ICE/ECE 2012
Full report inside, plus your invite to ECE 2013 in Copenhagen, Denmark

Giants should still fear body snatchers
The history of acromegaly

Recent Advances in Adrenal Disease

Also in this issue:
Endo Explorer visits Spain and Slovakia

A Day-in-the-Life of...
A Dublin Professor of Endocrinology

WIN WIN WIN!
with the Endo Crossword
NEWLY LAUNCHED!
www.ese-hormones.org

ESE has launched an exciting new-look website as part of the Society’s aim to modernise and increase benefits to our members. New sections include: Career Opportunities, Special Interest Group information, a developed Affiliated Society Members section, Educational Videos, Patent materials and much more! You will find the new website at www.ese-hormones.org - take a look and let us know what you think! info@euro-endo.org

ENDOCRINE CONNECTIONS offers authors the highest possible visibility for their work, publishing papers that have relevance to endocrinology and its related and intersecting disciplines. There are many new activities to look forward to over the coming months, including the ESE Postgraduate Course to be held in Antalya, Turkey; the Symposium on Hormone and Cell Regulation to be held in Mont Ste Ode, France; and the ESE Clinical Update to be held in Abu Dhabi, UAE.

Finally, I would like to remind members who have not paid their 2012 membership subscriptions to do so as soon as possible. The annual membership fee for 2013 remains unchanged from 2011 and is €70 for Full members and €35 for Reduced Rate members. Members are also able to pay for a 3-year membership at the discounted rate of €190 or €95 for reduced rate OR a Lifetime membership at €1120 or €560 for Reduced Rate members.

I hope reading this newsletter will entertain you and reinforce our view that ESE is a warm inclusive society that welcomes endocrinologists from around the world. We would love to receive your thoughts and suggestions for future issues and look forward to seeing everyone in Copenhagen.

Philippe Bouchard
ESE President

Society News

03

Society News
ICE/ECE 2012 and Prize winners

04

Society News
Apply for Grants and Prizes

05

ESE Committees
EYES and Clinical and Science Committees

06

History of Acromegaly
Giants should still fear body snatchers

Editor’s Selection
What’s hot in ESE’s official journals?

09

Endo Explorer
Spotlight on University of Cordoba and the Slovak Endocrine Society

10

Feature Article
Recent Advances in Adrenal Disease

11

Day-in-the-Life of...
a Dublin Professor of Endocrinology

12

Coffee Break & Diary
Win with the Endo Crossword! Future meeting dates

Society News

02

European Society of Endocrinology - the European hormone society

03

European Society of Endocrinology - the European hormone society

Society News

02

European Society of Endocrinology - the European hormone society

03
Welcome to new Executive Committee member

We warmly welcome Marja Pfeifer to the ESE Executive Committee. Marja is a Professor of Internal Medicine and Endocrinology at the Medical faculty, University of Ljubljana, Slovenia, and the head of the Department of Endocrinology at the University Medical Center Ljubljana. Her main fields of interest are pituitary diseases, especially GHD and atherosclerosis; PCOS - metabolic and vascular derangements, obesity and cellular lipid handling; male hypogonadism, LOH in diabetic patients and CVD; and osteoporosis.

Welcome to our new members

Over 930 new member applications were approved by the Executive Committee during ICE/ECNE 2012. ESE’s membership is growing each year and we currently have an impressive 2862 members from all over Europe, truly making us the European Hormone Society.

New Honorary members: ESE is pleased to announce that Honorary membership was presented at ICE/ ECNE 2012 to Wilmar Wiersinga in special recognition of his services to ESE, and to Pierre Chambon in special recognition of his contribution to science. Congratulations to them both.

AGM 2012

Thanks to all members who attended our Annual General Meeting at ICE/ECNE 2012 in Florence. It is a valuable platform for updating members on Society performance and its future plans. At the AGM it was voted that our Treasurer, A) Van der Lely, would remain in his post for a further year. We also welcomed the newly elected Executive Committee member Marja Pfeifer from Slovenia, and look forward to our future collaborations. The minutes of the AGM will be available in the members’ section of the ESE website.

ESE ENDO International Endocrine Scholars Programme (IESP) - 2012

An exceptional training experience for young endocrinologists: the successful candidates receive counsel through a unique mentoring programme that helps them find financial support, advice and esteemed training opportunities. ESE is pleased to announce that the 2012 IESP scholarships have been awarded to:

ENDO ESE International Endocrine Scholars Programme
Carmelo Nuquer, Italy
Sebastian Michael Schmid, Germany

ESE Travel Bursary
Jovana Kalijdorjovic, Serbia
Giampaolo Trivellin, Italy

Congratulations to you all!

Grants and prizes

Nominations now open for the European Journal of Endocrinology Prize 2013 – the prize of a certificate and €10,000 will be awarded to a candidate who has significantly contributed to the advancement of knowledge in the field of endocrinology, through publication. ESE Meeting Grants – there are still some grants of up to €400 available to ESE members! Don’t forget to apply for grants for the upcoming Postgraduate course in Turin and the Summer school in Bregenz.

NEW Basic Science Meeting Grant – worth up to €450 each. JOE/JME Prize update Congratulations to Dr Li Chan, of the William Harvey Research Institute, London, on winning the 2012 JOE/JME prize for basic endocrinology.

ESE’s Clinical Committee: Advancing and harmonising clinical practice and research in Europe

1. To play a leading role in the development of guidelines for optimal management of endocrine disorders, and to give guidance on matters in clinical endocrinology. Special Interest Groups have been established to recommend treatment and management in specific areas of expertise: 1) monogenic metabolic bone disorders (Chair: Osten Ljunggren, Sweden), 2) long-term monitoring of patients operated for phaeochromocytoma/paraganglioma – prognostic indices for tumour recurrence (Chair: Pierre-François Plouin, France), and 3) management of polycystic ovary syndrome (Chair: Renato Pasquali, Italy). The Special Interest Groups will present their recommendations in peer-reviewed publications, and at ESE-sponsored symposia 2013–2014.

2. To support all healthcare professionals (clinicians, specialist nurses and allied professions) delivering patient care.

3. To support clinical research in Europe, with a special focus on supporting endocrinologists in less economically developed countries, and to advance quality and equality of patient care in endocrinology across Europe. Pia Burman Clinical Committee Chair Pia.A.Burman@kare.se

ESE’s Science Committee: Promoting basic endocrinology science within Europe

1. To establish a European basic endocrine scientists’ network and to recruit basic scientists as members of ESE.

2. To establish a basic science training course programme. The Summer School on Endocrinology for young scientists will continue their recommendations in peer-reviewed publications, and at ESE-sponsored symposia 2013–2014.

3. To establish a high-quality basic endocrinology congress series in Europe.

4. To create a funding programme for basic scientists to attend the ESE congresses and courses. A total of 100 travel grants, €450 each, will be available for basic scientists to attend the European Congress of Endocrinology.

5. To develop a funding programme focused on networking and exchange visits within the European basic endocrinology community.

6. To establish links with other European Societies in the field of endocrine sciences.
Giants should still fear body snatchers

A recent BMJ article (BMJ 2011:343:d7597) made the case for the skeleton of Charles Byrne, “The Irish Giant”, to be thrown into the sea, almost 230 years after his death.

It was Byrne’s dying wish that his body should be buried deep into the ocean, safe from those 18th Century physicians who wanted instead to dissect and display him. Despite his wishes, Byrne’s skeletal remains have been on display at the Hunterian Museum at the Royal College of Surgeons in London for two centuries. But in their BMJ article, Professor of Medical Ethics, Len Doyal, and Thomas Muirner, a lawyer, argued that it wasn’t too late to fulfil Byrne’s request to rest in peace at the bottom of the sea. Their pleadings prompted lively debate, both in the BMJ and the world’s media.

Charles Byrne suffered from acromegalic gigantism and reached a final height of 2.31 metres (7’ 7”) before his death at the age of 22 in 1783. Just a year earlier he was put on show in London as a ‘curiosity’ that Londoners were willing to pay to see. However, not long after his arrival in London, Charles Byrne was robbed of most of the money he had earned as a side-show exhibit and had contracted “consumption” (tuberculosis) and became an alcoholic. He realized that he was a dying man, but death was not his greatest fear, rather it was the physicians who were eager to obtain his body after death for dissection.

One of these surgeons was Dr John Hunter (1728–1793), the “Godfather of Modern Surgery”. Charles Byrne was determined to stay out of the hands of Dr Hunter and arranged desperate precautions to avoid such a fate. Byrne instructed that, after his death, his body was to be sealed in a lead coffin. His loyal friends were to guard it day and night until such time that it could be sunk deep into the sea. Byrne pre-paid an undertaker to ensure that his will would be carried out, but alas it was all to no avail. After his death, the remains of Byrne came into the possession of Dr Hunter. Charles Byrne was put on display in Dr Hunter’s museum 4 years after his death.

If Dr John Hunter had opened the skull of Charles Byrne he might have been the first to describe pituitary enlargement in gigantism/acromegaly. The famous American neurosurgeon, Dr Harvey Williams Cushing, also known as the “Godfather of Neurosurgery” (1869–1939) reasoned that Hunter never ventured so far because “his passion as a collector exceeded his thirst for knowledge”. It wasn’t until 1909 that Dr Harvey Cushing, together with Sir Arthur Keith, the curator of the John Hunter museum, opened the skull of Charles Byrne and demonstrated an enlarged sella turcica.

More recently, in 1980, Drs Alexander M. Landolt and Milo Zachmann estimated the “bone age” of Charles Byrne to be only about 17, indicating that he was still growing at the time of his death age 22, implying that he was suffering from (hypogonadotrophic) hypogonadism. Just two years ago, Dr Harvinder S. Chahal and his colleagues at the Department of Endocrinology, Barts and the London School of Medicine, extracted DNA from a tooth of Charles Byrne. From this they identified a germ-line mutation in the ‘aryl hydrocarbon–interacting protein gene’ (AIP). Four contemporary Northern Irish families who presented with gigantism, acromegaly, or prolactinoma were found also to have the same mutation. Using coalescent theory, it was thus inferred that Charles Byrne and these four families with pituitary disorders shared a common ancestor who lived about 57 to 66 generations earlier.

It’s clear that little has changed in more than 200 years – there’s still an overriding and macabre interest in giants. Endocrinologists, therefore, should warn their acromegalic giant patients: “Watch out! There are still body snatchers about.”

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

Charles Byrne was determined to stay out of the hands of Dr Hunter and arranged desperate precautions to avoid such a fate.
The mouse Slc30a8 gene encodes the zinc transporter-8 (ZnT-8). ZnT-8 is thought to be required for providing zinc to allow for proper storage and secretion of insulin. This study detected ZnT-8 in both alpha and beta cells in human pancreatic islets. It also documented that the human SLC30A8 genomic region located in intron 2 contains a conserved islet beta cell-specific enhancer. The authors speculate that it is possible that SNPs that affect this specific enhancer may influence Type 2 diabetes risk.

Pound et al. 2011. Read full article at doi: 10.1530/jme-11-0055

There was a time when Córdoba was one of the most influential cities in Europe in terms of politics, culture and science; now many claim that the only remnents are a breath-taking mosque and picturesque spots. I do not quite agree. Córdoba is well positioned in terms of scientific research, especially considering our size. Indeed, the University of Córdoba and the Córdoba University Hospital have ranked well in recent national evaluations, despite both institutions being relatively young.

Very much in line with the spontaneous, or even serendipitous, way in which many good things crystallised in Spain in the 1980s, the University of Córdoba and its Hospital witnessed the emergence of active groups working in endocrinology and its related areas, such as nutrition. In basic endocrinology, two major nodes agglutinated: one in reproductive neuroendocrinology, the other in cellular (and later, molecular) endocrinology of the pituitary gland.

In the last decade, our group (departing from the pioneering work of Enrique Aguilar, Francisco Gaytán and Leonor Pinilla, who are still very active members of our team) has become increasingly interested in deciphering the neuroendocrine and molecular basis of mammalian puberty. Our growing interest partially stems from our involvement in the National Network for Research in Obesity and Nutrition, CIBERobn, a 2006 initiative of the Spanish Institutes of Health. Similarly, we belong to the recently created Biomedical Research Institute of Córdoba (IMIBIC), named Maimonides after the famous philosopher and medical doctor born in Córdoba in the twelfth century; a liaison that has increased our interest for the implications of our work in translational medicine, as well as our collaborations with clinically-oriented groups.

Highly reputed local Endocrinology and metabolism groups include the teams of Justo P. Cañado (pituitary and metabolic neuroendocrinology), Mar Malagón (cellular and molecular endocrinology of the adipose tissue) and the clinical team headed by Francisco Perez-Jimenez and Jose Lopez-Miranda at the Córdoba University Hospital (nutrigenomics and lipid metabolism). These groups, including ours, fall under an umbrella of institutions (University of Córdoba, IMIBIC and CIBERobn).

Facing pressing news about the funding of Spanish science, we trust that the scientific track record, institutional support and international connections of Córdoban endocrinologists will secure the continuation of our activities in the near future, thus pushing forward biomedical, specifically endocrine, research in Córdoba and making our brains heavier and more influential than our ancient stones.

Manuel Tena-Sempere
Professor of Physiology, Faculty of Medicine, University of Córdoba
mtena@ucc.es

Córdoba, located in the most Southern region of Spain – Andalucia, has a rich cultural heritage and an ancient historical tradition.

The Slovak Endocrine Society
The Slovak Endocrine Society (SES) was founded in 1937 as part of the Czechoslovak Endocrine Society, following the division of Czechoslovakia into the Czech and Slovak Republics, the SES started to work as an independent organization. Nowadays, the SES, which is an affiliated member of the European Society of Endocrinology (ESE), has more than 100 members, 36 of whom are simultaneously members of ESE. Despite the separation of Czechoslovakia, both the Slovak and Czech Endocrine Societies continued in the tradition of joint endocrine meetings, alternating every year between the Czech and Slovak Republics. When the meeting takes place in the Czech Republic, the SES organizes Slovak endocrine workshops on a specific topic. As a nonprofit organisation, the SES promotes research and training in endocrinology, supporting basic and clinical research by providing scientific grants and prizes to researchers, including travel grants to allow young endocrinologists to attend the European Congress of Endocrinology.

Ivica Lazurova, MD, PhD
President of the Slovak Endocrine Society
ilazurova@vs.sk

The Slovak Endocrine Society
Editor’s Selection

AIP mutations and sporadic pituitary macroadenomas
Only 5% of all pituitary adenomas are related to genetic causes, including MEN1, and familial isolated pituitary adenomas (FIIPA). Mutations of the aryl hydrocarbon receptor interacting protein (AIP) account for 15–30% of the FIIPA kindreds. This study indicates that germline AIP mutations occur in 11.7% of patients < 30 years with sporadic pituitary macroadenomas and even in 20.5% of such patients < 18 years of age, with different pituitary macroadenomas. Testing for germline AIP mutations should be considered in young patients with macroadenomas.


European Journal of Endocrinology

Submit your best research. www.eje-online.org/
Recent Advances in Adrenal Disease

In phaeochromocytoma the famous “10% rule” that 10% of tumours are hereditary has been abandoned and a growing number of familial cases are observed. The latest is MAX, the MYC associated factor X gene (Cominio-Méndez et al., Nature Genetics 2011). In 1694 patients with phaeochromocytoma or paraganglioma mutations in the MAX gene were found in 1.12% (Blüchhorn et al., Clinical Cancer Research, 2012). This now brings up the number of phaeochromocytoma susceptibility genes to 10: RET, VHL, SDHA, SDHB, SDHC, SDHD, SDHAF2, NFI, TMEM127, and MAX. Thus, 30–40% of phaeochromocytomas or paragangliomas have germline mutations. A challenge in phaeochromocytoma/paraganglioma is the diagnosis of malignancy prior to metastasis. Using modern catecholamine metabolite profiles (Eisenhofer et al. (European Journal of Cancer 2011) demonstrated that plasma biomarker for metastatic paragangliomas. 2011) demonstrated that plasma biomarker for metastatic paragangliomas. Exciting findings were further validated by a comprehensive analysis of 380 patients with APA (Bulikroun et al., Hypertension 2012). Somatic KNC5 mutations were found in an impressive 34% of patients. Unfortunately, these advances do not yet impact on the difficult clinical management of patients with primary aldosteronism. However, it is predicted that modern sequencing will soon identify the genetic cause of bilateral hyperplasia which could greatly simplify the differential diagnosis between unilateral and bilateral aldosteronism.

The power of exome sequencing was demonstrated in adrenocortico-producing adenomas (APA). Sequencing of only four APA blood pairs revealed a mutation in the potassium channel KCNJ5 in 2 cases. Expanding the series to 22 human APAs and focusing exclusively on KCNJ5, mutations were found in 8 cases. Furthermore, a family with an inherited KCNJ5 mutation was described presenting with a severe form of aldosteronism and massive bilateral adrenal hyperplasia (Choi et al., Science 2011). These exciting findings were further validated by a comprehensive analysis of 380 patients with APA (Bulikroun et al., Hypertension 2012). Somatic KCNJ5 mutations were found in an impressive 34% of patients. Unfortunately, these advances do not yet impact on the difficult clinical management of patients with primary aldosteronism. However, it is predicted that modern sequencing will soon identify the genetic cause of bilateral hyperplasia which could greatly simplify the differential diagnosis between unilateral and bilateral aldosteronism.

In adrenocortical cancer (ACC) Vhl et al. (JCEM, 2011) have demonstrated the power of steroidomics using GC-MS. This sensitive non-invasive tool may greatly facilitate the diagnosis of ACC and early detection of tumour recurrence. Targeted treatments for ACC have been disappointing. However, mitotane, the standard drug for advanced ACC, has recently been found to massively induce CYP3A4 leading to profoundly increased metabolism of a large number of drugs, including most targeted therapies (Văn Erp et al., European Journal of Endocrinology 2011, ‘Krois et al., Clinical Endocrinology 2011). Thus, insufficient drug levels may have played a major role in the negative trials using targeted treatments, as the effect of mitotane on CYP3A4 persists for many months after cessation.

Adrenal insufficiency is associated with impaired well-being and increased mortality. Despite patient education, adrenal crisis, occurs in 1.12% of patient years (White & Arti, ‘Hahner et al., European Journal of Endocrinology 2010). Improved treatment strategies are a major goal and a hydrocortisone dual-release formulation has been shown to allow administration once daily (‘Johannsen et al., JECM 2012). However, a more physiological cortisol profile (with hydrocortisone release in the hours before waking) is probably needed to restore well-being and may be particularly important for patients with congenital adrenal hyperplasia.

Recent progress in adrenal disorders has been supported by strong European networking. (e.g. European Network for the Study Adrenal Tumours, EURADRENAL consortium).

Bruno Alloiso, University of Wuerzburg alloiso_billmedizin.uni-wuerzburg.de

A Day in the life of...

A Dublin Professor of Endocrinology

06.30
Physiotherapy, following shoulder surgery. My physio described this as “voluntarily hurting yourself 270 times a day for the next three months”.

08.00
Start morning tutorial. The junior doctors dread these interactive sessions but express gratitude afterwards. Like physiotherapy, tutorials are painful, but ultimately beneficial.

09.00
Diabetes clinic. Large queues dictate that we work fast; I hope the medical students absorb enough to keep them conscious. Between patients I field phone calls from those family doctors canny enough to realise I am a sitting duck. One of them simply wants tickets for Dublin’s next hurling match and through gritted teeth I concede that I’ll do my best.

13.00
Clinic draws to an exhausted conclusion. Outside a crowd jostles for attention, my secretary prevails. I adjudicate on clinic defaults – too striking and they are denied tickets along with the match tickets). A new neurological referral is prolactin macroadenoma but VHL positive (VHL is our private insurance provider) and the surgeon is keen to operate. Firm diplomacy ensues, along with a prescription for cabergoline. I proceed to the neurological ITU to review a patient with symptomatic hypogonadism and negotiate a plan with the anaesthetists. Once out of earshot I encourage my Spy to double check them himself. Those anaesthetists will say anything but their prayers.

13.55
Review patient with septicaemia then bolt down a sandwich so fast that dyspepsia seems an inevitable consequence. They say that when God made time he made plenty, but I wish he’d sent a bit more my way.

14.00
The pituitary clinic. My second patient looks awful; an macroadenoma but VHI positive (VHI is our private insurance clinic draws to an exhausted conclusion. Outside a crowd jostles for attention, my secretary prevails. I adjudicate on clinic defaults – too striking and they are denied tickets along with the match tickets). A new neurological referral is prolactin macroadenoma but VHL positive (VHL is our private insurance provider) and the surgeon is keen to operate. Firm diplomacy ensues, along with a prescription for cabergoline. I proceed to the neurological ITU to review a patient with symptomatic hypogonadism and negotiate a plan with the anaesthetists. Once out of earshot I encourage my Spy to double check them himself. Those anaesthetists will say anything but their prayers.

13.55
Review patient with septicaemia then bolt down a sandwich so fast that dyspepsia seems an inevitable consequence. They say that when God made time he made plenty, but I wish he’d sent a bit more my way.

14.00
The pituitary clinic. My second patient looks awful; an macroadenoma but VHI positive (VHI is our private insurance clinic draws to an exhausted conclusion. Outside a crowd jostles for attention, my secretary prevails. I adjudicate on clinic defaults – too striking and they are denied tickets along with the match tickets). A new neurological referral is prolactin macroadenoma but VHL positive (VHL is our private insurance provider) and the surgeon is keen to operate. Firm diplomacy ensues, along with a prescription for cabergoline. I proceed to the neurological ITU to review a patient with symptomatic hypogonadism and negotiate a plan with the anaesthetists. Once out of earshot I encourage my Spy to double check them himself. Those anaesthetists will say anything but their prayers.
Coffee Break

Did you know?

According to a controversial 2004 study, in the Olympics of 2156 women will beat men in the 100-meter run.*

* Tatem and colleagues extrapolated winning 100-metre times since 1900 to forecast how race times would change in the future. Tatem et al. (2004) Nature 30: 431(7608): 525. doi: 10.1038/431525a

Endo Crossword

Across
4. Nobel prizewinner “for the development of radioimmunoassays of peptide hormones”, second name (5)
6. Male congenital birth defect (14)
8. Major risk factor for osteoporosis (3)
9. _____'s syndrome, post-partum necrosis of anterior pituitary (7)
12. The ‘cuddle’ hormone (8)
15. Element of the thyroid (6)
16. Cryptic clue: part of escort is older, shows stress (8)
17. Cryptic clue: Debate is raging to find cause of ulcer (8)
18. Trained iguanas (anagram): ESE ExCo member, second name (8)

Down
1. Described gonadal dysgenesis, second name (7)
2. See 18 across, first name (6)
3. A pleiary speaker who can make you blush (3)
5. See 4 across, first name (7)
7. Erotic gain (anagram): disease that’s your fault! (10)
10. See 1 down, first name (4)
13. _____’s oil, possible preventative treatment for Adrenoleukodystrophy (7)
14. Vitalising hormone (8)

WIN!
Send completed crosswords to us for your chance to win one of three €20 Amazon vouchers! Send your answers along with your name and email address to info@euro-endo.org (email) or 0044 1434 642222 (fax number). The first three correctly completed crosswords that we receive will win the prize!

Endo Lingo

HASHIMOTO’S DISEASE

“Hashimoto’s disease is an autoimmune disease which causes inflammation of the thyroid gland and results in a reduction in thyroid hormone levels.” Also known as chronic thyroiditis. The symptoms of Hashimoto’s disease vary, but usually include a swollen thyroid gland (goitre) and hypothyroidism. Hashimoto’s disease causing hypothyroidism is found in just above 2% of the population. Credit: www.yourhormones.info

Save the Dates!

Summer School on Endocrinology
5-9 August 2012
Monastery Mehrerau in Bregenz, Austria.

37th Symposium on Hormones and Cell Regulation European Society of Endocrinology (ESE)
11-14 October 2012
Mont Ste Odile, France.

ESE Postgraduate Training Course in Clinical Endocrinology
18-21 October 2012
Antalya, Turkey.

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

Register your interest today by emailing info@euro-endo.org

ECE 2013

27 April -1 May 2013
Copenhagen, Denmark.

ECE 2014

3–7 May 2014
Wroclaw, Poland.

Invitation to host ECE 2017 now open

Proposals are invited from ESE Affiliated Societies to host the annual European Congress of Endocrinology in their country in 2017.

ECE is organised centrally by ESE in close collaboration with the host national society. For more information please read the guidelines at www.ese-hormones.org/meetings/
Proposal deadline: 31 July 2012