

2023 ESPE

Science Symposium

Obesity in Childhood and Adolescence



ORGANIZER
ESPE
European Society for
Paediatric Endocrinology
www.eurospe.org

13 & 14
OCTOBER 2023

**Megaron International
Conference Centre**

ATHENS

Dear Colleagues,



Re: Invitation to attend the 2023 ESPE Science Symposium on ‘Obesity in Childhood and Adolescence’

This is the fourth in a series of high-profile conferences devoted to future research directions in child health.

The ESPE Science Symposium (<https://www.eurospe.org/education/espe-science-symposium/>) aims to promote the development of an interactive network between clinicians and researchers, helping to reduce the gap between research and patient care. It will also provide the means to disseminate new scientific knowledge in the community of Pediatric Endocrinology.

The first ESPE Science Symposium was on ‘The science of gender: Evidence for what influences gender development and gender dysphoria and what are the respective influences of nature and nurture’, and was held in London, UK, in October 2018. The second ESPE Science Symposium focused on ‘Congenital adrenal hyperplasia: From molecular medical research to clinical application’ and was held in Nijmegen, The Netherlands, in October 2021. The third ESPE Science Symposium was on ‘Hypothalamic dysfunction in childhood: Etiology, consequences and new ways of management to improve outcome’ and took place in Utrecht, The Netherlands, in October 2022.

The fourth ESPE Science Symposium is a continuation of the above series, and aims to bring together clinical and basic science researchers to offer their expertise on the topic of ‘Obesity in Childhood and Adolescence’. It will be held on October 13-14, 2023 at the Megaron International Conference Center in Athens, Greece.

Obesity represents one of the most challenging public health problems of the 21st century owing to both its epidemic proportions worldwide and the associated significant morbidity and mortality. During the last four decades, the prevalence of overweight and obesity in childhood and adolescence has risen substantially in most high-income countries and appears to be rising rapidly in low-income and middle-income countries. According to the World Health Organization (WHO), 41 million children under the age of 5 years, and more than 340 million children and adolescents aged 5–19 years are estimated to be overweight or obese. Childhood obesity is the most prevalent pediatric endocrine disorder.

Obesity is characterized by low-grade, systemic, chronic inflammation, increased production and release of pro-inflammatory, atherogenic cytokines and oxidative stress. Therefore, it is associated with several complications, including insulin resistance, dyslipidemia, hypertension, endothelial dysfunction, diabetes mellitus type 2, early onset atherosclerotic cardiovascular disease, orthopedic problems, fatty liver disease, cholecystitis, social stigmatization, and increased incidence of malignancies. In addition to the increased morbidity and mortality, overweight and obesity account for a significant increase in public health costs. The global economic impact from obesity is approximately \$2.0 trillion USD or 2.8% of the global gross domestic product (GDP), which is almost equivalent to the global impact from smoking or armed violence, war and terrorism.

The progressively increasing prevalence of overweight and obesity in childhood and adolescence indicates that our current health policies are not effective, and further developments in health policy strategies are required.

The 2023 ESPE Science Symposium aims to provide an overview of the pathophysiology, etiology and metabolic complications of childhood obesity, strategies for its prevention, and the role of pharmacotherapy and bariatric surgery.

The program covering the topics of the Symposium is attached below.

We truly hope that you will accept our invitation to attend the 2023 ESPE Science Symposium!

We look forward to seeing you in Athens!

With best wishes,

Yours sincerely,

On behalf of the Scientific and Local Organizing Committee



ΕΥΑΓΓΕΛΙΑ ΧΑΡΜΑΝΔΑΡΗ
ΚΑΘΗΓΗΤΡΙΑ
ΠΑΙΔΙΑΤΡΙΚΗΣ-ΠΑΙΔΙΑΤΡΙΚΗΣ ΕΝΔΟΚΡΙΝΟΛΟΓΙΑΣ
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Α ΠΑΙΔΙΑΤΡΙΚΗ ΚΛΙΝΙΚΗ ΣΟΦΙΑ
ΝΟΣΟΚΟΜΕΙΟ ΠΑΝΑΓΙΩΤΗΣ
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ESPE SCIENCE SYMPOSIUM 2023

MEGARON INTERNATIONAL CONFERENCE CENTER
ATHENS, GREECE

OCTOBER 13-14, 2023

SCIENTIFIC PROGRAM

FRIDAY 13/10/2023

07:30 – 08:15 *Registration*

08:15 – 08:30 **Welcome and Short Introduction**
Evangelia Charmandari (Athens, Greece)

I/ The Obesity Epidemic: A Global Perspective

08:30 – 09:00 **Introduction to Childhood Obesity: Definition, Clinical and Diagnostic Evaluation**
Martin Wabitsch (Ulm, Germany)

09:00 – 9:30 **Epidemiology of Obesity in Childhood and Adolescence and Financial Implications**
Constantine Athanasakis (Athens, Greece)

II/ Physiology and Pathophysiology of Energy Homeostasis

9:30 – 10:00 **Central Control of Energy Metabolism**
Hanneke M. van Santen (Utrecht, The Netherlands) (Virtual Presentation)

10:00 – 10:30 **Molecular Determinants Linking Adipose Tissue (Dys)function and Metabolism**
Antje Körner (Leipzig, Germany)

10:30 – 11:00 **White Adipose Tissue Accumulation and Dysfunction in Children with Obesity**
Constantine Tsigos (Athens, Greece)

11:00 – 11:30 *Coffee Break*

III/ Etiology of Childhood Obesity

i/ Genetics and Epigenetics of Childhood Obesity

- 11:30 – 12:00 **Monogenic Disorders of Childhood Obesity**
Sadaf Farooqi (Cambridge, UK)
- 12:00 – 12:30 **Polygenic Obesity**
Erica van den Akker (Rotterdam, The Netherlands)
- 12:30 – 13:00 **Syndromic Obesity**
Elena Frysira (Athens, Greece)
- 13:00 – 13:30 **Epigenetics of Human Obesity and its Comorbidities**
Wieland Kiess (Leipzig, Germany)
- 13:30 – 15:00 ***Lunch Break***

ii/ Pre-, Peri- and Postnatal Determinants of Childhood Obesity

- 15:00 – 15:30 **Maternal and In Utero Determinants of Childhood Obesity**
George Mastorakos (Athens, Greece)
- 15:30 – 16:00 **Fetal and Infancy Growth**
Ken K. Ong (Cambridge, UK)
- 16:00 – 16:30 **Hypothalamic Inflammation and Obesity in Childhood and Adolescence**
George Valsamakis (Athens, Greece)
- 16:30 – 17:00 **Endocrine Disruptors as Obesogens**
Maria Papagianni (Trikala, Greece)
- 17:00 – 17:30 ***Coffee Break***

iii/ The Role of Nutrition and Exercise in Childhood Obesity and its Complications

- 17:30 – 18:00 **Early Feeding Practices and Development of Childhood Obesity**
Christina Mavrogianni (Athens, Greece)
- 18:00 – 18:30 **Lessons from the Implementation of Childhood Obesity Prevention Programs in Real World Settings**
Odysseas Androutsos (Trikala, Greece)
- 18:30 – 19:00 **Patients Representative Group**
- 19:00 – 19:30 **Group Discussion**
- 19:30 ***End of Day 1 Sessions***
- 20:30 ***Dinner***

SATURDAY 14/10/2023

IV/ Metabolic Complications of Childhood Obesity

- 08:30 – 09:00** **From Insulin Resistance to Diabetes Mellitus type 2**
Antje Koerner (Leipzig, Germany)
- 09:30 – 10:00** **Ontogeny of Postpubertal Central Obesity Syndrome**
Francis de Zegher (Leuven, Belgium)
- 10:00 – 10:30** **Management of Adolescent Polycystic Ovary Syndrome (PCOS): Central Fat Takes Center Stage**
Lourdes Ibanez (Barcelona, Spain)
- 10:30 – 11:00** **Childhood Obesity and Cognitive Function**
Chrysoula Kostogiannis (Athens, Greece) - TBC
- 11:00 – 11:30** **Development of Obesity Following Treatment for Childhood Malignancies**
Elpida Vlachopapadopoulou (Athens, Greece)
- 11:30 – 12:00** *Coffee Break*

VI/ Prevention and Treatment of Childhood Obesity: Lifestyle Interventions

- 12:00 – 12:30** **Identifying Families at Risk for the Prevention and/or Early Treatment of Childhood Obesity**
Yannis Manios (Athens, Greece)
- 12:30 – 13:00** **Health Policies to Prevent Childhood Obesity**
Eirini Agapidaki (Athens, Greece)
- 13:00 – 13:30** **The Role of Big Data in the Prevention and Management of Childhood Obesity**
Anastasios Delopoulos (Thessaloniki, Greece)
- 13:30 – 14:00** **Novel E-health Applications for the Prevention and Management of Childhood Obesity**
Evangelia Charmandari (Athens, Greece)
- 14:00 – 14:30** *Lunch Break*

VII/ Pharmacotherapy and Bariatric Surgery for Obesity and Co-morbidities

- 14:30 – 15:00** **The Role of Pharmacotherapy in the Treatment of Pediatric Obesity and Its Comorbidities**
Martin Wabitsch (Ulm, Germany)
- 15:00 – 15:30** **Bariatric Surgery in Adolescents**
Claude Marcus (Stockholm, Sweden)
- 15:30 – 16:00** **Group Discussion – Future perspectives**
- 16:00** *End of Day 2 Sessions – Closing Remarks*

SPEAKERS – FACULTY MEMBERS (In alphabetical order)

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