



# PROGRAM

## BZ 103: Immunity and autoimmunity in early childhood

June 1-3, 2022, Nobelforum, Nobels väg 1, Solna

### Wednesday, June 1

Arrival

Reception at the Nobel Forum 18:00-21:00. Light refreshments and drinks will be provided.

### Thursday, June 2

Registration at the Nobel Forum 08:00 -17:00

**09:00 – 9:10 Welcome and introduction (Åke Lernmark and Olle Kämpe)**

**Session 1: Infant development of immune and autoimmune responses**

Chairs: Beena Akolkar NIDDK, NIH & Helena Elding Larsson, Malmö, Sweden

09:10 – 09:15 Beena Akolkar, NIDDK, MD, USA – Introduction (rapporteur)

09:15 – 09:45 Infant development of the immune response.  
Petter Brodin, Stockholm, Sweden

09:45 – 10:15 Age dependent immunity and autoimmunity.  
Eoin McKinney, Cambridge, UK

10:15 – 10:40 Immune cell alterations prior to islet autoimmunity. (Online lecture)  
Ezio Bonifacio, Dresden, Germany

10:40 – 11:00 Discussion

**11.00 – 11.15 Coffee**

**Session 2: Immune tolerance**

Chairs: Åke Lernmark, Malmö, Sweden & Jorma Toppari, Turku, Finland

11.15 – 11:20 Jorma Toppari, Turku, Finland - Introduction (rapporteur)

11.20 – 11:50 Thymic role in infant tolerance induction.  
Mark Anderson, San Francisco, CA, USA

- 11:50 – 12:20 Immune tolerance, superantigen responses and multisystem inflammatory syndrome in SARS – CoV2 infection.  
Moshe Arditi, Cedars-Sinai Medical Center, Los Angeles, CA, USA
- 12:20 – 12:35 Discussion

**12:30 – 13:15 Lunch**

**Session 3: Herd immunity, mother – child immune response development and infant immune responses to virus infections and vaccination**

Chairs: Marian Rewers, Denver, USA & Olle Kämpe, Stockholm, Sweden

- 13:15 – 13:20 Marian Rewers, Denver, CO, USA – Introduction (rapporteur)
- 13:20 – 13:50 Herd immunity and infant immune responses to virus infections.  
Heikki Hyöty, Tampere, Finland
- 13:50 – 14:20 Genetic and evolutionary sources of population variation in immune responses to virus.  
Lluís Quintana-Murci, Pasteur Institute, Paris, France

**14:20 – 14:45 Coffee**

- 14:45 – 15:15 Systems vaccinology in infants.  
Bali Pulendran, Stanford, CA, USA
- 15:15 – 15:45 Infant viral infections and control by vaccine responses. (Online lecture)  
Galit Alter, Cambridge, MA, USA
- 15:45 – 16:00 Discussion
- 16:00 – 17:00 Poster session & discussions

**18:00** *Departure by bus from the Elite Hotel Carolina Tower for dinner*

**18:30** *Symposium dinner at the Stadshuskällaren in Stockholms Stadshus (City Hall)*

## Friday, June 3

**Session 4: Staging the human microbiome and virome development**

Chairs: Xaquín Castro Dopico, Stockholm, Sweden & Petter Brodin, Stockholm, Sweden & TBN

- 08:30 – 08:35 Xaquín Castro Dopico, Stockholm, Sweden - Introduction (rapporteur)
- 08:35 – 09:05 Childhood microbiome and immunity.  
Joseph Petrosino; Houston, TX, USA
- 09:05 – 09:35 Infant microbiome and the developing immune response.  
Ramnik Xavier, Cambridge, MA, USA
- 09:35 – 10:05 Immune response to the intestinal microbiome in development of autoimmunity.  
Jayne Danska, Toronto, Canada
- 10:05 – 10:35 Staging the infant virome.  
Richard Lloyd, Houston, TX, USA
- 10:35 – 10:50 Discussion

**10:50 – 11:05 Coffee**

**Session 5: Infant growth, metabolomics, immunity and autoimmunity**

Chairs: Outi Mäkitie, Stockholm, Sweden & Carin Andrén Aronsson, Malmö, Sweden

- 11:05 – 11:10 Outi Mäkitie, Stockholm, Sweden – Introduction (rapporteur)
- 11:10 – 11:40 Infant metabolomics and islet autoimmunity risk.  
Kendra Vehik, Tampa, FL, USA
- 11:40 – 12:10 Growth and autoimmunity molecular defects  
Cheri Deal, Montreal, Canada
- 12:10 – 12:40 Food intake, gluten immunity and celiac disease autoimmunity.  
Ludvig Sollid, Oslo, Norway 12:40 – 13:00 Discussion

**13:00 – 14:00 Lunch**

**Session 6: The autoantigenome and cell-specific autoimmunity**

Chairs: Richard McIndoe, Augusta, USA & Daniel Agardh, Malmö, Sweden

- 14:00 – 14:05 Richard McIndoe, Augusta, GA, USA – Introduction (rapporteur)  
14:05 – 14:35 The Healthy Baby Initiative: Prevention of Childhood Disease by Targeting Microbiomes, Epithelial Barriers, and Immune Development.  
Richard Insel, Janssen R&D, USA  
14:35 – 15:05 First appearing autoantibodies – prospects for different etiologies in autoimmune diabetes.  
Jeffrey Krischer, Tampa, FL, USA  
15:05 – 15:35 Analyzing human immune responses in vitro and T cell dynamics in autoimmunity and infection.  
Mark Davis, Stanford, CA, USA 15:35 – 15:50 Discussion

**15:50 – 16:00 Coffee**

**Session 7: Inborn errors and infections**

Chairs: William Hagopian, Seattle, USA & Anna Wedell, Stockholm, Sweden

- 16:00 – 16:05 William Hagopian, Seattle, WA, USA – Introduction (rapporteur)  
16:05 – 16:35 Tissue-specific mechanisms of antifungal immunity: Lessons from inborn errors or immunity. (Online lecture)  
Michail S Lionakis, Bethesda, MA, USA  
16:35 – 17:05 Primary immunodeficiency and B cell malignancy.  
Qiang Pan Hammarström, Stockholm, Sweden  
17:05 – 17:35 Different inborn errors of immunity underlie childhood COVID-19 pneumonia and MIS-C.  
Jean-Laurent Casanova, New York, NY, USA 17:35 – 17:50 Discussion  
17:50 – 18:00 Concluding remarks  
Åke Lernmark and Olle Kämpe

**18:00 After Work & mingle**



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