



ESE News

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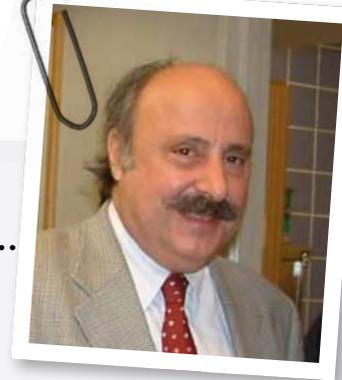
From great people come
great things

**Nobel
Laureate
Ciechanover
addresses
ECE 2013**

**Also in this issue:
IGSF1 deficiency:
discovery of a novel disorder**

**Survivors of the
Greek economy**

**90 years of Russian
endocrinology**



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Cover image of Aaron Ciechanover courtesy of Dan Porges

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

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Editorial

Most surely we all hope that our lives and work have an impact. This issue of *ESE News* focuses on the impact of endocrinology, and of endocrinologists working collectively as ESE, on the development of our discipline and on the wider world.

What greater recognition of the impact of one's work can there be than a Nobel Prize? And so the cover of this issue is graced with the image of Aaron Ciechanover, made a Nobel Laureate for his research into ubiquitin. Professor Ciechanover enthralled us at the recent European Congress of Endocrinology (ECE) in Copenhagen, as you can read below. You can find more news from the meeting on pages 3–4.

ESE's Committees lie at the heart of your Society's drive to progress our discipline. On pages 5–6 you can read how they aim to enable young endocrinologists, basic scientists and clinicians to maximise their potential, through a diverse range of initiatives. These include the development of basic science ambassadors, to nurture and develop the basic science contingent at future European Congresses.

Every so often, a novel endocrine discovery illustrates just how exciting and rewarding it can be to be an endocrinologist. On page 7, Jan Maarten Wit and Daniel Bernard describe their recent discoveries in IGSF1 deficiency syndrome. Its identification will surely have a big impact on the treatment of its sufferers.

Impact of a different sort is described on page 11, where Gregory Kaltsas' true story of the devastating effects of the economic turmoil facing Greek endocrinologists will give you food for thought. On page 10, Wouter de Herder relates some other less-than-positive effects of endocrine pathology, as it impacted the political scene of the late 20th century.

So, as you read on, I encourage you to contemplate the enormous impact that we can all make by working together, as members of ESE.

Philippe Bouchard
ESE President

ECE 2013's 'Nobel Lecture' A premonition?

At ECE 2013, Professor Aaron Ciechanover (featured on this issue's cover), delivered an enthusiastic lesson on the discovery of a basic cellular mechanism: the controlled degradation of intracellular proteins by ubiquitination, which led to his Nobel Prize in 2004.

This field is not well known to endocrinologists, who more often hear about hormones and gene regulation. Despite appearing unrelated to endocrinology, his plenary lecture was premonitory: 1 week later, an article in *New England Journal of Medicine* (Margolin *et al.*, 8 May 2013) demonstrated that mutations in genes regulating this cellular process (*RNF216*,

OTUD4) are found in families with ataxia, dementia and hypogonadism.

As author Stephanie Seminara (Massachusetts General Hospital) explains, the study 'highlights, for the first time, the importance of the ubiquitin system in a syndrome characterised by ataxia and hypogonadotropic hypogonadism due to abnormal signalling from the brain or pituitary gland'. Application of these discoveries may lead to therapies – potentially including drugs currently developed for other disorders involving ubiquitination, including Parkinson's disease – and enable genetic screening and counselling for affected families.

Philippe Bouchard
Justo Castaño

ECE 2013 in Copenhagen



The 15th European Congress of Endocrinology (ECE 2013) provided a full scientific programme over 5 days in the charming and energetic host city of Copenhagen.

From the vibrant atmosphere during the first few hours of registration and the exhibition to the dedicated enthusiasm found in the 'Meet the Expert' sessions, the Congress was a celebrated success for ESE, attracting over 3000 attendees from 101 countries.

The balanced programme of clinical and basic science was complemented by a dedicated strand for endocrine nurses, a symposium for young endocrinologists, over 1140 poster presentations and a busy and exciting exhibition.

Scientific sessions were extremely popular. In particular, the vitamin D debate attracted a full audience. The attended poster sessions buzzed with

enthusiastic conversations and achieved their goal of facilitating networking amongst young endocrinologists and more senior colleagues alike, thus stimulating new research.

The light and bright exhibition hall at the heart of the Congress was a hub of activity throughout the day and the beautiful sunshine complemented the natural feel of Copenhagen's Bella Centre.

On behalf of all those involved in the programming and organisation, we hope all attendees enjoyed the Congress as much as we did, and we look forward to welcoming you to the stunning city of Wrocław, Poland, in May 2014.



New members' welcome reception

Save
the Date!
ECE 2014
3-7 May 2014
Wrocław, Poland



Members – have your say!

On the second day of ECE 2013, ESE President Philippe Bouchard met with the heads of national and specialty affiliated societies. He began by expressing his desire to collaborate and learn – 'We need to work together more' – and so, evoking scenes from a summit of the European Parliament, he invited each group that was present to declare how it saw progress in partnership with ESE.

The issues were diverse and wide-ranging and, whilst many were shared, others were unique to a particular country's health or academic system.

It was, however, clear that those present were pleased to be given the platform to feed into the workings of ESE, which made for frank and open discussion: just what the doctor ordered!

A special session also gave those new to the Society an opportunity to meet, greet and network, both with members of ESE's Executive Committee and with one another. Being a part of the collective, meeting peers from around the world and taking part in the scientific community were why so many new members were present (pictured).

Whilst these meetings are scheduled, ESE welcomes feedback from its members at any time. This is your Society, and we need your input to provide you with the tools, information and resources to assist you in your career. As the European hormone society, we also represent you at an international level, making it even more important that we hear your views. You can Tweet (@ESEndocrinology), 'like' us on Facebook, and email us (info@euro-endo.org) – we will always listen.

New scope for basic science journals

Journal of Endocrinology and *Journal of Molecular Endocrinology* are official ESE journals, publishing the latest in basic endocrine science. To ensure that authors who submit papers to these journals are offered a clear choice, and that their research is published in the most appropriate journal to reach the intended readership, the scope of each journal has been redefined. This will give each a specific focus, together covering the entirety of basic endocrinology.



Physiology, metabolism and translation

Journal of Endocrinology publishes original research articles, rapid communications and reviews. Its focus will be on endocrine

physiology and metabolism, including hormone secretion, hormone action, and biological effects. The journal will consider basic and translational studies at the organ, tissue and whole organism level.



Molecules, cells and mechanisms

Journal of Molecular Endocrinology also publishes original research articles, rapid communications and reviews. Its focus

will be on molecular and cellular mechanisms in endocrinology, including gene regulation, cell biology, signalling, mutations, and transgenesis. The journal will consider basic and pathophysiological studies at the molecule and cell level.

To facilitate this, the Editorial Boards of the two journals have been combined under the Editorship of Adrian JL Clark, St George's, University of London, UK. For more information about the journals see www.es-e-hormones.org.



Retiring Committee members with ESE President Philippe Bouchard

Farewell and welcome to Executive Committee members

At ESE's AGM on 30 April 2013, we bade farewell to Paolo Beck-Peccoz (Vice President), AJ van der Lely (Treasurer) and three Executive Committee members: Wiebke Arlt, Andrea Giustina and Martin Reincke (pictured). We thank them for their support; they will be greatly missed.

We welcome our newly elected members: Vera Popovic-Brkic (Vice President), Jens Bollerslev and Georg Brabant. You can learn a little more about them below. We also welcome Richard Ross as the new ESE Treasurer.

Vera Popovic-Brkic

Vera Popovic-Brkic is Professor of Internal Medicine at Belgrade University School of Medicine, and Head of the Neuroendocrine Unit, University Clinical Center, Belgrade, Serbia. She is a certified specialist in internal medicine and subspecialist in endocrinology. She also completed postdoctoral studies in endocrinology at St Bartholomew's Hospital, London, UK, and was Chair of Postgraduate Studies in Endocrinology at Belgrade University. She organised the 1st and the 11th ESE Postgraduate Courses in Belgrade in 2006 and 2011 respectively.

She is a Fellow of the Royal College of Physicians and an elected Fellow of the Academy of Medical Sciences within the Serbian Medical Association. Vera's special clinical interests are hypopituitarism and management of pituitary adenomas.

Jens Bollerslev

Jens Bollerslev has been Head of the Section of Specialised Endocrinology, Oslo University Hospital, Rikshospitalet, and Professor of Endocrinology, Faculty of Medicine, University of Oslo, Norway, since 2000.

He graduated from the University of Odense, Denmark, before completing a doctoral thesis on metabolic bone disease and specialising in internal medicine and medical endocrinology at Odense University Hospital.

Jens has been a Board Member of the Danish Endocrine Society and the Danish Bone and Tooth Society, and Vice President of the Norwegian Endocrine Society. He has been on the organising committees of many meetings, including ECE 2005 and ICE/ECE 2012. He is a member of the Evaluation Committees for the *European Journal of Endocrinology* Prize 2012/2013 and the Danish Research Council 2011/2012.

Georg Brabant

Georg Brabant graduated from the University of Hamburg, Germany, later specialising in endocrinology and internal medicine. After 2 years of basic science training at the Institute of Reproductive Medicine, University of Münster, he joined the Medical School of Hannover as a resident, eventually becoming Professor of Endocrinology. In 2006 he moved to the Department of Endocrinology at the Christie Hospital in Manchester, UK. Since 2011, he has been Head of Experimental and Clinical Endocrinology in the Department of Medicine, University of Lübeck, Germany.

He has served on the Editorial Boards of various journals, and on the Executive Committees of the German Endocrine Society and the European Thyroid Association (ETA). He chaired the German Thyroid Association (Sektion Schilddrüse) (2000–2006), and has been Treasurer of the European Thyroid Cancer Research Network (since 2008).

1st EYES Meeting

held jointly with the 15th YARE Meeting



11–13 October 2013,
Rotterdam, The Netherlands

Registration closes 16 August.

For more information, see the EYES web page at www.eese-hormones.org/youngendo.

ESE Summer School 2013

The ESE Summer School on Endocrinology takes place on 27 July–1 August in Bregenz, Austria. Its theme will be 'Classical endocrine glands and mesenchymal tissues: stem cells, development, function and regulatory principles', including:

- Development of adrenals, muscle and fat cells
- The art of trimming proteohormones: biochemistry, structure, function and diseases
- Activins, inhibins and follistatin
- SPP ThyroidTransAct session: novel thyroid hormone metabolites and non-classical mechanisms of actions
- Metabolic interphases between nuclear receptors, hormones and cancer
- Endocrine animal models

Deadline for registration: 10 July 2013. For more information see www.eese-hormones.org/education/basicscience.aspx.



For further information, contact EYES@euro-endo.org or see www.eese-hormones.org

Eyes
EUROPEAN
YOUNG ENDOCRINE
SCIENTISTS
looking forward



It's yours for the taking!

What I gained by joining EYES...

Nowadays, many young researchers simply cannot be bothered to join 'yet another' network like the European Young Endocrine Scientists (EYES), or its German equivalent Young Active Research in Endocrinology (YARE). They are already members of several communities, juggle five email accounts and seven Facebook identities, and are occupied with their own research. I know, because I have been there (except for the seven Facebook accounts, that option didn't exist 'back in the day') – but I will try to convince you that it was, and still is, a good idea to join EYES.

In 2004, my supervisor showed me a flyer for the annual meeting of the 'Junge Forschung Aktiv' (the predecessor of EYES) in Münster. I didn't really want to go, because I didn't know anyone, and I was not sure about presenting my rather preliminary research data, let alone in English. The reason I made the journey was, I must admit, because I am from Münster and it meant a free trip home!

However, when I returned to Hannover 2 days later, I had successfully given my first outside-the-lab presentation in English, received a lot of positive feedback and helpful hints on the methods I was using and, most importantly, made plenty of new friends.

So if you ask why bother joining EYES, the answer is simple: 'you'll never walk alone'. Ever since that day in Münster, I have always known someone with whom I could have a friendly drink or dinner at any endocrine conference.

And the longer I stayed with EYES, the more conference buddies I accumulated. It should be fairly obvious that these people are also the most reliable source of juicy gossip from the endocrine labs of Europe! Consequently, my colleagues always eagerly awaited my return from our annual meetings, to hear the latest stories. This, by the way, should provide excellent motivation for any supervisor to send students to become his/her EYES and ears in Europe.

Almost equally important to me, the EYES community always provided a quick answer for any kind of research problems – directly from a 'hands-on' expert. And, vice versa, I was approached because of my expertise with hypothalamic *in situ* hybridisation, and ended up as a proud co-author of a very nice publication in *Molecular Endocrinology*.

Unfortunately, last year I attained the exit criterion for EYES, and was kindly asked to leave. It might be for the better, since I had started to use the term 'back in the day' subconsciously when talking about EYES, which is a clear sign to move on. Nevertheless, I hope I convince a few young endocrinologists that it's worth carrying the EYES torch for a bit along the way.

And to all active members of EYES I say, 'Keep up the good work, and no matter how hard you try, you will never get rid of me!'

Jens Mittag
Associate Professor, Karolinska
Institutet, Stockholm, Sweden

Jens Mittag was a founder member and Chair of the EYES Committee until 2012, and a YARE board member from 2006 to 2012.



From the Science Committee: ESE recruits ambassadors for basic science

The strategy for progress in any clinical discipline, including endocrinology, is from bench to bedside. So promoting strong ties between basic and clinical endocrinology within Europe ranks highly in ESE's agenda.

Attendance of ESE activities by clinical endocrinologists has always been very good, but we have lots to do to promote the engagement of basic scientists. For example, the table (right) shows statistics regarding attendance at the European Congresses of Endocrinology (ECE) over the last 3 years. The trend in involvement of basic scientists is promising. Those belonging to the 'both' category are obviously academic clinicians. For comparison, 22% of the attendees of the US Endocrine Society meetings are basic scientists.

To attract basic scientists to ESE, we have decided to create a network of national basic endocrine science contacts

Delegate interests at ECE (2010–2012)

Interest	ECE 2010	ECE 2011	ICE/ECE 2012
Basic science (%)	9	8	13
Clinical science (%)	41	41	45
Both (%)	50	51	42

or 'ambassadors'. These individuals will keep in contact with basic endocrinologist colleagues within their country or affiliated society. An invitation letter to all member/affiliated societies was sent a few months ago, and we have received several suggestions for basic science ambassadors. The ESE Science Committee is currently discussing the best ways in which to use their expertise to strengthen basic endocrine science. We expect the ambassadors to form an important body

of knowledge and provide ideas on how to promote their special areas of interest in ESE activities.

To find out more, contact me at info@euro-endo.org.

Ilpo Huhtaniemi,
Science Committee Chair

Clinical Committee Update: ESE set to establish clinical guideline framework

Since its inception in 2011, the ESE Clinical Committee has initiated new activities to advance the quality and equality of patient care, and to support healthcare professionals.

Special interest groups (SIGs) address areas which currently lack consensus, and/or where new research is likely to change patient management. The results of this work will be presented at ESE sponsored symposia, and form the basis for position papers and recommendations. The ECE Nurse Sessions held in Florence and Copenhagen, featuring presentations by nurse experts and physicians, have been well attended. Future activities to encourage networking amongst nurses are on the way. Together with the Endocrinology

Section/Board of the European Union of Medical Specialists, the Clinical Committee works to promote and improve fellowships for research and clinical practice in other centres for the benefit of young endocrinologists.

There is an ongoing increase in medical information, and so a growing need for well-balanced advice. ESE is considering providing guidelines on the management of selected endocrine disorders. Clinical Committee members met with a number of experts at a first meeting on policies and procedures in Paris on 10 April (pictured). Olaf Dekkers (Leiden, The Netherlands) emphasised the importance of defining the clinical questions to be addressed, and of being transparent with respect to how the literature is searched and judged. Pierre Durieux (Paris, France) discussed quality assessment and determinants of the strengths of



the recommendations. Wim Van Biesen (Ghent, Belgium), Chair of European Renal Best Practice, shared his vast experience of producing guidelines of a high standard. Pierre-Francois Plouin (Paris, France), Chair of the ESE/ESH (European Society of Hypertension) SIG on pheochromocytoma/paraganglioma, gave an update on their ongoing work on identifying predictors for tumour recurrence in a large cohort of patients prospectively monitored after surgery.

The meeting was constructive and generated firm ideas for developing a competent ESE guideline structure.

Pia Burman
Clinical Committee Chair

IGSF1 deficiency syndrome: a novel endocrinopathy

Sometimes a novel clinical syndrome emerges more or less 'out of the blue'.

Such was the case with immunoglobulin superfamily member 1 (IGSF1) deficiency syndrome (IDS), characterised by central hypothyroidism, variable hypoprolactinaemia, occasional growth hormone (GH) deficiency and, strikingly, macro-orchidism (see figure) (Sun *et al.* 2012 *Nature Genetics* 44 1375).

IDS was discovered when attentive clinicians in at least four centres independently observed that central hypothyroidism occurred more frequently in boys than in girls, and tended to run in families, suggesting an X-linked hereditary disorder. Detection of the syndrome was facilitated by screening methods for congenital hypothyroidism in The Netherlands, which include thyroxine. As a result, most infants with central hypothyroidism are detected. Furthermore, both clinical information and DNA from these infants were collected centrally, which aided detection of patterns of inheritance.

The final breakthrough was facilitated by two important factors. First, teams of paediatric endocrinologists, adult endocrinologists and clinical geneticists had been assembled and working collaboratively for many years. Secondly, newly developed exome sequencing identified mutations in the *IGSF1* gene in two affected cousins in Leiden, The Netherlands, and two brothers in Cambridge, UK. Later, candidate gene sequencing revealed additional *IGSF1* mutations in nine more families from Amsterdam, Leiden and Rotterdam in The Netherlands and in Italy. In total, we collected 26 patients from 11 families, with 10 different mutations or deletions.

The next challenge was to establish a functional link between *IGSF1* mutations and the clinical syndrome. At the time, and even now, the literature on IGSF1 was quite limited. Nonetheless, its robust expression in the pituitary, coupled with central hypothyroidism and prolactin deficiency in our patients, made IGSF1 an appealing candidate. The Leiden group then initiated a collaboration with researchers in Montréal, Canada,

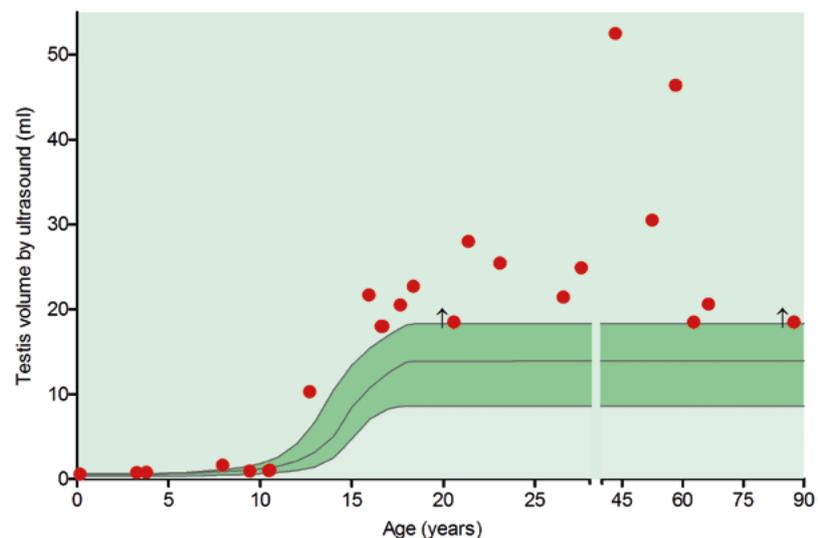
who had investigated IGSF1 for many years and had generated *Igsf1*-deficient mice. Remarkably, only 1 week later, the Montréal group was approached by the London/Cambridge team with a similar proposal to collaborate.

At that point, two routes could have been taken: competition or collaboration. Fortunately, a crucial teleconference paved the way for fruitful collaboration, where science and medicine took centre stage and egos a back seat! Thereafter,

mechanisms of IGSF1 function remain unresolved. Further studies are underway in human carriers of the mutation and in *Igsf1*-deficient mice to unravel the pathophysiology of the condition and the physiological role of IGSF1. We suspect that these efforts will uncover previously unrecognised regulatory mechanisms in various endocrine systems.

For the clinicians, it is noteworthy that *IGSF1* screening can be considered for individuals with central hypothyroidism,

Testis volume in IGSF1 deficiency syndrome



The red points show individual measurements, while the green band is the range of P10–P90 (used as reference range for age). P10 and P90 are the 10th and 90th percentiles.

two activities were carried out in parallel: the Montréal group studied mutant IGSF1 protein expression and performed metabolic studies in *Igsf1*-deficient mice in collaboration with Cambridge, while the clinicians studied the patients in a uniform fashion.

Together, we showed that pathogenic mutations block IGSF1 protein trafficking to the plasma membrane. Furthermore, *Igsf1*-deficient mice were centrally hypothyroid, which was probably secondary to a reduction in thyrotrophin-releasing hormone (TRH) receptor expression in their pituitaries. A similar down-regulation of TRH receptor in humans with IDS might explain their hypothyroidism and prolactin deficiency.

We are still far from understanding how IGSF1 deficiency causes this peculiar set of clinical features. In particular, we lack insight into how loss of IGSF1 causes macro-orchidism. Moreover, normal

combined GH and thyrotrophin deficiency, hypoprolactinaemia, macro-orchidism, and possibly delayed puberty (particularly if there is a discrepancy between testicular volume and testosterone secretion).

We believe that our experience serves as an example of how novel syndromes can be discovered and understood at a mechanistic level. The key elements include attentive clinicians; national and international collaboration of patients, endocrinologists, clinical geneticists and basic scientists; modern genetic technologies; and availability of time and resources for research.

Jan M Wit

Emeritus Professor of Paediatrics, Leiden University Medical Center, Leiden, The Netherlands

Daniel J Bernard

Associate Professor of Pharmacology, McGill University, Montréal, Canada

RAI in childhood Graves' disease



Anti-thyroid drugs have been the first-line therapy for treatment of Graves' disease in children and adolescents, but can lead to side effects, prolonged

therapy and relapse. Surgical near-total thyroidectomy heavily depends on surgical skill and can induce permanent hypothyroidism. Radioactive iodine (RAI) is becoming an established alternative. Cury and colleagues relate their clinical experience over 20 years with RAI with follow-up ranging from 7 to 24 years (mean±SD, 11.5±3.6), reporting that RAI is effective and safe for treatment in this age group.

Read the full article in *Endocrine Connections* **2** 32–37

Expression of selenoprotein P in β-cells



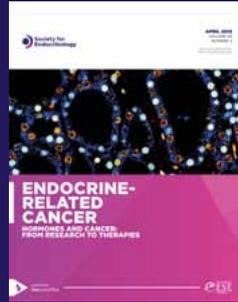
Progressive loss of pancreatic β-cell mass is a crucial pathophysiological feature of type 2 diabetes mellitus.

As β-cells express only

low amounts of antioxidant enzymes, they may be particularly vulnerable to oxidative damage. Steinbrenner *et al.* investigated the pancreatic expression of selenoprotein P (Sepp1), which may serve as an additional antioxidant enzyme inside and outside cells. Pancreatic islets were found to express relatively high levels of Sepp1, that may provide antioxidant protection of β-cells. The data indicate that high glucose levels down-regulate Sepp1 expression, which might contribute to glucotoxicity in β-cells.

Read the full article in *Journal of Molecular Endocrinology* **50** 31–42

Increasing effectiveness of androgen deprivation



Metastatic prostate cancer is treated with androgen deprivation therapy (ADT), but patients eventually progress to castration-

resistant prostate cancer, which is currently incurable. Mooso *et al.* have shown that nuclear localisation of the protein filamin A (FlnA) induced apoptosis in castration-resistant prostate cancer cells during ADT. The natural product 'genistein combined polysaccharide' (GCP) had a similar effect, by inducing FlnA cleavage and nuclear localisation. In a mouse model of prostate cancer recurrence, GCP, but not vehicle, impeded relapse following castration. This demonstrates the efficacy of GCP in promoting FlnA nuclear localisation and enhancing androgen responsiveness in prostate cancer.

Read the full article in *Endocrine-Related Cancer* **19** 759–777

Thyroid hormone down-regulates SIRT1



Calorie deprivation extends lifespan and reduces the rate of aging in various organisms. Sirtuin 1 (SIRT1), a NAD⁺-dependent

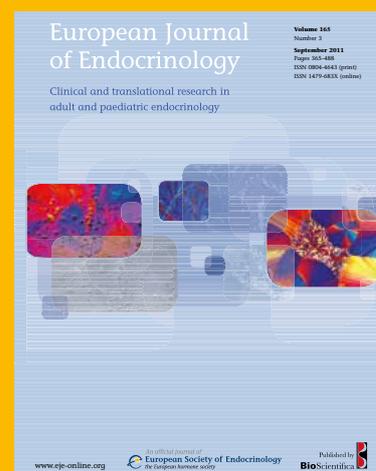
deacetylase, has been linked to beneficial effects elicited by calorie restriction. Physiological adaptation to starvation requires higher activity of SIRT1 and suppression of thyroid hormone (TH) action to achieve energy conservation. Cordeiro *et al.* tested whether TH may be a negative regulator of SIRT1 expression in mice. They found that SIRT1 protein content was down-regulated by TH in brown adipose tissue and liver. An increase in SIRT1 protein was achieved by fasting-associated suppression of serum TH. These data suggest an interplay between SIRT1 and thyroid hormone during energy deprivation.

Read the full article in *Journal of Endocrinology* **216** 181–193

Cushing's syndrome screening in hirsutism

Hirsutism may be present in some patients with Cushing's syndrome (CS), but the prevalence of CS in patients with hirsutism is not well known. Karaca *et al.* evaluated patients with hirsutism with a low-dose dexamethasone suppression test. All patients had suppressed cortisol levels following this test, excluding CS. The aetiology of hirsutism was polycystic ovary syndrome in 79%, idiopathic hirsutism in 13%, idiopathic hyperandrogenaemia in 6%, and non-classical congenital hyperplasia in 2% of the patients. So, routine screening for CS is not required in patients with a referral diagnosis of hirsutism in the absence of features of hypercortisolaemia.

Read the full article in *European Journal of Endocrinology* **168** 379–384



J A Romijn

Editor-in-Chief of *European Journal of Endocrinology*, Department of Medicine, Academic Medical Center, University of Amsterdam, The Netherlands
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The Endo Explorer



Russian Association of Endocrinologists

The Russian Association of Endocrinologists (RAE) will soon celebrate its 90th anniversary! Initially called the Russian Society of Endocrinologists (RSE), its first session was held in October 1924. At that time, it consolidated the work of different specialists: biologists, physiologists, pathologists and clinicians. By 1932, it had approximately 500 members. In 1941, its work was suspended due to the Second World War, only to recommence in 1942. In 1956, the Moscow Scientific Society was established (as a division of RSE), and has held regular monthly meetings ever since.

In 1991, the Society was reorganised and RAE established. There are more than 1200 members: researchers, clinicians and lecturers working in experimental and clinical endocrinology, as well as in related disciplines.

The Executive Board of the RAE is the Convention, which meets every 5 years to analyse the work of the endocrine service, define developmental priorities and approve new therapy standards. RAE organises and participates in a range of events. Our Annual Endocrine Congresses attract up to 1500 participants. Different sections of the RAE specialise in diabetes mellitus, osteoporosis, thyroidology, neuroendocrinology, endocrine surgery, paediatrics and reproductive endocrinology.

Our development is focused on integration with ESE and the rest of the international scientific community.

Galina Melnichenko
Vice-President

The European Thyroid Association – Cancer Research Network (ETA-CRN) promotes research and clinical trials in thyroid carcinoma to improve knowledge of this disease.

The Thyroid Cancer Research Network (TCRN) came into being as a platform for co-operation between researchers and clinicians whose primary focus was molecular biology and clinical studies of thyroid cancer. For formal legal reasons, TCRN became associated with the ETA, and is now a working group of this association.

The ETA-CRN organises parallel annual meetings as satellites to the annual meetings of the ETA, and you do not need to be an ETA member to participate in our meetings. Meetings focus on various clinical or basic problems related to thyroid carcinoma, and we achieve a good balance between the presentation of data in scientific symposia and meetings to discuss clinical issues relating to diagnosis and treatment.

The Officers of the Network are currently the Group Leader, President Ulla Feldt-Rasmussen (until 2014), Secretary Barbara Jarzab (until 2013) and Treasurer Georg Brabant (until 2014), who along with four other members form the Committee.

The ETA-CRN meeting in Lisbon in 2009 featured a lively discussion on the American Thyroid Association Guidelines on management of medullary thyroid cancer, which had just been published. The results of that session formed a special supplement to *Thyroid Research*, which is available to all at www.thyroidresearchjournal.com/supplements/6/S1.

This year, ETA-CRN has initiated a call for joint clinical trials in thyroid cancer. The Network has invited the European Society of Endocrine Surgeons and European Association of Nuclear Medicine to co-operate. The title of the forthcoming meeting in Leiden on 7 September is 'Clinical trials in thyroid cancer: an update and call for future studies', and you can find the preliminary programme at www.eta2013.org/eta-crn.php.

We invite all who are looking for partners to clinical trials in thyroid cancer to submit a short project to be presented and discussed during the meeting. We hope, however, to meet many other ESE members there who are interested in problems related to thyroid cancer. Annually, 60–100 delegates attend the ETA-CRN meetings and we would welcome more with open arms.

On behalf of the ETA-CRN I invite you to Leiden. Please contact me at bjarzab@io.gliwice.pl.

Barbara Jarzab
ETA-CRN Secretary
Gliwice, Poland

Ulla Feldt-Rasmussen
ETA-CRN President
Copenhagen, Denmark

Hormones 'rule the world':

Substituted hypothyroidism reigned over Europe

Two issues ago, we began our examination of the worldwide impact of hormones on international politics, with a look at endocrine disorders among world leaders. Yes, of course, European premiers have had endocrine health issues as well, and many readers have responded to my previous report which only considered the 'endocrine health' of US Presidents.



Ted Heath

Sir Edward Richard George 'Ted' Heath, (9 July 1916–17 July 2005), British Conservative politician, Leader of the Conservative Party from 1965 to 1975 and Prime Minister of the UK from 1970 to 1974, had hormonal problems. Around 1973, when the oil crisis was hitting most Western countries, he was suffering from hypothyroidism. Subsequently, he lost the 1974 election to Harold Wilson.



Helmut Schmidt

Helmut Heinrich Waldemar Schmidt (born 23 December 1918), German Social Democratic politician, Chancellor of West Germany from 1974 to 1982, had the same problem. In 1972, he was diagnosed with hypothyroidism. This condition has been claimed to be responsible for his 'bouts of irritability' during his active political career.



Boris Yeltsin

Boris Nikolayevich Yeltsin (1 February 1931–23 April 2007), the first President of the Russian Federation (1991–1999), suffered from several medical conditions.

It is generally known that Yeltsin struggled with alcoholism. He had a heart attack in 1996 and needed cardiac surgery. He had just won the 1996 presidential elections at that time. However, physicians did not consider Yeltsin fit enough to undergo surgery. Before surgery, two problems needed to be restored: first anaemia, presumably caused by 'internal bleeding', and secondly hypothyroidism. According to the reports there were no problems with regard to his liver function! After the correction of his haemoglobin and thyroid hormone levels, Dr Renat S Akchurin performed a successful quintuple coronary bypass on 5 November 1996 at the Moscow Cardiological Center. In later years, Yeltsin also underwent an angioplasty in the German Heart Centre in Berlin, Germany. One can only speculate on the extent to which Yeltsin's hypothyroidism (and quite likely the depressed mood that resulted from it) affected Russia during the years he served as Russian President. It is quite possible, however, that Yeltsin's complete transformation after his bypass surgery was not merely due to the surgical correction of his heart problem, because his turnaround after the start of thyroid hormone replacement was spectacular.

Finally, a question for readers...

Was Muammar Muhammad Abu Minyar al-Gaddafi (June 1942–20 October 2011), commonly known as Muammar Gaddafi, suffering from 'thyroid madness'?

Send your appraisal of the evidence to info@euro-endo.org.

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2013 ASPIRE Young Investigator Research Awards in Endocrinology

This competitive, peer-reviewed grants programme supports promising young investigators working in basic, translational or clinical research, to improve the care of endocrine patients, focusing on:

- outcomes of treatment beyond growth in children with growth disorders
- factors affecting the response to medical therapies in acromegaly.

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Two awards will be made for year-long projects, each for a total of US \$50,000, inclusive of overhead costs. Applications must be received by 28 June 2013.

For more information, see www.aspiresearch.org

The lives of young endocrinologists in modern Greece...

A tragedy of our times

Aris and Alexandros initially met each other while studying at the Medical School of Athens. Aris was brought up in Athens and came from a medical background, while Alexandros' upbringing was in an agricultural area. They became close friends and shared common interests and the desire to train in endocrinology–diabetes. Here are their stories...

2004

After graduating from medical school, they took different paths. Aris continued his studies in the USA, moving to Boston in 2004. Alexandros got married and carried on his training in Greece. He and his wife, who was training as a radiologist, had reasonable salaries, so they bought a medium-sized flat in Athens, after getting a mortgage, in 2006.

2009

The friends kept in close touch. Aris concluded his training first, returning to Athens in 2009. At that time Alexandros was still in training, while his wife, who had been working part-time, was also looking after their two children. After Aris returned he joined a private hospital and also started to develop his own private practice.

2010

The financial crisis made its appearance in Greece in 2010. Alexandros was in the middle of his training and his wife was still working part-time in a private setting. The first consequences of the crisis were a substantial reduction of approximately 25% in Alexandros' salary and the redundancy of his wife from most of her part-time jobs. At the same time, Aris' position in the private setting became less secure, as the number of private patients attending the institution substantially reduced.

2013

Over the following years, things have worsened for both friends as the financial crisis has deepened, with the Greek economy remaining in recession for 3 continuous years. As a consequence, Alexandros' salary is now approximately half its initial value, and his wife has just one part-time session. But the family's expenses, including the up-bringing of their two children, have remained high, as their mortgage remains virtually the same. As the private sector attracts fewer patients, Aris lost his job in the private hospital and is concentrating on his private practice.



The future

Despite their hopes that things will eventually improve, the Greek economy remains in recession and unemployment rates, especially among young people, remain extremely high. Alexandros has finished his training and passed his exit exam, qualifying as an endocrinologist, but he and his wife remain virtually unemployed, as the only available options are for them to work in the private sector, which continues to shrink. Although Alexandros wanted to work in an NHS or university hospital, there are no available positions as empty posts are not advertised.

The last time the two friends met, Aris announced that he would be leaving within a few months, as he has found a suitable job in USA. However, there are much fewer options for Alexandros and his wife, who have not worked abroad previously and have financial commitments in Greece. They are exploring the possibility of seeking a job in another European country.

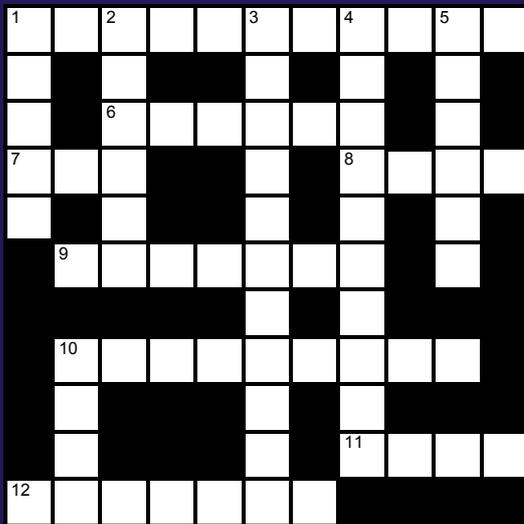
Although some young endocrinologists may succeed in finding a low income job in Greece, the number looking abroad is rising, and this will probably continue so as long the financial crisis prevails.

Gregory Kaltsas

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**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 Nikola Simovi (Zemun, Serbia), Lino Malandrino (Catania, Italy) and Giorgio Grani (Rome, Italy), last issue's winners.

Answers to the puzzle in issue 20

1. Stomach, 2. Antibody, 3. Captopril,
4. Epidermis, 5. Adrenaline,
6. Hashimoto's, 7. Parathyroid,
8. Progesterone, 9. Pre-eclampsia,
10. Conn's syndrome

Endo Prize Puzzle

Across

1. Desire for NaCl and symptom of Addison's disease (4,7)
6. Stomach enzyme that digests protein (6)
7. We want to do more of this if levels of glucose fall (3)
8. Common name for pharmaceutical agent (4)
9. Receive from parents by transmission of DNA (7)
10. Hormone that regulates seasonal biology and circadian rhythm of sleep (9)
11. Alkaline product of the liver stored in gall bladder (4)
12. Period of contraction of the ventricles of the heart (7)

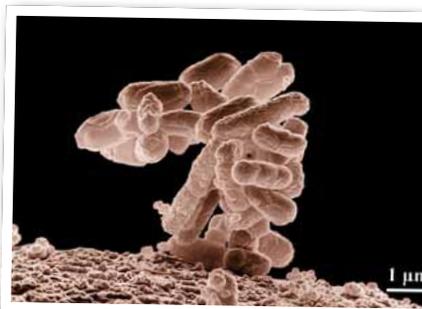
Down

1. Peak growth hormone levels occur when you do this (5)
2. Hormone derived from adipose tissue and from Greek word for thin (6)
3. Arrest lover (anagram) – an active ingredient of red wine? (11)
4. Native band (anagram) – kinase inhibitor used to treat medullary thyroid cancer (10)
5. Medical name for lumps in glands (6)
10. Hereditary form of type 2 diabetes mellitus in juveniles (abbreviation) (4)

Did you know?

Acromegaly also occurs in dogs

However, in dogs, the pituitary is generally NOT the source of the growth hormone (GH) excess. In the 1980s it was discovered that, in beagles, exogenous progestins and endogenous progesterone can induce GH excess. In the 1990s it was discovered that this GH excess originates from the mammary gland, and may give rise to acromegaly and insulin resistance/diabetes mellitus (JA Mol *et al.* 1995 Growth hormone mRNA in mammary gland tumors of dogs and cats. *Journal of Clinical Investigation* 95 2028–2034).



Lean times for friendly bacteria

Allogenic faecal transplantation from lean donors increases insulin sensitivity in subjects with the metabolic syndrome. These results suggest that manipulation of the intestinal microbiota is an innovative strategy to treat insulin resistance in humans.

Save the Dates!

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

ESE Summer School on Endocrinology

27 July–1 August 2013
Bregenz, Austria

38th Symposium on Hormones and Cell Regulation (ESE)

10–13 October 2013
Mont Ste Odile, France

4th ESE Clinical Update

25–27 October 2013
Madrid, Spain



16th European Congress of Endocrinology

3–7 May 2014
Wroclaw, Poland

Deadlines:

1 August 2013
38th Symposium on Hormones and Cell Regulation (ESE)
– registration deadline

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