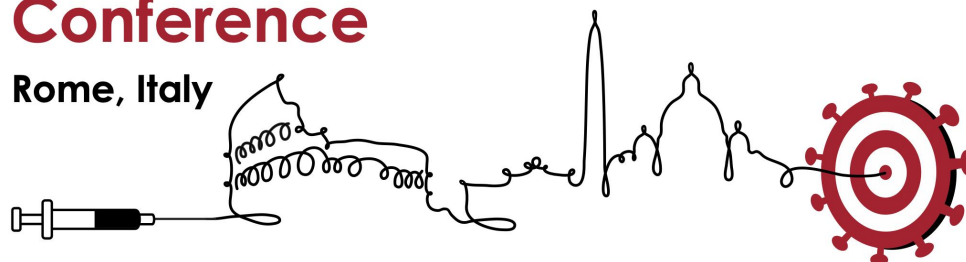


4th Biennial

International Precision Vaccines Conference

Rome, Italy



05-06 October 2023

Parco dei Principi Grand Hotel & Spa
Via G. Frescobaldi, 5 – 00198 Roma, Italy
www.parcodeiprincipi.com

Co-Hosted by



Day 1 - 05 October 2023

8:30 - 10:00

Plenary session

8:30 - 8:40 - Welcome

President of Bambino Gesù Children's Hospital - **Tiziano Onesti** and Scientific Director of Bambino Gesù Children's Hospital - **Andrea Onetti Muda**

8:40 - 8:50 - Opening remarks: Drs. **Ofer Levy & Paolo Palma**

8:50 - 9:20 - *What we learned for COVID-19. How can we ensure vaccine protection of vulnerable populations in future pandemics?*

Sir. Andrew Pollard, Director, Oxford Vaccine Group, Department of Paediatrics, University of Oxford, UK

9:20 - 09:50 - *The role of Controlled Human Infection Models in defining novel correlates of vaccine protection*

Pierre Van Damme, MD, PhD, Professor, Faculty of Medicine and Health Sciences; Chair, VAXINFECTIO (Vaccine & Infectious Disease Institute), University of Antwerp, Belgium

09:50-10:10 Coffee break

10:10-11:50 - Session #1

Limitations of current vaccine schedules

Chair/Moderator: Alberto Villani

10:10 - 10:15 - Introduction - **Alberto Villani**

10:15 - 10:35 - *Suggestions to address immunization in elderly*

Walter Ricciardi MD, MPH, MSc. Full Professor of Hygiene at the Faculty of Medicine “A. Gemelli” of the Cattolica University, Rome, Italy

10:35 - 10:55 - *Vaccines in Pregnant women*

Claire Thorne, Phil - Professor of Infectious Disease Epidemiology, Population, Policy and Practice Research and Teaching Department, UCL Institute of Child Health, University College London, UK

10:55 - 11:15 - *Vaccines efficacy in individuals with primary or secondary immune deficiency*

Paolo Palma, MD, PhD - Head of Clinical and Research Immunology and Vaccinology Unit, Bambino Gesù Children’s Hospital; Associate Professor of Pediatrics, University of Rome Tor Vergata, Rome, Italy

11:15 - 11:30 - *Vaccines in oncologic patients* - **Amy Sherman as backup**

(pending) **Lindsey Baden**, MD - Vice President of Clinical Research, Brigham and Women’s Hospital; Professor, Harvard Medical School, Boston, United States

11:30- 11:50 - Q&A Panel

11:50 - 13:00 Session #2

New strategies to optimize vaccine efficacy

Chair/Moderator: Viviana Moschese

11:50 - 11:55 - Introduction: **Viviana Moschese**

11:55 - 12:15 - *Precision Vaccines: Bringing Precision Medicine to Vaccinology*

Ofer Levy, MD, PhD - Senior Physician in Pediatrics, Boston Children’s Hospital; Director, Precision Vaccines Program; Professor of Pediatrics, Harvard Medical School, Boston, United States

12:15 - 12:35 - *Precision Adjuvants: High throughput in vitro screening of small molecules against human leukocytes to define an adjuvant diversity library*

David Dowling, PhD - Immunologist and vaccinologist, Boston Children's Hospital; Operational Lead, *Precision Vaccines Program*; Instructor in Pediatrics, Harvard Medical School, Boston, United States

12:35 - 12:55 - *Innate immune-based strategies to potentiate vaccine efficacy*

Ivan Zanoni, PhD - Associate Professor of Pediatrics and Immunology, Boston Children's Hospital; Assistant Professor, Harvard Medical School, Boston, United States

12:55 - 13:10 - Q&A Panel

13:10 - 14:00 Lunch break

14:00 - 14:35 Poster session

14:35 - 16:00 - Session #3

Bioinformatic approaches to define vaccine correlates of protection

Chair/Moderator: Laurent Beloeil, Bioaster

14:35 - 14:40 - Introduction: **Laurent Beloeil**, Bioaster

14:40 - 15:00 - *Integrated molecular biomarkers to predict neonatal vaccine responses*

Scott Tebbutt, PhD - Professor, Department of Medicine (Respiratory Division), University of British Columbia; Principal Investigator and Director of Education, Centre for Heart Lung Innovation, St. Paul's Hospital, Vancouver, Canada

15:00 - 15:15 - *Collaborative Data Approaches for Multi-Institutional Vaccines and Infectious Diseases Research*

Joan Arce, PhD - Instructor, Harvard Medical School; Lead of the Data Management and Analysis Core (DMAC), *Precision Vaccines Program*, Boston Children's Hospital, Boston, United States

15:15 - 15:30 – *Metabolomics in the study of vaccine response in vulnerable groups*

Jessica Lasky-SU, ScD - Associate Professor in Medicine, Associate Statistician, Harvard Medical School and Brigham and Women's Hospital, Boston, United States

15:30 - 15:45 - Abstract Presentation

15:45 - 16:00 - Q&A Panel

16:00 - 16:20 - Coffee break

16:20 - 17:45 - Session #4

Vaccine safety

Chair/Moderator: Karina Top

16:20-16:25 - Introduction: Paolo Palma

16:25 - 16:45 - *International Network of Special Immunization Services (INSIS): A global network to advance vaccine safety*

Karina Top, MD, MSc, FRCPC - Associate Professor of Pediatrics and Community Health & Epidemiology, Dalhousie University, Halifax, Nova Scotia; Principal Investigator, INSIS

16:45- 17:05 - *mRNA vaccine-related myocarditis: The OPBG experience*

Donato Amodio, MD, PhD - Research fellow, Bambino Gesù Children's Hospital, Rome, Italy

17:05-17:20 - Abstract Presentation

17:20 - 17:35 - Q&A Panel

17:35 - 17:45 - Day 1 Closing Remarks

Paolo Palma

Day 2 - 06 October 2023

8:30 - 9:50

Plenary session

8:30 - 8:45 - Welcome

Health Director of Bambino Gesù Children's Hospital **Massimiliano Raponi**, MD PhD & Rector of University of Rome Tor Vergata **Nathan Levialdi**

8:45 - 8:50 - Opening remarks, **Paolo Palma**

8:50 - 9:20 - *Novel gene analysis-based vaccine design*

Rino Rappuoli, PhD - Chief Scientist and Head External R&D, GSK Vaccines; Professor of Vaccines Research, Imperial College London, UK

9:20 - 9:50 - *Impact of immune sex differences on responses to infections and vaccines: lessons from HIV*

Philip Goulder, MA, FRCPCH, DPhil, FMedSci - Pediatrician and Professor of Immunology, Oxford University, UK

9:50 - 11:35 - Session #5

Host-related mechanisms of suboptimal immune responses to vaccines

Chair/Moderator: Chiara Azzari

9:50-9:55 - Introduction: Chiara Azzari

9:55- 10:15- *A novel sample-sparing high-throughput plasma proteomics platform to study the immune state in health and disease*

Hanno Steen, PhD

10:15 - 10:30 *Immunization in Early Life*

Asimenia Angelidou, MD, PhD - Neonatologist, Department of Neonatology, Beth Israel Deaconess Medical Center; Clinical Lead, Precision Vaccines Program, Boston Children's Hospital; Assistant Professor in Pediatrics, Harvard Medical School, Boston, United States

10:30 -10:45 - *Pre-vaccination phenotypic and transcriptional characteristics provide signatures of immune memory response upon BNT162b2 vaccine in vulnerable populations*

Nicola Cotugno, MD, PhD - Pediatric, Ospedale Pediatrico Bambino Gesù, Rome, Italy

10:45 - 11:00 - Abstract Presentation

11:00 - 11:15 - Q&A Panel

11:15-11:35 Coffee break

11:35 - 13:00 - Session #6

Updates on RSV immunization

Chair/Moderator: Carlo Giaquinto

11:35 - 11:40 - Introduction: **Carlo Giaquinto**

11:40 - 12:00 - *Where do we stand with maternal vaccination*

Kirsten Maertens - University of Antwerp

12:00 - 12:20 - *Where do we stand with infant immunization?*

Paul Heath - St. Georges University

12:20 - 12:35 - Panel - *How do we compare these strategies?*

Kirsten Maertens / Paul Heath

12:35 - 13:00 Debate - Carlo Giaquinto

13:00 - 13:45 Lunch break

13:45 - 14:30 - Poster session

14:30 - 15:30 - Oral abstract Presentations (5 or 6 selection)

15:30 - 15:45 - Coffee break

15:45 - 17:20 - Industry Presentations
Chair/Moderator - Paolo Rossi - Vito Di Cioccio

15:45 - 15:50 - Introduction - Paolo Rossi

15:50 - 16:05 - *Immune profiling of mRNA vaccines* - Moderna (Galit Alter, PhD, Vice President of Immunology Research at Moderna)

16:05 - 16:20 - *Correlates of protection for influenza and other vaccines for respiratory diseases* - Vismederi (Emanuele Montomoli, BSc, MSc – Professor of Hygiene and Public Health, University of Siena, Italy)

16:20 - 16:35 - CRODA (Angela Kleiner- Marketing Director - Adjuvant Systems & Veterinary)

16:35 - 16:50 - *(pending)* InImmune (Jay Evans, PhD - TLR7 agonists, Co-Founder Chief Scientific and Strategy Officer)

16:50 - 17:05 - Luca Emili - *Hyper Accelerate Vaccine Development from Discovery to Market through Advanced Computational Modeling and Simulation*

17:05 - 17:20 - Q&A Panel

17:20 - 18:00 - Round Table
Importance of biomarkers of vaccine safety and efficacy in pandemic preparedness: Current status and key gaps

17:45 - 18:00 - Concluding remarks
Drs. Ofer Levy & Paolo Palma

18:00 - Meeting adjourns