¡Viva España!

Great success for ESPE 2015

THANK YOU TO EVERYONE for making the 54th Annual ESPE Meeting in Barcelona such a huge success! A record number of 4100 delegates made this the largest ESPE Meeting to date and, coupled with exceptionally well-received plenary lectures, debates and symposia, this really was a meeting to remember.

ESPE 2015 brought together the wider paediatric endocrine community to share knowledge and expertise. This year’s theme, ‘Improving patient care: a pluridisciplinary dialogue’, was visible throughout the scientific programme, with world-renowned speakers exploring ways of working within a variety of specialisms.

I am particularly grateful to the Programme Organising Committee, chaired by Mehul Dattani, for their tremendous work. The plenary lectures were delivered to a packed hall, starting with Marian Rewers’ opening plenary, on the genetic and environmental determinants of type 1 diabetes, and continuing throughout the 3-day meeting.

ESPE 2015 received unprecedented levels of coverage in the international press (see page 2). Such levels of media attention show that ESPE is a truly international forum for disseminating our research.

We congratulate all our award winners this year, particularly Francesco G Chiarelli, who received the Andrea Prader Prize, ESPE’s most prestigious award. See pages 3–4 for details of all ESPE’s award winners.

I also thank the Local Organising Committee, who were instrumental in constructing an excellent social programme, culminating in a fabulous ESPE evening at the Museu Nacional d’Art de Catalunya. I am very grateful to all the Council members for their help and support, with special thanks to Lars Sävendahl, who handed over the role of ESPE Secretary General to Peter Clayton during the meeting.

I would also like to thank the Barcelona Convention Bureau, the staff of the Fira Gran Via, the Conference Team at Bioscientifica and – last but not least – you, for coming to Barcelona and participating. We hope that you all had a great time and experienced everything Barcelona has to offer, alongside the exciting scientific programme.

My best wishes,

Dr Laura Audí
ESPE President 2015
ESPE News

Welcome continued from page 1

ESPE 2015 also provoked much attention from the international press, and below you can read about the stories from the meeting which made headlines around the globe. This is accompanied by our regular ESPE Update, which brings you the latest news from the world of ESPE.

Our Research Update on page 5 brings more news from the ESPE Working Groups. In this issue, the Bone and Growth Plate Working Group highlight recent scientific developments, which will be useful to colleagues with an interest in this field.

IT WAS FANTASTIC to see so many of you at the ESPE Connect stand during ESPE 2015 in Barcelona. There were lots of familiar faces and many new ones too, with 25 new members joining during the meeting.

Our ‘Quiz the Council’ sessions enabled you to meet your Council members. Visit our new web page at www.eurospe.org/about/council.html to find photos of Council members and the ESPE Team.

Alongside the scientific programme, there was a busy schedule of committee meetings. We thank those of you who are involved in ESPE’s committees, which are all essential for keeping the Society moving in the right direction. We held a fantastic update session on our education and training activities, with many delegates attending to hear about the vast programme of events (see our new-look news alerts, Facebook and Twitter for updates). A video of the session will be available soon on the ESPE website.

During the Annual Business Meeting (ABM) in Barcelona, Annette Grüters-Kieslich was elected to be Peter Clayton’s successor as Chair of the Corporate Liaison Board, as Peter steps into the role of Secretary General. ESPE 2020 will be held in Liverpool, with Mehul Dattani as its President, following the election at the ABM.

Remember, to learn how you can become more involved with ESPE, or to answer any questions about your membership, please contact us at espe@eurospe.org. Follow us on Facebook and Twitter for all the latest Society and ESPE Meeting news.

Finally, the deadline for nominations for the 2016 ESPE Awards is 10 December 2015, so please submit your proposals before then. See www.eurospe.org/awards to find out more.

Joanne Fox-Evans, Hannah Bonnell and Tracey-Leigh Meadowcroft, ESPE Team

ESPE 2015 in the headlines

RESEARCH PRESENTED AT ESPE 2015 received unprecedented levels of attention from the world’s media. In the week of the conference, items from the meeting were reported in over 860 individual news stories in 26 different languages.

Press releases circulated by the ESPE office generated particular interest in three studies:

- Asthma medications during infancy linked to stunted growth (Antti Saari, Kuopio, Finland)
- Discovery of an association between height and cancer (Emelie Benyi, Stockholm, Sweden)
- Creation of insulin-producing cells that may treat diabetes (Philippe Lysy, Brussels, Belgium)

Press coverage highlights included (with numbers of unique website visitors):

- **MSN Nieuws** (>330m)
  Langere mensen grotere kans op kanker
- **Noticias de Salud** (>175m)
  Large-scale Swedish study discovers link between height and cancer
- **The Guardian** (>37m)
  Taller people more likely to get cancer say researchers
- **WebMD** (>34m)
  Asthma medication used in babies tied to stunted growth?
- **BBC News** (>16m)
  Asthma steroids ‘could stunt growth’ plus Study supports cancer link with height
- **New Scientist** (>0.5m)
  Rebooted pancreas cells could ease type-1 diabetes

ESPE welcomes new Secretary General

Professor Peter Clayton (Manchester, UK) began his term as ESPE Secretary General at the recent ESPE Meeting in Barcelona. You can read more about Peter on page 6. Our grateful thanks are extended to Professor Lars Sävendahl for the huge amount of work and support he has given ESPE during his time as Secretary General, and we wish him well for the future.
Award winners at ESPE 2015

We congratulate the many award winners who received their prizes at ESPE 2015 in Barcelona in October.

**ESPE Andrea Prader Prize**
Francesco G Chiarelli (Chieti, Italy, on the right) received the ESPE Andrea Prader Prize from Lars Sävendahl, in recognition of his lifetime achievement in teaching and research, outstanding leadership and overall contribution to the field of paediatric endocrinology.

**ESPE International Outstanding Clinician Award**
Malcolm Donaldson (Glasgow, UK, on the right) was presented with the ESPE Outstanding Clinician Award by Lars Sävendahl, in recognition of his outstanding clinical contribution to the practice of clinical paediatric endocrinology.

**ESPE International Award**
Claude Migeon (Baltimore, MD, USA) received the ESPE International Award. This is presented to an outstanding paediatric endocrinologist from a country outside Europe and the Mediterranean basin.

**ESPE Research Award**
Anders Juul (Copenhagen, Denmark) received the ESPE Research Award from Anita Hokken-Koelega, in recognition of research achievements of outstanding quality in basic endocrine science or clinical paediatric endocrinology.

**ESPE Outstanding Clinician Award**
Meena Desai (Mumbai, India) was awarded the inaugural ESPE International Outstanding Clinician Award, in recognition of her contribution and commitment to clinical paediatric endocrinology in a country outside Europe and the Mediterranean basin.

2016 ESPE Awards

Remember to make your nominations by 10 December 2015

For further details see www.eurospe.org/awards
ESPE News

Award winners at ESPE 2015

ESPE Young Investigator Awards
These awards for young paediatricians, in recognition of their scientific publications, were presented by Jan Lebl to:
- **Andrew Dauber** (Cincinnati, OH, USA), whose award lecture was entitled ‘Insights from genomic investigations into paediatric endocrine disorders’
- **Tulay Guran** (Istanbul, Turkey), whose award lecture was entitled ‘A long journey from phenomics to genomics’

ESPE President Poster Awards
This year’s prizes for the five best posters at the meeting were awarded to:
- **Hanna Moeller** (Hannover, Germany) for ‘The Eap1 promoter is differentially methylated at the onset of puberty in normal weight and obese female rats’ (P1–136)
- **Ayrton Moreira** (Sao Paulo, Brazil) for ‘Ontogeny of the synchronisation between adrenal clock genes, adrenal steroidogenesis-related genes and the circadian rhythm of the HPA axis in rats’ (P1–2)
- **Mesut Parlak** (Antalya, Turkey) for ‘Serum neurokinin B level can be used to differentiate central precocious puberty from premature thelarche’ (P1–111)
- **Viviana Dora Patianna** (Modena, Italy) for ‘Human placenta-derived mesenchymal stem cells: a novel protocol for pancreatic differentiation’ (P1–26)
- **Daniele Tessaris** (Turin, Italy) for ‘GH excess in McCune–Albright syndrome’ (P1–98)

ESPE Hormone Research in Paediatrics Prizes
These prizes for the best original papers published in *Hormone Research in Paediatrics* were awarded to:
- **Miranda de Jong** (Dordrecht, The Netherlands) for ‘Components of the metabolic syndrome in early childhood in very-low-birth-weight infants’ (Original Paper)
- **Kanetee Busiah** (Paris, France) for ‘Human pancreas endocrine cell populations and activating ABCB8 mutations’ (Novel Insights from Clinical Practice)

ESPE Research Unit Grant
This grant, designed to facilitate collaborative research in paediatric endocrinology, has been awarded to **Erica van den Akker** (Rotterdam, The Netherlands), **Evangelia Charmandari** (Athens, Greece) and **Christa Flück** (Bern, Switzerland) for their study ‘In search of novel monitoring tools to detect chronic over- or undertreatment in children with CAH’.

ESPE President Poster Awards

Henning Andersen Prizes
These awards for the most highly rated abstracts submitted to the ESPE Meeting were presented by ESPE President, Laura Audi, to:
- **Sasha Howard** (London, UK) for the Best Abstract in Basic Science, ‘Mutations in IGSF10 cause self-limited delayed puberty, via effects on GnRH neuronal migration’
- **Jesús Argente** (Madrid, Spain) for the Best Abstract in Clinical Science, ‘A new syndrome associated with mutations in the gene for pregnancy-associated plasma protein A2 (PAPP-A2) causing proportionate short stature, high circulating IGF-1, IGFBP-3, and ALS, mild microcephaly, thin long bones and decreased bone mineral density in two unrelated families’

Prize draw winners at ESPE 2015
CONGRATULATIONS TO Marcia Puñales (Porto Alegre, Brazil), who won our prize draw for a year’s free membership, and to María José Alcázar Villar (Madrid, Spain), who won the draw for a Kindle by completing our survey on the ESPE Connect stand.

Maria commented, ‘The meeting has been very worthwhile and has helped me in my daily practice. The sessions with experts were really interesting, particularly the ones dedicated to thyroid disease and suprarenal disease. The plenary sessions relating to diabetes topics have been very refreshing and the Yearbook session was also very useful.’

‘Scientific communication was at a high level and there were really interesting posters. The meeting was well organised and the programme schedules were respected. Besides the high scientific content of the conference, discussing difficult cases of your own with colleagues provides a great opportunity to improve treatment of the most challenging patients.’
Bone and growth disorders

IN RECENT YEARS, the use of next generation sequencing has identified the genetic causes of several rare skeletal disorders, including genetic causes of idiopathic short stature, skeletal dysplasias and osteoporosis.

Recent publications in the field

**WNT1** mutations in early-onset osteoporosis and osteogenesis imperfecta


This report identifies human skeletal diseases associated with mutations in *WNT1*. In ten family members with dominantly inherited, early-onset osteoporosis, a heterozygous missense mutation in *WNT1* was detected. In a separate family with two siblings affected by recessive osteogenesis imperfecta, a homozygous nonsense mutation was detected. *In vitro*, aberrant forms of the WNT1 protein showed impaired capacity to induce canonical WNT signalling, their target genes, and mineralisation. In mice, Wnt1 was clearly expressed in bone marrow, especially in B-cell lineage and haematopoietic progenitors. Lineage tracing identified the expression of the gene in a subset of osteocytes, suggesting the presence of altered cross-talk in WNT signalling between the haematopoietic and osteoblastic lineage cells in these diseases.

Short stature, accelerated bone maturation and early growth cessation due to heterozygous aggrecan mutations

Nilsson et al. 2014 *Journal of Clinical Endocrinology & Metabolism* 99 E1510–E1518

Most children with idiopathic short stature (ISS) have a delayed bone age (BA). ISS with advanced BA is far less common. In this article, the authors studied three families with autosomal dominant short stature, unexplained BA acceleration, and premature growth cessation. They found that this rare form of ISS is caused by mutations in the aggrecan gene. The findings indicate that aggrecan mutations can present as autosomal dominant short stature with advanced BA and early growth cessation. The results expand the spectrum of aggrecan defects and provide a molecular genetic aetiology for the unusual child with short stature and accelerated skeletal maturation.

Clinical guidelines – an update

**The diagnosis of osteoporosis in children**

The International Society for Clinical Densitometry (ISCD) 2007 Pediatric Official Positions define osteoporosis in children on the basis of fracture history and low bone density, adjusted as appropriate for age, gender and body size. The Task Force on Fracture Prediction and Osteoporosis Definition has reviewed these Positions and suggests modifications with respect to vertebral fracture and the definition of a significant fracture history, and draws attention to the need to consider degree of trauma as a factor that may modify fracture risk prediction.

Read more in: Fracture prediction and the definition of osteoporosis in children and adolescents: the ISCD 2013 Pediatric Official Positions

Bishop et al. 2014 *Journal of Clinical Densitometry* 17 275–280

Diagnosis of GNAS mutation-negative pseudohypoparathyroidism

The European Consortium on Pseudohypoparathyroidism (EuroPHP Consortium) is funded by ESPE. Its aim is to promote collaborative research and establish clinical consensus, and it has recently published these new guidelines.

Read more in: European guidance for the molecular diagnosis of pseudohypoparathyroidism not caused by point genetic variants at GNAS: an EQA study

Garin et al. 2015 *European Journal of Human Genetics* 23 438–444; corrigendum at 560

Worldwide Consensus Conference on the Prevention of Rickets

Following endorsement by all paediatric endocrine societies and with the support of experts from nutrition, epidemiology and health economics, as well as the ESPE Clinical Practice Committee, the consensus conference was held in Birmingham in May 2014 (as reported in *ESPE Newsletter* issue 25). The consensus papers are under preparation and will be published in the coming months. A follow-up public health questionnaire study of rickets and osteomalacia prevention in Europe is ongoing.

Other initiatives

The COST action BM1208 recently held a consensus meeting on Silver-Russell syndrome (diagnosis and treatment), with the help of a number of societies including ESPE and the European Society of Endocrinology. The action will conduct a consensus process for Beckwith-Wiedeman syndrome in 2016.

A consensus conference for pseudohypoparathyroidism is planned for 2017.

Events in the field

The ESPE Bone and Growth Plate Working Group held a successful symposium at ESPE 2015 in Barcelona in October. The 3rd European Imprinting School will take place in 2016; information will be available at [www.imprinting-disorders.eu/?page_id=3105](http://www.imprinting-disorders.eu/?page_id=3105). The 7th International Conference on Children’s Bone Health will take place in Salzburg, Austria, on 27–30 June 2016. See [www.iccbh.org](http://www.iccbh.org) for further details.

Ola Nilsson, Co-ordinator, ola.nilsson@ki.se
ESPE’s new Secretary General, Peter Clayton (Manchester, UK), was the second recipient of the ESPE Young Investigator Award (YIA), in 1994. The award was made on the basis of his work on the late endocrine effects of childhood cancer, supported by over 15 manuscripts published between 1987 and 1993 in prestigious journals such as *The Lancet*, *Pediatric Research*, *Journal of Clinical Investigation*, *British Medical Journal* and *Journal of Pediatrics*.

We asked Professor Clayton to share his thoughts on the development of paediatric endocrinology, the importance of ESPE and the impact of his YIA on his career – as well as the award’s value to others.

**Peter’s background**

Before receiving his YIA, Peter had spent a period as a Medical Research Council Travelling Fellow at the Department of Endocrinology and Metabolism in the University of Virginia Medical Center (1990–1991) and then as a Postgraduate Research Fellow in Paediatric Endocrinology at Royal Manchester Children’s Hospital (1991–1992). At the time of the award, he was a Lecturer in Child Health and Paediatric Endocrinology at the University of Manchester.

He is now Professor of Child Health and Paediatric Endocrinology, University of Manchester, and Honorary Consultant Paediatrician, Royal Manchester Children’s Hospital and the Christie Hospital, and Director of the Institute of Human Development, Faculty of Medical and Human Sciences, also at the University of Manchester. His main research interest is normal and disordered growth, focusing on clinical, biochemical and molecular aspects, including pharmacogenomics.

**How has paediatric endocrinology evolved since you received your YIA?**

I went to the USA in 1990–1991 to get training in molecular biology, as these techniques were coming into use widely in endocrine research. Since then, we have seen an incredible pace of molecular development.

In 1990, it would take several days from the extraction of mRNA from a cell model to determining whether treating those cells with a hormone had changed levels of that single mRNA. Now you can measure every mRNA in a cell within hours. In the clinic we could only confirm a few diagnoses by molecular tests; now, with exome/genome sequencing, we have the ability to find a specific diagnosis in many of the children with rare diseases that we see.

But what hasn’t changed is the need to understand the basics of growth and hormone action, to take a proper history, to listen to families and to examine comprehensively, so that you have really good phenotyping. These remain essential skills.

**Why should young investigators apply for the award?**

External, peer-reviewed, recognition of your work with an award is not only a great boost to your self-esteem, but also a really important marker to your institution that your work is viewed as high quality. Any clinician with a reasonable portfolio of research work under their belt should consider applying.

**Why did you join ESPE, and how has it helped your career?**

I initially joined on my supervisors’ recommendation. Both (Steve Shalet and Tony Price) were members and attended every annual meeting. It quickly became clear to me that ESPE was exactly the right organisation for a paediatric endocrinologist. Annual meetings were really stimulating and I would always come away buzzing with new ideas. They were a great place to meet like-minded individuals, to get friendly feedback on your work, and to listen to outstanding plenary speakers in our field. ESPE has been a constant focus through my career. The Society has a very important role internationally, as a beacon for high quality clinical science, education, training and continuing professional development.

**Peter Clayton**, University of Manchester, Royal Manchester Children’s Hospital and the Christie Hospital, Manchester, UK
Michel L Aubert remembered
1940-2015

AFTER A COURAGEOUS STRUGGLE against cardiovascular problems for a decade, Professor Michel Aubert sadly passed away in July 2015.

Michel played an important role as a biologist in paediatric and developmental endocrinology, not just in Switzerland, but across Europe and the rest of the world. He is well known to many ESPE members for his remarkable scientific achievements as well as for his enthusiastic, imaginative personality.

He was born in Lausanne, Switzerland, and trained in biochemistry. His PhD thesis in 1970 was on radioimmunoassays of polypeptide hormones in plasma, not only their evaluation, but their application in clinical endocrinology and gynaecology. From 1971 to 1975 he went to San Francisco, CA, USA, as a Research Fellow in the Paediatric Endocrine Unit at the University of California. There, he collaborated in studies on growth hormone (GH)’s molecular conformation and activity in radioreceptor assay and radioimmunoassay. He developed his interest in developmental endocrinology, demonstrated by his numerous publications on the ontogenesis of human fetal pituitary hormones and hypothalamic factors. During this period, he also became a consultant at the National Pituitary Agency (Baltimore, MD, USA).

In 1975, Michel returned to Switzerland as Research Associate at the University of Geneva School of Medicine, and a productive period in his career followed. In 1987, he was appointed Associate Professor at the Department of Paediatrics in Geneva.

Michel Aubert created and developed the basic research laboratory of the Division of Biology of Growth and Reproduction, where many biologists and fellows were trained. His research focused on the neuroendocrine aspects of growth and development, the neuroendocrine regulation of feeding, intrauterine growth retardation and the ‘programming’ hypothesis. His main research topic remained the question of sexual maturation in rats, studying the ontogeny from fetal to adult life of hypothalamic gonadotrophin-releasing hormone (GnRH) and pituitary GnRH receptors, their effects on gonadotrophin secretion, their number and activity after castration and replacement therapy.

Michel participated closely in studies of the measurement of GnRH and melatonin and their metabolites in biological fluids. He examined the role of melatonin and circadian rhythms in the control of onset of sexual maturation in the rat and in the oestrous cycles of female rats, as well as in humans. Furthermore, Michel also studied the role of GH-releasing factor, GH, insulin-like growth factor-1 (IGF-1), opiates, neuropeptide Y, leptin, nutrition and fasting on the sexual maturation of the rat and the possible role of these hormones and factors on the development of obesity, in relation to the programming hypothesis.

Despite retiring officially from the University of Geneva in 2005, Michel was asked by the National Scientific Research Foundation to develop a new research programme in the rat entitled ‘Endocrine disruptors: importance for human beings, animals, and ecosystems’. He studied the prenatal effects of low caloric diet, nicotine and bisphenol A on islet cells, adipogenesis, neonatal brain metabolism and development, as well as sexual maturation. His last, very original research was the study of a botulinum toxin-derived targeted secretion inhibitor that down-regulates the GH/IGF-1 axis, which might be of clinical relevance for the treatment of GH hypersecretion syndromes.

Michel was an active and faithful member of ESPE, and was Treasurer from 1983 to 1993, as well as participating in numerous Summer Schools. He received the ESPE Research Award in 1997 for his work on the sexual maturation of the rat. In 1981, he was a pioneer, as Chairman of the Organising Committee of the 1st Joint Meeting of LWPES (the Lawson Wilkins Pediatric Endocrine Society, now the Pediatric Endocrine Society, USA) and ESPE in Geneva. He was a leader in the organisation of several international meetings on puberty and developmental endocrinology and initiated many collaborative research studies around the world, as well as being a member of several Swiss and international societies.

Besides the remarkable achievements of his career, Michel raised a family of three children with his wife Monique, and was an excellent grandfather to his four grandchildren. He played the cello and was an accomplished horse rider.

All his colleagues, fellows and trainees who had the privilege of working under his supervision recognise his dedication to his field, modesty, rigour in his thinking, exigency in the analysis of experimental results, precision in his teaching, and his personality.

We wish Michel’s family all the strength necessary to deal with their loss.

Pierre C Sizonenko
Future meetings
See www.eurospe.org/meetings for details of all future meetings

Other Events

2nd ASPED-ESPE School
9-12 December 2015
Abu Dhabi, UAE

ESPE Winter School
18-24 March 2016
Sagadi, Estonia

Deadlines
Please note these fast-approaching deadline dates and submit your applications as soon as possible.

- ESPE Andrea Prader Award nominations
  - 10 Dec 2015
- ESPE Research Award nominations
  - 10 Dec 2015
- ESPE Outstanding Clinician Award nominations
  - 10 Dec 2015
- ESPE International Award nominations
  - 10 Dec 2015
- ESPE International Outstanding Clinician Award nominations
  - 10 Dec 2015
- ESPE Young Investigator Award nominations
  - 10 Dec 2015
- Advanced Seminar in Developmental Endocrinology applications
  - 31 Jan 2016
- ESPE Visiting Scholarship applications
  - 31 Jan 2016
- ESPE 2016 Abstract submission
  - 11 Apr 2016
- ESPE 2016 Travel Grant applications
  - 11 Apr 2016
- ESPE Visiting Scholarship applications
  - 30 Apr 2016
- ESPE Clinical Fellowship applications
  - 31 May 2016

See the ESPE website at www.eurospe.org for further details and the application process

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ESPE Office
The ESPE Office is managed by Bioscientifica Ltd. The role of ESPE's Senior Operating Officer is undertaken by Joanne Fox-Evans and Hannah Bonnell, providing support to ESPE Council and committees and, in particular, to the Secretary General. Tracey-Leigh Meadowcroft is the main point of contact for ESPE enquiries and manages all matters related to ESPE membership. The ESPE Office at Bioscientifica is also responsible for publication of the ESPE Newsletter and monthly news alerts.

Bioscientifica is the Professional Congress Organiser (PCO) for ESPE's annual meetings and manages the Corporate Liaison Board, which deals with industry sponsors.

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