



ENA / Project EarlyNutrition 9th BIANNUAL EARLY NUTRITION PROJECT MEETING 7th-11th May 2016

INCLUDING ONE DAY OF



7th of May 2016

School of Medicine. University of Granada
SALÓN DE ACTOS

Avda. de la Investigación, 11 – 18016 – Granada Spain

www.earlynutritionmeeting.com www.early-nutrition.org











Dear Colleagues and Friends,

Welcome to Granada!. On behalf of the Early Nutrition Academy (ENA), the European Union, the EURISTIKOS Excellence Centre for Paediatric Research and the University of Granada, we welcome you to the events organised on the occasion of the EarlyNutrition EU Project Meeting in Granada (Spain) from 4th-11th May 2016.

On 7th of May it has been programmed the International Symposium about the "Early Origins of Obesity" in which outstanding clinicians, basic scientists and epidemiologists will integrate their knowledge to disseminate the current understanding on the biological processes involved in foetal programming of Obesity and its comorbidities.

For more than a century, clinical investigators have focused on early life as a source of adult health. Although the hypothesized mechanisms have evolved, a central notion remains: "early life is a period of unique sensitivity during which experience confers enduring effects". The mechanisms for these effects remain almost as much a mystery today as they were a century ago. Recent studies suggest that maternal diet can program offspring growth and metabolic pathways, altering lifelong susceptibility to diabetes and obesity. The immediate consequence is the development of further alterations like obesity and metabolic syndrome, and other adverse health conditions (type-2 diabetes, cardiovascular diseases, cancer, reproductive, immune and neurological disorders), which are placed nowadays as a Public Health problem worldwide. Furthermore, the epigenetic inheritance of acquired metabolic disorders may contribute to the current obesity and diabetes pandemic.

Under the framework of the *EarlyNutrition* EU Project, a wide multidisciplinary group of scientists will try to address the most updated knowledge about how genetic and environmental factors will impact during early life, determining the risk of disease during child- and adulthood. This research is focused in the identification of health determinants to develop future preventive treatments and individualized therapies, and specially focused in Obesity and related diseases.

The main objective of the proposed scientific activities is to bring together leading experts from these interdisciplinary fields, and to show and disseminate the latest knowledge about how to interpret and integrate the data emerging from animal models and basic science (*metabolomics, epigenetics,..*) into the early clinical prevention and management of non-communicable diseases.

Moreover, these activities will take place in the new School of Medicine of the University of Granada, placed in the Health Sciences Technological Park of Granada, which has been growing up the latest years to be nowadays a wonderful area for interaction between scientists, researchers and stakeholders.

Furthermore, Granada is one of the most beautiful cities in the world and offers a wide range of cultural, historical, commercial and gastronomic experiences. Our most famous monument, The Alhambra, is a World Heritage place, which is the most visited in Spain and has been selected several times for one of the Seven Wonders of the World. But the city is plenty of other wonderful places which had in the background fantastic historic memories.

Finally, we have tried to offer you a scientific and social atmosphere of high quality to increase not only the scientific knowledge but also the social relationship between speakers and delegates.

Yours sincerely,



Prof. Cristina Campoy, MD Prof. Berthold Koletzko, MD, Dr. HC

DEFINITIVE PROGRAM

INTERNATIONAL SYMPOSIUM "Understanding Origins of Obesity: From Basic Science to Early Clinical Prevention" Saturday, May 7th, 2016

Venue: Salón de Actos – Tower B - School of Medicine – University of Granada

Health Sciences Technological Park

Avda. de la Investigación, 11 -18016 – Granada (Spain)

Host: Prof. Cristina Campoy, University of Granada, Spain

TIME	EVENT	
8:00-8:30	Registration	
MORNING SESSIONS		
8:15-8:30	Open Event and Welcome Prof. Enrique Herrera Vice-rector of Research at University of Granada Prof. Cristina Campoy Prof. Berthold Koletzko	
8:30-10:30	WORKSHOP 1: Understanding Mechanisms Involved in Early Programming of Health and Disease Chair: Prof. Berthold Koletzko – Co-chair: Harry McArdle	
8:30-9:00	Epigenetic programming of health and disease by nutritional factors in early life Prof. Richard Saffery	
9:00-9:30	Metabolomic analyses in relation to early nutrition Prof. Berthold Koletzko	
9:30-10:00	Placental adaptations to a nutrient rich environment and its impact on adiposity Prof. Michael Symonds	
10:00-10:30	New insights in the placental transport of fatty acids Prof. Elvira Larqué	
10:30-11:00	Coffee break	

TIME	EVENT
11:00-13:00	WORKSHOP 2: Life course models and human intervention studies of Early Programming Chair: Prof. Lucilla Poston – Co-Chair: Prof. Elvira Larqué
11:00-11:30	Life course models to study to early programming of NCD Prof. Sylvain Sebert
11:30-12:00	Role of feeding with low digesting carbohydrates during pregnancy improving metabolic health in mothers and offspring Dr. Ricardo Rueda
12:00-12:30	Associations between maternal obesity and offspring health: intervention studies in mice and women. Prof. Lucilla Poston
12:30-13:00	Low glycaemic index diet in pregnancy to prevent macrosomia (ROLO study): what have we learned? Dr. Aisling Geraghty
13:00-14:00	Lunch

AFTERNOON SESSIONS

14:00-16:00	WORKSHOP 3: Early programming: a fact in humans Chair: Vincent Jaddoe – Co-Chair: Michael Symonds
14:00-14:30	Consequences of maternal obesity Prof. Vincent Jaddoe
14:30-15:00	Impact of infant feeding on growth trajectory patterns in childhood and body composition in young adulthood Prof. Wendy Oddy
15:00-15:30	Early programming of the brain in different prenatal metabolic situations Prof. Cristina Campoy
15:30-16:00	Coffee break

TIME	EVENT
16:00 – 17:30	WORSHOP 4: Consequences of early programming for future Public Health interventions Chair: Prof. Francisco Mardones – Co-Chair: Prof. Richard Saffery
16:00-16:30	Environmental exposures and children development in Mexico Prof. Horacio Riojas
16:30-17:00	Special features of early programming during the first 1000 days of life in South America Prof. Francisco Mardones
17:00-17:30	Genetic variants associated with obesity and metabolic syndrome in children Prof. Angel Gil
17:30	Closing Event Prof. Berthold Koletzko and Prof. Cristina Campoy
20:00	Social Dinner

Organisers:

Cristina Campoy, Prof., MD

Department of Paediatrics. University of Granada. Spain

Berthold Koletzko, Prof., MD

Department of Paediatrics. Ludwig-Maximiliams University of Münich, Germany

Honour Committee

Rector of the University of Granada Research Vice-rector University of Granada Dean of the School of Medicine. University of Granada

Invited speakers:



Prof. Cristina Campoy
Department of Paediatrics
EURISTIKOS Excellence Centre for Paediatric Research. University of Granada, Spain



Dr. Aisling Geraghty
Department of Obstetrics and Gynaecology
School of Medicine National Maternity Hospital. University of Dublin. Ireland



Prof. Angel Gil President of FINUT Department of Biochemistry and Molecular Biology. University of Granada, Spain



Prof. Vincent Jaddoe Professor of Paediatric Epidemiology Erasmus MC, Sophia Children's Hospital. Erasmus University of Rötterdam, The Netherlands



Prof. Berthold Koletzko
Department of Paediatrics.
Ludwig-Maximiliams University of Münich, Germany



Prof. Elvira Larqué Department of Animal Physiology. Faculty of Biology. University of Murcia, Spain



Prof. Francisco Mardones Department of Public Health, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile



Prof. Wendy Oddy, PhD BAppSci MPH Unit of Nutrition and Dietetics, Public Health, Epidemiology University of Western Australia, Perth, Australia



Prof. Lucilla Poston
Department of Maternal and Fetal Health
Division of Women's Health at King's College London, London, UK



Prof. Horacio Riojas Director of Environmental Health Institute of Cuernavaca – Mexico



Dr. Ricardo Rueda Associate Director Discovery Technology R&D, Abbott Nutrition Abbott Laboratories, Granada, Spain



Dr. Richard Saffery

Murdoch Childrens Research Institute

Heads the Cancer & Disease Epigenetics (CDE) Laboratory

The Royal Children's Hospital in Parkville, Melbourne. Australia



Prof. Sylvain Sebert Institute of Health Sciences University of Oulu, Finland



Prof. Michael Symonds

Deputy Head of School of Medicine, Faculty of Medicine & Health Sciences

Queen's Medical Centre. Nottingham, UK

SCOPE OF THE EARLY NUTRITION ACADEMY (ENA)

The ENA, supported by several of the most prestigious researches in the field among Europe, was designed to:

- Offer a comprehensive Curriculum on mother-infant and paediatric nutritional programming research, literature, and clinical trials.
- Provide well-founded advice on the prevention, diagnosis, and management of early nutrition programming of adult diseases.
- Offer unique opportunities to learn from and interact with expert faculty from various International Centres, as well as from participants from around the world interested in early nutrition programming.
- Serve as an introduction to the new opportunities in Early Nutrition Programming research.

ORGANIZERS

The organising team consists of Prof. Berthold Koletzko, head of the Nutrition and Metabolism Division at the Ludwig-Maximiliams University of Münich, and Co-ordinator of the EU FP7 EarlyNutrition Project and President of the Early Nutrition Academy (ENA) and Prof. Cristina Campoy at the University of Granada, Director of the EURISTIKOS Excellence Centre for Paediatric Research, who in collaboration with her local team, will make this event a reality.

The International Symposium has been also supervised, approved and scientifically supported by the ENA members, as well as is supported by the European Commission through the EarlyNutrition FP7 EU Project.

VENUE

This one day of International Symposium will be held at the SALON DE ACTOS of the School of Medicine in Granada, sited at Health Sciences Technological Park, Avda. de la Investigación, 11 – 18016, Granada – Spain (www.ugr.es/~facmed/).

REGISTRATION

The registration deadline is **3**rd **of May 2016**. You can find the registration form or register on-line in www.project-earlynutrition.eu

WHO SHOULD ATTEND THE POSTGRADUATE SCHOOL?

The Symposium is designed to researchers, clinicians, master and PhD students and also for young investigators with previous knowledge or experience on clinical practice, nutrition and dietetic, sport medicine, basic science research related to pregnant women and paediatric nutrition, and those with an expertise linked to this field of research.

TRAVEL INFORMATION

Rich in both history and culture, Granada is an ideal holiday destination for anyone looking to visit Spain. With historical monuments and relaxing gardens to explore, it's easy to see why so many travelers are keen to find cheap flights to Granada or Málaga. This beautiful city occupies one of the most historically diverse destinations in Spain and so anybody looking to delve into the past can count on an unforgettable experience among Granada's many fascinating buildings and monuments.

Getting around Granada is also very easy. The bus and train networks are excellent and are also relatively inexpensive, making them ideal for exploring the city. However, visitors should not discount exploring the place on foot. Many of the local attractions are central and in any case wandering through the city's cobbled streets gives one an opportunity to explore the city in a relaxed manner.

The nearest airport is the airport of Granada-Jaén (Federico García-Lorca) (Phone: 0034-958 245 200), located 15 km from the city centre of Granada. You will probably have to take a connection flight via Madrid or Barcelona. Iberia (www.iberia.es), Spanair (www.spanair.com) and Ryanair (www.ryanair.com) offer frequent flights. Flights from and to the UK and some other important European cities are being offered. From Granada airport, a taxi to Granada city center costs from 25.00 € in a four seats taxi to 35.00 € in a six seats taxi would (one way).

The bigger and better International airport closer to Granada is the Málaga Airport (Pablo Picasso - AGP); it is about 1.5 hours away by car from Granada. If you arrive at Málaga airport you can easily find bus connections to Granada or by taxi.

How to move along Granada (TAXI / BUS)

All the taxis in Granada are official and sure.

Companies and telephones

- -Tele-Radio-Taxi
- +34 958 280 654 (12 lines)
- -Radio Taxi G.S.L.
- +34 958 132 323 (24 hours)
- -Servi-Taxi (Permanent service for Granada)
- +34 958 400 199

Language

The official language of the International Symposium will be English.

Weather

The weather and climate in Granada is extremely sunny, warm and enjoyable, with mild winters and hot summers. The spring weather and climate in Granada is pleasant, with average temperatures

ranging from 8°C to 25°C in May. A popular time of year to visit, spring in Granada brings a number of rain showers, together with cold nights, when coats are necessary, but warm weather at midday.

HOTEL INFORMATION

• HOTEL NAZARÍES *****

www.hotelnazariesgranada.com/

C/ Maestro Montero, 12. 18004-Granada Tel. (0034) 958 187 600

Fax. (0034) 958 187 601











WEBSITES INFORMATION

<u>www.spain.info</u>

<u>www.turismodegranada.org</u>