I am very flattered to have been asked to take over as editor of The Endocrinologist and hope I can justify my selection. My friends now think I am the editor of a high-brow scientific journal! And I will keep it a secret from them that it is actually a magazine fit for the last slot on ‘Have I Got News for You’! I have no idea how many people genuinely take the time to read this newsletter, but I am taking a wild guess that you are one of them. My feeling is that this newsletter should be an all-embracing quarterly update of what is happening scientifically, politically and within our specialty, with something of the human angle behind our endocrine world. One thing I have been pleased to introduce is the series of interviews with influential endocrinologists of our generation.

To match the Society’s snazzy new identity, we have a new newsletter design (I think I can feel your excitement), and we have appointed a team of scientists and clinicians to join the editorial committee. We are very reliant on you to provide us with new ideas and original articles, and this newsletter presents a refreshing chance for you to give an entirely biased, non-evidence based opinion on a particular aspect of endocrinology which is dear to our heart. It is also a chance to showcase our subject to the lay public, who might happen upon this publication whilst at the hairdressers or when rummaging through the recycling bin. In all seriousness, although it is a tricky time for our specialty in terms of funding for research and the uncertainties around commissioning, endocrinology remains the most interesting specialty by far, and we should be shouting it from the rooftops (or at least from the pages of this newsletter if you can’t get up on the roof). I hope you enjoy this current edition, which has a lot of stuff in it!

WELCOME

A WORD FROM THE EDITOR

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Find us on Facebook & Twitter...

ON THE COVER...

SOCIETY BES 2013: SPRINGTIME IN HARROGATE

Register now for the UK's premier scientific meeting on hormone research! The Society for Endocrinology BES conference takes place in Harrogate on 18-21 March 2013.

This 4-day meeting will encompass the best in British and international basic science and translational research, clinical investigation and clinical practice in endocrinology.

It is an unrivalled opportunity to network with endocrinologists from across the globe.

You will enjoy 8 plenary lectures from world-renowned researchers, including Ronald Evans (USA), Fabien Larbeteau (Canada) and Anna Spada (Italy), as well as 12 symposia covering a range of translational topics. Education workshops are an exciting addition to the programme for 2013.

NEW PRESIDENT

We are delighted to announce that the Society’s next President will be Professor Steve O’Rahilly from the University of Cambridge. He will be officially elected at the AGM in Harrogate during the Society BES 2013 meeting and will take up office at the AGM 2014.

HEADLINES

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The Society’s new approach will engage, support & advance endocrinology

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A life in hormones

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18 Aldosterone Scott Mackenzie and a tropical paradise

19 Clinical Research Networks explained

21 Next generation sequencing: Jason Carroll tells all

23 HOT TOPICS

ANNUAL REPORT AND AGM

With this mailing you will find your copy of the Annual Report. This gives a snapshot of the activities we have undertaken in the last financial year. Come to the AGM at the Society BES 2013 meeting in Harrogate to hear from The ACM will be held on Wednesday 20 March in the Main Auditorium of Harrogate International Centre.

CALL FOR NOMINATIONS/COMMITTEE MEMBERS NEEDED

Vacancies on the following committees will arise at the end of 2013. If you would like to be involved in running your Society, please consider standing for election to:

- Clinical Committee
- Corporate Liaison Board
- Finance Committee
- Awards Committee
- nominations 2013

For the latest news and views from the Society’s next President, please see the full programme, see www.endocrinology.org/meetings/2013/society

Follow #sfebes13 on Twitter for the latest news and views from the meeting.

We look forward to welcoming you all to Harrogate!

CORPORATE SUPPORTERS 2013

We are pleased to announce the Society’s Corporate Supporters for 2013. Many of the Society’s activities are facilitated with the help of these organisations, and we would like to take the opportunity to thank them all for their continued assistance. Companies wishing to participate in the scheme should contact Amanda Helm in the Bristol office (ama. helm@endocrinology.org).

Platinum supporters:

- Ipsen Ltd
- Pfizer Ltd

Gold supporters:

- Bayer Healthcare
- Ferring Pharmaceuticals Ltd
- Merck Serono
- Novartis Pharmaceuticals UK Ltd
- Novo Nordisk Ltd
- Profiblue
- Viropharma
- Silver supporter:
- Serdes Ltd

SOCIETY BES 2013: SPRINGTIME IN HARROGATE

Oral communication sessions will feature, along with a large poster display and exhibition. Talks from sessions will cater to the needs of nurses, and the highly popular Young Endocrinologists’ symposium will provide advice on having a successful research career. In addition, we will have the chance to ‘Meet the Expert’ at workshops for both clinicians and basic scientists.

To find out more, register, or to view the full programme, see www.endocrinology.org/meetings/2013/society

Follow #sfebes13 on Twitter for the latest news and views from the meeting.

We look forward to welcoming you all to Harrogate!

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We are delighted to announce that the Society’s next President will be Professor Steve O’Rahilly from the University of Cambridge. He will be officially elected at the AGM in Harrogate during the Society BES 2013 meeting and will take up office at the AGM 2014.

MEDALLISTS FOR 2014

The Society is pleased to announce the following medallists, who will speak at the Society BES 2014 meeting in Liverpool.

Dale Medal
Bert O’Malley, Baylor College, Houston, TX, USA

Transatlantic Medal
Mitchell Lazar, University of Pennsylvania, PA, USA

GRANT AND Bursary DEADLINES 2013

1 March SUMMER STUDENTSHIP

14 April CONFERENCE GRANT 2013

21 May EARLY CAREER GRANT 2013

15 July UNDERGRADUATE ACHIEVEMENT AWARD

1 August CONFERENCE GRANT 2013

27 November EARLY CAREER GRANT 2013

15 December CONFERENCE GRANT 2013

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The Society welcomes contributions and article suggestions; contact the Editorial office at info@endocrinology.org.


THE ENDOCRINOLOGIST | SPRING 2013 | 3

On the Society’s future, we will engage, support & advance endocrinology

An interview with...

Peter Sönksen: A life in hormones

Become a contributor... Contact the editorial office at info@endocrinology.org

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Latest News and Views from www.endocrinology.org

Grants & Bursaries 2013

1 March

Summer Studentship

14 April

Conference Grant 2013

21 May

Early Career Grant 2013

15 July

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The Society welcomes contributions and article suggestions; contact the Editorial office at info@endocrinology.org.

WHAT WE’VE BEEN WORKING ON

Our first step was to research people’s perceptions of the Society for Endocrinology, to evaluate whether there was a need for change. We conducted lengthy research, focus groups, workshops and interviews with a cross-section of people connected to the Society, including clinicians, scientists, nurses, trainee members, patient groups and members of the general public. From here, we examined where the Society should be positioned, what we wanted to be recognised for and the impact of our work to be. An independent specialist examined the evidence and made recommendations to take the Society forward. This was reviewed and agreed in early autumn by the Society’s Officers and Head Office Leadership Team.

OUR FINDINGS

Generally, we found the Society was in good shape, but there were a number of areas that needed fine-tuning. We found there was confusion over the relationship between the Society and its trading company Bioscientifica, conflict between the Society as a charity and Bioscientifica as a not-for-profit organisation and uncertainty about the future.

The recommendations were to clarify the relationship between the two organisations and magnify their very distinct characteristics. Everything we do will be based around these fundamental principles: to engage, support and advance.

We are working towards becoming an organisation that delivers even more benefit to the endocrine community, to be a society of which you can be even prouder to be a member.

A NEW ERA FOR THE SOCIETY FOR ENDOCRINOLOGY

The Society for Endocrinology is the only UK charity dedicated to representing endocrinology. To ensure we provide the best service to the endocrine community, we need to position ourselves to meet the increasing needs of our members and the public over the next 10 years, in the UK and globally, as our speciality develops. So during 2011 (with help from our members), staff at the Society’s Bristol office worked hard to develop our strategic plan.

Two key features of this plan are (a) to maximise appeal and value to members and potential members, and (b) to be a central information gateway for hormone information and knowledge resources. To achieve this, we need to be at the forefront of the sector, which means increasing recognition of the Society, making it easier for different groups to connect with us, developing access to our services, and maximising our support, advocacy and funding streams to you, our members.

HOW WILL IT AFFECT OUR WORK AS A SOCIETY?

Our vision, goals and charitable remit remain unchanged. However, what will change is how we go about delivering this vision. This change is not just about a new identity. It is our organisational promise that we will strive to engage, support and advance the discipline of endocrinology. These values will shine through in everything we do, focusing our activities, resources and the way we communicate.

COMMUNICATING OUR NEW IDENTITY

As you may have already seen, from the end of January, we started communicating about our new identity (our values and promises). This is just the beginning; we have more plans in place to continue the dialogue. You will see more in the coming months, especially at the Society for Endocrinology BES 2013, where we will showcase the new values and identity.

Research in endocrinology has come on leaps and bounds over the past decade. To ensure that this progress continues through the next 10 years … I support this new identity for the Society, because it offers us an exciting opportunity to propel the discipline into the stratosphere so we can realise our potential.’

PROFESSOR ASHLEY GROSSMAN, PRESIDENT, SOCIETY FOR ENDOCRINOLOGY

WHAT NEXT?

We hope you love the new designs for your journals, which bring them together as a recognisable family of publications while still maintaining each journal’s individual focus and reputation for publishing high quality, cutting-edge research.

A NEW ERA FOR THE SOCIETY FOR ENDOCRINOLOGY

Our aim is to ensure the Society for Endocrinology is in a strong position to meet the increasing needs of our members and the public in line with our strategic plans over the next 30 years. Our new values give us the persona and the tools to increase our reach and profile, boosting our support and representation to members while also attracting others into the discipline.

LEONI NEWARD-MILLS, CHIEF EXECUTIVE, SOCIETY FOR ENDOCRINOLOGY

YOUR TRADING COMPANY – BIOSCIENTIFICA

As many of you know, the Society’s trading company Bioscientifica offers a range of commercial services to learned societies, the academic sector and the pharmaceutical industry. What some of you may not know is the importance of Bioscientifica’s success in funding our charitable activities, through Gift Aiding all its profits to the Society.

As part of this project, we also reviewed Bioscientifica’s strategy and identity. Their growth is vital for your Society, to provide the financial support needed to continue to deliver its aims. Bioscientifica and the Society have a shared purpose to ‘improve knowledge, health and life’.

Find out more about Bioscientifica’s new identity and services at www.bioscientifica.com

OUR PROFILE WITH THE PUBLIC

So far, we have concentrated on how we can work with and support members of the endocrine community who have already specialised in the discipline. However, we also recognise there is a much larger conversation we need to have with non-specialists and the general public, to raise awareness and knowledge of hormones and hormone-related conditions, and to ensure that unreliable information can be challenged.

Work on this is underway and we will bring you more details soon.

OUR NEW LOGO

The Society’s new logo represents a stylised version of a hormone and receptor. The change in colour of the receptor from top to bottom signifies its action. The colours are designed to be bold and stand out from the crowd, allowing us to be instantly recognisable, while still giving us the authority to forward the views of the Society as a professional body.

OUR INVESTMENT

For us to continue to grow and support the endocrine community effectively, we need to invest in our organisation, communicating accurately what we stand for, what we do and how we change things for the better. Although this work means committing to initial costs, this will be more than offset by the measurable benefits that the Society and the discipline as a whole will reap. During the 2012/13 financial year, we expect to spend in the region of £50,000 on this project, representing 1.9% of the total planned Society spend. It will not impact on our grants programme or on other planned activities. We have carried out extensive research on the costs and benefits of this exercise, and would not commit the money unless we felt that it would be demonstratively beneficial for the organisation as a whole.

STRATEGY

The Society performs many different activities, but at the core of all of these are you, our members. Having such valuable expertise on our side, we are in a unique position to act as an advocate for endocrinology and support endocrinologists throughout their careers.

For more information on our strategic plan, visit www.endocrinology.org

‘As a member, I was encouraged by the length of the Society went to, to ensure that the members’ views were paramount to their developments. Having been a part of the research I can clearly see that the feedback has been considered and the new identity really does capture the essence of endocrinology, helping to define the role of Bioscientifica more clearly to me as a member and bringing in a strategy to promote popular understanding of hormones amongst the public.’

PROFESSOR JOHN WILLIS, CHAIRMAN, SOCIETY FOR ENDOCRINOLOGY

WHAT NEXT?

We want to hear your views, what would you like the Society for Endocrinology to do for you, and how would you like to get involved in our work.

Email us at members@endocrinology.org

Call us on 01454 642200

Contact us via Facebook or Twitter

facebook.com/SocietyforEndocrinology

twitter.com/Soc_Endo

We look forward to hearing your thoughts.
When I went down to meet Peter Sönksen, I was pleasantly surprised to find a ruddy and healthy looking chap, appearing rather younger than his 76 years. I knew he had been in a bad skiing accident rendering him a wheelchair user, the result of a fairly blameless attempt to ski back home after a day’s excursion in Utah. He came across an unexpected 10 foot drop, landed on his feet and fell forwards, hyperextending his neck. Lying face down in the snow he was unable to move his arms or legs, but luckily could breathe and speak.

This rather spoil his plans to spend his retirement flitting between the UK and the US skiing, sailing and playing golf. Despite this major setback, the steely look in his eyes suggests he still has a lot more planned to achieve in his life.

THE REGISTRAR YEARS

In 1967 Peter went to Boston, MA, USA, having won a Harlanstons Scholarship, and worked at Harvard Medical School. In those days a BTA (Born To America) carried a high premium for career progression. Whilst at Harvard, Peter investigated the metabolism of GH and insulin in dogs and man. He met an ambitious young medical student:

Peter really found himself on fertile ground at a very exciting time. He felt strongly that it was important to study both diabetes and endocrinology. To the chagrin of the indomitable matters at St Thomas’, Peter decided that nurses as well as doctors should play an important role in research and community- and hospital-based diabetes. Peter employed his first ever hospital-based diabetes specialist nurse (DSN), having previously successfully established two community-based DSNs in Lambeth. He was so impressed with his hospital-based DSN that he married her! ‘I’ve not done too badly thus’, he tells me with a glint in his eye, and with this look it is clear that she has been a pillar of support to him.

Sönksen was ahead of his time with computers. Through a skiing friend who worked for IBM he learnt to program in Fortran, which started a long and difficult relationship with computers and a project aiming to set up computerised diabetes clinic records. In the early days, Peter would cycle to Imperial College with a stack of punch-coded cards bound by a rubber band and feed them into a primitival computer. Through sheer perseverance Sönksen secured a British Diabetic Association (now Diabetes UK) grant, leading eventually to the first diabetes database (DIABETA), and subsequently to a massive EU-funded project known as EURODIAB (hell on earth!).

“Prior to GH treatment, I lacked energy. I had little stamina, was often out of breath even when climbing up a normal flight of stairs.”

SEMINAL CONTRIBUTORS TO DIABETES

In the 1970s, diabetic ketoacidosis (DKA) was treated initially with 100 U intramuscular insulin. Intravenously and intramuscularly, the assumption being that reduced peripheral uptake of glucose was the predominant problem in type 1 diabetes. Sönksen showed that much lower doses of infused insulin were sufficient to control hyperglycaemia and acidosis. The results were so striking that the clinical trial he had organised was stopped early, and low dose insulin infusions remain the treatment for DKA.

“He is most proud of his 1978 BMJ article, showing the key role of insulin in inhibiting hepatic glucose output, proteolysis and ketone formation in type 1 diabetes.”

Sönksen investigated dynamic aspects of metabolic diseases and actions of insulin and insulin analogues using isotope studies. He discovered that the hyperglycaemia of diabetes was due to excess hepatic glucose production rather than reduced uptake into the periphery, an entirely new concept at the time. Sönksen’s studies confirmed Starling’s 1916 hypothesis that the pancreas produces a ‘cholinergic substance which inhibits glucose production by the liver’. He is most proud of his 1978 British Medical Journal article, showing the key role of insulin in inhibiting hepatic glucose output, proteolysis and ketone formation in type 1 diabetes.

“Prior to starting rhGH I had very little energy or strength. I had trouble coping with everyday life. Since starting the treatment my life has changed beyond belief. Very little phases me now. I have so much more energy. I can walk several miles and not feel ‘normal’. I now have a real zest for life.”

“Although treatment for my macroprolactinoma put me back on my feet, the rhGH provided me with an extra capacity for stamina, i.e. on my daily cycle commuter journey I have become quicker and can sustain a longer hard push. There is no doubt in my mind that it has made a difference.”

“Peter really found himself on fertile ground at a very exciting time. He felt strongly that it was important to study both diabetes and endocrinology. To the chagrin of the indomitable matters at St Thomas’, Peter decided that nurses as well as doctors should play an important role in research and community- and hospital-based diabetes. Peter employed his first ever hospital-based diabetes specialist nurse (DSN), having previously successfully established two community-based DSNs in Lambeth. He was so impressed with his hospital-based DSN that he married her!”

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DEAR PROFESSOR SÖNKEN...
In the 1970s, glucose measurements were done using large non-portable devices. A pregnant patient with type 1 diabetes confirmed to hospital demanded to know why she couldn’t borrow the meter and measure her own sugars at home. This she did with great success, so ending the need to hospitalise patients for the last 3 months of pregnancy. Peter discussed this predicament with an engineer-patient in clinic, who developed the first prototype for a portable glucometer (Glucosechek). Sönksen was also first to introduce immediate HbA1c results ‘online’ in clinic with the assistance of a research fellow and an array of mini-columns made from plastic syringes.1

**THE START OF GROWTH HORMONE IN ADULTS**

In 1987, Peter was rung by a senior employee of Pharmacia about the role of GH in adults. Cadaveric GH could cause Creutzfeldt-Jakob-disease, which necessitated the development of recombinant GH (rGH). The company were looking for indications for its use outside children (although Sönksen did not know this at the time). Peter asked his research fellow, Franco Salomon, to review what was known about the physiological effects of GH in adults. This was long before any adults had received rGH, so it was an entirely new concept greeted with scepticism by some eminent endocrinologists. The review was presented at a paediatric symposium in Vienna, which was shortly followed by a Pharmacia-sponsored randomised controlled trial.2 The effects of GH on bone composition and metabolism in adults with GH deficiency led to a New England Journal of Medicine publication that has been cited over 1000 times (Sönksen’s most quoted paper).3

Sönksen is in no doubt that most GH-naïve patients had a genuine, dramatic response in terms of general well-being. In preparing supporting material for NICE’s review of GH treatment in adults, many of his patients sent him personal anecdotes on how much better they felt. Peter comments, ‘I’ve got around 75 of these, which are very interesting and ought to be published in some way.’ Several are reproduced towards the end of this article (page 8-9).

Sönksen led the way for all things adult GH-related, and was elected as the first President of the Growth Hormone Research Society after it was formed in 1990.

The next phase of Sönksen’s career began with a phone call whilst on a ward round in 1993. GH had become a major drug of abuse in sport, and the International Olympic Committee (IOC) ‘were hungry for information’. The review was presented at a paediatric symposium in Vienna, which was shortly followed by a Pharmacia-sponsored randomised controlled trial.2 The effects of GH on bone composition and metabolism in adults with GH deficiency led to a New England Journal of Medicine publication that has been cited over 1000 times (Sönksen’s most quoted paper).3

On 30 September 2001 he retired and stopped all clinical work. On 27 December 2002, 3 days after a $1 million US Anti-Doping Association award, Peter had his sking accident and his ‘new life began’.

**CURRENT LIFE**

In 1997 Peter and his wife moved to Winchester, in preparation for retirement. He planned to work for another 5 years and then stop clinical activity. He established a ‘stable isotope unit’ run by Margot Umpleby, now Professor at Guildford, with £1 million raised by a foundation set up by his ‘disciples’ (parent club members). He conducted a series of metabolic studies, largely carried out by David Russell-Jones, on the effects of GH, IGF-1 and insulin in adults with and without GH deficiency. In 2003, Peter was invited to give a ‘swan song’ lecture at the Society BES meeting entitled ‘Insulin, GH and sport’.

On 30 September 2001 he retired and stopped all clinical work. On 27 December 2002, 3 days after a $1 million US Anti-Doping Association award, Peter had his skiing accident and his ‘new life began’.

He is very philosophical about his injury, which I find inspiring given the effect it must have had on him and his family. As we chat, his computer flashes up photographs of his family and friends. He has two children from his first marriage, his son is an anesthetist in the West Midlands and his daughter a radiologist in Brighton. Sönksen lives a very active life, and publishes original research, review articles and book chapters. He holds regular research meetings with Richard Holt and his research group at his house.

**Sönksen’s method of detecting GH abuse was used at the London 2012 Olympics and Paralympics, successfully catching two cheats missed by the previous test**

Peter practises what he preaches. He has taken GH and testosterone replacement since his accident, and is convinced this has helped his recovery and maintains his strength. He is planning a GH-testosterone-steroid trial on frail elderly patients admitted with their first neck of femur fracture, and has many views on the ‘semaphore’.

Sönksen’s ‘marker method’ of detecting GH abuse has been approved by the World Anti-Doping Agency and the IOC, and was used for the first time at the London 2012 Olympics and Paralympics, successfully catching two cheats who were missed by the previous test.

**REFERENCES**

CALL FOR NOMINATIONS 2015 MEDALS

The Society awards several medals annually, in recognition of outstanding contributions to endocrinology. All members are invited to make nominations. Forms can be found at www.endocrinology.org/about/medals.html. They should be returned by 31 July 2013.

The Dale Medal is the highest accolade bestowed by the Society, and is awarded to an individual whose studies have changed our understanding of endocrinology in a fundamental way. Previous recipients include BW O’Malley, RM Evans, KS Korach, ER Simpson, S O’Rahilly, M Thorner, AS McNeilly and S Lombardi.

The Society Medal is an endocrinologist working in the UK, in recognition of outstanding studies. It has previously been awarded to A. Loudon, M Korbonits, IS Farooqi, GR Williams, W Arlt, A Hattersley, O’Malley, RM Evans, KS Korach, ER Simpson, S O’Rahilly, M Thorner.

The Hoffenberg International Medal (formerly known as the Asia and Oceania Medal and the International Medal) is awarded to an endocrinologist from outside the UK, to promote international collaboration. Previous recipients include RI McLachlan, F Labir, G Ramsay, PJ Fuller, T Yoshimura, M Kawata, K Ho and K Morohashi.

The Translational Medal is awarded to an endocrinologist working in North America, and has previously been received by M Lawer, M Meaney, P Piasecone-Corsi, J Kapchick, S Melmed, J Jameson, R Rosenfield and B Spiegelman.

REDEFINED SCOPE FOR SOCIETY JOURNALS

Journal of Endocrinology (J) and Journal of Molecular Endocrinology (ME) are the two Society for Endocrinology journals that primarily focus on the publication of basic science.

To best support members and authors, we must offer clear choices to those who submit papers to those journals. Consequently, we are diverging the scopes of the two journals so that each has a distinct focus, while together they still cover the whole of basic endocrinology.

PHYSIOLOGY, METABOLISM AND TRANSLATION

http://jend.endocrinology-journals.org

Journal of Endocrinology will focus 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. It will publish original research articles, rapid communications and reviews.

MOLECULES, CELLS AND MECHANISMS

http://jmme.endocrinology-journals.org

Journal of Molecular Endocrinology’s focus will be on molecular and cellular mechanisms in endocrinology, including gene regulation, cell biology, signalling, mutations, and transcription. The journal will consider basic and pathophysiologic studies at the molecular and cell level. It will publish original research articles, rapid communications and reviews.

The Editorial Boards of the two journals will be combined under the Editorship of Professor Adrian Clark, St George’s, University of London. This will ensure the suitability of your work is matched to the journal, increasing its visibility to the right audience.

POSTGRADUATE ESSAY PRIZE WINNERS

Congratulations to Syed Hussain (Imperial College London), who has won the Society’s £1000 prize for his postgraduate essay ‘Feeling nervy about my hormones’ in large white lettering. These proved immensely popular and usually within 24 hours.

1 min 39 secs, with patients having a rapid recovery and being discharged usually within 24 hours.

If you feel there are fields or individual groups too long ignored, that require support, let us know. If you see changes in what we offer tell us what you think, good or bad. We are keen to continue to ruffle things up, even just a little, not only because it’s the right thing to do, but also because it makes life much more enjoyable.

Tony Coll
Contact
members@endocrinology.org

7TH HARRISMERST ENDOCRINE SYMPOSIUM

The Society for Endocrinology sponsored the 7th Multidisciplinary Endocrine Symposium at HamERSMith Hospital on 7 December 2012. This annual meeting brings together trainees and consultants from all specialties who manage complex endocrine patients in multidisciplinary teams, to share best practice and discuss difficult cases. The 190 delegates, included 80 patients with pituitary disease and 10 patients with multiple endocrine neoplasia (MEN), who attended the main meeting and the parallel sessions specifically designed for them.

This year’s meeting had a strong thyroid emphasis. We were updated in thyroid ultrasound by Chris Harvey (Hamersmith) and in current surgical strategy in differentiated thyroid cancer by David Scott-Coombes (Cardiff). Stephen Robinson (St Mary’s, London) reviewed the potential side effects of suppressive doses of thyroxine in patients with thyroid cancer, and Will Drake (St Bartholomew’s, London) enlightened us with some excellent thyroid case discussions, accompanied by interactive clickers. Trainees then presented interesting thyroid cases with input from the audience. Anders Bengtson (Land, Sweden) delivered the Society for Endocrinology Seminar with a thought-provoking lecture on complications of thyroid surgery in the elderly.

The delegates viewed the excellent posters over lunch. The Society supported a prize for the best poster, which was awarded to Ian Seetho (Derby).

Jeremy Cox (St Mary’s, London) began the afternoon with a review of who needs genetic testing for primary hyperparathyroidism. Following some excellent neuroendocrine tumour case-based discussions, the audience was treated to a fascinating lecture on familial pituitary tumours by Marta Korbonits (St Bartholomew’s, London). did you know that up to 7% of your pituitary patients are likely to have familial disease? Feato

To be clear, I do not subscribe to change for change’s sake, nor do I believe that new and different equates with better. There are values and visions that should remain sacrosanct and are worth fighting for in an often vacuous, ‘on-trend’ world.

However, no format need be forever. Change offers fresh challenge and perspective. I am delighted to assure you that your Science Committee likes change too. This is not some ostentatious palaver, wielding unbridled supremacy to maintain established order. We are a concerned body of practicing research scientists trying to make sure the portfolio of activities we support are fit for purpose and fit to you. If a funding stream works and bright people with good ideas get a boost then great; if not, it’s time to rethink.

If you feel there are fields or individual groups too long ignored, that require support, let us know. If you see changes in what we offer tell us what you think, good or bad. We are keen to continue to ruffle things up, even just a little, not only because it’s the right thing to do, but also because it makes life much more enjoyable.

Tony Coll
Contact
members@endocrinology.org

Will Drake discusses difficult thyroid cases

Palazzo (Hamersmith) concluded the meeting by outlining how a retroperitoneoscopic approach can be used to access the adrenal gland in a min 39 secs, with patients having a rapid recovery and being discharged usually within 24 hours.

As well as providing a Sponsored Seminar Grant, the Society also supplied 50 blue T-shirts bearing the phrase ‘Endocrinologists do it with hormones’ in large white lettering. These proved immensely popular and disappeared within minutes

You can enjoy all the abstracts at http://metend.org. Preparations are underway for the 8th Hamersmith Endocrine Symposium on 6 December 2013.

Young Endocrinologists’ Prize Lectures 2013

Following a call for abstracts which were marked by the Nominations Committee, we are delighted to announce the winners for 2013.

The basic science prize winner is Dr Carlos Garcia-Massuet (University College London, London Institute of Child Health) for his abstract ‘Pituitary development: the answer is blowing in the Wnt’. Dr Gerard Walls (University of Oxford, UK) won the clinical prize for his abstract ‘Clinical and pre-clinical studies of neuroendocrine tumours (NETs) in development: the answer is blowing in the Wnt’. Dr Gerard Walls (University of Oxford, UK) won the clinical prize for his abstract ‘Clinical and pre-clinical studies of neuroendocrine tumours (NETs) in development: the answer is blowing in the Wnt’.

Mr M Khan (Liverpool) dr Z Hassan-Smith (Birmingham) Dr M Thida (Leeds)

Mr L Nardo (Manchester)

Dr R Poole (Poole)

Dr M Khan (Liverpool)

Dr R Poole (Poole)

Dr M Thida (Leeds)

Dr M Khan (Liverpool)

Dr Z Hassan-Smith (Birmingham)

Dr A Joshi (Sunderland)

Dr S Gonzalez-Seba (Leeds)

Dr D Cuilin (Manchester)

Dr J Gardiner (London)

Dr S Chouliaras (Manchester)

SOCIETY NEWS

SOCIETY NEWS

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MEASURING SUCCESS

WRITTEN BY CHRIS GIBSON

Nurses are drawn to endocrinology via many pathways. Unlike medicine, there is no set training for the specialty in adult nursing, and yet the skills and attributes required can be diverse and challenging. Nurses often enter with little or no background in the subject and learn in post, but until now without an established framework to measure success.

This was an issue identified by the Society’s Nurse Committee, which looks to support nurses to expert endocrine nurses. It was also recognised that consultants need to work with highly skilled nurses, to complement the endocrine services in their area.

A working party of carefully selected experienced nurses was invited to take part in drafting competencies related to caring for endocrine patients in a nursing capacity. The nine competencies were identified by the nurses themselves, using key indicators of capability in each targeted area. They are: accurately, Cushings, dynamic function testing, growth hormone deficiency, hypogonadism, hypothyroidism, steroid replacement therapy, thyroid and transition.

“It is hoped the competencies will help nurses measure their performance against a national benchmark”

Group members discussed the skills, knowledge and attitude required for each topic and how to demonstrate the level of expertise reached and set targets for future development. Level of ability in each instance is defined as competent, proficient or expert. In this way, nurses can set their goals in conjunction with the endocrine team, in order to benefit the local service.

Some nurses may not have the opportunity to reach the expert level in all the identified areas, due the nature of the work they do. However the document that has been drafted is meant to be fluid and allows for adaptation where necessary. It is also the first part of an ongoing process where further competencies will be added as the document is used and evaluated.

The tool can also be used by managers for appraisal and monitoring purposes, providing definable criteria to quantify expertise. Significantly, it is hoped the competencies will help nurses to measure their own performance against a recognised national benchmark, raising the standard of care achieved for endocrine patients.

The printed test will be circulated to all hospitals with an endocrine department and a PDF will be available at www.endocrinology.org/endocrinenurse.

An abstract detailing the formation of the tool has been submitted to the Society BES 2013 meeting, and a presentation on the subject is planned for the nurses’ session at ECE 2013.

ANOTHER NEW YEAR ALREADY!

WRITTEN BY NIKKI KIEFFER

As you can see the exciting news is that all the adult endocrine nurse competencies have now been completed and we are in the final stages of preparing the document for publication. We aim to have this sorted by the Society BES meeting in March - hope to see you there. I would like once again to thank all those who have been involved in the development of this document for all their hard work.

The committee continue to work on your behalf and will be meeting soon to finalise the programme for Endocrine Nurse Update in September, begin working on the nurses’ sessions at next year’s Society BES meeting, and any other business. This year’s Endocrine Nurse Update will be in Stratford-upon-Avon on 16-17 September 2013, so please put the date in your diary.

We welcome three new members to the committee this month, Julie Andrew (Leeds), Louise Breen (Leeds), and Sofia Llahana (London). I look forward to working with them all.

Finally, the nurses’ sessions at this year’s Society BES are on Wednesday 20 March 2013. If you intend to attend the whole of the meeting don’t forget to register in good time to take advantage of the reduced rate for early registration.

See you there.

NIKKI KIEFFER

THERE’S MORE TO AMEND...

WRITTEN BY JO GREY

The Association for Multiple Endocrine Neoplasia Disorders (AMEND) was 10 years old in 2012, and now has a membership of over 500.

What struck me when I gave presentations recently at the Society for Endocrinology Endocrine Nurse Update and the British Association of Endocrine and Thyroid Surgeons Annual Meeting was how little was known about what AMEND actually does. So, for the benefit of those of you who must just be too shy to come and visit our exhibition stand at the Society BES and other meetings, here is a read-at-your-leisure summary of our activities:

- AMEND is well-organised with a committed team of volunteers (patients and expert medical advisors). Our strategy considers and addresses the needs of our beneficiaries and we are transparent about our work. Beware groups who do not work in this way; they do exist and we have picked up the pieces of the patients who have been there.
- AMEND is currently supporting two patient members as they develop affiliated non-profit patient groups in the USA and New Zealand.
- AMEND’s main aims are to educate, support and befriend families affected by multiple endocrine neoplasia (MEN) and associated endocrine tumours, and to promote research into the conditions. Advocacy has become an additional recent focus.

EDUCATION

Our free educational resources are highly valued and include our website, which was launched in 2012 and houses our MEN patient experience films forum, information library and much more.

We also produce hospital leaflets, and a range of patient information titles: MEN1, MEN2a, MEN2b, FMTC (familial medullary thyroid carcinoma), MTC, Phaeochromcytoma and paragangliomas, Talking to children and young people about MEN, Whipple’s procedure, and FIPA (familial isolated pituitary adenoma).

We have just begun a new 2-year project to provide educational resources for children and teenagers: Project Superhero! Funded by the Big Lottery Fund, it will produce comic books and websites animations on MEN1 and MEN2 to help affected families talk about those genetic conditions with their children and to help engage youngsters more effectively in their healthcare.

SUPPORT AND FRIENDSHIP

The importance of support services to increase patients’ emotional well-being should not be underestimated. Our free services are available for MEN patients, patients with associated sporadic tumours, those with SDHs (succinate dehydrogenase-related) syndromes and others on request.

AMEND’s Annual Patient Information Day held in May each year and our periodic local area meetings are popular with patient members, who value the opportunity to talk with others and to quiz our brave visiting medical experts at the Q&A sessions!

All of our patient members are contacted every 6 months for a “check-up” by one of our trained “telebuddies”, providing a unique opportunity for them to off-load, when perhaps they hadn’t realised they needed to.

Our counselling helpline provides fast access to help for patients and their families when they reach crisis point.

ADVOCACY

AMEND provides a patient voice in a growing number of arenas: the European Medicines Agency, the National Cancer Intelligence Network Thyroid Cancer Working Group, the National Institute for Health Research, the British Thyroid Association, and within the patient-led setting of the World NET Cancer Day Alliance.

RESEARCH

AMEND funds an annual Young Investigator Award in association with the Society for Endocrinology at the Society BES meeting.

AMEND’s own Research Registry is a simple initiative to connect researchers with patients. Patients can opt to register when applying for free AMEND membership. Over 250 already have, and the Registry was used successfully four times in 2011, including by Birmingham University and the MD Anderson Cancer Center in the USA.

2012 saw the first ever AMEND Research Award: a £5050 grant to the University College London Hospitals for a study into prophylactic thyroidectomy in MEN2 children in the UK.

To add to our coffers, in autumn 2012, nine members of AMEND, nicknamed the ‘Maniac Endocrine Nomads’, happily braved searing heat, sandstorms, rain and D&V to trek 120km through the Sahara Desert, raising over £14,000 in the process.

For more information on how AMEND can help you and your patients, please visit us at www.amend.org.uk, or come to our stand at the Society BES 2013 meeting in Harrogate – I’ll see you there!

JO GREY

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OECD: RCP CALLS FOR COORDINATED ACTION

WRITTEN BY JOHN WAAS

The medical problems of obesity in the UK are the focus of a recent report from the Royal College of Physicians (RCP). This report, ‘Action on obesity: comprehensive care for all’, has been compiled over the last few months by a group led by myself and Nick Finer (www.rcplondon.ac.uk/resources/action-obesity-comprehensive-care-all).

We performed a major survey of multidisciplinary obesity services up and down the country, with which many of you kindly helped. This identified major gaps, indicating that only about 37% of the population are served by multidisciplinary obesity services to whom they can be referred for active treatment. Clearly these voids need filling, and the report outlines the steps necessary for this.

“In only about 37% of the population are served by multidisciplinary obesity services to whom they can be referred for active treatment.”

In parallel with this activity, a group chaired by Julian Barth is setting out the requirements under the NHS Commissioning Board (the group of services which will be commissioned nationally) to develop, regarding severe complex obesity. We narrowly avoided this being called bariatric surgery! A very sensible commissioner is also involved. The aim is to develop services, and one of our concerns is that the hubs and spokes should expand, and that there are not enough of either at the current time.

Returning to some other issues in the report, we highlight the problem that health care workers generally have a high prevalence of obesity, but that these people are poorly catered for in their employment. By interacting with occupational health physicians and setting up a template for Trusts which suggests healthy eating policies, exercise facilities and other aspects of an environment, we aim to encourage healthier diets and the maintenance of healthy weights.

We want to see a Patient Charter. We are keen to see the creation of a more formal group of bariatric physicians. This is the missing piece of this jigsaw, and we very much hope it might become part of the Society for Endocrinology. We want to see QOFs for adults and children which will encourage GPs to refer relevant patients to an adequate multidisciplinary team and unsupervised by an endocrinologist.

“14% of Addisonian patients die in crisis”

We decided to take a proactive approach to this problem and, together with Wiebke Arlt, wrote a leader article for the BMJ (2012 343 e633). This highlighted the difficulty that some patients have getting steroids and the resulting potential fatality (14% of Addisonian patients die in crisis). We also emphasised the guidelines which have been published (by the Society for Endocrinology; the Addison’s Disease Self Help Group and the Pituitary Foundation). These cover what to do in crisis and how best to cover operative intervention in patients with Addison. Patients should have primary or secondary adrenal failure.

Of course, others are at risk, and any patient who is on long prednisolone or more for longer than a month may be adrenally suppressed. It is known that inhaled steroids and widespread skin application of steroid creams may also suppress the adrenal gland. The BNF needs updating in this respect too, and we have raised the issue with Neil Gittens who is in the BNF’s endocrine group. Patients with congenital adrenal hyperplasia, albeit a rarer group, sometimes have adrenal crisis.

We have drawn the attention of the Addison’s Disease Self Help Group, the Pituitary Foundation and the congenital adrenal hyperplasia charities to the leader article, so that people can take the document into casualty with them when they are admitted and point out the urgency of steroid replacement therapy.

To further highlight the problem, we have written to the Royal College of Surgeons, and are writing a leader for Journal of Emergency Medicine. We have ensured that it is on the General Medical Council’s Curriculum at the RCP. I am meeting the lead on education at the Royal College of Nursing, so that this is highlighted in their-curricula. By contacting the head of the ambulance partnerships, we are trying to make sure that all ambulance services are equipped to give hydrocortisone to patients with known adrenal insufficiency in an emergency.

Rowna Hillman, the Diabetologist and Endocrine Unit, has been contacted, and our aim is to make it rather like insulin commission—a ‘never-event’—under the aegis of the Department of Health.

If there is anything else you think we can do please let us know. This is obviously an important avoidable endocrine fatality.

JOHN WAAS

CLINICAL ENDOCRINOLoGY TRuST fuNDING FOR qUALITY IMPROvEMENT PROJecTS

The Clinical Endocrinology Trust is a charity which derives its income from a profit-share of the Society for Endocrinology’s official clinical journal, Clinical Endocrinology. It has long supported endocrine audit projects within the UK. Recent examples include the UK Acreoglycemia Database, the GHASE audit of adults with congenital adrenal hyperplasia, the national audit of caborbeline and valvulopathy, and a British Thyroid Association study of teenage iodine status across the UK.

The Trustees now invite further applications from societies or endocrine centres. Preference will be given to projects involving multicentre collaborations. We are particularly interested in receiving applications related to areas of endocrinology the Trust has not supported previously. A sum of £50,000 is available during 2013-2014 for a number of projects judged by the Trustees to be worthy of support: their decision will be final. Projects must commence within 6 months of an award being made.

The closing date for applications is 28 June 2013. Forms are available from julian.davis@manchester.ac.uk and should be returned to Professor Julian Davis (CET Secretary) at julian.davis@manchester.ac.uk. The Clinical Endocrinology Trust looks forward to hearing from you!

CONGRATULATIONS...

Society for Endocrinology member Peter Trainer has been nominated for the position of President-Elect of The Endocrine Society, alongside Richard Santen (University of Virginia). Voting for the position is closed to The Endocrine Society members and will end on 3rd March 2013. We will bring you the result of the vote when announced.
WHAT RELEVANCE IS THIS TO NORMAL PHYSIOLOGY?
Perhaps we can rewrite the textbooks just yet, as the pancreas is undoubtedly vital to controlling blood glucose, but the involvement of these brain cells sense glucose is similar to these insulin-secreting cells of the pancreas. The brain is not just capable of sensing glucose – it is a lot smarter than that. As a result of hormone receptors, biochemical nutrient-sensing mechanisms and leaky capillaries near the hypothalamus, the brain can sense alterations in hormones related to digestion and energy homeostasis such as insulin, glucagon-like peptide-1 and leptin, as well as nutrients such as fatty acids and amino acids.4 The brain is also influenced by a variety of other physical and psychological stimuli such as temperature, smell, taste, anxiety, and stress. How and where all this information is integrated is not completely understood; however, the hypothalamus and brainstem are thought to be key players.

HOW DOES YOUR BRAIN TELL THE PANCREAS AND LIVER WHAT TO DO?
Glucose, insulin, glucagon and other hormones are influenced by the hypothalamus and brainstem.4,5 The hypothalamus senses signals and influences the brainstem, where the autonomic nervous system is located. The brain can sense alterations in hormones related to digestion and energy homeostasis such as insulin, glucagon-like peptide-1 and leptin, as well as nutrients such as fatty acids and amino acids.4 The brain is also influenced by a variety of other physical and psychological stimuli such as temperature, smell, taste, anxiety, and stress. How and where all this information is integrated is not completely understood; however, the hypothalamus and brainstem are thought to be key players.

HOW DOES YOUR BRAIN CONTROL SUGAR?
Earlier work demonstrated that lesions and altered delivery of glucose to specific parts of the hypothalamus can change insulin, glucagon and glucose levels.6 The last decade has seen a marked improvement in our ability to selectively alter precise brain cells and accurately phenotype rodents, which has helped address these questions more directly. Recent work demonstrates that alterations in hormones and nutrient sensing by the brain in rodents leads to marked changes in glucose control. Evidence suggests that distinct regions of the brain have roles in controlling blood glucose in response to changes in glucose, insulin and fatty acids.1,3,7 These discrete brain nuclei regulate glucose output from the liver, insulin resistance, counter-regulatory responses to hypoglycaemia, glucose-stimulated insulin and glucagon release from the pancreas.

HOW DOES YOUR BRAIN TELL DIABETES WHAT TO DO?
Speaking as one of the 347 million diabetics in the world today, I think we owe Banting, Best and their dog Marjorie a lot. If it was not for them and what followed perhaps we would still be considering lettuce leaves and water to keep people like me alive. But nine decades and several Nobel prizes later, it seems that we are still learning how the body controls glucose with such precision, and more importantly why it goes wrong.

WRITTEN BY SYED HUSSAIN

Our school biology teacher taught us that the regulation and control of blood glucose was all about a negative feedback circuit, with the clever pancreas responding to fluctuations in glucose by releasing insulin or glucagon accordingly to keep glucose levels tightly controlled, much like a radiator thermostat. Those painful hours I spent as a young teenager learning this important concept proved fruitful, as up till now all my lectures and textbooks have sung from the same hymn sheet. But whilst this negative feedback by the pancreas holds true, it cannot explain how the body is able to control glucose levels depending on its needs, and anticipate what it will do before glucose levels change. There must be something more...

It turns out that the brain plays an important role in controlling the body’s glucose levels. And why wouldn’t it? Glucose is the main energy source for the body. The brain relies almost entirely on glucose for energy and needs this energy to work properly. The brain ‘knows’ for energy and needs this energy to work properly. The brain ‘knows’

IMPLICATIONS AND FUTURE
Despite new treatments and improved ways to deliver insulin, diabetic patients still develop serious complications due to their inability to restore natural glucose, insulin and glucagon patterns. For example, some diabetic patients on insulin develop defective responses to counteract low blood sugar, leaving them more exposed to the serious consequences of disabling hypoglycaemia. Changes in the brain’s ability to sense glucose may cause this defect. Understanding how the brain regulates glucose may allow us to develop new and better treatments for diabetes. It also raises some interesting questions. Is the rise in diabetes the consequence of a selfish brain promoting glucose levels to cover its own high energy requirements? Is this similar to a selfish brain promoting hunger to cause obesity? Indeed, the parallel epidemics of obesity and diabetes may have a common origin in hypothalamic dysfunction. In rodents, high fat diet consumption leads to defective hypothalamic glucose-sensing and hypothalamic inflammation, both of which lead to insulin resistance and glucose intolerance.1,8 So is the major form of diabetes, in fact, a disease of the brain?

Much remains to be learnt, but it seems that the brain may be ready to regain its lost reputation as a regulator of glucose homeostasis. So feeling nerdy about diabetes might be a good thing. It may allow us to use our heads to treat this growing problem.

Syed Hussain is the winner of the Society for Endocrinology Post-Graduate Prize Essay. We are pleased to publish a slightly abridged version of his essay here (to read the full version, see www.endocrinology.org).

REFERENCES
1. Lipman BE et al. 2013 Endocrinology 154 2553–2577.
Early to a tropical paradise

Tantalisng hints

Tantalising hints

Well, after some reflection, I came to the inescapable conclusion that I am precisely the kind of weirdo who has a favourite hormone and that, for better or worse, my favourite hormone is aldosterone.

Although some of my affinity for aldosterone is undoubtedly due to having worked on it for so long – a kind of twisted, scientific obsession – it is undoubtedly the result of having worked on aldosterone for many years, an affection that, for better or worse, my favourite hormone is aldosterone.

It is often still within the generally accepted normal range, and this undoubtedly contributed to the delay in this discovery."

"When I let slip to a non-endocrinologist that I work on steroids, I am met with a sudden spark of recognition followed by a wide-ranging monologue touching on bodybuilding, sex changes and a strange rash they once had".

Aldosterone's physiological consequences, it appears, have also been played down. Through the RALES and EPHESUS trials, blockade of aldosterone access to the MR was shown to have large and significant impacts on cardiovascular mortality and morbidity. But to what extent does this benefit stem from reduction in blood pressure, or from other effects such as protection of cardiac MδRs, whose activation results in cardiac hypertrophy and fibrosis?

Recent work

Our own work has focused on the CYP11B2 gene that encodes aldosterone synthase. This enzyme catalyses the final stage in a biosynthetic sequence that extends back to cholesterol, and ends here with the conversion of deoxycorticosterone to aldosterone. The gene has various structural features that make it difficult to analyze accurately, and this may be why large genome-wide association studies have not flagged CYP11B2 as a significant factor in hypertension. However, our recent work demonstrates that common variants in the CYP11B2 gene sequence are associated not only with blood pressure levels in large populations, but also with significantly altered levels of CYP11B2 expression.

"That was left for me to fill up a few loose ends before retiring early to a tropical paradise"
The CRN does not provide the funds to undertake research, but it does provide support in order to achieve adequate participant numbers. In reproductive endocrinology, where many centres may need to be involved in running of studies, the CRN can offer, and develop productive relationships with other stakeholders.

The National Portfolio is a comprehensive list of academic and commercial bodies such as the NIHR to prioritise metabolic and endocrine research. Raises the profile of metabolic and endocrine research.

Running the coordinated system for obtaining NHS permission (CSP), bringing together centres on board.

We have successfully begun dialogue with industry, and aim to continue to work closely with the Society for Endocrinology and funding bodies such as the NIHR, CRN and Specialty Groups have to offer, and develop productive relationships with other stakeholders.

Investigators wishing to include studies in this portfolio will find further information regarding eligibility and procedures on the CRN website (www.crnc.nhri.org.uk). The site also has details of your local specialty CRBN lead, who will be able to advise you if you are uncertain what to do. Once your study has been approved and adopted by the Portfolio, you will benefit from CRN support. Your recruitment data should be regularly uploaded into the Portfolio to provide the current status.

Your local research and development office will be able to help you to access CRN support and can direct you to your local CRBN lead to discuss what support is appropriate. For those applying for research funds, early involvement of research and development and the CRBN is recommended.

One of the top priorities for the CRN is liaison with the life sciences industry to deliver leading-edge research within the NFN. In recent years, clinical research was often diverted to other countries, where studies could be undertaken more quickly and often more cheaply.

The CRN is committed to ensuring that clinical research resources are present in the UK. To facilitate this, the CRN has fostered strong links with our healthcare partners, appointing industry managers to nurture and develop the relationship and provide a wide range of tools and services to ensure that performance of commercial studies in the UK is exemplary.

It is essential that researchers in the UK promote their expertise and capabilities. A simple template is available for researchers to describe their talents, which can then be made available to the life science industry partners via the CRN website. We encourage all interested parties to contact Tracey.Crofts@uhb.nhs.uk for a copy of the template.

A recent review concluded that, overall, Speciality Groups make a major contribution to achieving the CRN’s high level objectives. The review comments that ‘Speciality Groups have continued to make a significant impact on delivering to time and target, engage research communities and raise awareness of what the NIHR CRN and Speciality Groups have to offer, and develop productive relationships with other stakeholders’.

The goal of medical research is to improve treatment for patients, and as is beginning to work with patient groups to provide information about trials that are relevant to them, in order to improve recruitment. We continue to work closely with the Society for Endocrinology and funding bodies such as the NIHR to prioritise metabolic and endocrine research. We have successfully begun dialogue with industry, and aim to bring more commercial studies into the Portfolio.

When you are next working on a grant proposal, remember to consider how the network can support your research, or, if your existing study is struggling to recruit, whether the network can help by bringing more sites on board.

The CRN is still fairly new and processes are continuously being reviewed and refined to make it work better for researchers to the benefit of patients; we are confident the CRN will flourish as awareness and understanding of its role widens.

Deep sequencing for common mutations

One of the major benefits of NGS is the ability to find DNA mutations that contribute to a disease. By deep sequencing and comparing different samples from patients with the same disease, we can gain insight into commonly mutated genes, and ultimately expressed proteins that may be contributing to changes in disease progression or drug response.

For the hormone-dependent cancers, it turns out that it is far more complex than we probably wanted to know. Many mutations occur in regions of the genome previously considered ‘junk DNA’ which we now know are important regulatory regions, but we still don’t completely understand the relationship between these regulatory regions and their target genes. In addition, there are many mutated genes throughout which a myriad of different mutations are scattered. The logical explanation is that since specific genes are commonly mutated, these must be contributing to the development and progression of the disease. But who is going to validate these? Currently it seems much more exciting to do genome-wide this and genome-wide that, rather than focused functional experiments.

Not too long ago, people would study specific genes in pathways of interest, revealing, sometimes very slowly, an insight into their disease of interest.

In hormone-dependent cancers, this sometimes meant that an individual researcher could spend a significant part of their career studying a single protein in a single pathway, or the same promoter of an interesting target gene. For people in our field, the scale of the questions changed quickly and dramatically, almost entirely because of technological advances in sequencing.
NEW LOOK FOR THE ENDOCRINOLOGIST

Every issue of Endocrinology has undergone a revamp of its own. Not only has the title been adapted to have a more modern look, but the overall feel and purpose of our digital magazine has been given a fresh, vibrant look that reflects our guiding principles—Engage, Support, Advance. We will continue to work hard at providing you with the most up to date editorial content, topical discussions and debates in endocrinology and the wider medical and scientific communities that matter most to you. We look forward to hearing from you.

Email us at info@endocrinology.org, Facebook or Tweet us.
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CONTINUED FROM PAGE 21

by these histone marks. Furthermore, by coupling NGS with chromatin
loop assays, we can find the loops that occur between the different
regions of the genome, sometimes telling us which ER-DNA region goes
with which target gene.

AND THE ENORMITY OF THE UNKNOWN

But of course it isn’t that straightforward. It turns out (by using NGS coupled with nuclear run-on approaches) that a large fraction of the empty
space within the genome is actually producing non-coding RNA transcripts
of which many are mediated by factors such as the ER. One would suspect
that some of these non-coding RNAs must be doing something to the
physiology of a cell. Given the huge quantity of data coming out of NGS
methods, it’s no surprise that we are now entirely dependent on having
computational biologists to make sense of the information.

With new technological capabilities come new problems. NGS has
provided an unprecedented and, at times, overwhelming insight into how
the genome responds to and contributes to our specific diseases. We can
either stick our head in the sand and pretend we don’t know about this
complexity (which, on some mornings, I support) or we need to tackle this
rapidly increasing wealth of genomic information.

As you will have noticed, in line with our new identity, The Endocrinologist
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the genome responds to and contributes to our specific diseases. We can
either stick our head in the sand and pretend we don’t know about this
complexity (which, on some mornings, I support) or we need to tackle this
rapidly increasing wealth of genomic information.

As you will have noticed, in line with our new identity, The Endocrinologist
has undergone a revamp of its own. Not only has the title been adapted to
our new house style, but the overall look and feel of our new design has
given the newsletter a fresh, vibrant look that reflects our guiding principles—Engage, Support, Advance. We will continue to work hard at providing you
with the most up to date editorial content, topical discussions and debates in endocrinology and the wider medical and scientific communities that matter
most to you. Let us know your thoughts and views on this.
A new option for patients with adrenal insufficiency

Comparison of PLENADREN® (Hydrocortisone modified-release tablets) and current hydrocortisone therapy with normal daily serum cortisol levels

PLENADREN compared to immediate release hydrocortisone TID:

- Is a once-daily, hydrocortisone modified-release tablet developed to better mimic natural circadian daytime cortisol release
- Consists of an immediate release coating that provides physiological cortisol concentrations within 20 minutes (20 mg); an extended release core provides a smooth cortisol serum profile over the day and a night-time cortisol-free interval
- Resulted in 85% of patients participating in the 12-week open-label crossover study preferring PLENADREN™

ABBREVIATED PRESCRIBING INFORMATION

Please refer to the Summary of Product Characteristics for full product information. PLENADREN® (Hydrocortisone modified-release tablets) 5 mg and 20 mg

Presentation: Pink, round, convex tablets containing hydrocortisone 5 mg or white, round, convex tablets containing hydrocortisone 20 mg.

Indications: Treatment of adrenal insufficiency in adults. Dosage: A common maintenance dose is 20–30 mg per day, given once daily in the morning. The lowest possible maintenance dose should be given. PLENADREN tablets should be taken orally with a glass of water on awakening, at least 30 minutes before food intake, preferably in an upright position and between 6.00 am and 8.00 am in the morning. Tablets should be swallowed whole. Changing from conventional oral glucocorticoid treatment to PLENADREN An identical total daily dose of PLENADREN may be given. Due to a lower bioavailability of the daily dose of PLENADREN compared to that of conventional hydrocortisone tablets given three times daily, clinical response needs to be monitored and further dose individualisation may be required. Use in intercurrent illness: Severe situations: An increase in dose is immediately required and oral administration of hydrocortisone must be replaced with parenteral treatment. Less severe situations: The normal oral daily replacement dose must be increased temporarily; the total daily dose of PLENADREN should be increased by administering the maintenance dose twice or thrice daily with 8–12 hour intervals. Children/adolescents under 18: No data on safety and efficacy in subjects below the age of 18 are available. Elderly patients: Dose adjustment to a lower dose may be necessary in case of age-related low body weight. Patients with renal or hepatic impairment: In patients with severe impairment, dose adjustment may be required. Contraindications: Hypersensitivity to any of the components of the product. Special warnings and precautions: During acute adrenal insufficiency parenteral administration of hydrocortisone, in high doses, together with sodium chloride 9 mg/ml (0.9%) solution for injection must be given. Patients with concomitant adrenal insufficiency and retroviral infection need careful dose adjustment. Modified-release tablets are not recommended in patients with increased gastrointestinal motility due to the risk of impaired cortisol exposure. High dosages of hydrocortisone can cause elevation of blood pressure, salt and water-retention and increased excretion of potassium. Long term treatment with higher than physiological hydrocortisone doses can lead to clinical features resembling Cushing's syndrome and thus result in an increased risk of cardiovascular morbidity and mortality. Old age and low body mass index are known risk factors for common adverse reactions of pharmacological doses of glucocorticoids. Patients with adrenal insufficiency on long-term glucocorticoid replacement therapy have been found to have reduced bone mineral density. Psychiatric adverse reactions may occur with systemic glucocorticoids. Risks may be higher when high doses are given. Patients with adrenal insufficiency should be monitored for hypothyroidism and hyperthyroidism as these conditions may markedly influence the exposure of administered hydrocortisone. Pregnancy and lactation: It is important to continue treatment with PLENADREN during pregnancy however the dose should be carefully monitored. PLENADREN can be used during breastfeeding. Side effects: Common: gastroenteritis, upper respiratory tract infection, viral infection, sedation, vertigo, dry eye, oesophagitis, nausea, upper abdominal pain, tooth erosion, pruritic rash, joint swelling, HDL decrease, weight increase. Very Common: fatigue. Other side effects are listed in the SmPC. Legal category: POM Basic NHS price: Bottle containing 50 x 20 mg tablets, £400.00. Bottle containing 50 x 5 mg tablets, £242.50. MA Number: EU/1/11/715/001-002 Marketing Authorisation Holder: ViroPharma SPRL, Rue Montoyer 47, B-1000 Brussels, Belgium Date of revision of SmPC: May 2012

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