



ESE News

Issue 19 Autumn 2012

THE NEWSLETTER OF THE EUROPEAN SOCIETY OF ENDOCRINOLOGY –
THE EUROPEAN HORMONE SOCIETY

ISSN 2045-1563 (print)
ISSN 2045-1571 (online)

Europe and beyond

ESE membership exceeds 2500 worldwide

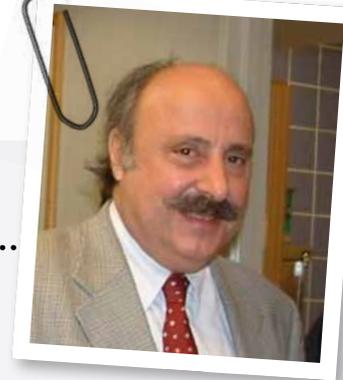


**BAT: the solution
to obesity?**

**Endocrine health
and the US Presidency**

**Also in this issue:
The Endo Explorer
in Italy and Poland**

**Day in the Life of...
a researcher in Ferrara**



In this issue

- 03 **Society News**
ECE 2013 and Prize winners
- 04 **Society News**
Clinical Update 2013, Nominations needed, Membership renewals
- 05 **ESE Committees**
EYES
- 06 **ESE Committees**
Science and Clinical Committees
- 07 **Feature Article**
Turning brown to be healthy
- 08 **Editor's Selection**
What's hot in ESE's official journals?
- 09 **The Endo Explorer**
We visit the University of Turin and the Polish Society of Endocrinology
- 10 **Historical View**
Hormonal havoc among US leaders
- 11 **A Day in the Life of...**
A researcher in Ferrara
- 12 **Coffee Break & Diary**
Win with the Endo Prize Puzzle!
Plus future meeting dates

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This document is available on the ESE website, www.eese-hormones.org

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Editor: Professor Philippe Bouchard, France
Email: philippe.bouchard@sat.aphp.fr

Deputy Editor: Professor Richard Ross, UK
Email: r.j.ross@sheffield.ac.uk

Editorial Board: Justo Castaño, Spain
Wouter de Herder, The Netherlands
Hans Romijn, The Netherlands
Dominik Schulte, Germany
Leonie van Houten, The Netherlands

Website: www.eese-hormones.org

Newsletter designed by Qube Design Associates

ESE would like to thank its Corporate Members for their continued support: CMM Global, Eli Lilly, Ipsen, Laboratoire HRA Pharma, Merck-Serono, Novartis, Novo Nordisk, Otsuka Pharmaceuticals Europe Limited, Pfizer, Roche, Sandoz International GmbH, ViroPharma SPRL

Editorial

Welcome to the autumn issue of *ESE News*, packed with stories from the world of endocrinology!

Europe and beyond is the strapline for this issue and the picture on our cover page reflects the universal reach of ESE. Membership stretches across the globe from national affiliated societies (highlighted in gold) to individual members residing in most countries of the world (shown in blue). Membership is rapidly approaching 3000, with members representing all clinical and scientific fields of diabetes and endocrinology.

All researchers, clinicians, nurses and students in endocrinology are welcome to join the Society. At the bottom of this page, you can read more about our new reduced 'In-training' membership rate, available to those in full-time training. We also offer reduced rate membership to other groups including nurses, young members and those based in certain countries around the world. Further information on the many benefits of ESE membership can be found on page 4.

Our Clinical Update meeting, in Abu Dhabi, UAE, on 11-12 January 2013 (see page 4), is just one example of how ESE is extending its reach to new geographic areas. (Remember that the deadline for early bird registration is 30 November.) ESE is also participating in the forthcoming Maghrebian Congress of Endocrinology, supporting endocrinology in North African countries.

NEW! 'In-training' membership fee for 2013 – only €20!

ESE will introduce a new membership category for the 2013 membership year, as agreed at the 2012 Annual General Meeting. The **In-training** membership fee is €20 per year and is open to members who are studying full-time for an academic qualification. This does not include those studying part-time whilst working in another role (e.g. MD students).

Nurse members will be interested to read the Clinical Committee update on page 6, where Sofia Llahana looks forward to sessions for nurses at ECE 2013. Page 6 also has details from the Science Committee about the exciting symposia at Mont Ste Odile, while page 5 showcases the activities of our younger members in the shape of EYES.

We are spoilt for feature articles in this issue of *ESE News*. On page 7, Francesc Villarroya and Antonio Vidal-Puig reveal that fat is the solution to obesity. Then Wouter de Herder whisks us back in time to chart the role of hormones in shaping world history, through the actions of three well-known 20th century US Presidents (page 10).

Back in the modern world, we travel with The Endo Explorer (page 9) to Turin in Italy and to Poland, to see what our colleagues are up to in their endocrine endeavours, and we also travel to Italy to share in the daily exploits of researcher Maria Zatelli (page 11).

Last but not least, do have a go at the Endo Prize Puzzle in your coffee break (page 12). There are prizes ready for the taking, so send us your entries without delay!

Philippe Bouchard
ESE President

Applicants must provide written proof of their student status by submitting a letter (by email) from their academic institution. If you think you may be eligible for the €20 membership then please email the ESE secretariat on info@euro-endo.org by **9 November 2012** so we can update your membership record before the annual renewal is sent.



ECE 2013

15th European Congress of Endocrinology
27 April - 1 May 2013, Copenhagen, Denmark

On behalf of ESE, we are delighted to invite you to ECE 2013 to discuss the latest advances in endocrinology and network with colleagues from across the globe.

Our stimulating scientific programme features more than 200 esteemed colleagues presenting lectures, workshops, expert sessions and debates on a range of topical issues. Clinical, translational and basic science strands will run throughout the meeting, along with a dedicated nurses' strand, following its success at the 2012 meeting. The full programme is available at www.ece2013.org.

We expect over 900 new data abstracts to complement the programme. You can submit your abstract online until 13 January 2013. Online registration is also open now – remember that ESE members pay a reduced registration fee. Early bird registration rates are available until 11 March 2013.

Arrive a day early to take advantage of one of the pre-Congress hands-on courses on proper medical writing and thyroid ultrasound. The limited numbers of spaces means early booking is advisable. Also, following the success of the onsite congress 'app' at ICE/ECE 2012, we will be providing this once again at ECE 2013.

Follow us on Facebook and Twitter to keep up-to-date with congress news:

[www.facebook.com/
EuropeanSocietyofEndocrinology](http://www.facebook.com/EuropeanSocietyofEndocrinology)

www.twitter.com/ESEndocrinology (the hash tag for the meeting is #ece13)

Join us in Copenhagen for a vibrant and significant congress!

Justo Castaño

Chair, Programme Organising Committee, ECE 2013

Jens Sandahl Christiansen

Chair, Local Organising Committee, ECE 2013

ECE 2013 prize winners!

ESE is delighted to announce the winners of the following prestigious prizes for 2013. The winners will deliver their prize lectures during the Opening Ceremony of ECE 2013 in Copenhagen, Denmark, on 27 April.

Iain Clarke (Australia) will receive the 2013 Geoffrey Harris Prize and deliver his prize lecture 'Cross-talk and chatter in reproductive neuroendocrinology'.

The 2013 *European Journal of Endocrinology* Prize will be awarded to Felix Beuschlein (Germany) whose prize lecture is entitled 'Regulation of aldosterone secretion - from physiology to disease'.

ESE MEETING GRANTS

Grants of up to €400 are still available to ESE members! The ESE Meeting Grant is made as a contribution towards the total cost of attending either the annual European Congress of Endocrinology or an ESE Training Course. Please check www.ece-hormones.org/prizes/ESEMeeting.aspx for eligibility criteria and details of how to apply.

For full details of the criteria and how to apply for ESE grants and prizes, please see the Prizes, Grants and Awards page of the ESE website
www.ece-hormones.org

Abstract submission deadline:
13 January 2013

Early registration deadline:
11 March 2013



ESE Clinical Update 2013

The third ESE Clinical Update takes place on 11-12 January 2013 in Abu Dhabi, UAE, as we broaden our educational reach. This update on current clinical practice will also encourage networking between trainees and established endocrinologists.

The Update takes place in association with the Imperial College London Diabetes Centre (ICLDC) of Abu Dhabi. You can read the full programme and register for the event at www.es-hormones.org/meetings/2013/eseclu2013.

Register by 30 November to benefit from reduced 'early bird' rates!

NOMINATIONS NOW OPEN!

Closing date 28 February 2013

Geoffrey Harris Prize 2014

The annual Geoffrey Harris Prize is a prestigious prize for neuroendocrinologists worth €12 000 and generously sponsored by Ipsen. As well as delivering one of the main lectures at ECE 2014, the winner will give two other lectures at future ESE scientific meetings.

EJE Prize 2014

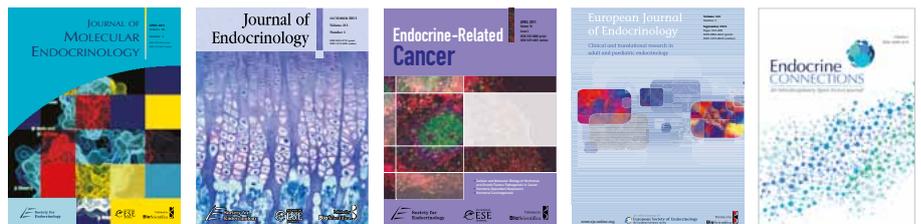
The *European Journal of Endocrinology* Prize is awarded to a candidate who has significantly contributed to the advancement of knowledge in the field of endocrinology through publication. The prize consists of a certificate and €10 000 plus travel expenses. The recipient will give a lecture on the relevant research during ECE 2014 and write a review paper for publication in the *European Journal of Endocrinology*.

Both prizes will be presented during ECE 2014 in Wrocław, Poland on 3-7 May 2014. For further information see www.es-hormones.org/prizes.

Membership for 2013

Members will soon receive renewal notices for 2013. We would like to take this opportunity to remind you of the benefits on offer to you:

- Free online access to all five of ESE's official journals: *European Journal of Endocrinology*, *Journal of Endocrinology*, *Journal of Molecular Endocrinology*, *Endocrine-Related Cancer* and the new interdisciplinary open access journal, *Endocrine Connections*, launched earlier this year
- Reduced registration fee for ECE 2013, saving €300 compared with the non-member fee. A special registration fee is also available for nurses
- Option to purchase preferential print subscriptions to *European Journal of Endocrinology*, *Journal of Endocrinology*, *Journal of Molecular Endocrinology* and *Endocrine-Related Cancer*
- Tri-annual newsletter and regular email alerts with up-to-date news
- Access to a web-based directory of member endocrinologists
- Reduced registration rates for ESE courses in clinical and basic science
- Access to prizes and awards
- Access to the ESE Meeting Grant (50 grants of up to €400 each), Basic Science Meeting Grant (100 grants of up to €450 each) and *Journal of Endocrinology* Travel Grants (10 grants of up to €300 each)
- Voting rights and attendance at the Annual General Meeting



2013 membership fees as agreed by vote at the 2012 Annual General Meeting

	Annual	3-year	Lifetime
Full members	€80	€215	€1280
Reduced rate (incl. nurses)	€35	€95	€560
NEW! In-training (see p2)	€20	n/a	n/a

Fees for the 2013 membership year must be paid by 31 December 2012. Details of payment methods will be included in your renewal notice.

ESE Election 2013

As a membership society, ESE offers all members the opportunity to nominate candidates for the Executive Committee.

In 2013, five members of the Executive Committee will retire: Paolo Beck-Peccoz (Vice-President), AJ van der Lely (ESE Treasurer), Wiebke Arlt, Andrea Giustina and Martin Reincke. However, in order to work towards a system of three elected members/three retirements each year, only the roles of the Vice-President and two Executive Committee members will be open for election in 2013.

Members will receive information on how to nominate candidates shortly by email.

UEMS 3E Fellowship

The 3E (Exchange in Endocrinology Expertise) Fellowship Programme is run by the Endocrinology Section/Board of UEMS (European Union of Medical Specialists), to aid training of new endocrinologists in Europe. The fellowships support both clinical practice and research. The next deadline for applications is 17 December 2012. For further details visit <http://uems-endo.homepage.dk>.



Watch out for EYES!

Young endocrinologists in Florence

'Obesity and metabolism' was the topic of the recent YARE/EYES Symposium at ICE/ECE 2012 in Florence, Italy, in May.

YARE (Young Active Research in Endocrinology) was founded in 1999 by young German endocrinologists, keen to improve communication and collaboration between young endocrinologists in their early careers. EYES (European Young Endocrine Scientists), a committee of ESE, was formed in 2011 to ensure that younger members are well represented within the Society.

The joint symposium at ICE/ECE was entitled 'Advancements in understanding endocrine regulation of energy balance: implications for obesity', and chaired by Maximilian Bielohuby (Munich, Germany) and Carmelo Quarta (Bologna, Italy). The five talks included two invited talks from 'senior' (but still young) speakers, and three talks from young European researchers.



As senior speakers, Daniela Cota (Bordeaux, France) and Diego Perez-Tilve (Cincinnati, OH, USA) presented highly interesting data on hypothalamic control of energy balance and brown adipose tissue thermogenesis by GLP-1 receptor signalling. Mona Mischke (recipient of a YARE Outstanding Presenter Award), Francesca Cinti (prize winner at the 1st Scientific Meeting of Engiol - Young Endocrinology in Italy) and Bogdan Galusca were invited to present their data as young researchers.

We thank all the speakers for excellent presentations and for the high level of active scientific discussion, for which we are also grateful to the audience. This exciting session was a big success and we look forward to future YARE/EYES symposia, starting with ECE 2013 in Copenhagen next year. We are also grateful to ESE, the German Endocrine Society and Novartis for their on-going support!

Finally, we want to encourage young researchers across Europe to be part of the EYES community. For more information, please visit www.es-hormones.org/about/committees/EYES.aspx. And why not present your data with EYES next year?

Carmelo Quarta and **Max Bielohuby**
Chairs, YARE/EYES Symposium

Bregenz Summer School

The annual Summer School on Endocrinology in Bregenz, Austria, saw a gathering of 76 endocrine researchers in early August. The Summer School always has a truly international flavour, and this year scientists participated from 18 European and non-European countries, including Denmark, Israel, Serbia, Russia, South Korea and the USA. Delegates included PhD students, post-docs and senior scientists. The Monastery Mehrerau, situated at beautiful Lake Constance, is an attractive setting, combining a scientific meeting with cultural and sports activities.

Members of the EYES and YARE organised two Young Investigators' Sessions. The first was opened by Reiner Jumpertz (Berlin, Germany), who focused on the link between the human intestinal microbiota and energy balance, and gave a fascinating insight into his recent research. Jaya Krishnan (Zurich, Switzerland) provided an overview of the adipocyte-mediated regulation of fatty acid oxidation, followed by Christopher Bachran (Washington, DC, USA) with



Contact us

to become an EYES ambassador for your country!

www.es-hormones.org/about/committees/EYES.aspx

an interesting introduction to prostate tumour therapy using specific fusion proteins based on anthrax toxin from *Bacillus anthracis*.

The second session looking at ethics in biomedical life sciences was realised by Esther Schnapp (Heidelberg, Germany) and Ulrich Schweizer (Berlin, Germany), who gave talks on ethics and competition in scientific publishing as well as ethics in terms of transgenic mouse models.

Thanks to all who attended for an excellent Summer School!

Verena Benz, Annekathrin Keiler, Mette Stoedter, Mona Mische and Susann Ludwig

Summer School Representatives



Mont Ste Odile, courtesy of Richard Edwards

Science Committee news: Our partnership with Mont Ste Odile

ESE's Science Committee exists to promote participation of basic scientists in the Society's activities. Basic knowledge is the starting point of scientific progress, and those providing fundamental scientific information in endocrinology must feel, in the same way as clinicians, that ESE is their 'home'.

The Committee's versatile action plan sets out to reach this goal. One aim was to establish a series of high quality basic endocrinology meetings in Europe. Rather than 'reinventing the wheel' we have joined forces with the Mont Ste Odile Symposia on Hormone and Cell Regulation, which have been highly acclaimed for their scientific quality during their 37-year history at their permanent venue: the historic monastery of Mont Ste Odile in Alsace, France, about 30 km west of Strasbourg. ESE is now to become the co-organiser and main sponsor of these meetings, which will take place annually in October.

The topic of the Mont Ste Odile-ESE Symposium will change every year. Last year we addressed 'G-protein-coupled receptors', while this year, on 11-14 October, we examined 'Receptor tyrosine kinases: from structural biology to systems biology'. Next year we will focus on 'Developmental aspects of endocrine function'. In this way, an interesting and varied programme will attract different groups of endocrine scientists each year.

The organisation of the Symposia is reminiscent of the Gordon Research Conferences and Keystone Symposia, extending over a 4-day period and offering formal top-quality invited

lectures, poster sessions and ample time for interaction between participants, not least because everyone will be accommodated and fed together within the monastery, which provides full-board accommodation for all participants.

ESE provides travel grants to help young members of the Society take part in these meetings. Further information can be found at: www.e-se-hormones.org.

Ilpo Huhtaniemi
Science Committee Chair
ilpo.huhtaniemi@imperial.ac.uk

Latest from the Clinical Committee: Supporting specialist nurses

The Clinical Committee supports specialist nurses in delivering patient care and advancing their role. We have developed dedicated nurse programmes at ECE, to promote education, exchange of ideas and networking.

Committee member and consultant nurse Sofia Llahana RGN INP MSc DNSc has led these activities. Sofia reports that, 'The dedicated endocrine nurse programme at ICE/ECE 2012 received great feedback. The three nurse sessions provided networking opportunities, and many nurses attended from around the world and benefited from significantly reduced registration fees.' The meeting also saw a dedicated nurse poster presentation session, with the best nursing poster prize awarded to Erin Booth from the USA for her work on 'A survey of knowledge related to cystic fibrosis related diabetes'.

ECE 2013 will host three nurse sessions: two clinical and one evening professional development session. As Sofia comments, 'Feedback from ICE/ECE 2012 included requests for more nurse speakers, so we are introducing a "Meet the Nurse Expert" session, where leading colleagues will share their expertise. We would like to hear from nurses who would be interested in speaking at future ECE meetings, and also invite colleagues to submit abstracts for poster presentation at ECE 2013. We hope that future ECE meetings will feature nursing oral presentation sessions, and for this we need significant contributions and abstract submissions from nurse colleagues.'

We are developing a forum for endocrine nurses and online resources. National endocrine nurse organisations and colleagues (including diabetes nurses) are invited to work closely with the ESE Clinical Committee towards these goals. Please contact us on info@euro-endo.org.



Sofia Llahana

Endocrine nurse members can register for ECE 2013 at the reduced rate of €100. To join ESE (€35 per year) see www.e-se-hormones.org/membership.

Pia Burman
Clinical Committee Chair
Pia.A.Burman@skane.se

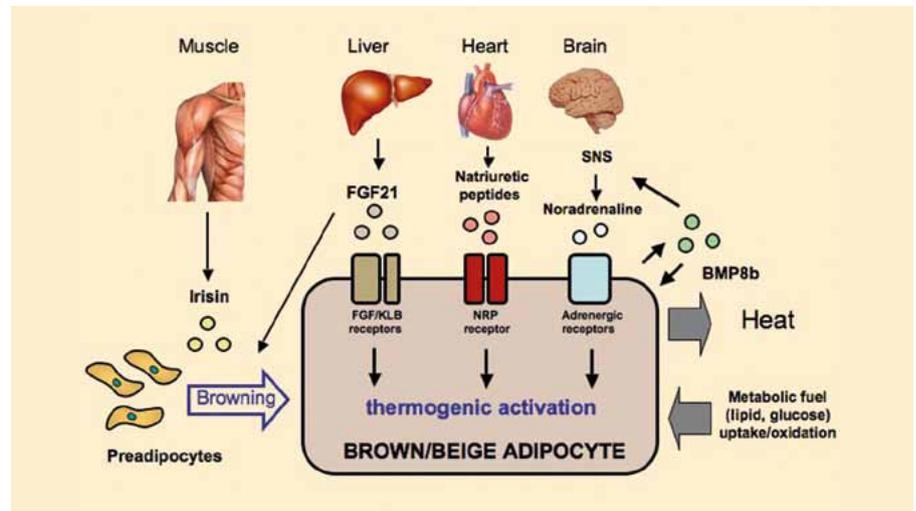
Turning brown to be healthy

Obesity is a massive worldwide health problem, associated with cardiometabolic complications. For the first time in history it is quite likely that the current generation may live shorter lives than their ancestors.

The cost of treating obesity is overwhelming the national health systems of European countries. The prospect is daunting when we realise that current and past anti-obesity therapies based on diet and drugs have failed, in part due to the robustness of the adaptive homeostatic mechanisms activated to defend the energy balance set point.

Therapies focused on promoting thermogenesis through the activation of the sympathetic nervous system (SNS) have also failed. Drugs such as ephedrine or sibutramine made people lose weight but had unacceptable cardiovascular side effects related to the excessive sympathetic tone to heart, kidney and arteries. These drugs were proof that activating the SNS causes stable weight loss. So it is a valid strategy to try and uncouple weight loss induced by activation of the SNS from cardiovascular side effects. We believe that the answer to this challenge may lie in brown adipose tissue (BAT).

BAT is an organ specialised in transforming fuel into heat to maintain body temperature. BAT is abundant in newborns, when maintaining body temperature is a challenge. The traditional view is that BAT is activated by the SNS, resulting in increased lipid availability for oxidation in specialised BAT mitochondria, characterised by the presence of a protein named UCP1. This protein makes mitochondria less efficient and transforms them into 'regulated energy burners' that contribute to thermic control, negative energy balance and weight loss.



Experiments in mice and anecdotal data from humans have shown that activating BAT increases energy expenditure, decreases weight, and improves insulin sensitivity, dyslipidaemia and cardiovascular problems. It has recently been shown that adult humans have BAT, although the obese tend to have less than lean individuals, and the obese who have the least BAT tend to be diabetics. Moreover, under some stimuli, white fat depots in humans can be transformed into active BAT, as is the case in rodents: the so-called 'browning' effect. The existence of BAT in adults suggests it should be amenable to strategies that increase its amount and/or activation.

One current BAT-related strategy is to build BAT mass using mediators such as PRDM16 and BMP7 that contribute to BAT differentiation. But simply having more BAT is not enough. BAT must be active to be helpful, and differentiating more BAT *per se* does not solve the problem of the selectivity of the SNS. A second strategy we have focused upon is to increase the sensitivity of BAT to the SNS – basically making the BAT more active for a given adrenergic stimulus. This is exactly what BMP8b, a recently identified BAT-secreted protein, does. It amplifies the adrenergic system in BAT and the brain, adjusting the firing rate of the SNS selectively to BAT.

A third approach is emerging, following the realisation that BAT activity can be regulated by molecules secreted by organs other than the brain. For example, the natriuretic peptides secreted by the heart activate brown fat. Similarly, we and others have shown that FGF21, an endocrine factor secreted by the liver, directly activates BAT. In addition, exercised muscle can promote browning of adipose tissue by secreting a molecule named irisin, which may contribute to metabolic benefits of exercise. This evidence suggests that the selectivity of the activation of BAT may be accomplished through SNS-independent approaches.

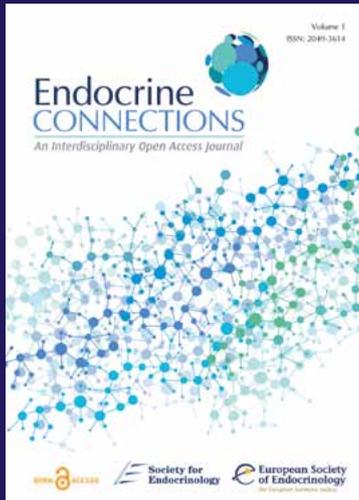
In summary, BAT-related strategies may offer an efficient way to keep weight off and be healthy. However, translation into human therapies requires a deeper knowledge of endocrine regulators and homeostatic regulatory loops.

Francesc Villarroya

Professor in Biochemistry and Molecular Biology, Institute of Biomedicine, University of Barcelona, Spain

Antonio Vidal-Puig

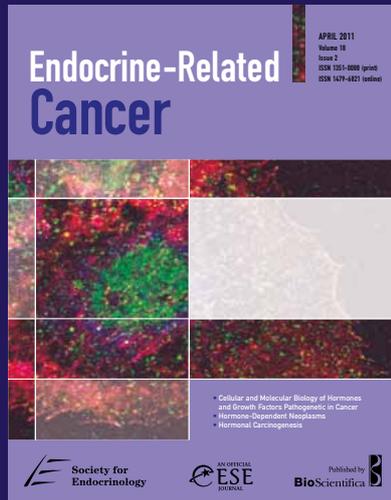
Professor in Molecular Nutrition and Metabolism, Addenbrooke's Hospital, University of Cambridge, UK



Renin-angiotensin system in early bovine embryo

This study shows angiotensinogen receptors 1 and 2 are present in bovine-hatched blastocyst. As precursor transcripts for angiotensin II were not detectable, it is possible the embryo responds to angiotensinogen II produced by the mother, and that this hormone might be involved in blastocyst hatching and embryonic development.

Pijacka *et al.* Read full article at doi: 10.1530/EC-12-0013



Estrogen and androgen receptors to assess risk in thyroid cancer

In a large series of T1 differentiated thyroid carcinomas, estrogen receptor- α (ER α) positivity, ER β negativity and positive androgen receptor expression are associated with a more aggressive tumor phenotype. The expression pattern of these receptors may represent an additional criterion to be considered when contemplating patient care.

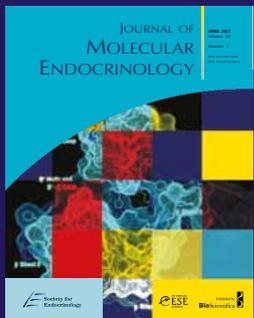
Magri *et al.* Read full article at doi: 10.1530/ERC-11-0389



Adiponectin and KISS1 gene expression

Hypothalamic kisspeptin could relay peripheral signals, including metabolic clues, to GnRH neurons. *In vitro* and *in vivo* evidence is provided that adiponectin reduces *KISS1* gene transcription through activation of AMPK and subsequently decreased nuclear translocation of specificity protein-1 (SP1), a vital regulator of *KISS1* transcription. This is the first experimental evidence for the characterisation of central reproductive regulation by adiponectin.

Wen *et al.* Read full article at doi: 10.1530/JOE-12-0054



CB1 receptor and GLUT4 expression

Endocannabinoid levels are elevated in the circulation and visceral adipose tissue of obese subjects.

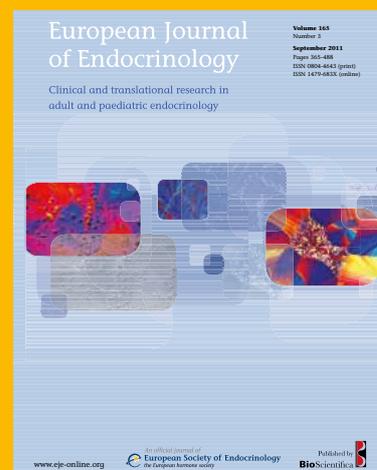
CB1 receptor blockers enhance insulin sensitivity and improve components of the metabolic syndrome. This study indicates that inhibition of CB1 receptor activity in adipocytes increases expression of insulin-sensitive glucose transporter type 4 (GLUT4), encoded by the *Slc2a4* gene, by decreasing NF- κ B and increasing SREBP-1 control of *Slc2a4* transcriptional activity. This demonstrates a peripheral interaction between the endocannabinoid system and metabolic regulation.

Furuya *et al.* Read full article at doi: 10.1530/JME-12-0037

Insulin degludec/insulin aspart combination in type 2 diabetes

Insulin degludec (IDeg) is an ultra-long-acting basal insulin analogue. This clinical proof-of-concept, open-label, treat-to-target trial showed that twice-daily administration of insulin degludec/insulin aspart (IDegAsp), the first soluble combination of distinct rapid-acting and basal insulin analogues, is a promising add-on therapy to metformin in patients with type 2 diabetes inadequately controlled with oral antidiabetic drugs. Twice-daily IDegAsp (in combination with metformin) was safe and well-tolerated, and provided overall glycaemic control similar to biphasic insulin aspart 30, but with a lower rate of confirmed hypoglycaemia.

Niskanen *et al.* Read full article at doi: 10.1530/EJE-12-0293



J A Romijn

Editor-in-Chief of *European Journal of Endocrinology*, Department of Medicine, Academic Medical Centre, University of Amsterdam
j.a.romijn@amc.uva.nl



The Endo Explorer

Turin, capital of Piedmont in northern Italy, has a proud history of innovation and education.

Turin is a major business and cultural centre, and was Italy's first capital city in 1861. Since the last century, Turin has developed into a major European crossroads for industry, commerce and trade, and currently is one of Italy's main industrial centres, being home to much of the Italian automotive industry. The city has a rich culture and history, and is known for its numerous art galleries, churches, palaces, piazzas, parks, gardens, theatres, museums and other venues. Turin boasts some of Italy's best universities, colleges and academies, such as the 600-year-old University of Turin and Turin Polytechnic.

The development of endocrinology in Turin took place in the 1930s and 40s and, in particular, after World War II, thanks to Francesco Ceresa and Aurelio Costa and their co-workers, who started the first laboratory for hormone measurements and the first dedicated outpatient clinics for endocrine disorders (especially thyroid pathologies). In the late 1950s, the first Italian Specialisation School in Endocrinology was founded at Turin University, and an important national centre for endocrine surgery began performing pioneering treatments for pituitary disorders.

The University Division of Endocrinology was founded in 1977 and directed by Professor Franco Camanni from 1983 to 2002. During those years, the research activity in endocrinology, diabetology

and metabolism at the University of Turin flourished and led to important achievements such as the development of the first GH radioimmunologic assay in Italy. This enabled original studies on GH neuroregulation in physiological and pathological conditions to be performed, and these have been published in the most important international journals in the field. The study of synthetic and natural GH-releasing peptides has become the major interest of our researchers and has led to fruitful collaborations with other Italian and international groups.

In the last two decades, the University Division of Endocrinology, Diabetology and Metabolism has widened its interests to different fields in diabetology, andrology and reproductive medicine, adrenal disorders, rare endocrine and autoimmune diseases, and cellular and molecular endocrinology.

Despite problems of funding, both basic and clinical research activity keeps increasing, thanks also to the enthusiastic commitment of young fellows who come to Turin from elsewhere in Italy, and to the collaboration of foreign visiting researchers.

Ezio Ghigo

Professor of Endocrinology
Dean of the School of Medicine
University of Turin
Italy

Polish Society of Endocrinology

The Polish Society of Endocrinology (PSE) was founded in 1949 by a group devoted to basic and clinical endocrinology, and the Society's journal *Endokrynologia Polska – Polish Journal of Endocrinology* appeared in the same year. However, the first organisation with an interest in endocrinology originated in Lvov in 1936. Named the Endocrinological Circle, it was led by A Cieszynski – a dentist!

Our membership exceeds 1000, active in 13 regional branches and 20 scientific sections. PSE members can be found in the Executive Committees of ESE, European Neuroendocrine Tumor Society, European Neuroendocrine Association, International Society of Gynecological Endocrinology and European Society of Gynecology.

Two years ago we organised the International Forum on Endocrinology, Diabetology and Metabolic Disorders in Krakow. Our 20th Congress in Poznan in September this year attracted about 1000 PSE members, and we are looking forward to hosting the 16th European Congress of Endocrinology in Wrocław in 2014.

Andrzej Milewicz, President
Marek Bolanowski, Secretary

'Endocrine health' among world leaders: USA versus Europe

November 2012 sees the 57th quadrennial presidential election of the USA. In the past century, at least three former US presidents suffered from an endocrine disorder, which in most cases significantly interfered with their daily professional activities. I'm not aware of such 'severe' endocrine pathologies occurring in European political leaders in the same era – though readers may wish to enlighten me! If you have similar reports on the endocrine health of European leaders during the past century, please send them to info@euro-endo.org.



Dwight Eisenhower – the president with the pheochromocytoma

Dwight David Eisenhower, aka 'Ike', was born on 14 October 1890 in Denison, Texas. After becoming world-famous as 'General of the Army' of the Allied Forces in Europe during the Second World War, he won the presidential elections in 1952 and 1956, and retired in 1961. Eisenhower had his first myocardial infarction in September 1955. Before 1955 he was diagnosed with 'borderline', 'labile' and 'transient' hypertension. In November 1957 he developed an ischaemic stroke, and between 1955 and his death on 28 March 1969 he suffered from 8 myocardial infarctions and 14 cardiac arrests. He died of heart failure. At the post-mortem examination, a 1.5-cm pheochromocytoma was found in the left adrenal. It is highly probable that this pheochromocytoma had at least partially been responsible for the cardiovascular problems of the 34th US president.

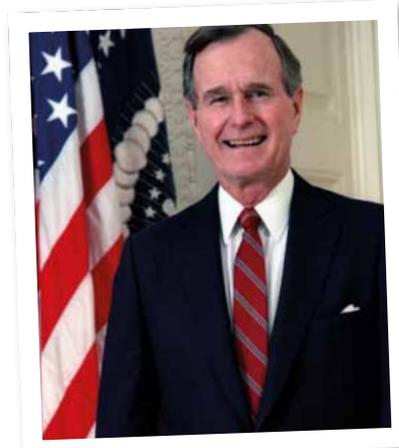


The complicated endocrinology of John F Kennedy

John Fitzgerald (Jack) Kennedy, or JFK, was born in Brookline, Massachusetts on 29 May 1917, and was famously assassinated in Dallas, Texas, on 22 November 1963. He most probably suffered from the autoimmune polyglandular syndrome type 2 (APS2). Sir Daniel Davis diagnosed him with an Addisonian crisis during a visit to the UK in September 1947. He was treated with glucocorticoid replacement, and the details of his peri-operative care during orthopaedic surgery for his spine were reported in 1955 by Dr James A Nicholas. According to a witness, no adrenal tissue was found at the post-mortem examination. In 1955, he was diagnosed with hypothyroidism and subsequently received thyroid hormone replacement therapy. JFK was married to Jacqueline Lee Bouvier (1929-1994), and the couple had 4 children between 1956 and 1963. However, from 1960 he was treated with testosterone preparations. He was also diagnosed with vitamin B12 deficiency. His family history is positive for autoimmune endocrine diseases.

Further reading

1. Messerli FH, Loughlin KR, Messerli AW & Welch WR 2007 The president and the pheochromocytoma. *Am. J. Cardiol.* **99** 1325-1329.
2. Messerli FH, Messerli AW & Luscher TF 2005 Eisenhower's billion-dollar heart attack – 50 years later. *N. Engl. J. Med.* **353** 1205-1207.
3. Mandel LR 2009 Endocrine and autoimmune aspects of the health history of John F Kennedy. *Ann. Intern. Med.* **151** 350-354.
4. Nicholas JA, Burstein CL, Umberger CJ & Wilson PD 1955 Management of adrenocortical insufficiency during surgery. *AMA Arch. Surg.* **71** 737-742.



George Bush and his thyroid: war and peace

George Herbert Walker Bush was born on 12 June 1924 in Milton, Massachusetts. As 41st US president, he served from 1989 to 1993. George Bush Senior is well-remembered because of the Gulf War; in January 1991, he initiated operation Desert Storm, followed by operation Desert Sabre, resulting in the liberation of Kuwait from occupation by Iraq under the leadership of Saddam Hussein. Bush developed atrial fibrillation while jogging at Camp David on 4 May 1991. This was caused by Graves' disease, and Kenneth Burman, chief of endocrinology at the Walter Reed Army Medical Center decided to treat him directly with radioiodine (¹³¹I). Within a few months he developed primary hypothyroidism and began thyroid hormone replacement therapy. Interestingly, his wife Barbara and their dog, the springer spaniel Millie, were also diagnosed with Graves' disease. This led the US secret service to test the water supply of the White House, the Camp David facilities, the house of vice-president Dan Quayle and the holiday residence at Walker's Point for lithium and iodine contamination. In his article in the *Los Angeles Times* of 20 May 1991, journalist and physician Lonny Shavelson discussed whether the president's thyroid dysfunction might have influenced his decision-making before, during and after the Gulf War.

Wouter de Herder

Professor of Endocrine Oncology
Erasmus MC, Rotterdam, The Netherlands
w.w.deherder@erasmusmc.nl

5. Authors unknown 2012 George H W Bush. http://en.wikipedia.org/wiki/George_H.W._Bush
6. Authors unknown 2012 Barbara Bush. http://en.wikipedia.org/wiki/Barbara_Bush
7. Authors unknown 2012 The health and medical history of President George Bush. <http://www.doctorzebra.com/prez/g41.htm>
8. Shavelson L 1991 Perspective on the president: was a 'war hormone' at work? Bush's hyperthyroidism combined with his usual hyper style may have shaped his choice of combat over sanctions. http://articles.latimes.com/1991-05-20/local/me-1347_1_george-bush

A Day in the life of...

A researcher in Ferrara



06.30

Wake up Maria! Just a few minutes to smile at sleeping Giulia (oh, she looks like an angel – well, only when she sleeps, though!) and the daily routine will start and you'll be ready, out in the flat country separating you from the 'new' hospital in the middle of cornfields. The cleaning woman greets me when I open the door of my office, to check for important emails before the clinical work starts.

08.30

General endocrine outpatient care: just 20-25 patients with the most varied endocrine afflictions to be listened to, visited, taken care of, prescribed medications, sent for other exams or – wow – to the surgeon. Hopefully some of the residents will be there to help out.

13.30

I approach the end of the outpatient clinic. OK, I can make it to the hospital restaurant before I faint onto the floor! Then I check my presentation for the lessons to medical students that will start next week. The next step is to talk to the lab girls concerning the development of the projects, and the instruments that broke down and need to be fixed. I catch them while they eat their sandwiches in the conference room. Then a call comes from the endocrine inpatient care team to fix a prescription and look at a patient who doesn't really feel very well after a insulin tolerance test.

15.30

I finally make it to my desk and can read the thousands of emails that I have received since yesterday. But I have to hurry up because three biotech students are coming at 4pm for an interview: the lab is attracting a lot of students for their training, and I have to spot the best ones.

17.00

Clinical meeting with the residents and colleagues for next week's planning: I'll be out for 3 days for an international meeting and someone has to cover the outpatient care...

18.00

Time to review a paper which has been waiting too long on my desk.

19.15

It's too late to start reading the results of the molecular tests on the thyroid fine needle aspiration biopsies with the lab technician. I promise I'll do it tomorrow morning, as soon as the clinical work ends (well, OK, after lunch...).

19.45

Finally home, Giulia complains because I prefer to eat dinner instead of immediately playing with her – I try several times to explain to her the dangerous consequences of hypoglycaemia, but it's really hard! In addition, I cannot resist the spaghetti that my husband cooks so well...

You know, recipes are not really like reactions and I prefer to hand over responsibility when it comes to food!

Maria Zatelli

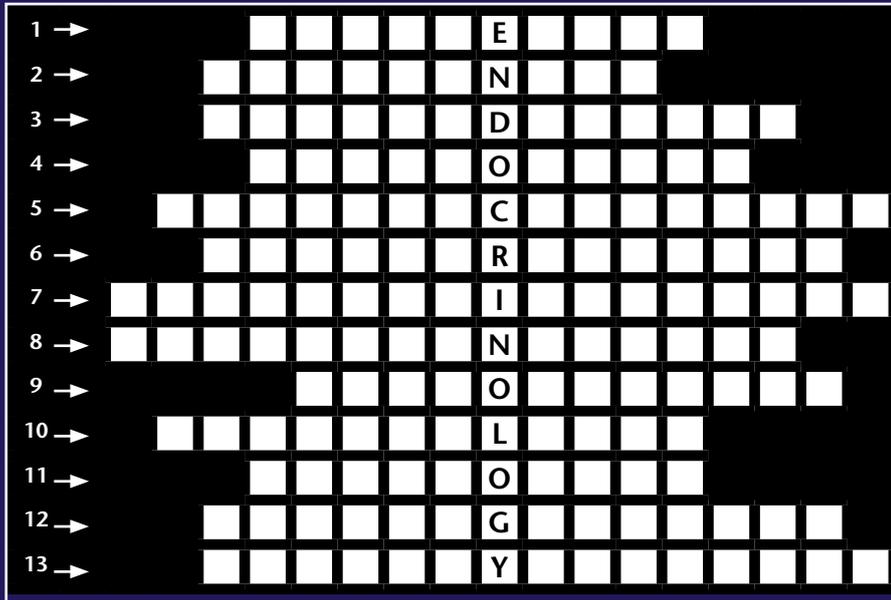
Department of Biomedical Sciences and Advanced Therapies
University of Ferrara, Italy
ztlmch@unife.it



**WIN!
WIN!
WIN!**

Send us your solutions to this topical puzzle for your chance to win one of three €20 Amazon vouchers! Let us have your answers, along with your name and email address, by emailing them to info@euro-endo.org or faxing them to 0044 1454 642222. The first three correctly completed puzzles that we receive will win the prizes!

Congratulations to **Jonathan Webster** (Royal Hallamshire Hospital, Sheffield, UK), last issue's winner.



Endo Prize Puzzle

1. Protein causing a cascade of changes leading to puberty (10)
2. Endocrine disruptor leached by some plastic food packaging (9, 1)
3. Autoimmune disorder, resulting in hyperthyroidism (6, 7)
4. Surgery 'through a keyhole' (11)
5. Technique used in tandem, with liquid chromatography, for sample analysis (4, 12)
6. Cell component whose ligand has not been identified (6, 8)
7. Disease resulting from reduced responsiveness to ADH (8, 9)
8. Pro-hormone important in formation of testosterone and oestrogen (15)
9. Softening of the bones due to lack of vitamin D, also known as rickets (12)
10. Syndrome in men associated with too many X chromosomes (12)
11. Studying proteins 'on a grand scale' (10)
12. Discoverers of insulin (7, 3, 4)
13. Peptide hormone found in the duodenum (15)

Answers to the puzzle in issue 18

Across 4. Yalow, 6. Cryptorchidism, 8. Age, 9. Sheehan, 12. Oxytocin, 15. Iodine, 16. Cortisol, 17. Diabetes, 18. Giustina Down 1. Ullrich, 2. Andrea, 3. VIP, 5. Rosalyn, 7. Iatrogenic, 10. Otto, 11. Thyroid storm, 13. Lorenzo, 14. Androgen

Did you know?

If your hairline is receding, you can take comfort from the fact that chimpanzees and orangutans can also suffer from androgenetic alopecia (otherwise known as male pattern baldness)!



Endo Lingo

MADAROSIS

is the loss of the outer third of the eyelashes, as seen in hypothyroidism

SOTOS SYNDROME

is cerebral gigantism with excessive growth in the first 2-3 years of life

Save the Dates!

For more information about any ESE event see www.e-se-hormones.org/meetings.



ESE Clinical Update 2013
11-12 January 2013
Abu Dhabi, United Arab Emirates



ECE 2013
27 April - 1 May 2013
Copenhagen, Denmark

15th European Congress of Endocrinology
27 April-1 May 2013
Copenhagen, Denmark



ECE 2014
3-7 May 2014
Wrocław, Poland

16th European Congress of Endocrinology
3-7 May 2014
Wrocław, Poland

Deadlines:

30 Nov 2012
ESE Clinical Update 2013
– Early bird registration

31 Dec 2012
JOE/JME Prize 2013
– Nominations

13 Jan 2013
ECE 2013 – Abstract submission deadline

28 Feb 2013
Geoffrey Harris Prize 2014 and European Journal of Endocrinology Prize 2014
– Nominations

11 Mar 2013
ECE 2013 – Early bird registration