



# International symposium on:

# THE IMPACT OF GENOMIC DEEP SEQUENCING ON PAEDIATRIC RESEARCH AND CLINICAL PRACTICE

# Organized by

Paediatrics Unit Sant'Orsola Academic Hospital Alma Mater Studiorum University of Bologna

#### Promoted by



FONDAZIONE INTERNAZIONALE MENARINI

Stabat Mater Hall Bologna, Italy



As many fields of medicine, paediatric research and clinical practice have greatly benefited, over this last decade, of the innovative discoveries derived by a deep approach to the genome.

We have selected, as icon for this symposium, the Angel holding a candlestick carved by a young Michelangelo for the shrine of San Domenico in Bologna, because the flame of genomic knowledge is like the candlestick lightening the dark scenario of our translational clinical practice.

The integration of the discoveries derived from deep genome sequencing has particular value for researchers who wish to address understudied issues in many different childhood diseases and clinical conditions.

The ultimate aim of this symposium is to promote a constructive dialogue between physicians and researches as to integrate distinctive knowledge in different fields towards a translational and personalized approach to paediatrics.

Andrea Pession President of the symposium

Justentonom

#### Under the auspices of

## Dipartimento Scienze Mediche e Chirurgiche

Alma Mater Studiorum Università di Bologna

SIP

Società Italiana di Pediatria

CIRC

Centro Interdipartimentale di ricerche sul cancro "Giorgio Prodi" Alma Mater Studiorum Università di Bologna

#### President of the symposium

Andrea Pession

Paediatrics Unit Sant'Orsola Academic Hospital Alma Mater Studiorum Università di Bologna

#### Scientific secretariat

Annalisa Astolfi Riccardo Masetti

#### Promoted by

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#### Organizing secretariat and CME provider

#### DueCi Promotion srl

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E-mail: ggrillenzoni@duecipromotion.com www.duecipromotion.com **03:00 p.m.** Attendees registration

Welcome ceremony

**03:30 p.m.** Welcome addresses

F. Ubertini, Rector, University of Bologna

G. Corsello, President SIP- Società Italiana di Pediatria

**A. Pession**, President of the meeting

**Opening lectures** 

Chairmen: G. Corsello, G. Basso

04:00 p.m. H. Hakonarson

The future of precision medicine approaches

in patient care

05:00 p.m. S. Semplici

Ethical issues

06:00 p.m. Welcome cocktail

**Session I: Paediatric Immunology** 

Chairmen: M. Duse, G. Faldella

09:00 a.m. S.F. Kingsmore

Rapid whole-genome sequencing for genetic disease

diagnosis in neonatal intensive care units

09:30 a.m. A. Aiuti

Novel approaches to screening and diagnosis of primary

FRIDAY, 20<sup>TH</sup> NOVEMBER - MORNING PROGRAM

immunodeficiencies

**Session II: Paediatric Rare Disease** 

Chairmen: L. Mazzanti, M. Seri

10:00 a.m. S. Calvo

Molecular diagnosis of infantile mitochondrial disease

with targeted next-generation sequencing

10:30 a.m. S. Vilarinho

Individual exome analysis in diagnosis and management

of paediatric liver diseases of indeterminate etiology

11:00 a.m. Coffee break

**Session III: Paediatric Pneumology** 

Chairmen: F. Bernardi, S. Nava

11:30 a.m. W.O. Cookson

The GABRIEL experience and beyond: making

sense of asthma with genes

12:00 a.m. R.B. Parad

Next generation sequencing of CFTR: utility in CF newborn screening

Session IV: Paediatric Endocrinology

Chairmen: A. Cassio, R. Pasquali

12:30 a.m. C. Dionisi Vici

Newborn screening

01:00 p.m. P. Froguel

Genetic characterization of monogenic childhood diabetes

and obesity towards personalized metabolic medicine

01:30 p.m. *Lunch* 

# **Session V: Paediatric Reumathology**

Chairmen: R. Meliconi, G. Ricci

03:00 p.m. A. Martini

Genetics of auto-inflammatory disorders in childhood

03:30 p.m. J.B. Harley

Sequence data analysis with trios in rheumatic

and other diseases

**Session VI: Paediatric Gastroenterology** 

Chairmen: S. Cucchiara, V. Stanghellini

04:00 p.m. S. Ennis

Deep exome sequencing of paediatric autoimmune

disease patients

04:30 p.m. P. Brigidi

Functional and phylogenetic characterization of gut microbiome by deep sequencing

Session VII: Paediatric Oncology and Hematology

Chairmen: F. Locatelli, G. Martinelli

05:00 p.m. C. Mullighan

Genomic characterization of childhood

acute lymphoblastic leukemia

05:30 p.m. R. Huether

The landscape of somatic mutations in epigenetic regulators across 1,000 paediatric cancer genomes

06:00 p.m. CME questionnarie

06:20 p.m. Closing remarks

A. Aiuti Milan, Italy G. Basso Padova, Italy F. Bernardi Bologna, Italy P. Brigidi Bologna, Italy S. Calvo Cambridge, USA A. Cassio Bologna, Italy W.O. Cookson London, UK G. Corsello Palermo, Italy S. Cucchiara Rome, Italy C. Dionisi Vici Rome, Italy M. Duse Rome, Italy

S. Ennis Southampton, UK
G. Faldella Bologna, Italy
P. Froguel London, UK

H. Hakonarson Philadelphia, USA
J.B. Harley Cincinnati, USA
R. Huether Aliso Viejo, USA
S.F. Kingsmore Kansas City, USA
F. Locatelli Rome, Italy

G. Martinelli Bologna, Italy A. Martini Genova, Italy L. Mazzanti Bologna, Italy R. Meliconi Bologna, Italy C.G. Mullighan Memphis, USA S. Nava Bologna, Italy R.B. Parad Boston, USA R. Pasquali Bologna, Italy A. Pession Bologna, Italy G. Ricci Bologna, Italy S. Semplici Rome, Italy M. Seri Bologna, Italy V. Stanghellini Bologna, Italy S. Vilarinho New Haven, USA

#### **GENERAL INFORMATION**

#### Meeting venue

The venue for the symposium is Stabat Mater Hall Archiginnasio Public Library Piazza Galvani 1, Bologna (Italy)

## Secretariat during the meeting

The Secretariat will be open at the following times: Thursday  $19^{\rm th}$  November from 03:00 p.m. to 06:00 p.m. Friday  $20^{\rm th}$  November from 09:00 a.m. to 06:30 p.m.

#### Official language

The official language of the meeting will be English. Simultaneous translation will not be provided.

#### **CME: Continuing Medical Education**

**DueCi Promotion srl**, CME Provider of the symposium, will assign CME credits to the following profiles:

- **Physicians** specialized in:
  - · Paediatrics
  - · Hematology
  - Endocrinology
  - · Oncology
  - · Gastroenterology
  - · Medical genetics
  - · Metabolic disease and diabetology
  - · Internal medicine
  - Rheumatology
- Biologists

# Attendees' registration

The symposium is free to attend, but on line registration is required.

Please link to the organizing secretariat website: www.duecipromotion.com > Congressi Medici > Calendario Congressi > Registrazione on line

# Registration deadline: 25th October, 2015

On line registrations will be accepted on a first-come, first-served basis and may be closed in advance whenever the maximum number of participants allowed in the venue will be reached.

# Registration includes:

access to scientific sessions, welcome cocktail, coffee breaks, lunch, program book, certificate of attendance.



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