

6th INTERNATIONAL NEONATAL & MATERNAL IMMUNIZATION SYMPOSIUM

Fostering Scientific Collaboration Across Nations

March 12-14, 2024 - San Jose (Costa Rica)

AGENDA

PRE-MEETING ACTIVITIES Monday, March 11, 2024

9:00 AM - 5:00 PM Onsite Registration

9:00 AM – 10:00 AM INMIS Administrative Meeting (Organizing and Scientific Committees)

10:30 AM – 4:00 PM Research Master Class – ESPID - SLIPE (By Invitation Only) Chairs: Paul Heath, Rolando Ulloa-Gutierrez, Flor Munoz

4:00 PM – 5:00 PM Welcome Coffee and Tasting Experience

5:00 PM – 7:00 PM Latin American Symposium Identifying gaps and opportunities for maternal and neonatal immunization in Latin America Chairs: Flor Muñoz, Rolando Ulloa-Gutiérrez, María Luisa Ávila-Agüero

This is an open scientific symposium. Everyone who is attending INMIS is invited to join. *Please confirm your participation*. <u>CLICK HERE</u>

Symposium Learning Objectives:

- 1. Discuss the current status of maternal and neonatal immunization in Latin America.
- 2. Identify gaps and opportunities for research and implementation of vaccines in pregnancy and early childhood.
- 3. Action items and prioritization.

Speakers

Mercedes Colomar, CLAP/PAHO Edwin Asturias, University of Colorado, USA Xavier Sáez-Llorens, Hospital del Niño, Panama

Panel Discussion

Angela Gentile, R. Gutiérrez Children's Hospital, Argentina Jezid Miranda, University of Cartagena, Colombia Marco Sáfadi, Santa Casa de São Paulo Medical School, Brazil Juan Pablo Torres, University of Chile, Chile

INMIS MEETING Day 1 - Tuesday, March 12, 2024

7:00 AM to 5:00 PM Onsite Registration

8:00 AM - 8:30 AM Welcome and Opening Address Chairs: Rolando Ulloa-Gutiérrez and María Luisa Ávila-Agüero

Opening Address

Laura Chinchilla, Political Scientist and former President of Costa Rica

8:30 AM - 9:00 AM Opening Keynote

Rebecca Martin, Emory Global Health Institute, Emory University, USA Maternal and Neonatal Health and Disease Prevention via Immunization Post-Pandemic: Where do we stand?

Session Learning Objectives:

- 1. Describe the role of maternal and neonatal immunization in a healthy life trajectory for the first 1000 days taking into consideration impact of the COVID-19 pandemic on 2030 SDG; zero dose concept, acceptance
- 2. Understand the challenges of coordinated and sustainable global implementation of maternal and neonatal immunization programs

SESSION 1 9:00 AM - 10:00 AM

Priorities for the Maternal and Neonatal Immunization Research Agenda Chairs: Manish Sadarangani and Kristen Maertens

Session Learning Objectives:

- 1. Highlight the current state of maternal and neonatal immunization research, including future challenges and opportunities.
- 2. Understand research gaps within maternal and neonatal immunization, emphasizing opportunities for advancing knowledge for existing and emerging vaccines.
- 3. Discuss research priorities to ensure pandemic readiness regarding new maternal and neonatal vaccines for diseases that can be potentially responsible for outbreaks in pregnant women and neonates.

Jan Englund, University of Washington, USA Current Status of Maternal and Neonatal Immunization Research, Learnings and Research Priorities

Marco A. Sáfadi, Santa Casa de São Paulo Medical School, Brazil Emerging Epidemic and Pandemic Diseases that Impact Pregnancy and the Newborn

> 10:00 AM - 10:30 AM Coffee-break

10:30 AM – 11:30 AM Session 1 Oral Abstract Presentations

10:30 AM -10:45 AM

J. Ballivian. Instituto de Efectividad Clínica y Sanitaria (IECS), Buenos Aires, Argentina. Data Visualization Tool to Assess the Effectiveness and Safety of COVID-19 Vaccines During Pregnancy: A Living Systematic Review and Meta-Analysis

10:45 AM -11:00 AM

N. Bhat. PATH, Seattle, USA Vaccination in Pregnancy with High- and Low-Dose Recombinant Pertussis Vaccines is Associated with Sustained Protection in DTwP Vaccinated Infants

11:00 AM -11:15 AM

A. Ciapponi. Instituto de Efectividad Clínica y Sanitaria (IECS), Buenos Aires, Argentina. The Burden of RSV Disease In Latin America: A Systematic Review And Meta-Analysis

11:15 AM - 11:30 AM

B. Kampmann. Vaccines and Immunity Team, Medical Research Council Unit (MRC), The Gambia, and London School of Hygiene and Tropical Medicine Safety and Immunogenicity of Bivalent Prefusion Vaccine Administered During Pregnancy to Prevent Infant RSV

SESSION 2

11:30 AM – 12:30 PM

Progress in Maternal-Infant Infectious Disease Prevention through Maternal Immunization Chairs: Flor Muñoz and Rolando Ulloa-Gutierrez

Session Learning Objectives:

- 1. Update on the current knowledge of antibody kinetics after maternal immunization for infant protection, optimal timing of vaccination during pregnancy, and implications on maternal and infant immunization schedules
- 2. Discuss the potential of infant protection through breastmilk after maternal vaccination and progress in research.
- 3. Learn about unique aspects and novel methods of safety assessment of vaccines in pregnancy, focusing on clinical trials and post-authorization surveillance systems

Kirsten Maertens, University of Antwerp, Belgium

Maternal Vaccine and Vaccination Research: Challenges, Strategies and Success Stories

Marcela Pasetti, University of Maryland, USA Protection of Infants through Breastmilk

12:30 PM – 1:30 PM Lunch & Networking

SESSION 2 – Cont. 1:30 PM – 2:00 PM Progress in Maternal-Infant Infectious Disease Prevention through Maternal Immunization Chairs: Flor Muñoz and Ener Dinlevici

Expert Round Table Novel Safety Surveillance of Vaccines in Pregnancy Post-Licensure/Authorization Andy Stergachis, University of Washington, Seattle, USA

2:00 PM – 3:00 PM Session 2 Oral Abstract Presentations

2:00 PM - 2:15 PM

A.L. Naleway. Kaiser Permanente Center for Health Research, Portland, OR, USA Monitoring Vaccination during Pregnancy in the Vaccine Safety Datalink, 2002-2023

2:15 PM - 2:30 PM

D. B. Fell. School of Epidemiology and Public Health, Faculty of Medicine, University of Ottawa and Children's Hospital of Eastern Ontario Research Institute, ON, Canada, *Pandemic A/H1N1 Influenza Vaccination during Pregnancy and Offspring Autoimmune Diseases*

2:30 PM - 2:45 PM

N.P. Klein. Kaiser Permanente Vaccine Study Center, USA Safety of Quadrivalent Recombinant Influenza Vaccine in Pregnant Women and Their Infants

2:45 PM - 3:00 PM

L. De Weerdt. Centre for the Evaluation of Vaccination, University of Antwerp, Belgium. *Tdap Vaccination In Successive Pregnancies: Impact On Immunogenicity at Delivery*

3:00 PM – 3:30 PM Coffee-break

Panel and Audience Interactive Discussion 3:30 PM - 4:30 PM Neonatal and Maternal Immunization – Learnings Informing the Research Agenda/Lessons Learned -Identifying Research Gaps and Priorities Chairs: Linda Eckert and Manish Sadarangani

Panelists

Clare Cutland, University of the Witwatersrand, South Africa Kirsty Le Doare, University of London, UK Marcela Pasetti, University of Maryland, USA Deshayne Fell, Pfizer Lucía Bricks, Sanofi Alisa Kachikis, Washington University, USA

Moderated E-Poster Presentations 4:30 PM - 6:00 PM

Access Abstract Book for full details. Click here.

6:00 PM Opening reception Networking and Cultural Event

INMIS MEETING Day 2: Wednesday, March 13, 2024

7:00 AM – 8:00 AM Administrative Meeting of the CEPI-SPEAC MIWG (by invitation only)

SESSION 3 8:00 AM – 10:00 AM Advances in Immunology Chairs: Arnaud Marchant and Michelle Giles

Session Learning Objectives:

1. To present and discuss the most recent advances and novel research in immunology in pregnancy and early life.

Arnaud Marchant, Université Libre de Bruxelles, Belgium Humoral immune profiling for timing of primary CMV infection during pregnancy and prediction of congenital infection

Joann Diray-Arce, Boston Children's Hospital, USA Systems Immunology Analysis of Neonatal Vaccine Responses

Session 3 Oral Abstract Presentations

8:45 AM - 9:00 AM

A. Saso. Vaccines and Immunity Theme, MRC Unit, The Gambia, Fajara, The Gambia. Does Maternal Pertussis Immunization During Pregnancy Impact Infant Antibody Responses to Subsequent Routine Pertussis Vaccines?

9:00 AM - 9:15 AM

L. Wood. Ragon Institute of Mass General, MIT and Harvard; Boston Children's Hospital, Boston, USA Increased Inhibitory Fcyriib Interaction in Pertussis Antigen Binding Antibodies During Pregnancy

9:15 AM - 9:30 AM

J. Diray-Arce. Precision Vaccines Program, Boston Children's Hospital, Harvard Medical School, Boston, USA Bacille Calmette Guérin (BCG) And Hepatitis B Vaccine (HBV) Induce Distinct Changes in the Neonatal Plasma Metabolome

9:30 AM - 9:45 AM

M. Akkoyunlu. US FDA, USA Mechanisms of IL-6 Mediated Suppression of Germinal Center Responses to Vaccines in Neonatal Mice

9:45 AM - 10:00 AM

Jessica A. Fleming, PATH On the verge of respiratory syncytial virus disease prevention: A communications toolkit

> 10:00 AM – 10:30 AM Coffee-break

SESSION 4 10:30 AM - 12:30 PM

Advances in Vaccine Development and Delivery Chairs: Beth Holder and Paul Heath

Session Learning Objectives:

- 1. Recognize the challenges and limitations in the rational design of vaccine antigens.
- 2. Appreciate the principles of precision vaccinology i.e., taking the target population's distinct immune system into account during vaccine discovery and development.
- 3. Understand the significance of adjuvants in enhancing vaccine immunogenicity, durability and protection.

Fadil Bidmos, Imperial College, London, UK

Advanced High-Throughput Strategies for Bacterial Vaccine Development

Ofer Levy, Precision Vaccines Program, Boston Children's Hospital & Harvard Medical School, Boston, USA

Precision Adjuvants to Optimize Neonatal Immunization

Session 4 Oral Abstract Presentations

11:15 AM - 11:30 AM

S. Sharma. European Plotkin Institute for Vaccinology, Universite Libre de Bruxelles, Brussels, Belgium Antibody Response to Primary Cytomegalovirus Infection during Pregnancy

11:30 AM - 11:45 AM

P. Dubey. Ohio State University, Columbus, Ohio, USA Immune Responses of Pregnant Women to Tdap Booster Vaccination are Blunted and Maintain Phenotypes Elicited by Infant Immunization

11:45 AM - 12:00 PM

L. de Brabandere. Centre for the Evaluation of Vaccination, Vaccine and Infectious Diseases Institute, University of Antwerp, Belgium.

Cell-Mediated Immune Responses to Different COVID-19 Vaccine Platforms In Pregnancy

12:00 PM - 12:15 PM

H. Senyondo. Kawenpe National Referral Hospital, Uganda. Maternal Antibody in Milk after Group B Streptococcus Vaccination In Uganda: MAMA Study.

12:15 PM - 12:30 PM

A. Hawkins. Department of Metabolism, Digestion, and Reproduction, Imperial College, London, UK *Development of Trans-Placental Antibody Transfer Models*

12:30 PM – 1:30 PM Lunch & Networking

SESSION 4 – Cont.

Panel Debates and Audience Interactive Discussion 1:30 PM - 2:30 PM Advances in Immunology Chairs: Beth Holder and Arnaud Marchant

Panelists

Marco Safadi, Santa Casa de São Paulo Medical School, Brazil Michelle Giles, Monash University, Australia Fiona Culley, Imperial College London, UK Beate Kampmann, Charite's Institute of International Health, Germany, and London School of Hygiene and Tropical Medicine, UK Manish Sadarangani, University of British Colombia, Canada Edwin Asturias, University of Colorado, USA

Debate 1: 'Vaccine Responses are Substantially Different in Pregnancy' Debate 2: 'Studying Trans-Placental Maternal Antibody Transfer Efficiency is not Mecessary; The Only Thing that Matters is Cord Blood Antibody Levels.'

Debate 3: 'The Observed Modulation of Infant Vaccine Responses by Maternal Antibody has Limited Clinical Implications'

Oral Abstract Presentations (Miscellaneous) 2:30 PM – 3:30 PM

Chairs: Rolando Ulloa-Gutiérrez and Clare Cutland

2:30 PM - 2:45 PM

E.J Asturias. University of Colorado School of Medicine, Denver, CO, USA Transplacental Transfer of Naturally Acquired RSV Maternal Antibodies in Preterm and Full-Term Infants from Guatemala

2:45 PM - 3:00 PM

E. Castillo. University of Calgary, Canada An Innovative, Co-Designed, Skill-Building Intervention for Healthcare Providers and Patients to Improve Vaccine Communication in Pregnancy in Canada

3:00 PM – 3:15 PM

P.T. Johm. Medical Research Council Unit, The Gambia, and the London School of Hygiene and Tropical Medicine *Vaccinator and Infant Caregiver Preference and Acceptance of an Alternative versus Standard Pneumococcal Conjugate Vaccine Schedule in The Gambia*

3:15 PM - 3:30 PM

C.A. Iwu. IMO State University, Nigeria Gender Dynamics and Vaccine Hesitancy in Resource-Poor Rural Settings: Exploring the Role of Fathers in Infant Immunization.

> 3:30 PM - 4:00 PM Coffee Break & Networking

Moderated E-Poster Presentations 4:00 PM – 5:30 PM Access Abstract Book for full details. <u>Click here.</u>

5:30 PM Meeting Adjourns

6:30 PM Faculty and INMIS Scientific Committee Dinner (By invitation only

INMIS MEETING Day 3: Thursday, March 14, 2024

SESSION 5 8:00 AM – 9:30 AM Implementing Maternal Vaccines Globally Chairs: Paul Heath and Clare Cutland

Session Learning Objectives:

- 1. Learn about new vaccines being considered for LMICs and how they can be successfully implemented
- 2. Learn about the status of GBS vaccines for pregnant women and the steps required for vaccine licensure based on serocorrelates of protection
- 3. Understand the ethical aspects of vaccine research in pregnant women
- 4. Understand the ethical barriers in implementing vaccines in pregnant women globally and potential strategies for overcoming them

Anna Seale, Bill and Melinda Gates Foundation How Can We Accelerate Maternal Vaccination as an Essential Part of Antenatal Care Globally?

Kirsty Le Doare, University of London, UK Pathway to a Group B Streptococcal vaccine

Anna Mastroianni, Johns Hopkins Berman Institute of Bioethics, Baltimore, USA Policy Perspective on Maternal Immunization Research

Session 5 Oral Abstract Presentations

9:30 AM – 9:45 AM

S.E. Roquer. Universidad Nacional de San Luis, Argentina. Nominal Vaccination Registry As a Tool to Improve Vaccination Coverage in Pregnant Women and Neonates. San Luis. Argentina. 2023

9:45 AM - 10:00 AM

R. Baral. PATH, Unites States Maternal Immunization Country Readiness Using a Checklist Approach

10:00 AM - 10:15 AM

A. Regan. School of Nursing and Health Professions, University of San Francisco, CA, USA and Fielding School of Public Health, University of California, LA, USA *Interventions to Increase Vaccine Uptake during Pregnancy: A Living Global Systematic Review & Meta-Analysis of Randomized Trials*

10:15 AM - 10:30 AM

S. Schrag. Division of Bacterial Diseases, Centers for Disease Control and Prevention, USA U.S. Plans for Maternal Group B Streptococcal Vaccine: Pre- and Post-Licensure Activities Built upon the Active Bacterial Core Surveillance (ABCS)



Panel and audience interactive discussion 10:45 AM - 11:45 AM The Future of Maternal Immunization: Leveraging Progress and Closing Gaps Chairs: Paul Heath and Flor Muñoz

Panelists:

Lisa Noguchi, Jhpiego, USA Katherine Fleming-Dutra, CDC, USA Anna Seale, Bill & Melinda Gates Foundation, USA Niranjan Bhat, PATH, USA Angela Gentile, NITAG, Argentina Alejandra Gurtman, Pfizer

Closing Keynote

11:45 AM - 12:15 PM

Beate Kampmann, Charite's Institute of International Health, Germany, and London School of Hygiene and Tropical Medicine, UK

Maternal Immunization: Fostering Scientific Collaboration Across Nations

Closing Remarks and Adjournment 12:15 PM – 12:30 PM

INMIS 2026 Announcement

INMIS 2026 Chairs Welcome and Preview

12:30 PM Lunch-box

IMPRINT (Immunising Pregnant Women & Infants Network) Full Network Meeting 1:30 PM – 6:00 PM

The <u>IMPRINT network</u> has joined forces with INMIS to offer additional sessions for the many IMPRINT members who already attend INMIS, where our members can present additional projects and activities. We would expect IMPRINT members at INMIS to make use of this opportunity.

This is a free and open scientific meeting from 1:30 PM to 5:00 PM, followed by a Happy Hour for further networking from 5:00 PM to 6:00 PM.

In addition to our IMPRINT members, anyone who still has energy for more science and networking is cordially invited to join the IMPRINT at INMIS session.

If you think you will be participating in IMPRINT @ INMIS, please register by clicking HERE.

SESSION 1 1:30 PM – 3:30 PM New and Existing Vaccine Clinical Trials: Lessons Learned and Implementation in Practice Chairs: Manish Sadarangani and Chrissie Jones

1:30 PM - 1:35 PM

Welcome and Introduction Beate Kampmann, Charité – Universitätsmedizin, Germany and Claudia Schacht, LINQ management GmbH, Germany

1:35 PM – 1:55 PM Eve Nakabembe, Makerere University, Uganda *The Uganda Pertussis Vaccine Study*

1:55 PM – 2:15 PM

Anja Saso, London School of Hygiene & Tropical Medicine, UK Further in Depth Immunology Results from the Gambian Pertussis Vaccine Trial

2:15 PM – 2:30 PM

Chrissie Jones, University of Southampton, UK Acceptability of RSV Vaccination in Pregnancy and Infant Monoclonal Immunisation in UK

2:30 PM – 2:40 PM

Caitlin Pley, Charité – Universitätsmedizin, Germany Access to Respiratory Syncytial Virus (RSV) Preventive Tools for Neonates and Infants in Europe

2:40 PM – 3:00 PM

Karen Tiley, University of Oxford, UK Maternal Measles Seroprevalence and Transplacental Transfer

3:00 PM – 3:15 PM Discussion

3:15 PM – 3:30 PM Coffee-break

3:30 PM – 5:00 PM Session 2 Challenges and Implementation of Pregnancy Registries Chair: Beate Kampmann

3:30 – 3:45 PM Jessica Fleming, PATH *Available when Needed? Piloting Testing a WHO Protocol on Timing of ANC Attendance for Maternal Immunization*

3:45 PM - 4:00 PM

Janča Prauseová, Shifo Foundation, Sweeden Implementing a Pregnancy Registry in The Gambia Using Smart Paper Technology

4:00 PM – 4:15 PM

Robert Mboizi, Makerere University, Uganda [tbc] *Pregnancy Registries in Uganda*

4:15 PM – 4:30 PM Flor Muñoz, Baylor College of Medicine, USA Safety Platform for Emergency vACcines (SPEAC): Remit, Members and Workplans

4:30 PM – 5:00 PM Final Discussions and Looking Forward for IMPRINT

> 5:00 PM – 6:00 PM Happy Hour for Further Networking