



# ESE News

Issue 22 Autumn 2013

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

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

Communication and collaboration:

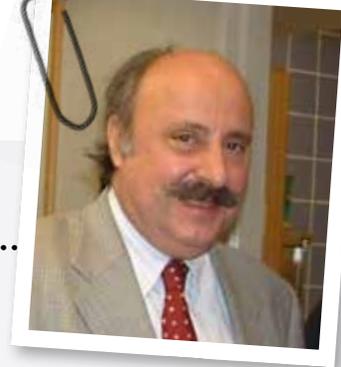
## Journals at the heart of endocrinology

**Also in this issue:**

**Perioperative Steroids:**  
avoiding a crisis

**A Day in the Life of...**  
an endocrine nurse

**Endo Explorer**  
in Germany and Tunisia



## In this issue

- 03 **Society News**  
ECE 2014, plus Nurses' Network
- 04 **Society News**  
Journal and committee news
- 05 **ESE Committees**  
EYES, plus new Club 30 in Poland
- 06 **ESE Committees**  
New Finance Committee plus Science Committee activities
- 07 **Feature Article**  
Surgery, steroids and adrenal insufficiency
- 08 **Editor's Selection**  
The latest from ESE's official journals
- 09 **Feature Article**  
Your favourite reads in EJE...
- 10 **The Endo Explorer**  
We look at research in Munich and visit the Tunisian Society
- 11 **A Day in the Life of...**  
An endocrine nurse
- 12 **Coffee Break & Diary**  
Win with the Endo Prize Puzzle!  
Plus future meeting dates

This document is available on the ESE website, [www.e-se-hormones.org](http://www.e-se-hormones.org)

The address lists used to mail this issue of *ESE News* were supplied by the member societies of ESE and are stored in Bioscientifica's database for future use. If you do not wish to receive further mailings, please advise [info@euro-endo.org](mailto:info@euro-endo.org)

©2013 European Society of Endocrinology  
The views expressed by the contributors are not necessarily those of ESE

**Editor:** Wouter de Herder, The Netherlands  
Email: [w.w.deherder@erasmusmc.nl](mailto:w.w.deherder@erasmusmc.nl)

**Co-Editor:** Philippe Bouchard, France  
Email: [ese.president@endocrinology.org](mailto:ese.president@endocrinology.org)

**Editorial Board:** Justo Castaño, Spain  
Gesthimani Mintzioti, Greece  
Hans Romijn, The Netherlands  
Dominik Schulte, Germany

Website: [www.e-se-hormones.org](http://www.e-se-hormones.org)

Newsletter designed by Qube Design Associates

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

## Editorial

We work most effectively when collaborating with our colleagues.

Our meeting of the ESE Affiliated National Societies in Vienna on 13–14 September resulted in a wonderful exchange of many exciting ideas for collaboration, as it was attended by the majority of the societies and the ESE Executive Committee. During the meeting, we decided to create the ESE Council of Affiliated Societies (ECAS). ECAS will be a collaborative global network enhancing the visibility of endocrine research, development and education – essential for our discipline. ECAS has ambitious objectives, but together we can become a real presence on the international stage, and discuss shared challenges and issues. Our next step is to carefully scope the projects that we agreed. Further information about these and ECAS itself will follow over the coming months.

On the subject of successful collaboration, we all recognise the burgeoning quantity of scientific data that results from our research endeavours as we work together. Crucial to our ability to learn what is relevant and important to our future studies is the art of scientific publication.

At ESE, we are proud and fortunate to have a range of high quality official specialist journals: *European Journal of Endocrinology* (EJE), *Endocrine Connections*, *Journal of Endocrinology*, *Journal of Molecular Endocrinology* (JME) and *Endocrine-Related Cancer*. Their impact is enormous, and they enable us to publish our work where we know our peers will read it, and give us a central location where we can be certain that we will find the information we need to know.

In this issue of *ESE News*, we celebrate the publication of research, and look at how its transition online and the availability of Open Access make the information widely accessible, for the good of us all. On page 9, Hans Romijn, Editor of EJE, takes a fascinating look at the most popular articles in that journal. There is also a host of journal-related news on page 4, with *Endocrine Connections* now indexed on PubMed Central, and JME celebrating 25 years of publication.

Sometimes, publications are controversial. On page 7, Wiebke Arlt discusses one such paper, the cause of much concern for many in our specialty: the latest Cochrane review on perioperative steroid

cover in adrenal insufficiency. How can we ensure patients aren't put at unnecessary risk of adrenal crisis?

This issue is also the first under the leadership of a new Editor for *ESE News*. I welcome Wouter de Herder of The Netherlands, and thank Richard Ross for his huge contribution in the role, which has overseen exciting times, including development of the excellent new design. We also thank Leonie van Houten, who has stepped down from the Editorial Board, and welcome Gesthimani Mintzioti (Greece) in her place. Richard Ross has of course moved to new challenges in ESE, as Treasurer, and is already making his mark with the development of a new Finance Committee (see page 6).

Look out also for information about endocrine nurses, with ESE's Endocrine Nurses' Working Group initiating an Endocrine Nurses' Network (page 3), as well as our feature on A Day in the Life of an Endocrine Nurse (page 11). We also have the first information about ECE 2014 in Wrocław, Poland (page 3), and, coincidentally, news of an exciting new group for young endocrinologists in that same country (page 5).

I wish you happy reading – of all our publications!

**Philippe Bouchard**  
ESE President  
Co-Editor of *ESE News*



Submit your abstracts online by:  
**13 January 2014**

Early bird registration by:  
**10 March 2014**

See [www.ece2014.org](http://www.ece2014.org)

## New ESE nurse activities

The new ESE Endocrine Nurses' Working Group is set to provide a Nurses' Network, giving support and resources to endocrine nurses based in Europe. It will develop and promote their role and raise the profile of endocrine nursing throughout Europe and internationally, to enable nurses to share experience, and to benchmark against and learn from one another.

A new section for nurses is now available on the ESE website ([www.ece-hormones.org/nurse](http://www.ece-hormones.org/nurse)). Here, you can become part of the Nurses' Network by signing up to receive updates from the Endocrine Nurses' Working Group (alternatively, email [info@euro-endo.org](mailto:info@euro-endo.org)).

Endocrine nurses recognise the value of meeting and networking, and ECE 2013 (27 April–1 May 2013, Copenhagen, Denmark) saw a formalised nurse programme at the ECE meeting for the second time. The sessions were very well received, with over 100 attendees from various multi-disciplinary areas. To continue this success, we ask all our colleagues to participate in future nurse sessions, not just as attendees, but also as speakers and chairs.

To become a nurse member of ESE for just €35 per year, apply online at [www.ece-hormones.org/membership](http://www.ece-hormones.org/membership).

*You can read more about 'A Day in a Life of an Endocrine Nurse' on page 11 of this issue, which features Sofia Llahana (London, UK), Chair of the ESE Nurses' Working Group, which oversees all of ESE's nurse activities. Sofia is now the ex-officio Nurse Representative on the ESE Executive Committee.*

# ECE 2014: Get ready for Wrocław

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

ECE 2014 will welcome a truly international delegation from across the entire spectrum of endocrinology, including scientists, clinicians, nurses – and not forgetting the next generation of endocrinologists! We are delighted to be holding this year's event at the prestigious Centennial Hall in Wrocław, Poland.

You will have the chance to hear from some of the leading figures in our field, in a comprehensive programme of plenary lectures, symposia, meet-the-expert sessions and debates. The carefully selected speakers include Geoffrey Harris Prize Lecturer Professor Ashley Grossman (Oxford, UK), *European Journal of Endocrinology* Prize Lecturer Professor Martin Fassnacht (Munich, Germany), Professor Martin Reincke (Munich, Germany), Professor Sophie Christin-Maitre (Paris, France), Professor

John Wass (Oxford, UK) and Dr Albert Beckers (Liège, Belgium), among others.

The congress will also feature oral communications, poster presentations and a European Young Endocrine Scientists' (EYES) symposium, as well as endocrine nurses' sessions and pre-congress courses on proper medical writing and thyroid ultrasound.

You can find out more and read the programme at [www.ece2014.org](http://www.ece2014.org).

We look forward to welcoming you to Wrocław for ECE 2014.

**Paolo Beck-Peccoz and Anna Spada**  
Joint Chairs,  
Programme Organising Committee

**Andrzej Milewicz**  
Chair, Local Organising Committee

## Endocrine nurses' sessions

The popular dedicated endocrine nurses' strand will include clinical sessions with presentations and case studies from physicians and nurses, as well as a session focused on professional development.

## Proper medical writing

This specially designed pre-congress workshop has been developed for scientists and medical professionals in the healthcare system, academia and clinical departments of the pharmaceutical industry.

## Thyroid ultrasound

Attend this postgraduate course for a review of the latest advances in thyroid ultrasound techniques through presentations, interactive discussions and practical sessions working with thyroid patients.

## Publishing and Communications Committee

The ESE Publications Committee, which is chaired by Vera Popovic-Brkic, has recently been revamped and renamed as the Publishing and Communications Committee.

The move follows a review which highlighted that the Committee's remit should encompass ESE's communications strategy, in addition to the Society's publications. Membership of the Committee will therefore not be limited to individuals with involvement in ESE's publications.

## NEW Finance Committee

A new ESE Finance Committee has been formed, chaired by ESE Treasurer Richard Ross.

It will serve to:

- support the Treasurer
- make the approval process clearer for the Executive and other committees
- increase transparency
- ensure financial control and effective forecasting

You can read more on page 6.

## Are you in training?

An in-training membership fee of just €20 per year is available for those wishing to join ESE 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). Applicants must provide written proof of their student status. You can apply online at [www.e-se-hormones.org/membership](http://www.e-se-hormones.org/membership).

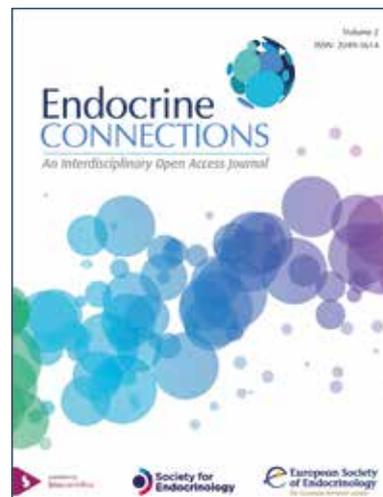
## ESE collaboration in Tunisia

ESE has enjoyed a recent collaboration with the Tunisian Endocrine Society, to organise a postgraduate meeting at the 10th Maghreb Meeting of Endocrinology in Hammamet, Tunisia, on 31 October–2 November 2013. To learn more about your colleagues in the Tunisian Society, read the article on page 10, or visit their website at [www.endocrinologie.org.tn](http://www.endocrinologie.org.tn).

## Endocrine Connections

The ESE journal *Endocrine Connections* is now indexed and live in PubMed Central. You can find the content at [www.ncbi.nlm.nih.gov/pmc/journals/2122](http://www.ncbi.nlm.nih.gov/pmc/journals/2122).

Consequently, all articles published in *Endocrine Connections* will now be freely available in PubMed Central, increasing the reach and discoverability of authors' work. This is a major achievement in the establishment of a new journal, and a crucial consideration for authors when deciding where to publish their work.



To submit your article to *Endocrine Connections*, visit [www.endocrineconnections.com](http://www.endocrineconnections.com).

## 25 years of Journal of Molecular Endocrinology



*Journal of Molecular Endocrinology* was first published in 1988, to support the burgeoning discipline of molecular endocrinology. Now, 25 years on, we can look back on the great number of important and well-cited papers that have since appeared in the journal, including Bustin's authoritative

description of the newly developed technique of real-time PCR – the gold standard of RNA quantitation – in 2000.

After publishing over 1700 papers, the journal is celebrating with a series of articles from major contributors to the field, guest edited by Ron Evans.

So, is the need for a specialist molecular endocrinology journal now coming to an end? As Editor-in-Chief Adrian Clark reflects, 'New molecular techniques are constantly emerging, and will need publishing in a dedicated journal. Furthermore, a molecular torrent is building in endocrinology as a result of the incredible technology to collect huge amounts of molecular data from tiny samples, even single cells, at low cost. The massive challenge is to be able to make sense of this deluge of "big data" far more effectively, so that we can integrate genetic, epigenetic, transcriptomic, proteomic and metabolomic data in a constructive manner. *Journal of Molecular Endocrinology* certainly has a role to play!'

You can view a selection of the journal's seminal papers at [www.try-jme.org](http://www.try-jme.org).

## 2012 impact factors

ESE is delighted to announce the latest impact factors for its official journals.

*European Journal of Endocrinology* continues to stand strong with an impact factor of 3.136, giving it an underlying 5-year figure of 3.575. Values for *Endocrine-Related Cancer*, *Journal of Endocrinology* and *Journal of*

*Molecular Endocrinology* have increased to 5.261, 4.058 and 3.577 respectively.

*Endocrine Connections*, your new open access journal, has a focus on publishing high quality papers, which we hope will stand it in good stead when the time comes for it to receive its first impact factor.



**EYES**  
EUROPEAN  
YOUNG ENDOCRINE  
SCIENTISTS  
*looking forward*

For further  
information, contact  
[EYES@euro-endo.org](mailto:EYES@euro-endo.org)  
or see  
[www.e-se-hormones.org](http://www.e-se-hormones.org)



## EYES wide awake at ECE 2013!

A new tradition has been born: the European Young Endocrine Scientists' (EYES) symposium at ECE. This symposium, organised by the members of EYES, provides a platform for young and experienced scientists to discuss cutting edge endocrine topics.

The 2013 EYES symposium was entitled 'Novel technologies and inspiring ideas: from basic endocrine research to clinical practice', and was chaired by Gefsi Mintziari (Greece) and Filip Gabalec (Czech Republic).

Francesco Antonica (Belgium) talked

about his innovative research, 'Making a functional thyroid in a dish', after which we will never again think of the thyroid in the same way. 'Dissecting androgen action: new clues from conditional knockout mice' was a truly inspirational look at the research of Lee Smith (UK).

Novel studies presented by Anneke van den Beukel (The Netherlands) and Thomas Kvist (Denmark), both young endocrinologists, led to interesting discussions, thoughts and new ideas. Finally, Wiebke Arlt, as the ESE Executive Committee Member in liaison with EYES,

invited all young members of ESE to become part of the EYES initiative.

The evening social event was jointly organised by EYES and the Danish Young Endocrine Society (FYEN). It gave a great opportunity for informal discussions and networking, leaving us with nice memories and new friends.

The next EYES symposium will take place at ECE 2014 in Wrocław, Poland. Watch this space for more information. We look forward to seeing you there.

**Gefsi Mintziari & Max Bielohuby**  
EYES Committee

## 1st Central European Symposium of Young Endocrinologists

Organised by the new Club 30 of the Polish Society of Endocrinology (PSE; see right), this event took place on 10 May in Wrocław, Poland, and was the group's first international initiative.

Congratulations are due to Ewelina Szczepanek-Parulska, Club 30 President, and her team for providing young endocrinologists in Central European countries with a platform to exchange ideas and, most importantly, feel at home.

This brilliant kick-off meeting saw young endocrinologists from across Central Europe, along with their mentors, presenting their own work and networking with their peers in front of an international audience. Participation and accommodation were free for active participants and their tutors.

Honorary guests included Philippe Bouchard (ESE President), Vera Popovic-Brkic (ESE Vice-President), Paolo Beck-

Peccoz (former ESE Vice-President) and Barbara Jarzab (ESE Secretary). It was a great pleasure to see the Presidents and Vice-Presidents of ESE and PSE actively supporting the next generation of endocrinologists. Representatives of all endocrine societies from Central Europe came along to show their enthusiasm, politically and scientifically. I was delighted to lead a session looking at how EYES and Club 30 can work together.

As well as lectures by invited speakers Philippe Bouchard and Andrea Genazzani (President of the International Society of Gynecological Endocrinology), there were seven scientific oral and poster sessions covering all major fields of endocrinology, enabling young endocrinologists from Central Europe to present their original research, and to receive awards for the best oral and poster presentations.

**Dominik M Schulte**  
EYES Committee

### New Club 30 takes shape in Poland

Club 30 is a new venture of the Polish Society of Endocrinology (PSE). It aims to enhance scientific collaboration between members of PSE who are under 35, by organising scientific meetings and co-operation with other organisations supporting young endocrinologists (including EYES), as well as subsidising scientific projects and participation in congresses.

Club 30 was founded in September 2012, during PSE's 20th Jubilee Congress in Poznań. The 'godfather' of the idea was PSE President Andrzej Milewicz, who has always supported initiatives to aid the development of young endocrinologists.

For more information about Club30, contact [ptendo@ptendo.org.pl](mailto:ptendo@ptendo.org.pl).

## New Finance Committee: From strength to strength

ESE has been exponentially successful since its inception in 2006, running a major annual congress and clinical and basic science courses, as well as providing grants, developing guidelines, and supporting young endocrinologists, basic scientists and nurses.

These activities are supported by the work of 12 committees, including the governing Executive Committee. The budgetary implications are significant, and the organisation now has revenue and expenses of over €3 million per annum.

The Society's success has been a great credit to its officers – particularly outgoing Treasurer, AJ van der Lely. Between 2008 and 2013 he conscientiously maintained the Society's healthy positive balance, allowing it to develop its international profile.

Our success has allowed us to grow our infrastructure and very significantly to appoint a General Manager, Helen Gregson. Helen has a great background knowledge, having been with us since

the start, and is already leading change which will allow us to fulfil our ambitions and deliver on our strategy.

One of the major changes is the introduction of a Finance Committee to share the burden of the Treasurer. The Finance Committee is chaired by the Treasurer and includes the President, Vice-President, Chair of the Corporate Liaison Committee and up to four members.

The Committee's role is to increase transparency and ensure financial control and effective forecasting for the Society. An immediate task is to revise budget reporting, such that each ESE committee can clearly see its spend and commitments, and give flexibility to develop new projects. The financial world is changing and the Society's income from sponsors and its meeting is always under threat, so a key role for the new Finance Committee is to review our financial strategy and ensure our future remains secure.

### Richard Ross

Treasurer and Finance Committee Chair



Richard Ross



Helen Gregson

### Finance Committee Members

- Richard Ross (*Chair; ESE Treasurer, UK*)
- Philippe Bouchard (*ESE President, France*)
- Jens Christiansen (*ESE Corporate Liaison Committee Chair, Denmark*)
- AJ van der Lely (*The Netherlands*)
- Massimo Mannelli (*Italy*)
- Vera Popovic-Brkic (*ESE Vice-President, Serbia*)

## Science Committee news: More support, more courses!

We hope you will benefit from two exciting new initiatives from your Science Committee

### ESE Short-Term Fellowships

are available to fund research visits of between 1 week and 3 months for early career members (basic or clinical scientists), to promote collaboration within the ESE community. They will be awarded for exchanges between two laboratories in different ESE member countries, and will cover the fellow's economy class travel plus subsistence, but not research costs or dependents. So, if your study depends on a technique not available in your locality, this could allow you to visit another laboratory to run the critical experiments.

Applications may be made electronically at any time, but at least 2 months before the

proposed start date. The application must be supported by a research plan, and only genuine ad-hoc visits to perform scientific experiments will be supported.

You can find further information at [www.ese-hormones.org/prizes/ESeshortTermFellowship.aspx](http://www.ese-hormones.org/prizes/ESeshortTermFellowship.aspx). We hope this will fill a gap in the available funding schemes and promote collaboration between ESE members.

### Circulating Basic Science Courses

aim to expand the geographic boundaries of ESE's basic science events, to include a series of courses at a changing venue. The annual ESE Summer School in Endocrinology in Bregenz, Austria, and ESE Symposium on Hormones and Cell Regulation in Mt Ste Odile, France, are centrally

located within Europe and easy to reach for most, but we considered it important to extend further.

The first course in the series, on neuroendocrinology, will take place in Amsterdam, The Netherlands, on 15–17 January 2014, organised in collaboration with the Dutch Endocrine Society. More information can be found at [www.ese-hormones.org/education/basicscience.aspx](http://www.ese-hormones.org/education/basicscience.aspx). The course is specifically aimed at early career basic and translational scientists, and funding is available from ESE to support participation. We expect to arrange an event like this every year, each in a different location.

### Ilpo Huhtaniemi

Science Committee Chair

# The need for perioperative steroid cover

(or how to avoid early administration of the last rites)

Yong and colleagues recently published a Cochrane review (an update of their previous report in 2009) asking 'whether it is necessary to administer supplemental perioperative steroids in adult patients on maintenance doses of glucocorticoids because of adrenal insufficiency'.<sup>1</sup> Is this a question we need to ask?



In 1955, John Fitzgerald Kennedy was famously described by Nicholas and colleagues as 'Case 3, a 37-year-old man who has had Addison's disease for 7 years' and who 'had managed well on deoxycorticosterone acetate pellets implanted every 3 months and cortisone in doses of 25mg daily' but now required spine surgery for disabling pain due to a previous back injury.<sup>2</sup> This paper was one of the first to document how increasing glucocorticoid dose during the perioperative period of planned surgery can help to reduce mortality.

At that time, death appeared close to certain in patients with Addison's disease undergoing elective major surgery. JFK underwent a 3-hour surgery with 'two bone fusions and insertion of a metal plate', but survived on the new regimen of increased perioperative steroid administration. However, doctors did not realise that the early postoperative period also required increased steroid cover. Consequently, JFK received the last rites 'after falling into a coma due to a urinary tract infection' only a few days after his surgery. Fortunately, he recovered and went on to take office as the 35th President of the USA in 1961.

Sadly, even nowadays, failure to increase glucocorticoid dose during and shortly after surgical intervention is still a cause for serious clinical deterioration in a significant number of patients

with adrenal insufficiency. Hahner and colleagues described that, amongst the 42% of 442 patients who reported at least one adrenal crisis, it had occurred during the perioperative period in 7% of the patients with primary and in 16% of those with secondary adrenal insufficiency.<sup>3</sup> A similar study surveying 823 patients with adrenal insufficiency showed that a surgical procedure with insufficient steroid cover caused more adrenal emergencies than accidental injury.<sup>4</sup>

Yong *et al.* identified two double blind studies that compared placebo with increased steroid dose during the perioperative period.<sup>1</sup> One study looked at 18 patients with secondary adrenal insufficiency due to chronic exogenous steroid treatment with doses  $\geq 7.5$ mg prednisolone. Of these, 6 underwent surgery on increased steroids, whereas 12 received placebo, with postoperative hypotension episodes in both groups.<sup>5</sup> The other study considered 20 organ transplant patients on chronic treatment with 5–10mg prednisone, comparing hydrocortisone 100mg i.v. with placebo for gingival surgery carried out under local anaesthesia, with no adverse events observed in either group.<sup>6</sup>

From these two studies in patients on chronic high dose steroids undergoing mostly minor procedures, Yong *et al.* concluded that 'there is insufficient evidence on whether additional steroids

are required at the time of surgery for patients with adrenal insufficiency'.

I think most of us will strongly disagree with this conclusion, and worry that such a statement will put patients at serious risk. Just yesterday, I was called to review a patient with Addison's disease who survived emergency surgery for a ruptured abdominal aortic aneurysm. He had stress dose steroid cover during and immediately after surgery, but had been switched back to his routine dose of 20mg hydrocortisone on the first postoperative day. The surgical colleagues were worried as he had developed severe hypotension, nausea, vomiting and abdominal pain. This has now quickly resolved after immediate initiation of appropriately increased intravenous hydrocortisone cover.

As my colleague John Wass and I recently put it, diabetes is treated with insulin and adrenal insufficiency is treated with cortisol.<sup>7</sup> There will not be any studies on how type 1 diabetes patients do without insulin, and we do not need studies on how adrenal insufficiency patients fare in major surgical stress whilst receiving treatment with placebo only. It would be in the interest of all patients with adrenal insufficiency if Cochrane were to remove the Yong paper from the public domain.

## Wiebke Arlt

Centre for Endocrinology, Diabetes and Metabolism, School of Clinical & Experimental Medicine, University of Birmingham, UK

## References

1. Yong *et al.* 2012 *Cochrane Database of Systematic Reviews* **12** CD005367.
2. Nicholas *et al.* 1955 *AMA Archives of Surgery* **71** 737–742.
3. Hahner *et al.* 2010 *European Journal of Endocrinology* **162** 597–602.
4. White & Arlt 2010 *European Journal of Endocrinology* **162** 115–120.
5. Glowniak & Loriaux 1997 *Surgery* **121** 123–129.
6. Thomason *et al.* 1999 *Journal of Clinical Periodontology* **26** 577–582.
7. Wass & Arlt 2012 *British Medical Journal* **345** e6333.

## Congenital isolated GH deficiency and diabetes



Growth hormone (GH) regulates beta-cell function and insulin sensitivity both directly and via complex interactions with its principal mediator, insulin-like growth factor-1. Vicente *et al.*

document that subjects with lifetime GH deficiency due to homozygous GHRH receptor gene mutations have increased insulin sensitivity but decreased beta-cell function compared with heterozygous subjects matched for body mass index. The prevalence of impaired glucose tolerance and type 2 diabetes was not reduced in these subjects, compared with the general population. The authors conclude that lifetime untreated isolated GH deficiency does not protect from diabetes.

Read the full article in *Endocrine Connections* **2** 112–117

## Aldosterone directly affects apelin in adipocytes



Hyperaldosteronism is associated with altered adipokine profiles. Apelin, the endogenous ligand of the G-protein-coupled receptor (APJ), has multiple protective functions in cardiovascular

homeostasis and metabolism. Here, Jiang *et al.* have found that aldosterone is a negative regulator of apelin production *in vivo* and in adipocytes. This effect was reversed by glucocorticoid receptor (GR) antagonists or GR knockdown. Moreover, both glucocorticoids and mineralocorticoids regulated apelin expression through GR activation. This supports the existence of crosstalk between adipose tissue and the adrenal cortex. These mechanisms may be involved in the pathophysiology of hyperaldosteronism and/or the cardiometabolic syndrome associated with hyperaldosteronism.

Read the full article in *Journal of Molecular Endocrinology* **51** 37–48

## Predicting sensitivity to mTOR inhibitors in bronchial carcinoids



Bronchial carcinoids are rare neuroendocrine tumours, the medical treatment of which has limitations.

They have a relative lack of sensitivity to currently employed mTOR inhibitors. Gagliano *et al.* have documented that the novel dual PI3K/mTOR inhibitor NVP-BEZ235 is more potent than everolimus in reducing the proliferation of human bronchial carcinoid cells. Moreover, cells resistant to mTOR inhibitors display lower levels of mTOR, p70S6K, AKT and ERK1/2, indicating that these may be useful as predictive markers of resistance to mTOR and PI3K/mTOR inhibitors. The suitability of such markers, however, needs to be confirmed in clinical trials.

Read the full article in *Endocrine-Related Cancer* **20** 463–475

## DPP-4 inhibitors improve cognition in insulin-resistant rats



Vildagliptin and sitagliptin are dipeptidyl-peptidase-4 inhibitors, drugs used in type 2 diabetes mellitus. Pintana *et al.*, using rats with

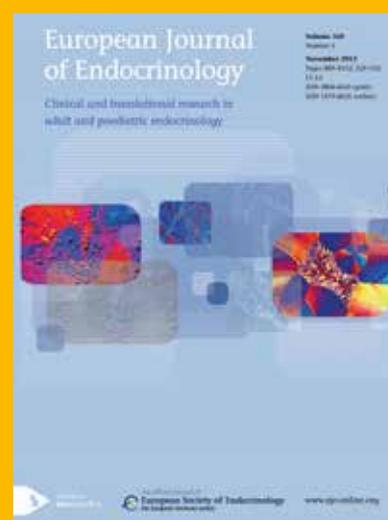
insulin resistance induced by high fat feeding, have shown that vildagliptin and sitagliptin not only attenuate peripheral insulin resistance, but also decrease oxidative stress parameters in the brain and restore brain and hippocampal mitochondrial function. A high fat diet induced learning and memory impairment in rats, which was attenuated by vildagliptin and sitagliptin. It appears that the effects of high fat feeding extend to cognitive dysfunction, and that dipeptidyl-peptidase-4 inhibitors are more pleiotropic than hitherto appreciated.

Read the full article in *Journal of Endocrinology* **218** 1–11

## Metformin inhibits goitrogenous effects of type 2 diabetes

In a cross-sectional study in 2570 subjects, Ittermann *et al.* showed that females with type 2 diabetes mellitus (T2DM) receiving anti-diabetic medication other than metformin had a larger thyroid volume than females without T2DM, whereas no such association was detected in males. In females or males treated with metformin, T2DM was not associated with thyroid volume or goitre. In longitudinal analyses in 1088 subjects, they found that incident T2DM not treated with metformin was significantly associated with a higher risk for incident goitre in the total population. This inhibitory effect of metformin on prevalent and incident goitre add to the benefits of its use in T2DM.

Read the full article in *European Journal of Endocrinology* **169** 9–15



### J A Romijn

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

# So, what have YOU been reading?

Statistics regarding the medical literature are astonishing, with more than 22 million citations of publications in Medline. A conservative estimate is that 6% of these are related to endocrinology. The romantic notion that knowledge might be gained passively by attending some seminars and incidental journal subscriptions has thus dissipated.

The modern clinician and scientist have to navigate this gruesome avalanche to collect and apply up-to-date knowledge in patient care and research. Nonetheless, irrespective of the available literature, major questions remain in many areas of clinical endocrinology.

The way we are reading has changed. Instead of using hard copies of journals and going to the library, we now download manuscripts, browse journals and/or use PubMed. Consequently, the number of downloads of articles has far exceeded the number of formal subscriptions to journals. These high download scores may reflect a different, unappreciated, parameter from the citation scores, because the profile of the readership who downloads manuscripts must be quite different from that of scientists who cite publications.

These comments all hold true for *European Journal of Endocrinology* (EJE). With its truly global readership, we have observed an upward trend in article downloads over the past few years. All articles are posted online within 24 hours of acceptance, and are accessible by ESE members and journal subscribers. Reviews are freely available online to all immediately; original articles are freely available to all after 12 months, or immediately if the authors choose the open access option.

EJE's growing influence as a global publication is reflected by the increase in submitted and published manuscripts from countries outside Europe. In line with this, we have recently welcomed experts from these regions to the Editorial Board: Cesar Bogusewski (Brazil), Ken Ho (Australia), Andre Lacroix (Canada) and Zhengpei Zeng (China).

Table 1 shows the most frequently downloaded review articles published in EJE since January 2012 (based on downloads in the first 3 months after publication). They cover many topics from

clinical and translational endocrinology. Reviews are accessed much more often than original studies. Apparently, there is a high need for accumulation of integrated knowledge, which enables the readership to put the contributions of many individual original studies into perspective in a cohesive way.

Similarly, Table 2 shows the top downloaded clinical studies published in EJE in the same period. These manuscripts provide important information on subjects that are clinically very relevant.

The study by Jejum *et al.* compared the new criteria for diagnosing gestational diabetes mellitus (GDM) proposed by the International Association of Diabetes and Pregnancy Study Groups (IADPSG) with those of WHO. The new criteria identified 2.4 times more subjects with GDM, especially of South Asian origin.

The study by Niskanen *et al.* compared the efficacy and safety of insulin degludec/

insulin aspart (IDegAsp), a soluble co-formulation of insulin degludec (70%) and insulin aspart (IAsp; 30%), with an alternative IDegAsp formulation (AF; containing 45% IAsp) and biphasic IAsp 30 (BIAsp 30). IDegAsp provided overall glycaemic control which was comparable with BIAsp 30, with a significantly lower rate of hypoglycaemia.

The study by Jakob *et al.* documents the prolonged beneficial effects of 18 months of teriparatide treatment on incidences of fractures, back pain and quality of life in postmenopausal women with prior bisphosphonate therapy.

So, we encourage you to submit your best clinical research and reviews to EJE. This will further inspire the global readers of ESE's official clinical journal.

**Johannes (Hans) A Romijn**

Editor-in-Chief,

*European Journal of Endocrinology*

| TABLE 1: Top review articles   | Author(s) and citation                      | Downloads |
|--|---|-----------|
| Heart failure and thyroid dysfunction  | Biondi (167 609-618)                        | 1993      |
| Insulin initiation in patients with type 2 diabetes mellitus: treatment guidelines, clinical evidence and patterns of use of basal vs premixed insulin analogues | Vaag & Lund (166 159-170)                   | 1846      |
| Insulin and type 1 diabetes: immune connections  | Culina <i>et al.</i> (168 R19-R31)          | 1794      |
| Vitamin D and fertility: a systematic review   | Lerchbaum & Obermayer-Pietsch (166 765-778) | 1740      |
| Approach to the patient with advanced differentiated thyroid cancer  | Schlumberger & Sherman (166 5-11)           | 1609      |

| TABLE 2: Top research papers  | Author(s) and citation               | Downloads |
|---|--------------------------------------|-----------|
| Impact of ethnicity on gestational diabetes identified with the WHO and the modified International Association of Diabetes and Pregnancy Study Groups criteria: a population-based cohort study | Jejum <i>et al.</i> (166 317-324)    | 591       |
| Comparison of a soluble co-formulation of insulin degludec/insulin aspart vs biphasic insulin aspart 30 in type 2 diabetes: a randomised trial  | Niskanen <i>et al.</i> (167 287-294) | 441       |
| Effects of teriparatide in postmenopausal women with osteoporosis pre-treated with bisphosphonates: 36-month results from the European Forsteo Observational Study                              | Jakob <i>et al.</i> (166 87-97)      | 409       |
| Proteomic profiling of follicular and papillary thyroid tumors  | Sofiadis <i>et al.</i> (166 657-667) | 349       |
| Confirmatory testing in primary aldosteronism: extensive medication switching is not needed in all patients   | Solar <i>et al.</i> (166 679-686)    | 344       |



roughly 30 000 clinical annotations and more than 6500 biosamples.

This platform serves as a hub for a number of associated clinical and biomarker studies which have received national and European funding. In one translational research approach, surgical tumour samples were used to establish individualised tumour models to study therapeutic efficacy of liposomal therapies in adrenocortical cancer.

In the study of primary aldosteronism, the European network recently enabled my group to identify, by exome analysis, genes involved in the pathogenesis of aldosterone-producing adenomas. In future, these investigations might lead to personalised treatment decisions and identification of biomarkers with diagnostic or therapeutic relevance.

As endocrinologists and clinicians, we aim to gain insights into mechanisms relevant to disease, which in the long term should translate into improvement of clinical care after testing in clinical studies.

#### **Felix Beuschlein**

Klinikum der Universität München  
felix.beuschlein@med.uni-muenchen.de

**Munich, known for its festivities, beer and beauty, is also renowned for biomedical studies, pursued at two universities and several large research facilities. Within this unique environment, endocrine research continues to flourish.**

My group is located at the University Clinic of the Ludwig Maximilian University. One of the Endocrine Research Department's main areas of scientific study is unravelling the mechanisms involved in regulating growth and differentiation of the adrenal cortex: during development, during adaptation in the adult organism and in relation to adrenal tumorigenesis and endocrine autonomy. General concepts of relevance to adrenal tumours are further assessed in other endocrine tumour entities using appropriate *in vitro* and *in vivo* models. A further focus of research is investigation of the relationship between adipocyte tissue and endocrine systems, which are explored in cellular and animal models.

Complementary to this model-based research, molecular characterisation,

expression profiling and genetic studies are performed on a variety of patients' tumour samples, and correlated with clinical data and outcome measures.

Of particular importance for these translational approaches have been clinical registries and associated biobanks. In addition to national initiatives, European networks are instrumental when it comes to rare disorders that are not encountered in single institutions.

One prime example of European collaboration is the European Network for the Study of Adrenal Tumours (ENSAT; [www.ensat.org](http://www.ensat.org)) which focuses on adrenocortical cancer, pheochromocytomas, primary aldosteronism and adrenal Cushing's syndrome. The registry currently combines more than 4500 cases,



## **Tunisian Endocrine Society**

The Société Tunisienne d'Endocrinologie, Diabète et Maladies Métaboliques (STEDIAM) has promoted endocrinology in Tunisia since 1991. It has 159 clinician endocrinologist members (researchers, teachers and clinical practitioners) and associate members from other related disciplines.

STEDIAM organises three annual events: the National Congress in Tunis each April, and meetings in the Kerkennah Islands each June, and Sousse each December.

We recently became affiliated to the International and European Societies of Endocrinology, and are also a member of the Maghreb Federation, which includes the Algerian and Moroccan endocrine and diabetology societies. Since 2003, the Federation has organised the Annual Maghreb Meeting of Endocrinology.

The Society also publishes the *Maghreb Journal of Endocrinology, Diabetes and Reproduction*.

STEDIAM is involved in postgraduate courses and national guidelines. We have recently collaborated with ESE

to organise a postgraduate course during the 10th Maghreb Meeting of Endocrinology in Hammamet, Tunisia, in November 2013.

Our areas of greatest current interest include diabetes, metabolic syndrome and thyroid, adrenal, gonadal, pituitary and parathyroid diseases.

For more information, see [www.endocrinologie.org.tn](http://www.endocrinologie.org.tn).

**Insaf Hadj Ali**  
Vice-President

A Day in the life of...

## An endocrine nurse

### 05.45

Our 11-month-old daughter wakes us up; I walk to her room half-asleep and receive a big smile and lots of clapping. I leave the house at 06.45 and run to catch the train to London (this will probably be all my exercise today).

### 07.45

I arrive in the office and have some time for a coffee and to go through my emails before clinic.

### 08.30

It's a general endocrine nurse-led clinic today, with a mixture of pituitary, fertility and hypogonadism cases. The first patient is a 25-year-old man who was seen recently by our consultant and his karyotype revealed Klinefelter's syndrome. So, I am to break the news and initiate his treatment. He was in tears when he heard the results, but says it is a relief to finally find out what is wrong. I give him time to digest the diagnosis before we plan his treatment and follow-up.

I knew this would be a long consultation and allowed extra time, something I did not anticipate for my next patient, who was referred for growth hormone (GH) adjustment following a low IGF1 measurement. I soon realise that adherence to GH is the least of her worries; she has recently lost her job and her partner has left her. Alarm bells start ringing when she says she '...didn't see a point in carrying on!' and the 20-minute slot becomes a 1-hour consultation. Nursing is about providing holistic care after all.

Unfortunately, that means my next patient is 45 minutes late and my apology is met by a lengthy complaint. I decide it is best to wait for him to finish (I don't have much choice!) before we proceed. He is starting gonadotrophins for spermatogenesis. I give him a prescription, and explain what the treatment entails and how to take his injections. The student nurse shadowing me says that I handled the situation well; I must have done as the patient later emails me to thank me for the detailed information and to apologise for losing his temper.

With a patient not attending and the other five being straightforward consultations, I manage to finish clinic just in time, albeit severely dehydrated!

### 12.30

I grab a glass of water and a biscuit to keep me going and head off to meet Professor Baillie to discuss a grant application for a nursing project; let's hope we will be successful this time. We failed another bid in the last round – so close!



### 13.00

It is our monthly departmental meeting where we discuss internal affairs, service development and clinical governance issues (lunch included – yes!).

### 14.30

Now I'm back at my desk to deal with admin tasks and to answer several patient calls/queries. I am also reviewing the nursing abstracts for ECE 2013 and am impressed by the standard of work submitted; I cannot wait to see the posters.

### 16.30

On the train home, I'm fast asleep; a 40-minute snooze is great to recharge my batteries.

### 18.00

I dress Elise in her new outfit (she is so pretty!) and we pick up my husband from the station to go to our favourite restaurant – a great ending to a busy week.

### 20.30

While I watch Elise sleeping like an angel, I take a moment to remind myself how fortunate I am; I have the perfect family and job. There is nothing more I would ever want from life! Well, actually yes! I want world peace, no poverty and health and happiness for every child on earth, but this is another story, perhaps for another newsletter...

### Sofia Llahana

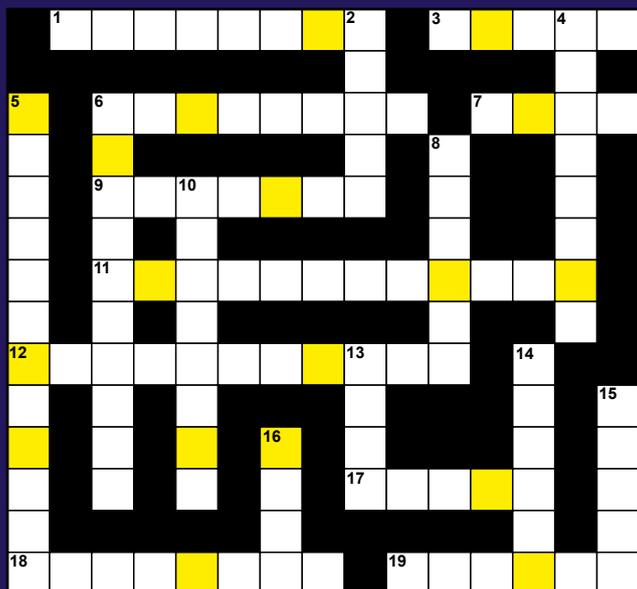
Consultant Nurse in Endocrinology  
Independent Nurse Prescriber  
University College Hospital,  
London, UK  
sofia.llahana@uclh.nhs.uk

*Sofia Llahana is the Chair of the newly formed ESE Endocrine Nurses' Working Group. For more information and to participate in the ESE Endocrine Nurses' Network visit [www.ese-hormones.org/nurse](http://www.ese-hormones.org/nurse).*



**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](mailto: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 Margherita Baccini (Italy), Daniel Kelly (UK) and Milena Lackovic (Serbia), last issue's winners.

**Answers to the puzzle in issue 21**

- ACROSS 1. Salt-wasting, 6. Pepsin, 7. Eat, 8. Drug, 9. Inherit, 10. Melatonin, 11. Bile, 12. Systole  
DOWN 1. Sleep, 2. Leptin, 3. Resveratrol, 4. Vandetanib, 5. Nodule, 10. MODY

**Endo Prize Puzzle**

**Extra challenge:** The letters in the yellow squares must be rearranged to give the answer to the following clue: An author needs to declare this! (8,2,8)

**Across**

- 1 Research summary (8)
- 3 Pictorial representation of results (5)
- 6 Intellectual \_\_\_\_\_ – yours or the journal's? (8)
- 7 A colleague, your equal (4)
- 9 Store for past documents (7)
- 11 Background information – follows 1 across in most papers (12)
- 12 He/she to whom research correspondence is often addressed (5,6)
- 17 Publishing \_\_\_\_\_ – e.g. Bioscientifica, Wiley, Macmillan (5)
- 18 An expert who checks submissions for accuracy (8)
- 19 A journal's decision-maker (6)

**Down**

- 2 Heading – what's it all about? (5)
- 4 Unedited version of paper published immediately on acceptance (8)
- 5 Journal 'score' (6,6)
- 6 Similar gap (anagram) – copy! (10)
- 8 Correspondence – the first journals were collections of these (6)
- 10 Recognition of published work (8)
- 13 Punctuation mark: # (4)
- 14 Decline to publish – 12 across will be disappointed (6)
- 15 A scientific report, and the material it's printed on... (5)
- 16 The price charged to view Open Access articles (4)

**Did you know?**

**Where art meets osteoporosis**

What is the relationship between the French art world and new drugs against osteoporosis?

Henri Marie Raymond de Toulouse-Lautrec-Monfa (1864–1901), also known as 'Toulouse Lautrec', probably suffered from pycnodysostosis. This inborn error of bone matrix degradation results from the deficient activity of a protease, cathepsin K, in the osteoclasts. Cathepsin K plays an important role in mediating bone resorption by degrading collagen types I and II. Cathepsin K inhibitors, such as odanacatib, show great potential in the treatment of osteoporosis.



**Save the Dates!**

For more information about any ESE event see [www.es-e-hormones.org/meetings](http://www.es-e-hormones.org/meetings).

**5th ESE Clinical Update**

**10–11 January 2014**  
Abu Dhabi, UAE

**ESE Basic Endocrinology Course**

**15–17 January 2014**  
Amsterdam, The Netherlands

**14th ESE Postgraduate Training Course in Clinical Endocrinology**

**10–12 April 2014**  
Vilnius, Lithuania



**16th European Congress of Endocrinology**

**3–7 May 2014**  
Wroclaw, Poland

**17th European Congress of Endocrinology (ECE 2015)**

**16–20 May 2015**  
Dublin, Ireland

**Deadlines:**

**13 Jan 2014**  
**ECE 2014** – Abstract submission deadline

**28 Feb 2014**  
**Geoffrey Harris Prize 2015 and European Journal of Endocrinology Prize 2015**  
– Nominations

**10 Mar 2014**  
**ECE 2014** – Early bird registration

**Follow ESE online for the latest news and developments:**

 Follow ESE on Facebook:  
[www.facebook.com/EuropeanSocietyofEndocrinology](http://www.facebook.com/EuropeanSocietyofEndocrinology)

 Follow ESE on Twitter:  
[www.twitter.com/ESEndocrinology](http://www.twitter.com/ESEndocrinology)

[www.es-e-hormones.org](http://www.es-e-hormones.org)