<td>Manager, National Blood Transfusion Service</td>
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<td>LuxConsulTrans</td>
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<tr>
<td>Dr. Yasmin Ayob</td>
<td>Dr. Ina-Noelia Pérez-Huynalaya</td>
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<tr>
<td>Visiting Consultant</td>
<td>Regional Director Americas</td>
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<td>National Blood Centre, Kuala Lumpur</td>
<td>International Society of Blood Transfusion</td>
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<tr>
<td>Dr. Afifah Hassan</td>
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<tr>
<td>Deputy Director</td>
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<tr>
<td>National Blood Centre, Kuala Lumpur</td>
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<tr>
<td>Dato' Dr. Faraizah Bt Dato 'Abd Karim</td>
<td></td>
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<tr>
<td>Director, National Blood Centre</td>
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<tr>
<td>Dr. Shahnaz Irwani Sabri</td>
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<tr>
<td>Head, Unit of Transfusion Medicine, Transfusion Medicine</td>
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<tr>
<td>Specialist, Queen Elizabeth Hospital</td>
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<tr>
<td>Dra. Jimena Morales Ayala</td>
<td>Dr. Maria Victoria Abesamis</td>
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<tr>
<td>Subdirectora de Investigación y Desarrollo de la Normatividad de la Sangre</td>
<td>OIC Executive Director, Philippine Blood Disease and Transfusion Center</td>
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<tr>
<td>Ministry of Health</td>
<td>Department of Health</td>
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<tr>
<td>Dr. Omar Sánchez Ramírez</td>
<td>Ms. Cherry Rose C. Ang</td>
</tr>
<tr>
<td>Director de Normalización</td>
<td>Food and Drug Regulation Officer III, Center for Drug Regulation and Research</td>
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<tr>
<td>Ministry of Health</td>
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<tr>
<td></td>
<td>Prof. Elizabeth Arcellana- Nuqui</td>
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<tr>
<td></td>
<td>Consultant Specialist</td>
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<td>Department of Health</td>
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<td></td>
<td>Ms. Maylene Beltran</td>
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<tr>
<td></td>
<td>Director, Bureau of International Health Cooperation</td>
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<td></td>
<td>Ms. Maria Victoria Calub</td>
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<td></td>
<td>Food-Drug Regulation Officer IV</td>
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*Not an APEC Member Economy
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<tr>
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<tbody>
<tr>
<td>Dr. Celia Carlos</td>
<td>Chief, Laboratory Research Division, Research Institute for Tropical Medicine</td>
</tr>
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</tr>
<tr>
<td>Ms. Angeli Casala</td>
<td>Food and Drug Regulation Officer II</td>
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<tr>
<td>Ms. Maria Rizalina Chua</td>
<td>Technical Consultant (Supervisory)</td>
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<tr>
<td></td>
<td>St. Luke’s Medical Center QC/ Global City</td>
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<tr>
<td></td>
<td>Metropolitan Medical Center</td>
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<tr>
<td>Dr. Roland Cortez</td>
<td>Assistant Secretary of Health, Support to Service Delivery</td>
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<td></td>
<td>Technical Cluster I</td>
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<td>Ms. Carolyn P. Custodio</td>
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<tr>
<td>Ms. Emelita R. Delmiguez</td>
<td>Supervising Administrative Officer</td>
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<tr>
<td>Dr. Arvin Faundo</td>
<td>Chairman, Department of Pathology and Laboratory Services</td>
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<td></td>
<td>Philippine Blood Disease and Transfusion Center</td>
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<tr>
<td>Mr. Gomel C. Gabuna</td>
<td>Chief Administrative Officer</td>
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<td>Dr. Richard &quot;Dick&quot; Gordon</td>
<td>Chairman and C.E.O.</td>
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<tr>
<td>Dr. Renato V. Hapan</td>
<td>Quality Assurance Manager</td>
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<tr>
<td>Dr. Kenneth Hartigan-Go</td>
<td>Acting Director General, Food and Drug Administration</td>
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<tr>
<td>Dr. Melvin Jude G. Katapang, MD</td>
<td>Head, Donor Management Section</td>
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<td>Philippine Blood Disease and Transfusion Center</td>
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<td>Dr. Hilton Lam</td>
<td>Director, Institute of Health Policy and Development</td>
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<td>Studies-National Institutes for Health</td>
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<td></td>
<td>University of the Philippines</td>
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<tr>
<td>Dr. Reysttte Christine Ligaray</td>
<td>Medical Specialist II (Blood Center Head)</td>
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<td></td>
<td>Department of Health, Region VII Blood Center</td>
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<tr>
<td>Ms. Maria Cecilia C. Matienzo</td>
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<td>Ms. Grace L. Medina</td>
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<tr>
<td>Ms. Jekee Bryan T. Miraflor</td>
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<tr>
<td>Dr. Angelina Mirasol</td>
<td>Hematology Task Force Member, PBDTC</td>
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<tr>
<td></td>
<td>Blood Bank Head, Philippine General Hospital</td>
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<tr>
<td>Dr. Rosella Montano</td>
<td>Associate Professor</td>
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<td></td>
<td>UST Faculty of Medicine and Surgery</td>
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<tr>
<td>Dr. Christie Nalupta</td>
<td>Director, National Blood Services</td>
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<tr>
<td>Ms. Ma. Lynn Rachelle A. Natividad</td>
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APEC POLICY DIALOGUE AND WORKSHOP ON ATTAINING A SAFE AND SUSTAINABLE BLOOD SUPPLY CHAIN

Asian Institute of Management, Manila, Philippines

30 September – 1 October 2014

Participant List

Dr. Enrique Ona
Secretary of Health
Department of Health

Dr. Norma Ona
Hematology Task Force Presiding Officer
Victor Potenciano Medical Center

Atty. Oscar P. Palabyab
Legal Counsel
Philippine Red Cross

Dr. Gwendolyn Pang
Secretary General
Philippine Red Cross

Dr. Agnette P. Peralta
Director IV, Center for Device Regulation, Radiation Health and Research
Food and Drug Administration

Dr. Arlene Maria Pilaspilas
OIC Deputy Director for Administrative Services

Mrs. Cynthia Elaine Rabadam
Quality Assurance Officer
Philippine Blood Disease and Transfusion Center

Dr. Anne Claire Reyta
Blood Center Manager
Philippine Red Cross

Dr. Leonisa Sagun
Head, Blood Bank Division
Philippine Heart Center

Bayani C. San Juan
Center for Device Regulation, Radiation Health and Research
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Ms. Eliza G. Sison
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Center for Drug Regulation and Research
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Ma. Suzette R. Sta Clara
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Regional Field Office
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Dr. Juanito Taleon
Director IV, National Center for Health Facility Development and Concurrent NVBSP Manager
Department of Health

Mrs. Eleanor Torcasas
Section Manager- Blood Bank and Transfusion Service, St.Lukes Medical Center
Philippine Blood Coordinating Council
Executive Board Member

Dr. Maritess Teresita Torio
Medical Specialist III, Blood Bank
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Hematology Task Force Co-Chair
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Health Sciences Authority

*Not an APEC Member Economy
## Participant List

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<tr>
<th>Country</th>
<th>Name</th>
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<tr>
<td><strong>South Africa</strong>*</td>
<td>Mr. Vengetassen (Ravi) Reddy</td>
<td>Chief Operations Officer</td>
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<td></td>
<td>South African National Blood Service</td>
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<tr>
<td><strong>Chinese Taipei</strong></td>
<td>Ms. Ellen Ying-Hua Chen</td>
<td>Section Chief, Food &amp; Drug Administration</td>
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<td></td>
<td>Ministry of Health and Welfare</td>
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<td></td>
<td>Ms. Shu Ping Huang</td>
<td>Technical Specialist, Food &amp; Drug Administration</td>
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<td>Ministry of Health and Welfare</td>
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<tr>
<td></td>
<td>Mr. Ming-Chang Lin</td>
<td>DIRECTOR, Department of Operation</td>
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<td></td>
<td>Taiwan Blood Services Foundation</td>
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<tr>
<td><strong>Thailand</strong></td>
<td>Dr. Tasanne Sakuldamrongpanich</td>
<td>Deputy Director</td>
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<td></td>
<td>National Blood Centre, Thai Red Cross Society</td>
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<td></td>
<td>Dr. Busarawan Sriwanthana</td>
<td>Medical Scientist, Expert Level</td>
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<td></td>
<td>Ministry of Public Health</td>
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<tr>
<td><strong>United States</strong></td>
<td>Dr. Brian Custer</td>
<td>Associate Investigator, Blood Systems Research Institute</td>
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<tr>
<td></td>
<td>UCSF/ Adjunct Associate Professor</td>
<td></td>
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<tr>
<td></td>
<td>Dr. Steven DeKrey</td>
<td>President</td>
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<td></td>
<td>Asian Institute of Management</td>
<td></td>
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<tr>
<td><strong>United Kingdom</strong>*</td>
<td>Ms. Eleanor Saunders</td>
<td>Senior Consultant in Health Economics</td>
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<td>Ti Salud</td>
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<tr>
<td><strong>Vietnam</strong></td>
<td>Dr. Nguyen Minh Dao</td>
<td>Vice Head of Quality Management Bureau, Administration</td>
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<td></td>
<td>Medical Services</td>
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<td></td>
<td>Ministry of Health</td>
<td>Vietnam</td>
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<tr>
<td></td>
<td>Dr. Tuan Duong Pham</td>
<td>Deputy Director, National Institute of Hematology and Blood Transfusion</td>
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<td>Ministry of Health</td>
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<tr>
<td><strong>Pan-American Health Organization</strong></td>
<td>Dr. Geni Neumann de Lima Camara</td>
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<td></td>
<td>Pan-American Health Organization</td>
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<tr>
<td><strong>Western Pacific Regional Office, World Health Organization</strong></td>
<td>Dr. Klara Tisocki</td>
<td>Team Leader, Essential Medicines &amp; Health Technology, Western Pacific Regional Office, World Health Organization</td>
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*Not an APEC Member Economy*
APEC POLICY DIALOGUE AND WORKSHOP ON ATTAINING A SAFE AND SUSTAINABLE BLOOD SUPPLY CHAIN

Asian Institute of Management, Manila, Philippines

30 September – 1 October 2014

Participant List

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Dr. Celso Bianco  
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*Not an APEC Member Economy*
APEC 2020 Blood Supply Chain Roadmap

A Framework to Assist APEC Economies to Work Together to Build the Capacity of Their Blood Services, Infrastructure and Governance and Promote the Achievement of International Safety and Quality Standards for Blood
APEC 2020 Blood Supply Chain Roadmap

Introduction

Transfusion of blood and blood products helps save millions of lives every year. The demand for blood and blood products is increasing at a rapid rate throughout the Asia-Pacific region due to many influences including aging populations, increased disease risk and greater use of healthcare services. Despite the growing demand, wide disparities in access to safe and reliable blood exist. In developing APEC economies in particular, blood supplies are rarely sufficient to meet local demand and international quality and safety standards.

Many challenges, such as appropriate infrastructure, governance and achievement of international safety/quality standards obstruct APEC economies’ efforts to improve the safety and sustainability of the blood supply chain. In spite of these challenges, there are clear opportunities for implementation of plans by APEC economies to achieve a well-organized, nationally-coordinated blood transfusion service. For example, emphasis on areas such as process control through quality systems; infrastructure improvements for collection and processing of blood and blood products; and development of testing strategies that match the disease risk could provide immediate paths to safer blood systems.

The APEC Life Science Innovation Forum (LSIF) will continue its commitment to collaboration as it embarks on trying to improve blood safety in APEC economies. Multi-sectoral, multi-lateral involvement and public private partnerships can and should play a role in driving blood safety improvements in the future.

This APEC Blood Supply Chain Roadmap (the Roadmap) has been developed to provide a framework of practical measures that APEC economies can apply at local, national and regional levels to improve the safety of the blood supply. The Roadmap pulls from content discussed and conclusions reached at the APEC Policy Dialogue and Workshop on Attaining a Safe and Sustainable Blood Supply (Manila, Sept 30-Oct 1). It is the hope of the APEC LSIF that government, academia and industry will work together on this Roadmap to enhance the safety of blood and blood products in the Asia Pacific region.

Background on APEC Blood Safety Initiative

Transfusion of blood and blood products helps save millions of lives every year. Blood transfusion can help patients suffering from life-threatening conditions live longer and with higher quality of life, supports complex medical and surgical procedures, and has an essential, life-saving role in maternal and perinatal care.

The demand for human blood is increasing at a rapid rate throughout the Asia-Pacific region. Growth in demand is driven by rising incidence of disease and sickness, population growth,
government focus on developing the healthcare infrastructure, steadily growing base of affluent middle-class population, and increasing healthcare spending.

Despite the growing demand, wide disparities in access to safe and reliable blood exist and blood supplies in many developing economies in the region are rarely sufficient to meet local demand and existing international quality and safety standards. Where blood is available, the blood and blood products supply chain and quality systems may fail to ensure on-time access to safe blood. As of 2013, only 13 of the 21 APEC economies report collecting 100% of their blood supplies from voluntary unpaid donors.

Every stop along the blood supply chain is critical – from the point of collection to providing product to the recipient. The complicated process requires synergy of multiple factors ranging from quality systems, blood processing, testing strategies, and distribution to patient blood management and adequate volunteer blood donors. The vein-to-vein (donor-to-patient) synergy also requires collaboration of many stakeholders including blood banks, hospitals, ministries of health, and national regulatory authorities.

Many challenges obstruct the path of APEC economies’ efforts to improve the safety and sustainability of the blood supply chain to achieve a well-organized, nationally-coordinated blood transfusion service. Challenges can be found in all areas including the capacity of their blood services, appropriate infrastructure, governance and the achievement of international safety and quality standards for blood.

However each challenge also offers an opportunity for improvement. For example, many national governments prioritize improving access to blood collected from regular, voluntary non-remunerated blood donors to ensure blood is available when needed. Additional opportunities for improvement include process control through quality systems and infrastructure improvements for collection and processing of blood and blood products to development of the appropriate testing strategy to match the risk of disease.

Success by APEC economies to recognize these challenges as opportunities to improve the national transfusion services is enhanced through heightened collaboration among all stakeholders, including private, academic, community, health and non-health public sectors. Multi-sectoral, multi-lateral collaborations and model public-private partnerships – built on best and innovative practices appropriate to local environments – support the ability of all APEC economies to operate a fully centralized National Blood Service with consistent quality standards to provide optimal blood safety for improved patient outcomes. Through increased collaboration, patients are assured timely access to blood, as well as confidence that the transfusion is free from infectious viruses such as hepatitis and HIV. National governments also benefit from the economic impact of a healthy individual who leaves the hospital to return to the workforce and actively contribute to society.

On 4 July 2013, the APEC Life Sciences Innovation Forum (LSIF) and APEC Health Working Group (HWG) convened in Medan, Indonesia to discuss Healthcare-associated Infections (HAIs). It was during this dialogue that APEC economies’ leadership discussed the important challenge of
blood-borne infections from transfusions. Due to interest in the health and economic impact of transfusion transmitted infections such as HIV, hepatitis B and hepatitis C, APEC approved funding to fully explore the safety and sustainability of blood supply chains in developing economies across the region.

The APEC Policy Dialogue and Workshop on Attaining a Safe and Sustainable Blood Supply Chain was held September 30 to October 1, 2014 in Manila, Philippines. The Workshop convened senior leaders from government, academic institutions, the private sector, civil society, and international organizations to identify how APEC economies can work together to build the capacity of their blood services, infrastructure, and governance and promote the achievement of international safety and quality standards for blood.

Following the outcome of the 2014 workshop, action will focus on developing and implementing the “APEC 2020 Blood Supply Chain Roadmap”, included in the overall scope of the APEC project. The roadmap will focus on four key areas: 1) promoting harmonization and implementation of international standards for blood and blood products; 2) optimizing the efficiency of the blood supply chain through capacity building for blood processing, testing, and distribution systems; 3) sharing best practices to improve the safety and quality of the blood supply and the sustainability of the blood system; 4) identifying strategies for optimizing clinical transfusion practices and patient blood management in both developed and developing economies; and 5) building the capacity of APEC economies to develop and export plasma, which can help sustain blood systems in APEC economies.

Vision

APEC Life Science Innovation Forum (LSIF) includes senior leaders from government, academic institutions, the private sector, civil society, and international organizations, working together to create better health outcomes for the people of the Asia Pacific region. The APEC LSIF recognizes the potential for leveraging the collective strength of these stakeholders to help APEC economies, particularly developing economies, to build the capacity of their blood services, infrastructure, and governance and promote the achievement of international safety and quality standards for blood.

Mission

For APEC economies to improve the safety and sustainability of their blood supply by working through cross-sectoral, multi-disciplinary, coordinated and collaborative approaches to optimize their blood processing, testing, and distribution systems.
Goals and Actions

1. To strengthen cross-sectorial political commitment and national level government leadership for improving the safety and sustainability of the blood supply by optimizing blood processing, testing and distribution systems for the advancement of public health

Global organizations such as the World Health Organization, the International Society for Blood Transfusion, and AABB strive to address the safety and accessibility of blood and blood products. These organizations provide significant support to governments and blood banks around the world to improve blood safety standards.

Yet, their efforts don’t always translate to political commitment and government leadership at the national level on blood safety matters. In fact, government leadership on blood safety varies greatly across APEC member economies and between agencies within member economies. This is especially true for developing member APEC economies.

For developing economies, competing health issues, communication between disciplines and lack of resources and expertise all impact governments’ commitment to prioritize national blood safety and availability. In order for blood safety to stand out as a priority area in public health, data, case studies and easy-to-understand messages need to be communicated to key decision-makers.

Consultation from APEC developed economies can greatly facilitate development and political leadership in this area.

Actions

1.1 Understand the health and blood safety gaps in developing APEC economies compared to international standards in quality and safety for blood and blood products for the improvement of public health.

1.2 Establish a task force to ensure that clear policies for blood transfusion services are developed and communicated to decision makers at the national level to provide sufficient and timely supplies of safe blood.

1.3 Establish a quality system, from which practical guidelines to ensure the quality and continuity of test kits, reagents and other consumables will come.

1.4 Create mechanisms for APEC developed economies to assist with training and other areas of guidance to improve government leadership on blood safety.

1.5 Design ongoing funding mechanisms.

1.6 Share successes by APEC developing economies with other APEC developing economies, for ongoing education and encouragement.
2. To strengthen local policy enactment and implementation of national blood safety policies

Current Situation
The key to success is a combination of national level policy and local level funding. Governments at the national level may not be aware of the drivers for successful policies to ensure safety and availability of blood at the local level. By providing a road map for governments to assess local drivers for blood safety implementation can help improve public health.

A missing element in many developing economies blood safety policies is long term operational funding for local implementation. For example, a national policy can be set up that recommends advanced technologies such as component therapy, testing with serology and nucleic acid technology (NAT). However, without funding for local implementation, the national level policy will have little impact.

Actions
2.1 Enhance the understanding of government at the national level of local public health considerations for addressing blood safety and sustainability
2.2 Make appropriate resources available for consistent and reliable screening.
2.3 Make a sufficient number of qualified and trained staff available for blood screening.
2.4 Review funding mechanisms to ensure funds can be used by local level implementers for blood safety activities.
2.5 Utilize industry expertise to educate and mentor local experts.

3. To strengthen quality systems as an essential foundational element for creating a viable National Blood Service that requires full government commitment for long-term success

Current Situation
The WHO has established the quality system as a foundation for blood safety and has outlined five pillars of quality systems. Yet, many developing APEC economies still struggle to integrate the quality system into daily practice. There is a significant need to support implantation of quality systems for all elements of the blood screening program, including standards, training, documentation and assessment. With a thorough culture of quality systems in place, blood centers will be prepared to address opportunities for centralization/regionalization, testing strategies, and plasma. Leverage other APEC developed economies that have mastered quality systems in order to build and maintain quality systems in APEC developing economies.
**Actions**

3.1 Develop a national quality policy and plan to embrace Good Manufacturing Practices (GMP).

3.2 Focus on the key elements of the quality system: organizational management; standards; documentation; training; assessment.

3.3 Secure the commitment and support of the National Blood Transfusion Service to focus on quality systems.

3.4 Work with experts from other APEC economies to identify the best approach for prioritizing quality in the national blood policy.

3.5 Secure ongoing resources for establishing and maintaining a quality system.

3.6 Designate a national quality manager with overall responsibility for the implementation of quality systems at all levels.

3.7 Develop a quality section, with appropriate staffing and expertise, in each blood center and hospital blood bank.

3.8 Provide training in quality for all BTS staff and other healthcare professionals involved in blood transfusion.

3.9 Assess the effectiveness of the quality system continually.

3.10 Stay committed to establishing quality systems in order to develop hemovigilance to understand ongoing risk needs.

3.11 Train technical staff on best practices for maintaining quality systems and managing resources.

4. **To increase government awareness that economies of scale are best achieved through centralization and regionalization to provide quality services at the local level**

**Current Situation**

A decentralized blood banking system and poor infrastructure create challenges for blood banks in developing APEC economies trying to deliver safe blood to patients in far-flung areas. For blood banks that screen only a few hundred units a month, they are likely unable to invest in testing, IT enhancements and other important infrastructure components. Low testing volume prohibits economies of scale. Without economies of scale for testing, blood banks will find it hard to justify investment in needed infrastructure that could improve everything from donation testing to tracking and distribution. One answer to the challenges of the fragmented blood banking system is centralized or regionalized testing.

**Actions**

4.1 Conduct educational awareness activities for decision-makers on how centralization/regionalization creates economies of scale and can help improve safety and quality standards.
4.2 Explore which type of centralization and regionalization is best for them, including options for testing, collection, component preparation and therapy.

4.3 Perform a healthcare economic analysis to see how economies of scale will drive down costs.

4.4 When feasible, pursue consolidation of blood donor testing and/or component preparation in order to drive quality standards and increased oversight of procedures. Blood screening should be consolidated in strategically located facilities at national and/or regional levels to achieve uniformity of standards, increased safety and economies of scale.

4.5 Start the blood testing scheme as a pilot program with only two or three hospitals sending samples to a central site. Learn from the pilot experience before expanding the program to a wider area to increase economies of scale.

5. To increase government focus on blood testing strategies based on the disease burden in the APEC developing economy’s population

Current Situation
Even with accelerated policies that support voluntary blood donation, APEC developing economies will still need time before those efforts impact the safety of the blood supply. By matching the most sensitive testing technology to the disease prevalence, APEC economies can advance blood safety and deliver the safest possible blood to patients.

It’s critical that the blood screening technology and how it’s employed (e.g. the blood testing algorithm) reflect the prevalence of disease in the general population.

Actions

5.1 Establish a baseline for transfusion-transmitted infection risk.
5.2 Perform a risk analysis to understand the scope of risk in the blood supply.
5.3 Support implementation of serology and Nucleic Acid Technology (NAT). Screening of all donations with serology should be in place before screening strategies utilizing NAT are considered.
5.4 Baseline global best practices in blood screening strategies.
5.5 Educate policy makers, patient groups and healthcare professionals on safety and identify champions who promote the importance of blood safety.
5.6 Measure progress and collect appropriate testing data.
5.7 Collect baseline health economic data on testing strategies.
6. To incorporate models such as public-private partnerships and partnerships with non-profit organizations to access resources and expertise and identify advocates for advancing blood safety

Current Situation
Participation in public-private partnerships and partnerships with non-profit organizations in areas of healthcare varies across APEC economies. Some economies with limited resources have shown openness to collaborating with other governments, academia and the private sector to strengthen public health and improve outcomes for patients. Blood safety is an area where there is sufficient experience around the world that numerous public and private sector experts could share information and expertise, thereby helping improve developing economies’ access to resources.

Partnerships can be carried out with academic institutions, private corporations, NGOs and hospitals. While many partnerships will be focused on technical expertise, APEC economies can benefit from public affairs partnerships, working with vocal proponents of blood safety to carry blood safety messages to decision makers.

The APEC 2020 Blood Supply Chain Roadmap includes a proposal for a public private partnership to create a regional Network of Excellence for Blood Safety (APEC NEBS) in Manila, Philippines. Other APEC economies could evaluate similar partnerships that meet the needs of the economy.

Actions

6.1 Review successful Public Private Partnerships in healthcare and other industries to find a model that fits.
6.2 Establish a task force that can make recommendations to Ministry of Health:
- Establish appropriate legal framework for the partnership model.
- Set clear, attainable and mutually beneficial goals for the partnership. Communicate widely and have adequate transparency.
- Incorporate advocates for blood safety from across the continuum of care, including physicians, hospital administration and healthcare workers who can speak to peers and other decision-makers on best practices in testing.
- Measure the impact of the partnership and share results publically for transparency.
- Involve outside stakeholders for input on how to improve the partnership.
7. **To provide evidence to decision-makers on the value of blood safety policies that facilitate data-based decisions for public health**

*Current Situation*

The decisions that APEC economies are making today on national blood services will require ample time and evaluation. Access to accurate, local data, such as health economic analyses and transfusion transmitted infection rates, will be essential. Without a clear picture of the environment, it will be difficult for decision-makers to make the best long-term decisions for the country.

With a view towards strengthening blood safety in Asia Pacific, there is a real need to devote resources to empower economies to use data to understand and demonstrate ongoing value of blood safety for the region.

*Actions*

7.1 Collect baseline health economic data on centralization/regionalization and testing strategies.
7.2 Support data collection and analysis to demonstrate value of blood safety in the continuum of care.
7.3 Devote regional resources to health economic analysis to drive policy.
7.4 Devote regional resources to plasma strategies to discuss best approaches to meet demand and how to leverage untapped resources of discarded plasma in developing economies.

8. **Adopt Patient Blood Management (PBM): a standard of care used to optimise the use of a patient’s own blood, thereby reducing or avoiding unnecessary blood transfusions**

*Current Situation*

PBM is a patient-focused, evidence-based and systematic approach to optimise the use of a patient’s own blood. It is designed to improve patient outcomes through the safe and rational use of blood and blood products and by minimizing unnecessary exposure to blood products.

Anaemia affects approximately 1.6 billion people (25% of the world’s population) and is associated with increased healthcare costs, risk of postoperative mortality and morbidity, infectious complications, prolonged hospitalization, and a greater likelihood of allogeneic red blood cell (RBC) transfusions.
Despite the World Health Organization (WHO) resolution in May 2010 to adopt PBM, relatively few countries have adopted the approach or the three main elements (3 pillars) that can be applied during the pre, intra, and postoperative stages:

1. Optimise patient’s own blood volume, especially red cell mass
2. Minimize the patient’s blood loss and bleeding
3. Harness and optimise the patient’s physiological tolerance of anaemia

**Actions**

8.1 Educate and generate broader awareness of the benefits (patient safety / reduced healthcare costs) of PBM
8.2 Create a PBM Taskforce to oversee regional / APEC implementation and sharing of best practice
8.3 Create a National PBM Advisory Board with the responsibility to educate, develop national guidelines and oversee the implementation of PBM
8.4 Develop metrics for good clinical practice and to benchmark transfusion rates per health facility
Overview of the Proposed APEC LSIF Network of Excellence for Blood Safety (APEC NEBS)

Request: APEC developing economies involved in the APEC LSIF Blood Safety Initiative are invited to apply to serve as the host economy for the APEC LSIF Network of Excellence for Blood Safety (NEBS).

Overview: The LSIF Blood Safety Project Task Force is exploring the establishment of an APEC LSIF Network of Excellence for Blood Safety (NEBS). Located within an existing network of blood banks within an APEC developing economy, the NEBS would be a partnership between the national Ministry of Health, local and international blood banks, academic institutions, the private sector, and other expert stakeholders to support a range of capacity building activities that would help the blood banks optimize their blood processing, testing, and distribution systems.

Goals: To help APEC developing economies improve the safety and sustainability of their blood supply by optimizing their blood processing, testing, and distribution systems.

Key activities:
- Understand the health and blood safety gaps in the selected economy and within the blood banks participating in the NEBS.
- Establish a baseline for transfusion-transmitted infection risk and collect baseline health economic data.
- Work with participating blood banks to upgrade to and align with current international quality standards.
- Train technical staff on best practices for maintaining quality systems and managing resources.
- Centralize donated blood of the participating blood banks for testing at a single institution.
- Support implementation of serology and nucleic acid technology.
- Support data collection and analysis to demonstrate value of blood safety in the continuum of care.
- Develop matrix for measurement of progress and collect appropriate data
- Design ongoing funding mechanism
- Share key learnings and best practices with other APEC developing economies.

Eligibility: The following 11 APEC member economies are considered “developing APEC economies:
- Chile
Overview of the Proposed APEC LSIF Network of Excellence for Blood Safety (APEC NEBS)

- China
- Indonesia
- Malaysia
- Mexico
- Papua New Guinea
- The Philippines
- Peru
- Russia
- Thailand
- Viet Nam

Timeline: The program will take four years to complete, and will focus on three key phases:

Phase 2: Quality systems, infrastructure and leadership development (2015-2016)
Phase 3: Deployment of serology and nucleic acid testing (2017)

Phase 1 (2014 - mid-2015)

Summary: Phase 1 focuses on policy review/revision.

- Selection of APEC developing economy to host the NEBS at the APEC Blood Safety Workshop in Manila, Philippines on September 30-October 1, 2014.
- Identification of economy’s blood safety gaps; conceptualizing the NEBS with the Ministry of Health.
- Identify local and international project partners.
- Seek commitment for donor funding (private and public)

Phase 2 (2015 - 2016)

Summary: The selected economy and partners commence the NEBS planning and establishment.

After the initial phase of policy review and revision, work will begin at a designated site to build the infrastructure and human resources. Key activities in Phase 2
Overview of the Proposed APEC LSIF Network of Excellence for Blood Safety (APEC NEBS)

include:
- Establish a baseline for transfusion-transmitted infection risk and collect baseline health economic data.
- Finalize commitment for donor funding (private and public)
- Centralize donated blood of the participating blood banks for testing at a single institution.
- Deploy serology and sets up the center for deployment of NAT in Phase 3
- Support implementation of serology and nucleic acid technology on sample size.
- Develop matrix for measurement of progress

Phase 2 will require four trainings per a year by up to four specialists, with each training lasting 1-2 weeks. Some didactic education may be delivered remotely, dependent on the host economy’s broadband internet connectivity. Some training topics may include:

**Quality Management**
- Cold chain
- Supply chain management
- Information systems, documentation and recordkeeping

**Haemovigilance and risk assessment**
- Quality Control
- Research methods
- Clinical & epidemiological research skills
- Donor recruitment and retention
- Change and process control

**Phase 3 (2017)**

Summary: Publish data output from NEBS economic studies

The third phase is devoted to the following activities:
- Full scale establishment of advanced testing for the economy
- Understand donor screening tests required for endemic diseases
- Determine yield to interdict transfusion-transmitted infections
Overview of the Proposed APEC LSIF Network of Excellence for Blood Safety (APEC NEBS)

- Establish sustainable funding sources
- Donor counseling and follow-up
- Refinement of service delivery
- Issue final report

The last 3-6 months will involve intensive evaluation of all components of the program, including policy, leadership, quality systems, advanced testing, overall scalability. Upon completion of the project, the NEBS partners will develop and issue a report to the APEC LSIF on the findings, best practices, and final recommendations from the project.
## LOGISTICAL INFORMATION

### SCHEDULE OVERVIEW

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monday, 29 September 2014</strong></td>
<td></td>
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<tr>
<td>16:00 – 17:30</td>
<td>Pre-Workshop Briefing for Speakers and Moderators</td>
<td>New World Hotel, Conference Room A (3rd Floor)</td>
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<tr>
<td>17:30 – 19:30</td>
<td>Welcome Reception and Early Registration</td>
<td>New World Hotel (Gallery I)</td>
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<tr>
<td><strong>Tuesday, 30 September 2014</strong></td>
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<tr>
<td>08:00</td>
<td>Transfer from New World Hotel to AIM (5 minutes)</td>
<td>New World Hotel (Lobby)</td>
</tr>
<tr>
<td>07:45 – 08:30</td>
<td>Registration</td>
<td>AIM Main Building, Fuller Hall</td>
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<tr>
<td>08:30 – 18:20</td>
<td>Policy Dialogue &amp; Workshop</td>
<td>AIM Main Building, Fuller Hall</td>
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<tr>
<td>18:30</td>
<td>Transfer from AIM to New World Hotel to (5 minutes)</td>
<td>AIM Main Building, Fuller Hall</td>
</tr>
<tr>
<td>19:00 – 21:30</td>
<td>Gala Dinner</td>
<td>New World Hotel (Glasshouse)</td>
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<tr>
<td><strong>Wednesday, 30 September 2014</strong></td>
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<tr>
<td>08:00</td>
<td>Transfer from New World Hotel to AIM (5 minutes)</td>
<td>New World Hotel (Lobby)</td>
</tr>
<tr>
<td>18:00</td>
<td>Policy Dialogue &amp; Workshop</td>
<td>AIM Main Building, Fuller Hall</td>
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<tr>
<td>18:15</td>
<td>Transfer from AIM to New World Hotel to (5 minutes)</td>
<td>AIM Main Building, Fuller Hall</td>
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</tbody>
</table>
1. Venue
The meeting will take place at the Asian Institute of Management (AIM). The AIM is one of the finest graduate schools in Asia. Its address at the heart of Makati Central Business District is only a 5-minute walk to major shopping centers. The Ninoy Aquino International Airport and the Manila Domestic Airport are approximately 8 kms away.

AIM Main Building – Fuller Hall
123 Paseo de Roxas, Makati,
1260 Metro Manila, Philippines
+63 2 892 4011

2. Badge Pick-up
Badges will be available for pick-up during early registration at the Welcome Reception (29 September) or at the registration desk on the morning of Tuesday, 30 September.

3. Working language
The event will be conducted in English as the official language of the Asia-Pacific Economic Cooperation Forum (APEC).

4. Secretariat Room
The Workshop Secretariat will be located at the AIM Main Building. It is open to speakers and moderators during the period of 29 September – 1 October. Computers, internet, printers, and photocopiers will be available for use.

5. Accommodation
We recommend that delegates make their hotel reservations with the New World Hotel Makati, as this is the accommodation in closest proximity to the meeting venue and the location of the Welcome Reception (29 September) and Gala Dinner (30 September). Delegates should reserve their accommodations directly with the hotel as early as possible. To secure your reservations, please complete the attached registration form and send the form directly to Ms. Leah Alegre at leah.alegre@newworldhotels.com.

New World Makati Hotel
Esperanza Street corner Makati Avenue, Ayala Center
Makati City. 1228 Philippines
Tel.: (632) 8116888
6. Entry requirements

All delegates should possess a valid passport (validity not less than 6 months prior to expiration) or applicable travel documents with visas or entry permits to enter into the Philippines. Participants are responsible for obtaining their own visa, if required, and should contact the nearest Philippine diplomatic or consular office for further information. Please note that the Philippines participates in the APEC Business Travel Card System.

Citizens of the following APEC member-economies are allowed to enter the Philippines without a visa for a period of stay of 21 days or less: Australia, Brunei Darussalam, Canada, Chile, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Russia, Thailand, Singapore, United States, Vietnam.

Holders of Hong Kong and Macau Special Administrative Region (SAR) passports are allowed to enter the Philippines without a visa for a stay not exceeding 7 days.

Citizens of China and Chinese Taipei are required to secure visa prior to entry to the Philippines. Holders of diplomatic and official (service) passports, however, are exempted from the visa requirement.

For other information regarding entry formalities and requirements, please contact the nearest Philippine Embassy or log on to http://www.dfa.gov.ph.

7. Airport Information and Airport Transfer

Manila Ninoy Aquino International Airport (MNL) is the main international airport in Manila.

The following airlines have flights to MNL: Air China, Air Macau, Air Niugini, AirphilExpress, ANA, Asiana Airlines, Cathay Pacific, Cebu Pacific, China Airlines, China Southern, Delta, Dragonair, Emirates, Etihad Airways, EVA Air, Garuda Indonesia, Gulf Air, Hawaiian Airlines, Japan Airlines, Jeju Air, Jetstar, KLM,
Korean Air, Kuwait Airways, Malaysia Airlines, Philippine Airlines, Qantas, Qatar Airways, Royal Brunei, Saudi Arabian Airlines, Seair, Singapore Airlines, Thai Airways, United, Vietnam Airlines.

8. Airport Transfer
Unfortunately we are unable to provide shuttle transfer service for APEC delegates between the airport and the New World Hotel. The New World Makati Hotel offers a 24-hour limousine service from/to the international airport. Please indicate in the hotel reservation form or contact Ms. Leah Alegre directly if you would like to request a car pick-up. Below are the New World Hotel’s airport transfer rates:

- Teana (capacity: 3 pax) PHP 2,800.00 nett / way / car
- Grandia / Estate (capacity: 8 pax) PHP 2,800.00 nett / way / car
- Mercedes Benz PHP 3,000.00 nett / way / car

Contact: Ms. Leah Alegre
Email: leah.alegre@newworldhotels.com
Tel.: (632) 8116888 extension 3245
Fax: (632) 7556866

9. Health Regulations
All participants are advised to obtain their own insurance coverage for any costs arising out of sickness or accident, covering the entire duration of the Meetings and travel time. The Organizers will not be responsible or liable for such contingencies.

10. Security and safety
All participants must wear their badge to access the meeting venue. The badge should be worn at all times while attending the meeting. The meeting venue will be staffed at all times by security guards. Meeting participants should exercise good judgment and basic security habits while remaining aware of their surroundings.

11. Medical Services
The following hospitals are located within close proximity to the meeting venue: Cardinal Santos, The Medical City, Makati Medical Center, Asian Hospital, Manila Doctors, Ospital ng Maynila, Manila Sanitarium.

12. Local Time
The standard time of the Philippines is GMT+8.

13. Climate
The local climate is hot, humid, and tropical. The average yearly temperature is around 26.50°C (79.70°F) with humidity of about 77%. September is the end of the rainy season in the Philippines.

14. Attire
Suggested dress attire throughout the meeting is business casual.

15. Currency
In the Philippines the currency is the Philippine Peso (PHP) and at the present time 1 US Dollar is equivalent to approximately 43.00 PHP.

16. Tipping
Tipping is expected for many services. The standard practice is 10% of the total bill. Tipping is optional on bills that already include a 10% service charge.
## Evaluation Survey

**Instructions:** Please indicate your level of agreement with the statements listed in the table below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>COMMENTS (Continue on back if necessary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The objectives of the training were clearly defined</td>
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<tr>
<td>The project achieved its intended objectives</td>
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<tr>
<td>The agenda items and topics covered were relevant</td>
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<tr>
<td>The content was well organized and easy to follow</td>
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<tr>
<td>Gender issues were sufficiently addressed during implementation</td>
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<tr>
<td>The trainers/experts or facilitators were well prepared and knowledgeable about the topic</td>
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<tr>
<td>The materials distributed were useful</td>
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<tr>
<td>The time allotted for the training was sufficient</td>
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</tr>
</tbody>
</table>

1. **How relevant was this project to you and your economy?**

   5 very mostly somewhat a little not much

   \[Explain: \] ____________________________

   \[Explain: \] ____________________________
2. In your view what were the project’s results/achievements?

   Explain: ____________________________________________________________
   ____________________________________________________________

3. What new skills and knowledge did you gain from this event?

   Explain: ____________________________________________________________
   ____________________________________________________________

4. Rate your level of knowledge of and skills in the topic prior to participating in the event:

   5  4  3  2  1
   very high  high  medium  low  very low

5. Rate your level of knowledge of and skills in the topic after participating in the event:

   5  4  3  2  1
   very high  high  medium  low  very low

   Explain: ____________________________________________________________
   ____________________________________________________________

6. How will you apply the project’s content and knowledge gained at your workplace? Please provide examples (e.g. develop new policy initiatives, organise trainings, develop work plans/strategies, draft regulations, develop new procedures/tools etc.).

   Explain: ____________________________________________________________
   ____________________________________________________________

7. What needs to be done next by APEC? Are there plans to link the project’s outcomes to subsequent collective actions by fora or individual actions by economies?

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

8. How could this project have been improved? Please provide comments on how to improve the project, if relevant.

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
Participant information (identifying information is optional):

Name:

Organisation/Economy:

Email:

Gender: M / F

Thank you. Your evaluation is important in helping us assess this project, improve project quality and plan next steps.