# SELENIUM

### FROM CHEMISTRY TO CLINICAL MEDICINE



YEARS since the first publication on Selenium

### Gaia Centre Goulandris Natural History Museum

Athens, Greece

## 30/11-01/12 2018

Scientific Programme

Organized by



Under the Auspices of















### Index

Organizing & Scientific Committee	3
Welcome	4
Scientific Programme	5
Faculty	8
General Information	10
Acknowledgements	11



Gaia Centre Goulandris Natural History Museum Athens, Greece

### Organizing & Scientific Committee

Chair:	Leonidas Duntas (Athens)	
	Panos Zirogannis (Athens)	

Honorary: Jacques Dumont (Brussels)

Members: Dimitrios Goulis (Thessaloniki) Josef Köhrle (Berlin) Margaret P. Rayman (Surrey) Anthony Tsarbopoulos (Athens) Fali Voyatzaki (Athens)





### Welcome

Ladies and Gentlemen, Dear Colleagues and Friends,

On behalf of the Organizing Committee, I would like to warmly welcome you all to Athens on the Occasion of the **Celebration of the 200 years**, 1818-2018, since the discovery of and the first publication on Selenium. The discovery of the trace element Selenium was a milestone in the science of minerals, an achievement that, 150 years after its discovery, paved the way to bringing nutrition closer to clinical medicine. The revelation that Se is not the toxic element that it had been thought exclusively to be for many decades (and is of course at high concentrations), but an essential element for life on earth, was fully corroborated by pivotal research studies. These studies, made in the fields of chemistry, molecular biology and medicine, revealed the numerous actions of selenium in redox mechanism, its anti-inflammatory and anti-cancer properties and its important role in regulating metabolism and disease. Many aspects of this amazing element have thus in recent times been discovered and surely many more will be elucidated in the years to come.

Two hundred years after its discovery, Selenium continues to attract growing scientific interest and due to its lunar-selene glow, and mystery, stimulates constant multidisciplinary research.

This Meeting in Athens to celebrate the second centennial of Selenium is, in this context, an exceptional event, bringing together scientists from many countries of Europe, East, West, North and South, to honor those who have so importantly contributed to the many advances in selenium research and thus to the improvement of millions of lives.

A very cordial welcome to this special Meeting on Selenium!

Leonidas Duntas



Gaia Centre Goulandris Natural History Museum Athens, Greece

### Scientific Programme

#### Friday 30<sup>th</sup> November 2018

15:00 - 16:00	Registration	
16:00 - 16:45	<ul> <li>Welcome Addresses</li> <li>Vice President of the Goulandris Natural History Museum <i>Mrs Fali Voyatzaki</i></li> <li>President of the European Thyroid Association <i>Professor Laszlo Hegedüs</i></li> <li>President of the Hellenic College of Pediatrics <i>Professor George Chrousos</i></li> <li>President of the Hellenic Association for the Study of Obesity, Metabolism &amp; Eating Disorders <i>Dr. George Panotopoulos</i></li> </ul>	
Opening Lectures		
16:45 - 17:00	<i>Panos Zirogiannis (Athens)</i> From Hippocrates to periodic system and Selenium.	
17:00 - 17:15	<i>Peter PA Smyth (Dublin, Galway)</i> Fifty years of the ETA: The Selenium connection.	
17:15 - 17:30	<i>Leonidas Duntas (Athens)</i> Why "Selenium 2018".	
Special Lecture Chair: <i>Georgios Dedoussis (Athens)</i>		
17:30 - 18:00	<i>Margaret P. Rayman (Surrey)</i> Selenium intake and health: a complex relationship.	
Selenium infertility and pregnancy Chair: Josef Köhrle (Berlin), Dimitris Goulis (Thessaloniki)		
18:00 - 18:30	Gesthimani Mintziori (Thessaloniki)	

18:30 - 19:00 *Alicja Hubalewska-Dydejczyk (Krakow)* Pregnancy, thyroid and potential use of selenium.

The multifarious role of selenium in infertility.

#### 19:00 - 19:30 Honorary Lecture: Jacques Dumont (Brussels) Evolving research on selenium and thyroid: endemic cretinism, selenium and ROS.



### Scientific Programme

#### Saturday 1<sup>st</sup> December 2018

Selenium and Thyroid I

Chair: Ulla Feldt-Rasmussen (Copenhagen), Krystallenia Alexandraki (Athens)

09:00 - 09:30 Josef Köhrle (Berlin) The actions of selenium in the thyroid.
09:30 - 10:00 Corin Badiu (Bucharest) Selenium involvement into mitochondrial function in thyroid disorders.
10:00 - 10:30 Leonidas Duntas (Athens) The protective role of selenium in thyroid autoimmunity and inflammation.
10:30 - 11:00 Laszlo Hegedüs (Odense) Treating autoimmune thyroiditis with selenium: challenges and perspectives.

#### 11:00 - 11:30 Coffee Break

Selenium and Thyroid II Chair: Margaret Rayman (Surrey), Melpomeni Peppa (Athens)

- **11:30 12:00 Tomasz Bednarczuk (Warsaw)** 

   Challenges and perspectives of selenium supplementation in Graves' Disease and Ophthalmopathy.
- 12:00 12:15 Ulla Feldt-Rasmussen (Copenhagen) The GRASS and the CATALYST studies: what do we expect?
- 12:15 12:45 *Christine Kanaka-Gantenbein (Athens)* Selenium supplementation in children.

#### 12:45 - 13:15 Anna Kipp (Jena) Selenium in gastrointestinal and thyroid tumors.



Gaia Centre Goulandris Natural History Museum Athens, Greece

### Scientific Programme

#### Saturday 1<sup>st</sup> December 2018

13.15 - 15.00 Break

#### Selenium and Metabolism

Chair: Peter PA Smyth (Dublin, Galway), Evanthia Diamanti-Kandarakis (Athens)

- 15:00 15:30 Stergios A. Polyzos (Thessaloniki) Selenoprotein P in non-alcoholic steatohepatitis.
  15:30 - 16:00 Lutz Schomburg (Berlin) The facts in the role of selenium in obesity and diabetes mellitus.
  16:00 - 16:30 Costas Phenekos (Athens) Selenium in bone diseases.
- **16:30 17:00** *Nikolay Solovyev (Ghent)* Selenoprotein P and Alzheimer disease.
- 17.00 17.30Anthony Tsarbopoulos (Athens)Therapeutic Strategies for Alzheimer's Disease: The potential role of selenium.

**17:30 - 18:00** Interactive networking and conclusions.



### Faculty

#### Krystallenia Alexandraki

Division of Pathophysiology, National and Kapodistrian University of Athens, Athens, Greece

#### Corin Badiu

M.D., Ph.D., FACE, Professor in Endocrinology, Fellow of the Romanian Academy of Medical Sciences, National Institute of Endocrinology, "C. Davila" University of Medicine and Pharmacy, Bucharest, Romania

#### Tomasz Bednarczuk

M.D., Ph.D., Professor of Medicine, Head of the Department of Internal Medicine and Endocrinology, Medical University of Warsaw, Warsaw, Poland

#### **Georgios Dedoussis**

Professor of Cellular and Molecular Biology, Department of Nutrition and Dietetics, School of Health Science and Education, Harokopio University, Athens, Greece

#### Evanthia Diamanti-Kandarakis

Emeritus Professor of Internal Medicine and Endocrinology, Medical School, National and Kapodistrian University of Athens, Director of Endocrinology and Diabetes Department, Hygeia Hospital, Athens, Greece

#### Jacques E. Dumont

M.D., PhD, Professor, Institute of Interdisciplinary Research, Schools of Medicine, Université Libre de Bruxelles, Vrije Universiteit Brussels, Belgium

#### Leonidas H. Duntas

Professor of Internal Medicine and Endocrinology, University of Ulm, Germany, Secretary of the European Thyroid Association, Evgenideion Hospital, Unit of Endocrinology, Diabetes and Metabolism, National and Kapodistrian University of Athens, Greece

#### Ulla Feldt-Rasmussen

M.D., DMSc, Professor, Chief of Medical Endocrinology, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark

#### **Dimitrios G. Goulis**

Associate Professor in Reproductive Endocrinology, Unit of Reproductive Endocrinology, 1<sup>st</sup> Department of Obstetrics and Gynecology, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece

#### Laszlo Hegedüs

M.D., DMSc, Professor and Consultant Physician, Immediate Past President, Danish Thyroid Association, President, European Thyroid Association, Department of Endocrinology and Metabolism, Odense University Hospital, Odense, Denmark

#### Alicja Hubalewska-Dydejczyk

Professor, M.D., PhD, Head of the Chair and Endocrinology Department Jagiellonian University, Medical College, Krakow, Poland



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### Faculty

#### **Christine Kanaka-Gantenbein**

M.D., PhD, Professor of Pediatrics - Pediatric Endocrinology, Director First Department of Pediatrics, Medical School, National and Kapodistrian University of Athens, "Agia Sophia" Children's Hospital, Athens, Greece

#### Anna Kipp

Professor, Friedrich Schiller University Jena, Institute of Nutritional Sciences, Molecular Nutritional Physiology, Jena, Germany

#### Josef Köhrle

Seniorprofessor, Charité Universitätsmedizin Berlin, Campus Virchow - Klinikum, Institut für Experimentelle Endokrinologie, Berlin, Germany

#### Gesthimani Mintziori

M.D., MSc, PhD, Endocrinologist, Unit of Reproductive Endocrinology, 1<sup>st</sup> Department of Obstetrics and Gynecology, Aristotle University of Thessaloniki Medical School, Thessaloniki, Greece

#### Melpomeni Peppa

Associate Professor of Endocrinology, National and Kapodistrian University of Athens, Endocrine Unit, 2<sup>nd</sup> Dept of Internal Medicine Propaedeutic, Research Institute and Diabetes Center, Attikon University Hospital, Athens, Greece

Costas Phenekos M.D., PhD, f. director, Department of Endocrinology and Diabetes Center, Red Cross Hospital, Athens, Greece

#### **Stergios Polyzos**

Endocrinologist, Assistant Professor of Pharmacology - Medical Research Methodology, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece

#### Margaret P. Rayman

Professor of Nutritional Medicine, Department of Nutritional Sciences, Faculty of Health and Medical Sciences, University of Surrey, Guildford, UK

#### Lutz Schomburg

Professor, Deputy Director; Institut für Experimentelle Endokrinologie, Charité Universitätsmedizin Berlin, Berlin, Germany

#### Peter PA Smyth

Professor, University College, Dublin, Ireland and National University of Ireland, Galway, Ireland, Chair, ETA Archives Board

#### Nikolay Solovyev

PostDoc (EuraMet funded project ReMIND) Ghent University, Department of Chemistry, A&MS Group, Ghent, Belgium

#### Anthony Tsarbopoulos

Dr., Associate Professor, Department of Pharmacology, Medical School, National and Kapodistrian University of Athens, Athens, Greece & Director of Bioanalytical Department, GAIA Research Center, The Goulandris Natural History Museum, Kifissia, Greece

#### Panos Zirogiannis

Dr., Nephrologist, President of the Hellenic Society for the Dissemination of the Hippocratic Spirit, Athens, Greece



### **General Information**

#### Dates

#### Friday 30 November - Saturday 1 December 2018

#### Venue

#### Gaia Centre

Goulandris Natural History Museum Othonos 100, 145 62 Kifissia Athens, Greece Website: **www.gnhm.gr** 

#### Language

The official language of the congress is English.

#### Registration

Registration fees (per participant)

#### 150,00€

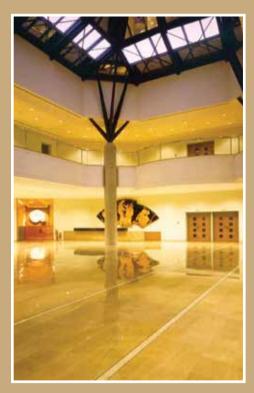
The registration fees include:

- Admission to all scientific sessions
- Admission to the exhibition area
- Congress Material
- Certificate of Attendance

The registration fees do not include VAT 24%.

#### Accreditation

The congress has been accredited by the Panhellenic Medical Association with **10 CME-CPD Credits**, according to the UEMS-EACCME<sup>®</sup> criteria.





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### Acknowledgements

The Organizing & Scientific Committee of the Meeting would like to express their sincere gratitude to the following sponsors for their support:













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