**FINAL ORAL PROGRAMME & POSTER PROGRAMME**

**VED 2015**

**SCIENTIFIC ADVISORY PANEL**

- Duncan Steele (Bill & Melinda Gates Foundation, USA)
- Timo Vesikari (University of Tampere, Finland)
- Carol O. Tacket (University of Maryland, USA)
- Mary Estes (Baylor College of Medicine, USA)
- Myron M. Levine (University of Maryland, USA)
- John D. Clemens (ICDDR, Dhaka, Bangladesh)
- Kevin Killeen (Matrivax Corporation, Boston, USA)
- Ann-Mari Svennerholm (Göteborg University, Sweden)
- Margaret E. Conner (Baylor College of Medicine, USA)
- Linda J. Saif (Ohio State University, USA)
- Roger I. Glass (Fogarty Center, NIH, Bethesda, USA)
- Harry B. Greenberg (Stanford University, USA)
- Claire-Lise Chaignat (WHO, Switzerland)
- John D. Clements (Tulane University, USA)
- Umesh Parashar (CDC, Atlanta, USA)
- Julie E. Bines (Royal Children’s Hospital, Melbourne, Australia)
- David Sack (Johns Hopkins University, Baltimore, Maryland, USA)
- Mark Riddle (NMRC, Bethesda, Maryland, USA)
- Armelle Phalipon (Pasteur Institute, Paris, France)
- Lou Bourgeois (PATH, Washington DC, USA)
- Robert Hall (NIAID/NIH, Bethesda, Maryland, USA)
- Serge Debrus (GSK Biologicals, Wavre, Belgium)
- Ladaporn Bodhidatta (AFRIMS, Bangkok, Thailand)
- Bernd Benninghoff (GSK Biologicals, Wavre, Belgium)
- Daniel Cohen (Tel Aviv University, Tel Aviv, Israel)
- Martin Mengel (Agence de Médecine Préventive, Paris, France)
- Robert F. Bargatze (Takeda Vaccines Inc., Bozeman, Illinois, USA)
- Hugues Bogaerts (Consultant, Takeda Vaccines, Belgium)

**SECURE ON-LINE REGISTRATION IS NOW OPEN AT:** www.meetingsmanagement.com/ved_2015
**SESSION 1: DIARRHOEAL DISEASE BURDEN – NEW INSIGHTS**

Moderators: Anita Zaidi (Gates Foundation, Seattle, Washington, USA) and Mike Levine (University of Maryland, Baltimore, Maryland, USA)

09.00-09.30
'True burden of enteric pathogens utilizing advanced molecular techniques: Re-analysis of the GEMS data'
Eric Houry, (University of Virginia, Charlottesville, Virginia, USA)

09.30-10.00
'Potential contribution of nutritional and long-term outcomes on the cost-effectiveness of enterotoxigenic Escherichia coli and Shigella vaccination'
Richard Rheingans¹, Lindsey Laytnner¹, Mirna Amaya¹ and Deborah Atherly²
(1 University of Florida, Gainesville, Florida, USA; 2 PATH, Seattle, Washington, USA)

10.00-10.20
'Veces against West African Ebolavirus, a diarrheal disease'
Myron M. Levine (University of Maryland, Baltimore, Maryland, USA)

10.20-10.40
'Achieving public health impact with vaccines: The role of advocacy'
Deborah Kidd and Richard Walker (PATH, Washington DC, USA)

10.40-11.00
Coffee Break & Posters Set-Up

**SESSION 2: THE DEVELOPMENT OF ETEC VACCINES**

Moderators: Ann-Mari Svennerholm
(University of Gothenburg, Gothenburg, Sweden)

11.00-11.20
'Dose-dependent spectrum of illness and immune response profiles after primary infection and following homologous re-challenge in a low dose enterotoxigenic E. coli (ETEC) challenge model'
Subhra Chakraborty, Clayton Harro, Barbara DeNearing, Malathi Ram, Louis Bourgeois, Nicole Bauers, Jorge Flores, Len Dally, Richard Walker and David Sack
(Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA)

11.20-11.40
'Induction of long term immunological memory by an oral inactivated multivalent ETEC vaccine in Swedish volunteers'
Anna Lundgren and Ann-Mari Svennerholm (University of Gothenburg Vaccine Research Institute, Sahlgrenska Academy, Sweden)

11.40-12.00
'T cell responses to an oral inactivated multivalent ETEC vaccine'
Anna Lundgren, Ana Cárdeno, Joanna Kaim and Ann-Mari Svennerholm
(University of Gothenburg Vaccine Research Institute, Sahlgrenska Academy, Sweden)

12.00-12.20
'DmLT adjuvanted live attenuated enterotoxigenic Escherichia coli (ETEC) vaccine candidate protects against virulent ETEC in a human ETEC challenge model'
Michael Darsely, Clayton Harro, Subhra Chakraborty, David Sack, Barbara DeNearing, Louis Bourgeois, Nicole Bauers, Len Dally, Alan Fix and Richard Walker (Johns Hopkins University, Baltimore, Maryland, USA)

12.20-12.40
'A CFA-toxoid MEFA elicits antibodies protecting against seven CFAs (CFA/I, CS1 – CS6) and two toxins (LT, STa) of enterotoxigenic Escherichia coli (ETEC)'
Xiaosi Ruan, David A. Sack and Weiping Zhang (1 Kansas State University, Manhattan, Kansas, USA; 2 Johns Hopkins University, Baltimore, Maryland, USA)

12.40-13.00
'Detailed LT antibody analysis on ETEC clinical trial samples'
Elizabeth Norton¹, Milton Maciel Jr.¹, Robin Baudier¹, Carli Cunningham¹, Ursula Janikowski¹, Renee Laird², Ramiro Gutierrez³, Stephen Savarino³ and John Clements² (1 Naval Medical Research Center, Silver Spring, Maryland, USA; 2 Tulane University, New Orleans, Louisiana, USA)

13.00-14.00
Lunch Break & Posters

**SESSION 3: VACCINE DEVELOPMENT AGAINST SHIGELLA**

Moderators: Armelle Phalipon (Pasteur Institute, Paris, France) and Malabí M. Venkatesan (WRAIR, Bethesda, Maryland, USA)

14.00-14.20
'Clinical evaluation of the S. flexneri bioconjugate vaccine'
M. Riddle¹, R. Kaminski¹, C. Di Paoloi¹, C. Porter¹, R. Gutierrez², K. Paolino², K. Clarkson¹, C. Duplessis¹, C. Soltis¹, C. Streile², K. Jaep³, A. Castellano³, M. Wacker³ and V. Gambillara³ (1 University of Alabama at Birmingham, Birmingham, Alabama, USA; 2 Walter Reed Army Institute of Research, Silver Spring, Maryland, USA; 3 Glycovaxyn AG, Schlieren, Switzerland)

14.20-14.40
'Development of a simple and transferable bactericidal assay for Shigella flexneri 2a, S. flexneri 3a, and S. sonnei'
Jisheng Lin¹, Mark A. Smith², William H. Benjmín³, Robert W. Kaminski³, Lillian Van De Verg¹, Heather Wenzel¹ and Moon H. Nahm¹ (1 University of Alabama at Birmingham, Birmingham, Alabama, USA; 2 Walter Reed Army Institute of Research, Maryland, USA; 3 PATH, Washington DC, USA)

14.40-15.00
'Safety and immunogenicity of a Shigella sonnei generalized modules for membraneantigens (GMMA) vaccine administered by intramuscular, intranasal, and intradermal route'
Christiane Gerke¹, Laura B. Martin¹, Pierre Loulergue², Odile Launay², David Lewis³, Aldona Greenwood, Dani Cohen⁴, Allan Saul⁵, Audino Podda¹ and the Shigella sonnei clinical trial consortium (1 ScIano Béring Vaccines Institute for Global Health, Siena, Italy; 2 CIC Cochin-Pasteur, Paris, France; 3 University of Surrey, Guildford, Surrey, UK; 4 Tel Aviv University, Tel Aviv, Israel)

15.00-15.20
'A randomized, double-blinded, placebo-controlled, dose-escalation, age-descending study to assess the safety and tolerability of live, attenuated, oral Shigella WRSS1 vaccine candidate in Bangladeshi adults and children'
R. Raqib¹, A. Mily¹, A. Fix², P. Sarkar², N. Bauers², K. Zaman¹, K. Talukder¹, R.W. Kaminski¹, L. Van de Verg² and M.M. Venkatesan³ (1 Centre for Vaccine Sciences, ICDDR,B, Dhaka, Bangladesh; 2 Enteric Vaccine Initiative, Vaccine Development Global Program, PATH, Washington, USA; 3 Walter Reed Army Institute of Research, Maryland, USA)
15.20-15.40
‘Development of a broad-spectrum vaccine against shigellosis’
Jae-Ouk Kim (International Vaccine Institute, Seoul, Korea)

15.40-16.00
‘Agent and host-related factors supporting the global emergence of S. sonnei shigellosis’
Dani Cohen, Shiri Meron-Sudai, Anya Bialik, Sophy Goren, Amit Hochberg, Uri Rubinstein, Ofr怡 Levy, Ravit Bassali and Shai Ashkenazi (Tel Aviv University, Tel Aviv, Israel)

16.00-16.15
Tea Break & Posters

SESSION 4: NOROVIRUS

Moderators: Ben Lopman (CDC, Atlanta, Georgia, USA) and Mark Riddle (NMRC, Silver Spring, Maryland, USA)

16.15-16.35
‘Comprehensive assessment of genetic and immunologic factors in norovirus outbreaks in long-term care facilities’
Jan Vinjé, Veronica P. Costantini, Emily M. Cooper, Hope L. Hardaker, Lore E. Lee, Marielle Bierhoff, Paul R. Cieslak and Aron J. Hall (Centers for Disease Control, Atlanta, Georgia, USA)

16.35-16.55
‘Optimal composition of a norovirus GI-GII VLP vaccine: Strain selection and inclusion of rotavirus VP6 “rods” for adjuvant function’
Timo Vesikari, Maria Malm and Vesna Blazevic (University of Tampere, Tampere, Finland)

16.55-17.15
‘Development of a candidate VLP norovirus vaccine’
Robert Bargatze, Charles Richardson, Paul Mendelman, Frank Baehner, Astrid Borkowski and Robert Goodwin (Takeda Vaccines Inc., Deerfield, Illinois, USA)

17.15-17.30
‘The burden of norovirus diarrhea in Nicaraguan children: Results from a population-based study’
Sylvia Becker-Dreps1, Filemon Bucardo2, Samuel Vilchez2, Luis Enrique Zambrana2, Lan Liu3, Leslie Barclay2, Jan Vinjé4, Michael G. Hudgens1, Lemmart Svensson1, Johan Nordgren1, Margarita Paniagua2 and Félix Espinoza2 (1 University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA; 2 National Autonomous University of Nicaragua (UNAN-León), León, Nicaragua; 3 Center for Epidemiology and Health (CIDS), León, Nicaragua; 4 Harvard School of Public Health, Boston, Massachusetts, USA; 5 Centers for Disease Control and Prevention, Atlanta, Georgia, USA; 6 Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA; 7 Linköping University, Linköping, Sweden)

17.30-17.45
‘Active surveillance for medically-attended acute gastroenteritis and norovirus infection in a US managed care population’
Aron J. Hall1, Allison L. Naleway2, Elizabeth J. Estemberg3, Emilio E. DeBess3, Christianne Biggs4 and Mark A. Schmidt2 (1 Centers for Disease Control and Prevention, Atlanta, Georgia, USA; 2 Kaiser Permanente Northwest, Portland, Oregon, USA; 3 Oregon Health Authority, Portland, Oregon, USA; 4 Oregon Health Authority, Hillsboro, Oregon, USA)

17.45-18.00
‘Modeling norovirus transmission and strategies for vaccination in the United States’
Molly K. Steele, Justin V. Remais, Andreas Handel and Benjamin A. Lopman (Emory University, Atlanta, Georgia, USA; Centers for Diseases Control, Atlanta, Georgia, USA)
SESSION 5: FRONTIERS IN ENTERIC VACCINOLOGY

Moderators: Dani Cohen (Tel Aviv University, Tel Aviv, Israel) and Tom Wierzbia (PATH, Washington DC, USA)

08.30-08.50

‘Clayton Harro Memorial Lecture’

‘Protective efficacy of an enterotoxigenic E. coli fimbrial tip adhesin vaccine given with LTR192G by intradermal vaccination against experiment challenge with CFA/I-ETEC in adult volunteers’
C. Harro1, R. Gutierrez2, M. Riddie3, C. Porter3, M. Maciel4, S. Poole5, R. Laird5 and S. Savarino5 (1 Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA; 2 Naval Medical Research Center, Silver Spring, Maryland, USA)

08.50-09.10

‘Enteric vaccines adjuvants: Overview and mechanism of action of enterotoxin-derived adjuvants’
Jan Holmgren, Maximilian Larena, Michael Lebens, Anna Lundgren and Manuela Terranoni (University of Gothenburg, Gothenburg, Sweden)

09.10-09.30

‘Physiologic and immunologic consequences of exposure to ETEC enterotoxins’
Lisa T. Read, Rachel W. Hahn, Carli C. Thompson, David L. Bauer, Stephanie Longet1, Christopher Davitt1, Edel McNeela1, Vincenzo Aversa3, Nathanael D. Reynolds1, Amritha Ramakrishnan1, Mark P. Simons1, Nelum Dorabawila2, Zuchao Ma3, Alexander Maue1, Renee Laird1, Steven Poole1, Yang Liu2, Milton Maciel Jr.3, Mario A. Montero1, Stephen J. Savarino1 and Patricia Guerry2 (1 Naval Medical Research Center, Silver Spring, Maryland, USA; 2 Infectious Disease Clinical Research Program, Bethesda, Maryland, USA; 3 Johns Hopkins University, Baltimore, Maryland, USA; 4 MD Biologic, LTD, Cambridge, Massachusetts, USA; 5 PATH, Washington, DC, USA; 6 University of Bergen, Bergen, Norway)

09.30-09.50

‘Experimental ETEC infections: Going beyond the ‘running stool log’
Chad K. Porter1, Mark S. Riddle2, Ashley N. Alcala1, David R. Tribble2, David Sack1, Clayton Harro2, Subhra Chakraborty1, Ramiro L. Gutierrez1, Stephen J. Savarino1, Mike Darsley4, Robin McKenzie1, Anne Berit Guttormsen3, Hans Steinsland1 and A. Louis Bourgeois5 (1 Naval Medical Research Center, Silver Spring, Maryland, USA; 2 Infectious Disease Clinical Research Program, Bethesda, Maryland, USA; 3 Johns Hopkins University, Baltimore, Maryland, USA; 4 MD Biologic, LTD, Cambridge, Massachusetts, USA; 5 PATH, Washington, DC, USA; 6 University of Bergen, Bergen, Norway)

09.50-10.10

‘The novel oral vaccine delivery technology SmPill® significantly increases vaccine-specific intestinal antibody responses’
Stephanie Longet1, Christopher Davitt2, Edel McNeela1, Vincenzo Aversa2, Joshua Tobias1, Michael Lebens1, Monica Rosa1, Jan Holmgren1, Ivan Coulter3 and Ed C. Lavelle1 (1 Trinity College Dublin, Dublin, Ireland; 2 University of Gothenburg, Gothenburg, Sweden; 3 Dublin City University, Dublin, Ireland)

10.10-10.30

‘Understanding pathogen behaviour in vivo for the rational design of safer live attenuated bacterial vaccines’
Andrew Grant, Chris Coward, Sarah Peters, Olivier Restif, Richard Dybowski, Olusegun Oshota, Simon Clare, Gordon Dougan, Duncan Maskell and Pietro Mastroianni (Department of Veterinary Medicine, University of Cambridge, United Kingdom/Wellcome Trust Sanger Institute, Hinxton, United Kingdom)

10.30 -10.50

Coffee Break & Posters

SESSION 6: COMBINED VACCINES

Moderators: Richard Walker (PATH, Washington DC, USA) and Melody Mills (NIH/NIAD, Bethesda, Maryland, USA)

10.50-11.10

‘Advances in the development of a combined Shigella-ETEC vaccine’
Eileen Barry, Tao Wu, Christen Grassel and Myron Levine (Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, Maryland, USA)

11.10-11.30

‘ShigETEC®, a live attenuated vaccine inducing serotype independent protection against Shigella and immune response against ETEC toxins’
Shushan Harutyunyan, Michael Aichinger, Petra Krause, Valéria Szijártó, Gabor Nagy, Eszter Nagy and Tamás Henics (EveliQure Biotechnologies GmbH, Vienna, Austria)

11.30-11.50

‘Chromosomal super-recombineering in development of an oral vaccine for simultaneous protection against both enteric fevers and Shigellosis’
Madushini N. Dharmasena1, Manuel Osorio1, Scott Sibitz2 and Dennis J. Kopecko1,3 (1 U.S. FDA-Center for Biologics Evaluation and Research, Silver Spring, Maryland, USA; 2 Protein Potential, LLC, Rockville, Maryland, USA)

11.50-12.00

‘Development of a live attenuated vaccine against typhoid fever and shigellosis’
Yun Wu, Sumana Chakravarty, Mingli Li, Tint Tint Wai, Dennis J. Kopecko, Stephen L. Hoffman and B. Kim Lee Sim (Protein Potential LLC, Rockville, Maryland, USA)

12.00-12.20

‘ETEC-C. jejuni Capsule Conjugate Vaccine Immunogenicity and Protective Efficacy in A. nancymaeae’
Nathanael D. Reynolds1, Amritha Ramakrishnan1, Mark P. Simons1, Nelum Dorabawila2, Zuchao Ma3, Alexander Maue1, Renee Laird1, Steven Poole1, Yang Liu2, Milton Maciel Jr.3, Mario A. Montero1, Stephen J. Savarino1 and Patricia Guerry2 (1 Naval Medical Research Unit 6, Lima, Peru; 2 Naval Medical Research Center, Silver Spring, Maryland, USA; and 3 University of Guelph, Guelph, Ontario, Canada)

12.20-12.40

‘Development of Typhetec®: An oral typhoid-ETEC vaccine’
Rocky Cranenburgh (Prokarium Ltd, Keele Science Park, Keele, Staffordshire UK)

12.40-13.30

Lunch Break & Posters

SESSION 7: NEGLECTED ENTERIC PATHOGENS

Moderators: Beth Kirkpatrick (University of Vermont, Burlington, Vermont, USA)

13.30-13.50

‘Invasive Salmonella infections in Africa and implications for vaccination programs’
Florian Marks et al. (International Vaccine Institute, Seoul, Korea)

13.50-14.10

‘Utility of a Cryptosporidium human challenge model as a platform to guide development of vaccines and therapeutics’
C.E. Lyon, C.D. Huston, M. Carmolli, S.A. Diehl, E.R. Colgate and B.D. Kirkpatrick (University of Vermont, Burlington, Vermont, USA)

14.10-14.20

‘Safety and immunogenicity of a Campylobacter capsule-conjugate vaccine in healthy adult volunteers’
R. Gutierrez7, R Gormley1, M. Riddie1, C. Porter1, K. Paolino2, A. Maue1, R. Laird1, N. Dorabawila1, K. Jaeg1, A. Castellanos2, M. Monterio3 and P. Guerry4 (1 Naval Medical Research Center, Silver Spring, Maryland, USA; 2 Walter Reed Army Institute of Research Clinical Trials Center, Silver Spring, Maryland, USA; 3 University of Guelph, Guelph, Ontario, Canada)
SESSION 8: CHOLERA

Moderators: David A. Sack (Johns Hopkins University, Baltimore, Maryland, USA) and Robert Hall (NIAID/NIH, Bethesda, Maryland, USA)

15.20-15.40
‘Update on the developments of OCV with regard to stockpile, GAVI and use of vaccine in outbreaks’
Dominique Legros (WHO Global Cholera Task Force, Geneva, Switzerland)

15.40-16.00
‘Characterizing the regional distribution and burden of cholera in Africa’
Sean M. Moore, Andrew S. Azman and Justin Lessler (Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA)

16.00-16.20
‘Clinical and environmental surveillance for Vibrio Cholerae in resource constrained areas: Application during a one year surveillance in the far north region of Cameroon’
Amanda K. Debes, Jerome Ateudjieu, Walter Ebile, Malathi Ram, Etienne Guenou and David Sack (Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA)

16.20-16.35
‘Safety and immunogenicity of the killed bivalent (O1 and O139) whole-cell oral cholera vaccine in the Philippines: Results of the first Asian study outside the Indian subcontinent’
Naveena Aloysia1, Yael Thollot2, Maria Rosario Capeding3, Ma. Liza Antoinette Gonzales4, Anvar Rasuli and Mandeep Dhingra1 (1 Naval Medical Research Center, Silver Spring, Maryland, USA; 2 University of Guelph, Guelph, Ontario, Canada)

16.35-16.50
‘Is the use of a single dose of killed whole cell oral cholera vaccine justified in response to outbreaks?’
Andrew S. Azman1,2, Francisco J. Luquero1,4, Iza Ciglenecki5, Rebecca F. Grais2, Andrew S. Azman3, Iza Ciglenecki4, Trina Helderman5, Haley West5, John Rumono5, Stephen Martin5 and Dominique Legros3 (1 World Health Organization, Juba, Republic of South Sudan; 2 Epicentre, Paris, France; 3 Johns Hopkins University, DOVE Project, Baltimore, USA; 4 Médecins Sans Frontières, Geneva, Switzerland; 5 Medecair, Geneva, Switzerland; 6 International Organization for Migration, Juba, Republic of South Sudan; 7 Ministry of Health, Juba, Republic of South Sudan; 8 World Health Organization, Geneva, Switzerland)

17.05-17.20
‘Redevelopment of a single-dose live-attenuated oral cholera vaccine CVD 103-HgR’
Jakub K. Simon1, Wilbur H. Chen2, Mitchell B. Cohen3, Beth D. Kirkpatrick4, Caroline E. Lyon1, Robert H. Hall5, Michael Lock1, Myron M. Levine2 and Marc Gurwitz1 (1 PaxVax, Inc., Redwood City, California, USA; 2 University of Maryland School of Medicine, Baltimore, Maryland, USA; 3 Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA; 4 University of Vermont College of Medicine, Burlington, Vermont, USA; 5 National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, USA)

17.20-17.35
‘Development of a ‘2nd generation’ vaccine for epidemic response and endemic country use’
Marc Gurwitz1, Jakub K. Simon1, Wilbur H. Chen2, Mitchell B. Cohen3, Beth D. Kirkpatrick4, Caroline E. Lyon1, Robert H. Hall5, Michael Lock1 and Myron M. Levine2 (1 PaxVax, Inc., Redwood City, California, USA; 2 University of Maryland School of Medicine, Baltimore, Maryland, USA; 3 Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA; 4 University of Vermont College of Medicine, Burlington, Vermont, USA; 5 National Institute of Allergy and Infectious Diseases, Bethesda, Maryland, USA)

17.35-17.50
‘Validity of the estimates of cholera vaccine protective effectiveness derived from the test-negative design’
Mohammad Ali, Young Ae You, Dipika Sur, Suman Kanungo, Deok Ryun Kim, Jacqueline L. Deen, Lorenz von Seidlein, Thomas F. Wierzba, Sujit K. Bhattacharya and John D. Clemens (Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA)

17.50-18.05
‘AfriChol, the African Cholera Surveillance Network understanding the distribution of cholera burden in Africa and its usefulness for determining vaccine impact’
Martin Mengel (Agence de Medecine Preventive, AMP, Paris, France)

18.05-18.25
‘Update of recent studies on oral cholera vaccine in Bangladesh and prospects for the future’
Firdausi Qadri and John Clemens et al. (ICDDR, Dhaka, Bangladesh)

Free Evening for VED 2015 Delegates

VIEW FUTURE EVENTS AT WWW.MEETINGSMANAGEMENT.COM
SESSION 9: ROTAVIRUS VACCINES

Moderators: Umesh Parashar (CDC, Atlanta, Georgia, USA)

09.00-09.20
‘Rotavirus vaccine effectiveness in Zambia: Preliminary results from Lusaka Province’
Laura Beres, Lungowe Njobvu, Bertha Chibwe, Annika Kruuner, Cheryl Rudd, M. Brad Guffey, Jacqueline Tate, Umesh Parashar, Jeffrey Stringer and Roma Chilengi
(Centre for Infectious Disease Research in Zambia, Lusaka, Zambia)

09.20-09.40
‘A Phase I/II descending age, double-blinded, randomized, placebo-controlled dose escalation study to examine the safety, tolerability and immunogenicity of the P2-VP8 subunit parenteral rotavirus vaccine in healthy South African toddlers and infants’
(1 Medical Research Council: University of the Witwatersrand, Johannesburg, South Africa; 2 Vaccine Preventable Diseases, University of the Witwatersrand, Johannesburg, South Africa; 3 Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA; 4 National Institute for Communicable Diseases, Sandringham, South Africa; 5 PATH, Washington, DC, USA)

09.40-10.00
‘The “Performance of Oral Vaccines in Developing Countries (PROVIDE)” study: Insights into oral rotavirus vaccine underperformance’
(University of Vermont, Burlington, Vermont, USA)

10.00-10.20
‘Modeling the potential for vaccine-driven strain replacement following rotavirus vaccination in Bangladesh’
Virginia E. Pitzi, Joke Blickeii, Elisabeth Heylendii, Mark Zellier, Forrest W. Crawford and Jelle Matthijnssenii
(1 Yale School of Public Health, New Haven, Connecticut, USA; 2 University of Antwerp, Antwerp, Belgium; 3 University of Leuven, Leuven, Belgium)

10.20-10.50
Coffee Break & Posters

SESSION 10: REGULATORY AND PUBLIC HEALTH CONSIDERATIONS IN ENTERIC VACCINES

Moderators: Duncan Steele
(Bill & Melinda Gates Foundation, Seattle, Washington, USA)

11.00-11.10
‘Regulatory aspects of enteric vaccine development: A US FDA perspective’
Jon Daugherty (CBER/FDA, Silver Spring, Maryland, USA)

11.10-11.30
‘Environmental enteropathy, malnutrition and oral polio vaccine response’
Caitlin Naylor, Jennie Ma, Miao Lu, Mimi Taniuchi, Eric Houp, Uma Nayak, Joe Mychaleckyj, Ross Colgati, Marya Carmolli, Masud Alam, Rashidul Haque, Beth Kirkpatrick and William A. Petri, Jr., for the PROVIDE Study
(University of Virginia, Charlottesville, Virginia, USA; University of Vermont, Burlington Vermont, USA; ICDORB, Dhaka, Bangladesh)

11.30-11.50
‘Typhoid vaccination in the US military’
Chad K. Porter, Tia Sorrel, Indrani Mitra and Mark S. Riddle
(Naval Medical Research Center, Silver Spring, Maryland, USA)

11.55-12.10
‘Co-administration of oral polio vaccines interferes with Rotarix immunogenicity in rural Bangladesh’
D. Emperori, D. Velasquezii, C. Estivarizi, B. Lopmani, B. Jiangii, U. Parashar, A. Anandi and K. Zamanii (1 Division of Viral Diseases and 2 Global Immunization Division, Centers for Diseases Control and Prevention, Atlanta, Georgia, USA; 3 International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh)

12.10-12.30
‘Typhoid fever protein capsular matrix vaccine: Pathway to phase 1 clinical trial’
Kevin Killeen (Matrivax Inc., Boston, Massachusetts, USA)

12.30-13.30
Lunch Break & Posters

SESSION 11: LATEBREAKERS SESSION

Moderators: Florian Marks (International Vaccine Institute, Seoul, Korea) and John Clemens (International Centre for Diarrhoea Disease Research, Dhaka, Bangladesh)

13.30-13.50
‘Causes of prior inconsistency of protective efficacy and rationale for renewed clinical evaluation of Salmonella Typhi Ty21a expressing Shigella sonnei form 1 O-antigen’
Dennis J. Kopeckoi, Stanley Cryzii, Anu Kanteleiii, Kim Lee Simi and Stephen L. Hoffmani (1 Protein Potential LLC, Rockville, Maryland, USA, 2 PATH, Washington DC, USA, 3 Helsinki Hospital, Helsinki, Finland)

13.50-14.10
‘Prevention of shigellosis during infancy through maternal immunity and vaccination early life’
Shannon J. Heine, Olga L. Franco-Mahecha, Eileen M. Barry and Marcela F. Fasetti
(University of Maryland School of Medicine, Baltimore, Maryland, USA)

14.10-14.30
‘Combinatorial effects of secretory IgA on Vibrio cholerae virulence and fitness in the intestinal lumen’
Kara J. Levinson, Magdia De Jesus, Samantha Giffen, Danielle Hindes and Nicholas J. Mantis (Wadsworth Center, New York State Department of Health, Albany, New York, USA / University at Albany, Albany, New York)

14.30-14.50
‘Low cost optimized oral cholera vaccine’
Davinder Gill, Zimra Israel, Stefan Karlsson, Michael Lebens and Jan Holmgren
(Hilleman Laboratories Private Ltd., New Delhi, India/University of Gothenburg, Gothenburg, Sweden)

14.50
Tea Break & Departure

* This final programme is correct at the time of printing. However the organizers reserve the right to make any alterations that may be required in the interests and integrity of the final conference programme.
Poster 101
‘Serum bactericidal assay for the evaluation of typhoid vaccine using a semi-automated colony-counting method’
Jae Seung Yang et al.
(International Vaccine Institute, Seoul, Republic of Korea)

Poster 102
‘Serum anti-rotavirus IgA as a measure of rotavirus exposure in unvaccinated infants from Malawi’
Aisleen Bennett et al.
(Malawi-Liverpool-Wellcome Trust, Blantyre, Malawi)

Poster 103
‘Cross-reactivity of antibody responses to colonization factors after immunization with a multivalent enterotoxigenic Escherichia coli (ETEC) vaccine’
Susannah Leach et al.
(University of Gothenburg, Gothenburg, Sweden)

Poster 104
‘Development of a serum bactericidal assay to determine functional antibody response following vaccination against Campylobacter jejuni’
Joanna E. Rimmer et al.
(NMRC, Silver Spring, Maryland, USA)

Poster 105
‘Plasmablast responses induced by oral enterotoxigenic Escherichia coli (ETEC) vaccination’
Ana Cardeno and Anna Lundgren
(University of Gothenburg, Gothenburg, Sweden)

Poster 106
‘Functional capacity of anti-Salmonella flagellin antibodies’
Sharon M. Tennant et al.
(University of Maryland School of Medicine, Baltimore, Maryland, USA)

Poster 107
‘Reactogenicity of Salmonella Newport flagellin prevents its use as a carrier protein in a Salmonella Group C conjugate vaccine’
Fabien J. Fuche et al.
(University of Maryland School of Medicine, Baltimore, Maryland, USA)

Poster 108
‘Nutrition and diarrhoea in children under age five in Tanzania: Evidence from the DHS’
Melinda Judge et al.
(University of Western Australia, Perth, Australia)

Poster 109
‘Down regulation of the gut inflammation in shigellosis with polypropyletherimine dendrimer glucosamine (PETIM-DG), a non-antibiotic based drug’
Dilara Islam et al.
(AFRRMS, Bangkok, Thailand)

Poster 110
‘Oral vaccination with live-attenuated Salmonella (Ty21a) generates polyfunctional vaccine and heterologous cellular immune responses at the human intestinal mucosa’
Melita A. Gordon et al.
(University of Liverpool, Liverpool, UK)

Poster 111
‘Increased severity in patients presenting to hospital with diarrhea in Dhaka, Bangladesh’
Fahima Chowdhury et al.
(ICDDR, Dhaka, Bangladesh)

Poster 112
‘Development of a nested Real-Time multiplex PCR for the typing of enteric pathogens: Application to Campylobacter jejuni capsule typing’
Frederic Poly et al.
(NMRC, Silver Spring, Maryland, USA)

Poster 113
‘The household economic burden of rotavirus hospitalization among children <5 years of age in selected hospitals in Bangladesh’
Jahangir A.M. Khan et al.
(ICDDR, Dhaka, Bangladesh)

Poster 114
‘Hospital-based surveillance for severe rotavirus gastroenteritis among young children in Bangladesh: Defining the potential impact of a rotavirus vaccine program’
Syed M Satter et al.
(ICDDR, Dhaka, Bangladesh)

Poster 115
‘Clinical features and molecular epidemiology of pediatric norovirus infections in Lusaka Province, Zambia’
Innocent Mwape et al.
(CIDRZ, Lusaka, Zambia)

Poster 116
‘Cholera and pregnancy’
Iza Ciglenecki et al.
(Medecins Sans Frontieres, Geneva, Switzerland)

Poster 117
‘Association of maternal immunity to rotavirus vaccine immunogenicity in Zambian infants’
Roma Chilengi et al.
(CIDRZ, Lusaka, Zambia)

Poster 118
‘Seasonal variations in anti-rotavirus serum IgA antibody titre in Zambian infants’
Michelo Simuyandi et al.
(CIDRZ, Lusaka, Zambia)

Poster 119
‘Development and preclinical evaluation of tmLT, a 3rd generation heat-labile toxin derived vaccine adjuvant’
Jacob P. Bitoun et al.
(Tulane University School of Medicine, New Orleans, Louisiana, USA)

Poster 120
‘Prevalence and genetic diversity of sapoviruses in children hospitalised with gastroenteritis in South Africa’
Tanya Y. Murray et al.
(University of Pretoria, Pretoria, South Africa)

Poster 121
‘Host genetic susceptibility to enteric viruses: A systematic review and meta-analysis’
Anita Kambhampati et al.
(Centers for Disease Control and Prevention, Atlanta, Georgia, USA)

Poster 122
‘Inhibitory effect of pre-existing rotavirus serum IgG and IgA to live oral rotavirus vaccine in South African infants’
Sung-Sil Moon et al.
(Centers for Disease Control and Prevention, Atlanta, Georgia, USA)

Poster 123
‘Global age distribution of pediatric norovirus cases’
Kayoko Shioda et al.
(Centers for Disease Control and Prevention, Atlanta, Georgia, USA)
Poster 124
‘Cost-effectiveness of monovalent rotavirus vaccination in Malawi: A ground-up costed cohort study’
Naor Bar-Zeev et al.
(Malawi-Liverpool-Wellcome Trust, Blantyre, Malawi)

Poster 125
‘Adjusting for age and time-dependent fluctuations in rotavirus testing when assessing the effect of rotavirus immunization in children <5 years of age’
Khitam Muhsen et al.
(Tel Aviv University, Tel Aviv, Israel)

Poster 126
‘Invasive non-typhoidal Salmonella infection and P. falciparum malaria: Epidemiology in sub-Saharan Africa’
Se Eun Park et al.
(International Vaccine Institute, Seoul, Republic of Korea)

Poster 127
‘Incidence of norovirus-associated medical encounters among active duty United States military personnel and their dependent beneficiaries’
Brian Rha et al.
(Centers for Disease Control and Prevention, Atlanta, Georgia, USA)

Poster 128
‘Variations of invasive Salmonella infections by population size in Asante Akim North Municipal, Ghana’
Ligia Maria Cruz Espinoza et al.
(International Vaccine Institute, Seoul, Republic of Korea)

Poster 129
‘Immunomodulation by Shigella outer membrane vesicles: A comparative study between SOMVs and MOMVs’
Hemanta Koley et al.
(National Institute of Cholera and Enteric Diseases, Kolkata, India)

Poster 130
‘Functional antibodies against Shigella and their association with protection against disease in humans’
Avital A. Shimanovich et al.
(University of Maryland, Baltimore, Maryland, USA)

Poster 131
‘Preventing cholera introduction using oral vaccines’
Joseph A. Lewnard et al.
(Yale School of Public Health, New Haven, Connecticut, USA)

Poster 132
‘Dietary rice bran protects against viral gastroenteritis through preserving intestine homeostasis and promoting growth of diarrhea-reducing probiotic bacteria in gnotobiotic pigs’
Lijuan Yuan et al.
(VPI & State University, Blacksburg, Virginia, USA)

Poster 133
‘Carriers of invasive salmonellosis – results from two TSAP sites: Senegal and Guinea Bissau’
Justin Im et al.
(International Vaccine Institute, Seoul, Republic of Korea)

Poster 134
‘Comparative study and efficacy of a live Salmonella Gallinarum vaccine candidate secreting and adjuvant protein with SG9R in chickens’
John Hwa Lee
(Chonbuk National University, Jeonju, Republic of Korea)

Poster 135
‘A safe Salmonella Gallinarum vaccine candidate that secretes an adjuvant protein with immunogenicity and protective efficacy against fowl typhoid’
John Hwa Lee
(Chonbuk National University, Jeonju, Republic of Korea)

Poster 136
‘Travellers’ diarrhoea epidemiology and field site development at the British Army Training Unit in Kenya: A focus on ETEC’
Patrick Connor et al.
(Royal Centre for Defence Medicine, Birmingham, UK)

Poster 137
‘IDCRP TRAVMIL: Traveller’s diarrhea and other infectious disease risk assessment, outcomes, and prevention strategies among U.S. Department of Defense beneficiaries’
David Tribble et al.
(Uniformed Services University of Health Sciences, Bethesda, Maryland, USA)

Poster 138
‘Molecular re-analysis of community burdens of diarrhea in children in developing countries in the multisite MAL-ED cohort study’
James A. Platts-Mills et al.
(University of Virginia, Charlottesville, Virginia, USA)

Poster 139
‘Cost-effectiveness of traveller’s diarrhea vaccination’
Richard Rheingans et al.
(University of Florida, Gainesville, Florida, USA)

Poster 140
‘Engineering of a live-attenuated Salmonella enterica serovar Paratyphi B vaccine’
Ellen E. Higginson et al.
(Universtiy of Maryland School of Medicine, Baltimore, Maryland, USA)

Poster 141
‘Combined enterotoxigenic Escherichia coli (ETEC) – Campylobacter jejuni conjugate vaccines: A platform for multivalent vaccines against enteric pathogens’
Nelum Dorabawila et al.
(NMRC, Silver Spring, Maryland, USA)

Poster 142
‘Impact of co-infections on rotavirus vaccine efficacy in a clinical trial of rotavirus vaccination (PROVIDE)’
Eric Houpt et al.
(University of Virginia, Charlottesville, Virginia, USA)

Poster 143
‘Development of safe and non-self immunogenic mucosal adjuvant by recombinant fusion of cholera toxin A1 subunit with protein transduction domain’
Man Ki Song et al.
(International Vaccine Institute, Seoul, Republic of Korea)

Poster 144
‘Mapping rotavirus vaccine immunologic correlates of protection to clinical outcomes’
Ross Colgate et al.
(University of Vermont, Burlington, Vermont, USA)