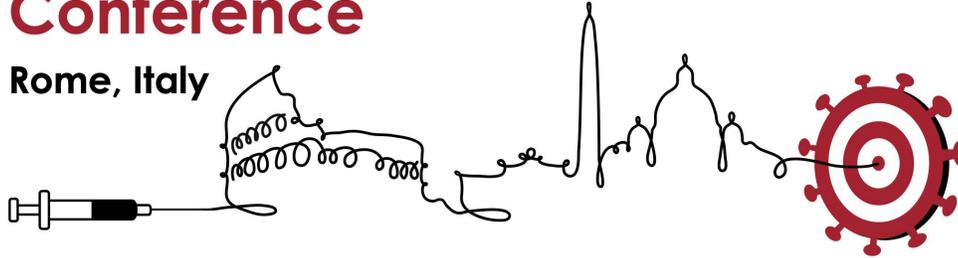


4th Biennial

# 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](http://www.parcodeiprincipi.com)

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## **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*

**Asimena 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**