ESPE Newsletter

bringing the latest in paediatric endocrinology to you

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The newsletter of the

ESPE
European Society for Paediatric Endocrinology

Improving care of children with endocrine diseases by promoting knowledge and research

ESPE News Contents *(click on a link below)*

Barcelona beckons

DEAR FRIENDS AND COLLEAGUES,

First of all, I would like to wish you all a prosperous 2015, bringing us good work and happiness! Among many ventures, we have the 54th ESPE Annual Meeting in my own city of Barcelona to look forward to. As you may imagine, preparing the various aspects of the meeting is both exciting and gratifying.

The Programme Organising Committee (POC) began discussing and preparing the scientific programme almost a year ago, following the ESPE membership and Local Organising Committee (LOC) call for proposals. Speakers have now been invited for the many different sessions (6 plenary lectures and 10 symposia, alongside 8 Meet the Expert sessions, 4 sessions on new perspectives, 2 on controversies, 2 on new technologies and the Yearbook of Pediatric Endocrinology sessions). The ESPE Working Groups are organising their events for the first morning, and the Satellite Symposia are also in preparation.

Contributions to oral and poster communication sessions are currently being accepted, so please remember to send your abstracts before 10 April 2015. Early bird registration is open until 3 May. Make your way to the website now at www.espe2015.org, where you will find all the information you need about the preliminary scientific programme, abstract submission, registration, hotels and the city of Barcelona.

The meeting takes place at the Fira Gran Via 8th Pavilion (the convention centre), located between Barcelona Airport and the entrance to the city at Plaça España. It has a single ground floor area for all activities, with a central exhibition area.

Hotels are found around the venue and in Plaça España. They are well connected by public transport to areas of interest in Barcelona, such as its famous architecture, which ranges from modernist buildings to Gothic edifices and Roman remains, and its impressive harbourside.

Participants will be welcomed at a reception at the meeting venue on Thursday 1 October, and are warmly invited to attend the traditional ESPE evening, on Saturday 3 October, at the Sala Oval in the Montjuïc National Museum. Here you will enjoy the magnificient view over the city and the colourful musical fountains.

Together with the ESPE Council, POC, LOC and Bioscientifica, the contribution of the Barcelona Convention Bureau and the support of ESPE Platinum and Gold Sponsors, we are working to bring you an excellent, exciting and fruitful 2015 meeting.

I encourage you to send your abstracts and register today at www.espe2015.org!

My best wishes,
Dr Laura Audí
ESPE President 2015

ESPE 2015 KEY DATES

Abstract deadline	**10 April 2015**
Travel grant applications	**10 April 2015**
Early bird registration	**3 May 2015**
Standard registration	**3 August 2015**

For more information see
www.espe2015.org

ESPE Newsletter survey

Please tell us what you think!

Complete a short survey HERE

Welcome to issue 27

DEAR FRIENDS AND COLLEAGUES,

Following the very successful ESPE Meeting in Dublin in September 2014, ESPE has started finalising the 54th ESPE Meeting in Barcelona, Spain, in 2015. The President of the Meeting, Dr Laura Audí, shares the latest news on this page: the scientific programme is already on its way and abstract submission closes on 10 April! Time passes quickly, so please mark your calendar...

This issue also features fascinating interviews with ESPE members. On page 5 you can read the thoughts of the first recipient of the ESPE Young Investigator Award, Jesús Argente, as he looks back over the 20 years

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Welcome *continued from page 1*

since he received his award. Meanwhile, on page 6, you can learn what a Sabbatical Leave Grant has meant for the career of Anne-Simone Parent.

We thank our colleagues from Switzerland for sharing news from the Swiss Society in our regular column featuring updates from national societies (page 7). Do send us your society's news and information.

You can also enjoy an excerpt from the *Yearbook of Pediatric Endocrinology* on page 7, prepared for us by Ze'ev Hochberg. We thank him for his contribution, which is a much appreciated part of the Newsletter.

As well as the regular update from the ESPE Team with recent news from our beloved Society (below), there is much information about other ESPE activities. These include the next ESPE Science School (also below), Research Unit Grants (page 3), the ESPE Summer School (page 6), the 1st ESPE Caucasus & Central Asia School (page 4), and an update from the Disorders of Sex Development Working Group (page 4).

Other leading news items include a short summary from the recent Consensus Meeting on Growth Hormone Safety (page 3). You can also learn the latest about the ESPE Training Programme from the Accreditation and Syllabus Subcommittee on page 3.

We, as the Editorial Board, endeavour to maintain the quality of the Newsletter and try to enrich it with feedback from all members. You are encouraged to let us have your comments via the online survey that we are running with this issue please.

I also would like to thank Lars Sävendahl for his continued support, and all my colleagues in the Newsletter team, whose enthusiasm and collaboration I greatly enjoy.

Yours sincerely,
Professor Feyza Darendeliler
Editor, ESPE Newsletter
feyzad@istanbul.edu.tr

ESPE update

WELCOME TO THE SPRING 2015 EDITION of the ESPE Newsletter! To address the growing needs of your Society and to ensure that you are kept up to date with our many programmes and activities, we are pleased to announce that there will now be four editions of the Newsletter each year.

2015 is full of exciting initiatives, including the return of the ESPE Science School. The Science School is part of ESPE's ever-expanding school programme, which also includes the Summer, Winter, Diabetes & Obesity, Caucasus & Central Asia, Maghreb and ESPE-ASPED Schools. There is a school to suit you at various stages of your career and in various locations. You can find more information about each school at www.eurospe.org/education.

ESPE has over 20 activities and programmes, all run by a team of dedicated committee chairs and members. By joining an ESPE committee, you too can make the most of the opportunity to engage and support your Society and take an active role in its development. Current committee vacancies are advertised via the monthly news alerts, which you can find at www.eurospe.org/news/alert.aspx. If you have any queries about the ESPE committees, such as how to join and what the roles involve, please contact the ESPE Team at espe@eurospe.org.

The ESPE Team is headed by the Senior Operating Officer (SOO), a role currently undertaken by Joanne Fox-Evans and Hannah Bonnell in a job-share arrangement. Hannah will be going on maternity leave shortly, and Lucy Lawrance will be covering her role. Please do not hesitate to contact Joanne, Hannah or Lucy if you have any queries regarding this role or your Society on espe@eurospe.org.

You can also find ESPE on Facebook (www.facebook.com/EuroSPE) and Twitter (www.twitter.com/eurospe).

And lastly, don't forget it's the time of year to renew your membership. You should now have received an email with details of how to renew for 2015 and a link to make payment. There are many great benefits of ESPE membership, so please encourage your colleagues to join as well! Find out more at www.eurospe.org/membership.

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

ESPE Science School

Lake Annecy, France
3-6 June 2015

REVISED DEADLINE:
31 MARCH 2015

DELEGATES AT THE 2013 ESPE SCIENCE SCHOOL

WE ARE DELIGHTED TO ANNOUNCE the return of the ESPE Science School. The school runs every 2 years, and is an exciting initiative, bringing together top basic scientists, experts in paediatric endocrinology and paediatric endocrinologists in training with a strong basic research interest.

The school is aimed at final year PhD students, post-doc fellows or research active young paediatric endocrine investigators who are within 5 years of their PhD or fellowship. Participants will discuss new scientific and clinical avenues for improving the understanding of pathogenic mechanisms, diagnosis and treatment of paediatric endocrine disorders.

The 2015 ESPE Science School will focus on 'Non-coding RNA in paediatric endocrinology'. It takes place on 3–6 June 2015, at The Pensières, Veyrier-le-Lac, near Lake Annecy, France.

The deadline for applications is 31 March 2015 and successful applicants will be notified in April 2015.

Further information and an application form are available at www.eurospe.org/education/education_scienceschool.html.

ESPE Training Programme

from the Accreditation and Syllabus Committee

THE REVISED ESPE TRAINING PROGRAMME was approved by the EAP (European Academy of Paediatrics) in 2014. Revisions had been undertaken between 2011 and 2014 by the ESPE Accreditation and Syllabus Subcommittee, in a process involving consultation with colleagues from different countries. The revisions were advertised in the ESPE Newsletter as well as on the ESPE website and at a poster presentation at the ESPE meeting in Leipzig. The approved version can be found at www.eurospe.org/education/education_training.html.

Following the approval of the Training Programme, the next step is its implementation at a national level and distribution of the Programme among centres and fellows in each country.

The Accreditation and Syllabus Subcommittee decided at the ESPE meeting in Dublin that the revised Training Programme should be distributed to the President of each National Society and/or to the colleague responsible for training in each country represented within ESPE. At the same time, we are also seeking answers to the following questions for each country. This will help us facilitate implementation of the Training Programme.

QUESTION 1: *Is paediatric endocrinology legally recognised as a specific subspecialty in your country?*

If the answer to Question 1 is NO:

QUESTION 2a: *Is there a structured and written training programme for trainees in paediatric endocrinology?*

QUESTION 2b: *Is there a structured working group for trainers and trainees in paediatric endocrinology?*

QUESTION 2c: *Is there advocacy for subspecialisation in paediatric endocrinology?*

If the answer to Question 1 is YES:

QUESTION 3a: *Do the centres for training in paediatric endocrinology meet the standards in the Programme?*

QUESTION 3b. *How could the recommended Programme be implemented in the centres?*

QUESTION 3c. *How can the use of portfolios in accordance with the Programme be advertised among the fellows in your country?*

Obtaining a thorough knowledge of the structure of paediatric endocrine training in countries in and around the EU will enable to us to find efficient methods of implementing the Training Programme. This will achieve harmony between different countries and, with the use of portfolios, will allow feedback from the fellows, as well as ultimately achieving efficient mobility among centres.

You will be able to read further updates in the ESPE Newsletter. Please send us your feedback if you have further suggestions or questions by contacting espe@eurospe.org.

Feyza Darendeliler, Sten Drop, Stefano Cianfarani, Jan Lebl, Wilma Oostdijk, Giorgio Radetti, Stefan Riedl *and* **Lars Sävendahl**, *Accreditation and Syllabus Subcommittee Members*

Consensus on growth hormone safety

ESPE RECENTLY ORGANISED A CONSENSUS WORKSHOP with the North American PES (Pediatric Endocrine Society) and the GRS (Growth Hormone Research Society). The workshop's aim was to examine the current state of knowledge about the long term safety of growth hormone (GH) in adults and children, including those in transition. It was held on 5–8 November 2014 near Manchester, UK.

Published and unpublished studies and specially commissioned reviews were examined, and senior medical advisers from the main GH manufacturing companies were also invited to present the results of their post-marketing surveillance studies. Participants worked on a series of specific questions over the 3-day meeting, and the particular points from each of the four discussion groups were collated in plenary sessions.

On the last day, a final document was prepared, hotly debated and agreed without industry members being present, to ensure complete impartiality and independence. It is a comprehensive statement about GH safety in the longer term, which in general is reassuring. It is being submitted for publication very shortly and, once published, will be widely available.

For further information, please contact Gary Butler, Chair, ESPE Clinical Practice Committee (gary.butler@ucl.ac.uk).

ESPE Research Unit Grants

PLEASE SUBMIT YOUR preliminary requests for ESPE Research Unit Collaborative Project Grants by **15 March 2015**.

The ESPE Research Unit co-ordinates high quality research in paediatric endocrinology. It aims to support the involvement of as many ESPE members as possible in various research activities, as well as disseminating information about on-going research.

Participation in research studies and other related activities of the Research Unit is open to any ordinary member of ESPE actively involved in paediatric endocrinology (non-members may participate as co-investigators).

Collaborative Project Grants will only be awarded for applications based on co-operative studies among eligible ESPE applicants from different countries. Competing applications for Collaborative Project Grants will be peer-reviewed by physicians and scientists who are actively involved in research. Full terms and conditions can be found at www.eurospe.org/research.

ESPE is pleased to announce that Sandoz continues to be the ESPE Research Unit sponsor for 2015.

Preliminary requests by 15 March

Your proposal for a Collaborative Project Grant should start with a preliminary request directed to the ESPE Research Unit Co-ordinator, Irène Netchine (irene.netchine@trs.aphp.fr; marked 'ESPE Research Unit'). Guidance and forms may be found at www.eurospe.org/research. If your proposal is approved you will be asked to submit a full grant application.

Grant applications by 26 April

Further information will need to be submitted on the more detailed form available at the above web address.

ESPE Caucasus & Central Asia School 2014

THE 1ST ESPE CAUCASUS & CENTRAL ASIA SCHOOL took place at Alatau Sanatorium near Almaty, Kazakhstan, on 24–30 October 2014. It was the first time that an ESPE teaching course was conducted in two languages: Russian and English. This was extremely advantageous for students from Central Asian countries, where proficiency in English is generally limited.

The 5-day course covered most paediatric endocrine topics in the form of lectures, interactive clinical cases and research project presentations by students. Teachers' clinical case discussions took place in small groups and were much appreciated by students.

The School witnessed a novel educational approach: the e-Learning Programme. The main topics were available in Russian, thanks to over 300 hours of translation beforehand! PDFs of all lectures will be available for the course participants for a year following the school, at the C&CA area of the ESPE e-Learning portal (www.espe-elearning.org).

In total, 25 fellows from Kazakhstan, Uzbekistan, Tajikistan, Azerbaijan, Armenia, Georgia, Kirgizstan and Ukraine were selected from more than 40 applications on the basis of clinical and academic experience. The teaching faculty comprised both English and Russian speakers: Gunduz Ahmadov (Azerbaijan), Rimma Bazarbekova (Kazakhstan), Francesco Chiarelli (Italy), Sten Drop (The Netherlands), Alina German (Israel), Jan Lebl (Czech Republic), Gulnora Rakhimova (Uzbekistan) and Rasa Verkauskiene (Lithuania). Rimma Bazarbekova and her local team receive our thanks for excellent course organisation, which contributed greatly to the School's success.

The course provided an extraordinary experience of teaching at the interface of several different cultures, bringing together paediatric endocrinologists in various positions in training with academic clinicians. The exchanges between students and teachers were very lively during interactive teaching time as well as during the breaks, which were rather short due to the busy schedule! Nevertheless, we all enjoyed a pleasant half-day excursion in Almaty and a relaxing evening of presentations from students' countries – not forgetting a very amusing song with the teachers' skits at the gala dinner!

And so the spirit and tradition of teaching and paediatric endocrine team building redolent of all ESPE Schools was successfully created at the 1st ESPE Caucasus & Central Asia School. All fellows were extremely proud and grateful to be generously awarded 1 year's free ESPE membership following the School.

The educational programme for the ESPE Caucasus & Central Asia School has been approved by the ESPE Council initially for 3 years, and we are grateful to Ferring Pharmaceuticals A/S for their generous support.

Rasa Verkauskiene, *ESPE Caucasus & Central Asia School Co-ordinator*

Caucasus & Central Asia School 2015

The 2nd ESPE Caucasus & Central Asia School will take place in Tashkent, Uzbekistan, on 29 October–3 November 2015. The deadline for applications is 30 April. See www.eurospe.org/education/education_caucasus.html for details.

ESPE WORKING GROUP UPDATE

Disorders of Sex Development (DSD)

THE DSD WORKING GROUP held a well attended successful symposium at the 2014 ESPE Annual Meeting in Dublin. The topic was 'Advances in endocrine understanding and detailed phenotyping of DSD'. John Achermann (London, UK) gave the first talk and discussed the role of steroidogenic factor-1 (SF-1) mutations in DSD. The backdoor pathway of steroid biosynthesis was presented by Clemens Kamrath (Giessen, Germany). Svetlana Lajic (Stockholm, Sweden) presented long term data from prenatal dexamethasone treatment in congenital adrenal hyperplasia (CAH), based on a large Swedish cohort.

Further talks were given by Michelle Welsh (Edinburgh, UK), who explained the role of early embryonic androgens on genital development, and by paediatric surgeon Lutz Wünschfrom (Lübeck, Germany), who presented the role of imaging for better phenotype description.

Subsequently, Jillian Bryce (Glasgow, UK) updated us on the I-DSD and I-CAH databases and activities. Then Birgit Köhler (Berlin, Germany) informed us about the progress of the dsd-LIFE outcome study (currently funded by the EU) and Olaf Hiort (Lübeck, Germany) discussed the development of the European Reference Networks in DSD.

Anna Nordenström, *anna.nordenstrom@ki.se*

Why my Young Investigator Award remains close to my heart

JESÚS ARGENTE WAS THE FIRST RECIPIENT of the ESPE Young Investigator Award (YIA) in 1993, following publication of 'Sexual dimorphism of growth hormone-releasing hormone and somatostatin gene expression in the hypothalamus of the rat during development' (*Endocrinology* 1991 **128** 2369–2375).

Although his research developed at the University of Washington (Seattle, WA, USA), by the time he received the YIA he was Associate Professor at the Universidad Autónoma de Madrid and Head of the Department of Paediatric Endocrinology at the Hospital Infantil Universitario Niño Jesús in Madrid, Spain.

Jesús is now Professor and Chairman in the Department of Paediatrics and Paediatric Endocrinology at the same institutions in Madrid, as well as Director of the National Programme of Childhood Obesity in the CIBERobn, at Madrid's Instituto de Salud Carlos III. His main areas of research are still growth and eating disorders, with an special emphasis on childhood obesity.

We asked Professor Argente to share his thoughts on paediatric endocrinology, ESPE and the impact of his YIA.

How has paediatric endocrinology evolved since your YIA?

Research using genetic and molecular techniques has developed dramatically. The number of monogenic diseases identified has substantially increased in every area of paediatric endocrinology. Molecular techniques have increased our knowledge in basic research. The pathophysiology of child endocrine diseases is much better understood today.

Why should young investigators apply for the award?

It is one of the first steps in connecting with the best scientific Society in paediatric endocrinology – namely ESPE – after being involved in research and publishing some manuscripts in peer-reviewed journals. After winning the award, there is a real moral incentive to continue doing research. It is very stimulating to interact with senior researchers when you are still young. I cannot forget how my mentors considered the ESPE YIA so relevant in supporting the academic career of a young investigator. In 1993, when I was establishing my own independent group in paediatric endocrinology in Madrid, this award gave me support and stimulated me to continue working hard with my research programme. Today, after over 20 years, I still keep this award in my heart.

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

I joined ESPE in 1987 because my mentor, Jean Claude Job in Paris, France, advised me of the importance of joining a scientific society involved in research in paediatric endocrinology. He reiterated the need to discuss clinical cases with colleagues from every country, and to continue studying to try to get the proper diagnosis and therapeutic options for your patients. This has been undoubtedly been facilitated by my ESPE membership, which allowed me to establish fruitful collaborations.

In my career, many people have helped me. I am in debt to them all, and most have been ESPE members. As a medical resident in Madrid with a major interest in paediatric endocrinology, Raquel Barrio and Manuel Hernández were my first mentors, who helped me take the initial clinical and academic steps to develop my career. Later, I was aided by Jean Claude Job, together with Professors Evain-Brion, Chaussain and Bougnères at Saint-Vincent de Paul Hospital in Paris, France, and later still by Professors Blizzard and Rogol in Charlottesville, VA, USA. My time at Professor Steiner's lab in Seattle (WA, USA) greatly helped my understanding of molecular techniques, largely due to Dr Chowen, then a PhD student.

These people showed me how to support a child with a potential endocrine disease, how important it was to ask questions, and the need to go to the laboratory to get answers and hopefully a diagnosis.

Jesús Argente, *Universidad Autónoma de Madrid and Hospital Infantil Universitario Niño Jesús, Madrid, Spain*

CAREER HIGHLIGHTS TO DATE

Jesús Argente has published over 200 peer-reviewed original manuscripts in prestigious journals.

His main contributions have been related to clinical research:

- Growth disorders with a genetic basis, especially *IGFALS*, *SHOX* and PAR1 mutations, as well as the discovery of mutations in *RNPC3* and others
- Childhood obesity and the pathophysiological relevance of novel adipokines, new genes, epigenetics and genomics
- Eating disorders, particularly endocrine conditions in anorexia nervosa and bulimia nervosa, as well as bone mineral density and fat content in these patients
- Advances in clinical and basic aspects of precocious puberty

Jesús has trained many fellows contributing to research in paediatric endocrinology from both Spain (Beatriz García-Cuartero, Luis Pérez-Jurado, Gabriel Á Martos-Moreno, Leandro Soriano-Guillén) and further afield (e.g. Brazil, Mexico, Argentina).

THEN...

...AND NOW

What a Sabbatical Leave Grant meant to me

We talk to Anne-Simone Parent of the University of Liège, Belgium, recent recipient of an ESPE Sabbatical Leave Grant.

I AM A PAEDIATRIC ENDOCRINOLOGIST at the University Hospital in Liège, and also have a permanent research position at the National Foundation for Research. My interests include the effects of perinatal exposure to endocrine-disrupting chemicals (EDCs) on the hypothalamic control of puberty, as well as the effects of EDCs on neurogenesis in the hippocampus.

Why did you apply to the Sabbatical Leave Programme?

Our laboratory had developed a research programme over several years, focusing on the effects of EDCs on brain development. The Sabbatical Leave Programme provided an outstanding opportunity to develop new tools to study the effects of EDCs on hippocampal development.

How did you choose your host centre?

Gary Westbrook and his team at the Oregon Health and Science University in Portland, OR, USA, have developed exquisite tools to study the incorporation of newborn neurones into the synaptic network of the hippocampus and to examine the functional and morphological development of new synapses. Those techniques represented an outstanding approach to study the effects of hormones and EDCs on circuit formation in the developing and adult nervous system.

Did the programme fulfill your expectations?

Absolutely! We have established a long-standing fruitful collaboration between our teams. I am grateful to ESPE for a wonderful opportunity to get new research perspectives at this stage of my career. I thank my host and his team who shared their knowledge with great generosity. The programme brought support for developing tools that will be transferred to our laboratory in Belgium.

How will the programme improve your current studies?

It will have a strong and positive influence on our research projects. The techniques will allow us to develop our research on EDCs and brain development in Europe. In particular, we gained the ability to tag newborn granule cells in the hippocampus with enhanced green fluorescent protein using a novel transgenic mouse model as well as retroviral labelling. This has provided a unique opportunity to follow the effects of EDCs on single neurones during perinatal exposure as well as on neurones in animals born months after EDC exposure. We could thus assess the acute effects of EDCs as well as late effects due to residual EDC levels or a disrupted neural environment. Grant applications have been submitted to continue our collaborative project in Europe and the USA.

What was your main area of research during Programme?

We aimed to examine the impact of EDCs on brain development using novel animal models. We proposed a novel approach to determine the effects of perinatal exposure to polychlorinated biphenyls (PCBs), a group of EDCs perturbing thyroid function, on synapses and neural circuits in the mouse hippocampus. Indeed, several epidemiological studies have reported that children exposed *in utero* to PCBs have a decreased IQ and some learning difficulties. Newborn granule cells in the dentate gyrus are important for cognitive function, and are exquisitely sensitive to hormones, providing a sensitive assay of brain development. Thus we have shown that early EDC exposure altered neural circuit development and function.

Would you recommend the Sabbatical Leave Programme to other ESPE members?

I definitely would. It is an outstanding opportunity to develop new skills, acquire knowledge and develop active collaborations. It offers great support to open new research perspectives and energise your career.

Anne-Simone Parent, *University of Liège, Belgium*

To find out more about applying for a Sabbatical Leave Grant see www.eurospe.org/awards/awards_sabbatical.html.

29th ESPE Summer School

Poblet Monastery, Catalonia, Spain
28-30 September 2015

PREPARATIONS ARE UNDERWAY for the ESPE Summer School, which provides up to date teaching in selected areas of paediatric endocrinology, promotes discussion and interaction between younger and more senior paediatric endocrinologists, and develops the next leaders in paediatric endocrinology.

In 2015, it will be held at Poblet Monastery, Catalonia, Spain, immediately before the 54th Annual Meeting of ESPE in Barcelona. The Summer School extends over 3 nights and 3 days and is composed of lectures, discussions and interactive case presentations. Fellows attending the Summer School are usually physicians in academic training in paediatric endocrinology, aged 40 years or less. They are selected by the Summer School Steering Committee.

The following topics will be covered at Summer School 2015:

- Puberty
- Disorders of the neuroendocrine axis
- Growth and genetics
- Diabetes and obesity

We are grateful to Ferring Pharmaceuticals A/S for supporting the ESPE Summer School by means of an educational grant.

For further information see www.eurospe.org/education/education_summer.html.

Nick Shaw *(Co-ordinator)*, **Marie Clemente** *(Local Organiser)*, **Abdullah Bereket**, **Antje Koerner**, **Carla Bizzari** *and* **Johnny Deladoey**
ESPE Summer School 2015 Steering Committee

Yearbook of Pediatric Endocrinology: Editor's preview

Editor Ze'ev Hochberg picks out an outstanding paper published in the forthcoming Yearbook of Pediatric Endocrinology.

Childhood environment influences adrenarcheal timing among first-generation Bangladeshi migrant girls to the UK

Houghton LC, Cooper GD, Booth M, Chowdhury OA, Troisi R, Ziegler RG, Katki HA, Hoover RN & Bentley GR
PLoS One 2014 Oct 13;9(10):e109200

BACKGROUND: Adrenarche marks middle childhood at about 7 years of age. Research examining British–Bangladeshi migrant women suggested that environmental conditions experienced before adrenarche influence adult reproductive function. This study investigated whether Bangladeshi children who migrate to the UK reach adrenarche earlier than non-migrants in Bangladesh or the UK.

METHODS: Healthy girls (aged 5–16 years) recruited from schools in Sylhet, Bangladesh, and London, UK, comprised four groups: Sylhetis ($n = 165$), first-generation migrants to the UK ($n = 42$), second-generation girls ($n = 162$), and British girls of European origin ($n = 50$). Anthropometric measurements were collected with questionnaire data for migration and socioeconomic characteristics. Saliva samples were assayed for dehydroepiandrosterone (DHEAS) using ELISAs. Multiple linear regressions tested for group differences in anthropometric and socioeconomic variables and DHEAS levels. Median ages at adrenarche (DHEAS > 400 pg/ml) were estimated using Weibull regression models for parametric survival analysis. Hazard ratios for reaching adrenarche earlier and 95% confidence intervals (CI), both unadjusted and adjusted for anthropometric variables, were estimated from the survival analyses.

FINDINGS: First-generation migrants had a median age at adrenarche (5.3 years) that was significantly earlier than Sylheti (7.2), second-generation (7.4) and European (7.1) girls. In univariate analyses, first-generation girls reached adrenarche significantly earlier than Sylhetis [HR(CI): 2.8 (1.4–5.5)]. In multivariate models, first-generation girls still reached adrenarche earlier than Sylhetis after adjusting for height [HR(CI): 1.9 (0.9–4.1)] and weight [HR(CI): 1.7 (0.8–3.8)], but these results were attenuated.

CONCLUSIONS: We suggest rapid catch-up growth experienced by first-generation girls during early childhood may explain their advanced adrenarche. The environmental conditions leading to earlier adrenarche, and the health implications of this early transition, merit further exploration.

COMMENTARY

Plasticity in developmental programming has evolved to provide the best chances of survival and reproductive success under changing environments. Environmental conditions experienced in early life can profoundly influence human biology and long term health. Developmental origins of health and disease and life history transitions are purported to use placental, nutritional and endocrine cues for setting long term biological, mental and behavioural strategies in response to local ecological and/or social conditions.[1]

The window of developmental plasticity extends from preconception to early childhood and involves epigenetic responses to environmental changes, which exert their effects during life history phase transitions. This paper shows that environmental conditions experienced by British–Bangladeshi migrants before adrenarche influence adult reproductive function, and that rapid catch-up growth experienced by first-generation girls in early childhood may explain their advanced adrenarche.

The adrenarcheal transition is a key event defining the transition from childhood to juvenility.[2] Such life history transitions are when the child adaptively responds to environmental cues to enhance growth, body composition, lifespan, fecundity schedules and behavioural strategies that yield the highest fitness in a given environment.[3] Here, we learn that childhood environment before adrenarche might represent a key period influencing adult reproductive function, that adrenarche itself might represent a critical childhood threshold for later life development, and that rapid catch-up growth might provide the switch for this cascade of events.

1. Hochberg Z *et al.* 2011 *Endocrine Reviews* **32** 159–224.
2. Hochberg Z 2008 *Archives of Diseases of Childhood* **93** 534–539.
3. Hochberg Z 2009 *European Journal of Endocrinology* **160** 135–141.

Société Suisse d'Endocrinologie-Diabétologie Pédiatrique

The SSEDP (the Swiss Society for Paediatric Endocrinology and Diabetology) was founded in 1993 and has 46 members, led by President Valérie Schwitzgebel.

It has working groups covering two main areas:

- Disorders of Sex Differentiation (DSD) – aiming to assess DSD epidemiology and quality of care in Switzerland (Co-ordinator Christa Flück; christa.flueck@dkf.unibe.ch)
- Growth Hormone Register – initially involved in the SAGhE Study, resulting in a national register of every child treated with recombinant human growth hormone in Switzerland since 1985 (Co-ordinator Primus Mullis; primus.mullis@insel.ch)

There is also an ongoing collaborative project on monogenic diabetes, co-ordinated by Professor Schwitzgebel.

The SSEDP organises an Annual Meeting, as well as the ESPE Advanced Seminar in Developmental Endocrinology (arranged by Professor Mullis).

ESPE and ISPAD (International Society for Pediatric and Adolescent Diabetes) guidelines are currently followed in Switzerland. There are six centres of excellence with full fellowship programmes (the Universities of Basel, Berne, Geneva, Lausanne and Zurich, and the Children's Hospital of St Gallen). The fellowship programme, including the learning goals, can be found at www.fmh.ch/bildung-siwf/fachgebiete/facharzttitel-und-schwerpunkte/kinder-und-jugendmedizin.html. A national exam is mandatory after the 3-year fellowship for accreditation in paediatric endocrinology.

For further information about SSEDP visit www.ssedp-sgped.ch or contact valerie.schwitzgebel@unige.ch.

Future meetings

See www.eurospe.org/meetings for details of all future meetings

Other Events

2nd ESPE Diabetes/ Obesity School
16–18 April 2015
Slovenia

Advanced Seminar in Developmental Endocrinology 'Endocrine Disruptors and Child Health'
29–30 May 2015
Rome, Italy

ESPE Science School
3–6 June 2015
Lake Annecy, France

ESPE Summer School
28–30 September 2015
Poblet Monastery, Catalonia, Spain

2nd ESPE Caucasus & Central Asia School
29 October–3 November 2015
Tashkent, Uzbekistan

5th ESPE Maghreb School
18–23 November 2015
Tunisia

Deadlines

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

ESPE Research Unit Grant preliminary applications	15 Mar 2015
ESPE Science School applications	31 Mar 2015
ESPE 2015 Abstract deadline	10 Apr 2015
ESPE 2015 Travel Grant applications	10 Apr 2015
ESPE Maghreb School applications	15 Apr 2015
ESPE Research Unit Grant final applications	26 Apr 2015
ESPE Caucasus & Central Asia School applications	30 Apr 2015
ESPE Visiting Scholarship applications	30 Apr 2015
ESPE 2015 Early Bird Registration deadline	3 May 2015
ESPE Clinical Fellowship applications	31 May 2015
ESPE Visiting Scholarship applications	31 Jul 2015
ESPE 2015 Standard Registration deadline	3 Aug 2015

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

ESPE
European Society for Paediatric Endocrinology

Improving care of children with endocrine diseases by promoting knowledge and research

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ESPE Office

The ESPE Office is managed by Bioscientifica Ltd, headed by Managing Director Leon Heward-Mills.

The role of ESPE's Senior Operating Officer is undertaken by Joanne Fox-Evans and Lucy Lawrance. They oversee the day-to-day activities of ESPE, liaising with the ESPE Council and committee members as well as being the main point of contact for ESPE enquiries. They undertake projects requested by the Secretary General, providing him with assistance and attending ESPE Council and committee meetings. Tracey-Leigh Meadowcroft handles membership renewals and payments and deals with subscriptions to *Hormone Research in Paediatrics*.

Bioscientifica also manages the Corporate Liaison Board which deals with industry sponsors, and is also responsible for publication of the ESPE Newsletter and monthly news alerts.

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