



## ENVIRONMENTAL FACTORS AND NOSOLOGY OF THE ENDOCRINE SYSTEM

“Human health cannot be treated separately from the natural environment

Hippocrates”

The realization that the environment exerts a favorable or unfavorable effect on the human organism is not new. Plato, Aristotle and others wrote about the adverse effects of a deteriorated environment.

In our modern era (1986), the US Environmental Protection Agency initiated steps to assess the potential developmental toxicity of certain environmental agents. The endocrine system soon emerged as a significant target of a “toxic environment” and this was clearly reflected in the two forums on “endocrine disruptors” organized by the American Endocrine Society in 2005 and 2009.

In our day and age, it is essential for scientists and the public to be made fully aware of the deleterious chemicals that are present in items used every day by every one of us and, most importantly, by children and pregnant women.

Among environmental agents, obesogens have been largely overlooked as factors exerting a toxic effect on the adipose tissue. Moreover, it should also be borne in mind that, besides environmental chemicals, an adverse social environment may have deleterious effects on the developing organisms.

Hence, our efforts for environmental improvements should be wide-ranging, encompassing the many aspects of environmental influences. In such efforts, knowledge constitutes a powerful instrument that must be transmitted to scientists, most particularly to those caring for children, as well as to the public and, vitally, to decision makers.

I feel sure that the speakers and attendees of this symposium will create a good background to build measures aiming at preventing nosology arising from adverse environmental factors and most importantly promote the highly beneficial effects of nature, namely the animating power of nature's beauty.

On behalf of the editorial board of the journal “Hormones”, and the Organizing Committee, I wish to say how much I look forward to welcoming you to a beautiful seaside location of Attica, an ideal setting for such a gathering.

C. Dacou-Voutetakis

## ENVIRONMENTAL FACTORS AND NOSOLOGY OF THE ENDOCRINE SYSTEM

### SCIENTIFIC PROGRAM

Saturday, October 3<sup>rd</sup> 2009

09:15-09:30 Introductory remarks  
**Catherine Dacou-Voutetakis, Greece**

#### Section A: Environmental factors I

**Co-ordinators: M. Batrinos – M. Alevizaki**

09:30-10:00 Environmental factors. Immediate and late effects at the cellular and molecular level  
**Constantine E. Sekeris, Greece**

10:00-10:30 The role of the environment in fetal life. Long term effects  
**George P. Chrousos, Greece**

10:30-11:00 Environmental factors and the development of GnRH- gonadal axis in males and females  
**Anne-Simone Parent, Belgium**

11:00-11:30 DISCUSSION

11:30-12:00 **Coffee Break**

#### Environmental factors II

**Co-ordinators: A. Papavassiliou – L. Duntas**

12:00-12:30 Environmental chemicals, obesity and metabolism (obesogens)  
**Retha R. Newbold, USA**

12:30-13:00 Bisphenol A and Diabetes  
**Paloma Alonso-Magdalena, Spain**

13:00-13:30 Environmental chemicals targeting thyroid  
**Thomas R. Zoeller, USA**

13:30-14:00 Linking iodine with autoimmune thyroiditis  
**George Carayanniotis, Canada**

14:00-14:30 DISCUSSION

14:30-16:00 **Lunch Break**



## ENVIRONMENTAL FACTORS AND NOSOLOGY OF THE ENDOCRINE SYSTEM

### SCIENTIFIC PROGRAM

Saturday, October 3<sup>rd</sup> 2009

#### Section B: Endocrine disruptors I

**Co-ordinators: P. Nicolopoulou-Stamati – G. Mastorakos**

16:00-16:30 Endocrine disruptors. Definition and classification of disrupting chemicals  
**Wolfgang Wuttke, Germany**

16:30-17:00 Neuroendocrine targets of endocrine disruptors  
**Andrea C. Gore, USA**

17:00-17:30 Endocrine disruptors and antioxidant defence mechanisms  
**Josef Köhrle, Germany**

17:30-18:00 DISCUSSION

18:00-18:30 **Coffee Break**

#### Endocrine disruptors II

**Co-ordinators: G. Koukoulis**

18:30-19:00 Endocrine disruptors and estrogen receptor  
**Kenneth S. Korach, USA**

19:00-19:30 Endocrine disruptors and gonadal development  
**Paul A. Fowler, U.K.**

19:30-20:00 Cryptorchidism-Hypospadias  
**Jorma Toppari, Finland**

20:00-20:30 DISCUSSION

Sunday, October 4<sup>th</sup> 2009

#### Section C: Epigenetics

**Co-ordinators: D. Panidis – E. Diamanti-Kandarakis**

09:00-09:30 Stressful events and the endocrine system  
**Philip W. Gold, USA**

09:30-10:00 Environmental factors and epigenetics  
**David Crews, USA**

10:00-10:30 DISCUSSION

10:30 **CLOSING REMARKS**



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