2018 Global Vaccine and Immunization Research Forum (GVIRF) 20-22 March 2018 Bangkok, Thailand

Annotated Agenda DRAFT 14 March 2018

Tuesday 20 March				Wednesday 21 March				Thursday 22 March			
8:00-9:00	Registration										
9:00-9:15	Welcome and Opening Remarks			8:30-8:45	Day 1 Review and Day 2 Agenda			8:30-8:45	Day 2 Review and Day 3 Agenda		
9:15-9:45	**Keynote:** Alejandro Cravioto			8:45-9:15	**Keynote:** Maharaj Kishan Bhan			8:45-10:15	**Plenary 6:** Polio Endgame - Needs and Opportunities		
9:45-10:15	**Intro:** Context and Purpose of GVIRF			9:15-10:45	**Plenary 3:** Growing Developing Country Vaccine Manufacture			10:15-10:45	Break		
10:15-10:45	Break			10:45-11:15	Break			10:45-12:15	**W7:** New Vaccine Pipeline	**W8:** Vaccines and Antimicrobial Resistance	**W9:** Antibody Mediated Prevention
10:45-12:45	**Plenary 1:** Progress Towards and Commonalities in Vaccine Development Against HIV, TB, and Malaria			11:15-12:45	**W4:** Immunol. Principles of Vaccines and Vaccination	**W5:** Epidemic & Pandemic Prepared-ness	**W6:** Reaching Adolescents and Pregnant Women	12:15-12:30	Workshop Reports		
								12:30-13:15	**Closing Panel:** Discussion with thought leaders: Alejandro Cravioto, David Kaslow, Gagandeep Kang, Lucky Slamet		
								13:15-13:30	Closing Remarks		
12:45-14:00	Lunch			12:45-14:00	Lunch			13:30	Adjourn (lunch available)		
14:00-15:30	**W1:** Emerging Vaccine Strategies & Technologies	**W2:** R&D Update - Enteric Vaccines	**W3:** Pneumo-coccal Vaccines: Lessons Learned and the Road Ahead	14:00-14:15	Workshop Reports						
				14:15-15:45	**Plenary 4:** Regulatory Capacity, Challenges, and Convergence						
15:30-16:00	Break			15:45-16:15	Break						
16:00-16:15	Workshop Reports			16:15-17:45	**Plenary 5:** Evidence for Decision Making						
16:15-17:45	**Plenary 2:** Innovating for Equity										
17:45	Adjourn			17:45	Adjourn						
18:30-19:30	**Reception**			18:30-19:30	**Reception:** Jerome Kim						

Annotated Agenda

Plenary sessions are intended to be "end-to-end," promoting knowledge sharing and collaboration between discovery, development, and delivery communities. Workshops are intended to promote active discussion on specific issues of interest, and may target more narrow audiences.

Time	No	Title	Suggested Content (will replace with info for printed program, when available)
			Tuesday 20 March
9:00-9:15 15 min		Welcome and Opening Remarks	Day 1 Chair: **Lee Hall** (NIAID) Secretariat: **Martin Friede** (WHO), **Lee Hall** (NIAID), **Peter Dull** (BMGF)
9:15-9:45 30 min	**K1**	Keynote	• **Alejandro Cravioto** o Beyond effectiveness: research on vaccines seen as a continuum
9:45-10:15 30 min	**Intro**	Context and Purpose of GVIRF	• **Lee Hall** (NIAID): Progress in the Decade of Vaccines and the role of GVIRF in promoting the research agenda of the Global Vaccine Action Plan
10:45-12:45 120 min	**P1**	Progress Towards and Commonalities in Vaccine Development Against HIV, TB, and Malaria	Chair – **Helen Rees** (University of Witwatersrand)) This session will give multiple perspectives on progress over the last 2 years in the development of HIV, TB, and malaria vaccines. To highlight cross-cutting issues and capture a regional perspective on these high priority vaccines, we will combine short vaccine-specific updates with a panel discussion across all three vaccines. • Each topic – HIV, TB, Malaria – will be presented in a 30 minute block o 20 minute presentation focused on the current landscape and activities ▪ HIV – **Kathryn Mngadi** (Caprisa/HVTN) ▪ TB – **Gerald Voss** (Global HIV Vaccine Enterprise) ▪ Malaria – **Fred Binka** (University of Ghana) o 5 minute presentation/discussion focused on gaps and opportunites ▪ HIV – **Punee Pitisittithum** (Mahidol University) ▪ TB – **Willem Hanekom** (BMGF) ▪ Malaria – **J. Kevin Baird** (Eijkman Oxford Clinical Research Unit) o 5 minutes for questions and clarifications Panel Discussion (Moderator – **Helen Rees** (University of Witwatersrand)) • Panelists to include each of the speakers/discussants listed above • Discuss commonalities/cross-cutting issues, lessons learned and to be learned

Time	No	Title	Suggested Content (will replace with info for printed program, when available)
14:00-15:30 90 min	**W1**	Emerging Vaccine Strategies & Technologies	Chair – **Paula Bryant** (NIAID) As vaccine development moves beyond the conceptual basis of traditional approaches and the recapitulation of natural immunity to induce protection against hard-to-target pathogens, the adoption of new concepts is necessary. Building on vaccine discovery and design themes introduced at the 2014 and 2016 Global Vaccine and Immunization Research Forums, this session will include discussion of emerging systems and technologies to advance research and development of vaccine candidates. • MIMIC™ System – **Donald Drake** (Sanofi Pasteur VaxDesign Corp.) • CMV vectored vaccines – **Klaus Frueh** (Vaccine & Gene Therapy Institute) • Plasmid-launced, live-attenuated virus vaccine platform – **Johan Neyts** (University of Leuven) Panel discussion (Moderator – **Paula Bryant** (NIAID)) • Panelists to include each of the speakers listed above
14:00-15:30 90 min	**W2**	R&D Update - Enteric Vaccines	Co-Chairs: **Gagandeep Kang** (Christian Medical College), **Jean-Pierre Amorij** (AH Consultancy) During the last decade significant progress has been made towards the development and delivery of vaccines to combat enteric diseases. This session will provide updates on various advances in approaches and technologies, as well as the use of human challenge studies, in research and development of vaccines against enteric diseases. • Introduction and Rotavirus Vaccines: Approaches and Lessons Learned – **Gagandeep Kang** (Christian Medical College) • ETEC and Shigella: Vaccine Development – **Calman MacLennan** (BMGF) • Human Challenge Models: Utility in Vaccine Development – **Beth Kirkpatrick** (University of Vermont College of Medicine) Panel Discussion (Moderator – **Jean-Pierre Amorij** (AH Consultancy)) • Panelists to include each of the speakers listed above as well as: o **Norman Baylor** (Biologics Consulting Group) o **Dilara Islam** (AFRIMS) o **Firdausi Qadri** (icddrb)

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14:00-15:30 90 min	**W3**	Pneumococcal Vaccines: Lessons Learned and the Road Ahead	Chair – **David Durrheim** (University of Newcastle) Pneumococcal Conjugate Vaccines (PCV) are recommended by WHO as a priority in childhood immunization world-wide, in particular in countries with high childhood mortality, to complement other pneumonia-control measures (e.g. case management, exclusive breast feeding, reducing risk factors). Since its first introduction in 2000 in the U.S., PCV has been introduced in some of the high burden countries, including Sudan, Tanzania, Niger, Afghanistan, India and Bangladesh. However, coverage varies highly among the 10 countries that have introduced PCV (e.g. 13% in Nigeria to 95% in Tanzania), with four of the highest pneumonia burden countries currently not planning to implement PCV (e.g. Indonesia, Chad, China and Somalia). To achieve and sustain a high level of equitable PCV coverage, challenges remain with the high cost of the vaccine and the vaccine serotype replacement. This session will reflect upon the lessons learned on the access to the vaccine, and impact achieved thus far, and discuss ways to improve the utility of PCV towards achieving the SDGs. • Pneumococcal Disease: Current Status – **Kate O'Brien** (International Vaccine Access Center) • PCV in Africa: The Kenyan Experience – **Collins Tabu** (Ministry of Health, Kenya) • PCV Introduction in India – **Narendra Arora** (INCLEN) • The Future of PCVs – **Keith Klugman** (BMGF) Panel Discussion (Moderator – **David Durrheim** (University of Newcastle)) • Panelists to include each of the speakers listed above
16:15-17:45 90 min	**P2**	Innovating for Equity	Chair – **Narendra Arora** (INCLEN) Innovative approaches that improve outcomes are important given the varying contexts and changing and ever more complex immunization programs. In order to reach the GVAP goals, achieve Universal Health Coverage, and ultimately contribute to the SDGs, identifying, testing, implementing and scaling-up innovative approaches that help achieve and sustain equitable high coverage will become even more relevant. Innovative products and presentations will be a key contributor to overcoming equity challenges, and their ultimate impact will be on how they enable innovative delivery strategies, linking together with the health system so that reliable services are sustained at scale. • Innovation and Political Will: Mission Indradhanush – **Pradeep Halder** (Ministry of Health and Family Welfare, India) Panel Discussion (Moderator – **Narendra Arora** (INCLEN)) • Inequity, Innovations, and Future Research • Panelists include the speaker listed above as well as: o **Folake Olaykinka** (JSI) o **Luan Lin** (China CDC Suzhou) o **Awwal Waziri** (SPHCDA, Kaduna State, Nigeria) o **Anna Postovoitova** (Ukraine) o **Brigitte Giersing** (WHO)
18:30-19:30		Reception	
			Wednesday 21 March
8:30-8:45 15 min		Day 1 Review and Day 2 Agenda	Day 2 Chair: **Martin Friede** (WHO)

Time	No	Title	Suggested Content (will replace with info for printed program, when available)
8:45-9:15 30 min	**K2**	Keynote	• **Maharaj Kishan Bhan** o The Role of National and Regional Capacity for Research in Biotechnology
9:15-10:45 90 min	**P3**	Growing Developing Country Vaccine Manufacture	Chair – **Martin Friede** (WHO) This session will discuss the vaccine manufacturing landscape from the developing-country perspective, how manufacturers in developing countries contribute to global coverage, and how international agencies can assist these countries in acquiring sustainable manufacturing capacity. • Economic Analysis of Local Vaccine Manufacturing in Developing Countries – **Syarifah Lisa Munira** (University of Indonesia) • Perspective from an Indian Vaccine Manufacturer – **Mahima Datla** (Biological E. Limited) • The Industrial Development Aspect of Local Vaccine Manufacturing – **Martin Nicholson** (UNIDO) • Local Production and Access: MSF View – **Kate Elder** (MSF) Panel Discussion (Moderator – **Martin Friede** (WHO)) • Panelists include the speakers listed above
11:15-12:45 90 min	**W4**	Immunological Principles of Vaccines and Vaccination	Co-Chairs – **Bernhards Ogutu Ragama** (KEMRI), **Annie Mo** (NIAID) Substantial progress has been made in human immunology and vaccinology research. This session will provide a general overview of the current state of human immunology research and the current challenges in vaccination and vaccine development, and will include discussion of how immunological advancements can inform vaccine development. • Introduction – **Annie Mo** (NIAID) • Immunological Challenges in Vaccination and Vaccine Development – **Andrew Pollard** (University of Oxford) • Immunological Technologies and Human Immunology Research – **Lisa Wagar** (Stanford Medicine) • Lessons Learned from Malaria Vaccine Correlate of Protection Studies – **Chris Ockenhouse** (PATH) Panel Discussion (Moderator – **Bernhards Ogutu Ragama** (KEMRI)) • Panelists include the speakers listed above
11:15-12:45 90 min	**W5**	Epidemic and Pandemic Preparedness	Chair – **Martin Friede** (WHO) The H5N1 scare in 2006, the H1N1 pandemic in 2009, and the Ebola virus epidemic in 2014, have shown that the world is at continuous risk of epidemic and pandemic threats against which we have very few tools. Over the last several years the scientific community has taken steps to develop vaccines that could be deployed during such events. This session will discuss where we are in terms of vaccine development and preparedness for such outbreaks. • The WHO R&D Blueprint for Action to Prevent Epidemics – **Martin Friede** (WHO) • Influenza Pandemic Risk and Preparedness – **John Tam** (The HK Polytechnic University) • NIAID View on Unverisal Influenza Vaccines and Their Role in Preparedness – **Jennifer Gordon** (NIAID) • Thailand's Influenza Vaccine Development and Pandemic Preparedness – **Punne Pitisuttithum** (Mahidol University) Panel Discussion (Moderator – **Martin Friede** (WHO)) • Panelists include the speakers listed above

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11:15-12:45 90 min	**W6**	Reaching Adolescents and Pregnant Women	Chair – **Julie Bines** (Murdoch Children's Research Institute) This session aims to provide updates on the current status of adolescent immunization in low resource settings, as well as to discuss success factors for maternal immunization service delivery based on experiences gathered with Tetanus Toxoid containing and Influenza vaccine. • Presentations on adolescent immunization schedules in high and low resource settings, and maternal immunization operational research in El Salvador and Malawi o **Hartono Gunardi** (Indonesia) o **Nora Villatoro de Martinez** (El Salvador) o **Fannie Kachale** (Malawi) Panel Discussion (Moderator – **Nihal Abeysinghe**) • Panelists include the chair and speakers listed above
14:15-15:45 90 min	**P4**	Regulatory Capacity, Challenges, and Convergence	Chair – **Norman W. Baylor** (Biologics Consulting, Inc.) This session will look into alternative regulatory procedures and pathways such as the animal rule, use of effectiveness data from human challenge studies, and other mechanisms to facilitate the licensure of new vaccines as well as improvements in current vaccines. Further, perspectives from regulatory authorities from Korea, Thailand and Indonesia on conducting human clinical trials and evaluating vaccines in public health emergencies will be presented. The session will also include assessment pathways at WHO to facilitate access of vaccines at global level and collaborative procedures and joint assessments. • Introduction and New Regulatory Approaches: Challenges and Opportunities – **Norman W. Baylor** (Biologics Consulting, Inc.) • Benefits and Challenges: How Regulators Can Reduce Time and Efforts in Evaluating New Vaccines Public Health Emergencies – **Yeowon Shon** (Seoul National Unviersity) • Human Clinical Trials to Support the Development of New Vaccines – **Akanid Wapeewuttikorn** (Thai FDA) • Perspective from Thailand Assessment Pathways at WHO – **Carmen Rodriguez** (WHO) Panel Discussion • Panelists include the chair and speakers listed above as well as **Lucky Slamet** (Badan Pom)

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16:15-17:45 90 min	**P5**	Evidence for Decision Making	Co-Chairs – **David Kaslow** (PATH), **Robert Breiman** (Chair, IVIR-AC) The overall aim of this session is to introduce the concept of a generic Public Health Value Proposition that includes guidance on types of economic evaluations, to quantify value proposition of pipeline vaccines. We intend to have a facilitated interactive discussion incorporating the perspectives of different stakeholders, on the importance of PHVPs. • Introduction and Background by WHO Chairs from PDVAC and IVIR-AC – **David Kaslow** (PATH) • Views on the Value Proposition of New Pipeline Vaccines from Different Perspectives: o MIC Country Representatives: ▪ **Gagandeep Kang** (Christian Medical College) ▪ **Yoy Teerawattanaon** (Health Intervention and Technology Assessment Program) o Donors' Perspective – **Anita Zaidi** (BMGF) o DCVMN's Perspective – **Suresh Jadhav** (Serum Institute of India) o IFPMA's Perspective – **Jean-Antoine Zinsou** (IFPMA) Panel Discussion (Moderator – **Robert Breiman** (Chair, IVIR-AC)) • Panelists include the speakers listed above
18:30-19:30 (15 minute talk)		Reception	**Reception Address** • **Jerome Kim** (International Vaccine Institute)
			Thursday 22 March
8:30-8:45 15 min		Day 2 Review and Day 3 Agenda	Day 3 Chair: **Peter Dull** (BMGF)
8:45-10:15 90 min	**P6**	Polio Endgame – Needs and Opportunities	Chair – **Roland W. Sutter** (WHO/POL) The Global Polio Eradication Initiative (GPEI) is rapidly approaching the finishing line, and has begun to implement the Endgame Strategic Plan. As part of this plan, all live polioviruses (including those contained in the oral poliovirus vaccine) need to be removed from populations. As a first step, Sabin type 2 was withdrawn globally in April 2016 (switch from trivalent to bivalent oral poliovirus vaccine [OPV]), accompanied with the introduction of IPV in EPI routine immunization programs. This is the largest recall, and probably one of the greatest natural experiments ever conducted in public health. The session will provide a detailed review of why this was unavoidable, what was done, and what are the preliminary outcomes. In addition, the session provides an overview priority research and product development necessary for policy decision making, and a glimpse to the future with new vaccines and vaccine formulations under development. • The swith from tOPV to bOPV – **Alejandro Ramirez Gonzalez** (WHO/EPI) • Poliovirus Type 2 Detection in the 2 Years After the Withdrawal – **Ondrej Mach** (WHO/POL) • Research for Polio Policy Making: Lessons Learned – **Roland W. Sutter** (WHO/POL) • New Polio Vaccines and Formulations Under Development – **Peter Dull** (BMGF) Panel Discussion (Moderator – **Roland W. Sutter** (WHO/POL)) • Panelists from industry, academia, country and donor community

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10:45-12:15 90 min	**W7**	New Vaccine Pipeline: Lessons Learned and Accelerating Progress	Chair – **Jean-Pierre Amorji** (AH Consultancy) Progress toward the licensure and launch of vaccines against non-vaccine preventable diseases will be reviewed. Detailed updates will focus on the development of vaccines against Respiratory Syncytial Virus, Hepatitis C Virus, and Hookworm. This session will also introduce the concept of value propositions and their use in guiding investment decisions in vaccine research and development. • Introduction – **Jean-Pierre Amorji** (AH Consultancy) • Global Vaccine Pipeline and Value Propositions – **David Kaslow** (PATH) • Respiratory Syncytial Virus Vaccines: Update – **Ruth Karron** (Johns Hopkins University) • Hepatitis C Virus Vaccines: Update – **Andrea Cox** (Johns Hopkins University) • Hookwork Vaccines: Update – **Maria Elena Bottazzi** (Baylor College of Medicine) Panel Discussion (Moderator – **David Kaslow** (PATH)) • Panelists include the speakers listed above as well as: o **Suresh Jadhav** (Serum Institute of India) o **Jean Lang** (Sanofi Pasteur)
10:45-12:15 90 min	**W8**	Vaccines and Antimicrobial Resistance	Chair – **Dennis M. Dixon** (NIAID) The emergence and spread of antimicrobial resistance (AMR) not only limits effective treatment options for significant infectious diseases, but also imposes substantial economic costs on health care systems. This session will build on themes introduced at the 2016 Global Vaccine and Immunization Research Forum and include discussion of vaccines to reduce antibiotic selective pressures, research and development of vaccines against frequently encountered bacterial pathogens, and the global applicability of the approaches presented. • Introduction and Update Since 2016 – **Dennis M. Dixon** (NIAID) • Vaccination Against Bacterial Diseases in Farmed Salmon – **Edgar Brun** (Norwegian Veterinary Institute) • Uropathogenic E. coli Vaccines – **Scott Hultgren** (Washington University) Panel Discussion (Moderator – **Johan Vekemans** (WHO)) • **Visanu Thamlikitkul** (Mahidol University) • **Suphot Wattanaphansak** (Chulalongkorn University) • **Nithima Sumpradit** (Thai Food and Drug Administration)

Time	No	Title	Suggested Content (will replace with info for printed program, when available)
10:45-12:15 90 min	**W9**	Antibody Mediated Prevention	Chair – **Nina Russell** (BMGF) Building on discussion of antibody-based products at the 2016 Global Vaccine and Immunization Research Forum, this session will provide an overview of the pipeline of antibodies to combat HIV, influenza, and rabies as well as a presentation on therapeutic antibody engineering. Additionally, a conversation with the panellists will include discussion of the WHO Consultation on products for passive and active immunization to prevent HIV infection as well as the utility of monoclonal antibodies as tools for immunogen design and validation. • HIV – **Barney Graham** (NIAID) • Rabies – **Erin Sparrow** (WHO) • Influenza – **Bruce Innis** (PATH) • Antibody Engineering – **Steve Hadley** (BMGF) Panel Discussion (Moderator – **Nina Russell** (BMGF)) • Panelists include the speakers listed above as well as **Filip Dubovsky** (MedImmune)
12:30-13:15 45 min	**Closing Panel**	Discussion With Thought Leaders	• **Moderators** o Peter Dull (BMGF) o Martin Friede (WHO) o Lee Hall (NIAID) • **Panelists** o Alejandro Cravioto o David Kaslow o Gagandeep Kang o Lucky Slamet