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# The Endocrinologist

THE NEWSLETTER OF THE SOCIETY FOR ENDOCRINOLOGY • ISSUE 95

SPRING 2010





► Did it snow? Airports closed, roads impassable, schools empty and Colles' fractures galore - mayhem, on a grand scale. But by the time this edition of *The Endocrinologist* lands on your desk, these memories will be drifting into a fuzzy and cosy recess. Spring heralds the arrival of the Society BES 2010, this year in Manchester, and yet another superb programme awaits. The meeting benefits hugely from the Society's work with its corporate supporters, and this edition of *The Endocrinologist* features summaries from each of them (pages 9-12).

Clinical trainees should take note of the need to register in a timely manner for the Specialty Certificate Examinations (SCEs) (page 17), and also to register for the hugely popular and successful Society Clinical Update (CU) meeting (page 5). Steve Ball has done a superb job in chairing the CU programme and we should congratulate him. The baton has now passed to Wiebke Arlt, whose turn it is to rise to the challenge.

Still on a clinical theme, new developments in the clinical biochemistry lab, such as mass spectrometry, are increasingly being introduced. This, and the need for a greater harmonisation of approach across the UK, has prompted the establishment of 'LACE' (page 7). What is this I hear you ask? No, not a spin-off of the somewhat racy 1980's Shirley Conran novel, but a new Special Interest Group on the laboratory aspects of clinical endocrinology - a joint venture between the Association for Clinical Biochemistry and your Society. This is a vital area for clinicians and clinical scientists alike, and you can register your interest via the Society's website.

To balance such an initiative, the Society is stepping up its efforts on the scientific front by co-sponsoring meetings to encourage undergraduates into our discipline. See the report on page 6. We are also delighted to include a summary of the award-winning essay by Kylie Beale, the winner of the Society's new Postgraduate Essay Prize (page 13).

In the current economic climate, it is a tough person who takes on the role of Treasurer in any institution. The Society's latest 'Braveheart', Graham Williams, gives us an insight into the activities that have led him to be elected, and also his vision as to how the Society will weather the uncertain future that will affect us all (page 4), whilst Michael Sheppard, his predecessor in the role, moves on to be Chair of BioScientifica.

The Endo Train has steamed on to Barts (page 14). Although few will need introducing to this special place, which has played such an important role in British endocrinology, it is wonderful that we have the opportunity to read about its history and current state. On a personal note, I am especially pleased to have Adrian Clark's exposé in *The Endocrinologist* as I, like many others, remain completely indebted to the truly outstanding endocrine experience and training there. You will see that Barts remains a true centre of excellence.

The Society works closely with numerous patient support groups, and many members act as trustees or advisors to them. Supporting patients in this fashion is vital work. Here, Chair of the Patient Support Grants Panel, Philip Harris, discusses the grant monies the society makes available to them, with comments from the various recipients on how previous grants have been used (page 16).

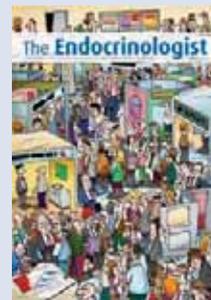
Finally, if you find yourself wallowing in the current legislative treacle that surrounds any research activity, Hotspur's reflections (page 18) serve to remind us that things were not always this way...

JOHN NEWELL-PRICE

## Where's Julia?



Paul Stewart; Michael Sheppard; Graham Williams; Márta Korbonits; an insulin pen; the Dale Medal; an 'Orchidometer'; Hotspur; Julia Buckingham; John Wass; John Wass's Handbell; David Ray



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Deadline for news items for the Summer  
2010 issue: 2 April 2010. Please send  
contributions to the above address.

# PRIZE LECTURERS

► We are delighted to have chosen two excellent Young Endocrinologist Prize Lecturers for the 2010 Society for Endocrinology BES meeting.

Dr Vicki Smith (University of Birmingham) will give her basic science lecture entitled 'PTTG and PBF as targets for augmenting radioiodine uptake in thyroid cancer', and the clinical lecture on 'RNA interference as therapy for Cushing's disease' will be given by Dr Alia Munir (University of Sheffield).

## 15 glorious years

► He may not look old enough for this to be true, but Steve Byford, Publications Director for the Society and BioScientifica, recently celebrated 15 years with the Society.

Steve received letters of congratulation from Julia Buckingham, Steve Bloom and Sue Thorn. There was a celebration in the office with cake and champagne and he managed to blow out all 15 candles in one go!

When Steve joined, we had 8 staff, no website or online journals, and BioScientifica wasn't even a twinkle in our eye. Steve's made a significant contribution to our development since then, and has been loyal, committed and fun to work with too. Here's to the next 15 years, Steve.



### Upcoming SfE events for the public

The Society is organising a number of public events in 2010. 'Gender: more than X versus Y' which takes place at 20.00 on Monday 12 April at the Edinburgh International Science Festival, will explore the complex world of gender in adults and children. Tickets are available now at: <http://www.sciencefestival.co.uk/>. 'Sex on the brain: can hormones change your mind' which will take place at the Cheltenham Science Festival, 9-13 June, will explore the science of attraction and the unconscious influences that hormone can have on the decisions we make. Finally, 'The obesity epidemic: whose fault is it anyway?' takes place at 10.00 on Wednesday 15 September at the British Science Festival in Birmingham. Further details can be found at [www.endocrinology.org/public](http://www.endocrinology.org/public).

### Congratulations

We congratulate John Bevan, who has been awarded a Personal Chair in Endocrinology by Aberdeen University. We are also delighted to announce that Chung Thong Lim, a Society for Endocrinology scientist-in-training member, has been awarded Xcel Sciences Student of the Year. Finally, congratulations also go to Richard Quinton, who recently spent 3 days in Boston, MA, USA as the Eliot B Shoolman Lecturer/Visiting Professor to the Harvard University Reproductive Endocrine Science Centre and the Reproductive Endocrine Unit of the Massachusetts General Hospital.

### Free journal access now live

All Society members can now access the full text of the Society's journals as part of their membership subscription at no extra cost. To view the journals, please log in to the BioSciAlliance site <http://www.bioscialliance.org/> and follow the links. As a Society for Endocrinology member, you may freely access *Journal of Endocrinology*, *Journal of Molecular Endocrinology* and *Endocrine-Related Cancer*.

## GRANT DEADLINES

See [www.endocrinology.org/grants](http://www.endocrinology.org/grants) for details of all Society awards.

### Early Career Grant: 27 May 2010

Ideally suited to trainee members, this grant has a value of up to £10 000. Applications are invited from paid-up Society members who are no more than 10 years past their postgraduate degree. (If you have extenuating circumstances, e.g. a career break please supply details.) Full, Associate and Nurse members may apply after a minimum of 1 year's membership. Scientists-in-training and clinicians-in-training may apply after 6 months' membership. The applicant will normally be an academic or academic-related staff member. If not, a letter of support is required from the principal investigator or clinical team leader.

### Undergraduate Achievement Award: opens 18 June 2010, closes 16 July 2010

These awards of £300 per annum for 3 years aim to encourage excellence in the undergraduate study of endocrinology. Departments may submit applications for an award to outstanding undergraduate students. The award will be granted for a specific endocrine-related piece of work, such as a project or essay, or awarded to the top-scoring student for an exam piece. The award winner will also receive a certificate from the Society. Up to 12 awards are made available each year and are given to eligible departments on a first-come, first-served basis. Only one award will be available to a department in any 3-year period.

SOCIETY CALENDAR	12 April 2010 <b>Public Event: Gender - more than X versus Y</b> <i>Edinburgh International Science Festival</i>
	8-10 November 2010 <b>Society for Endocrinology Clinical Update 2010</b> <i>Marriott Royal Hotel, Bristol, UK</i>
	11-14 April 2011 <b>Society for Endocrinology BES 2011</b> <i>ICC, Birmingham, UK</i>

## Graham Williams - your new Treasurer

Professor Graham Williams became the Society's Treasurer in January. We welcome him as he contemplates his new role and shares his thoughts with us here. Our thanks go to retiring Treasurer Michael Sheppard.



► It is a privilege to be elected as Treasurer. I joined the Society in 1987 and, as well as attending every Society BES meeting since, I have sat on the Editorial Boards of *Journal of Endocrinology*, *Journal of Molecular Endocrinology* and *Clinical Endocrinology*, and have been involved in many of the Society's activities. During this time, the Society has enjoyed enormous success and growth.

Since 2006, I have been a member of the Finance Committee, and have been lucky enough to learn from the finance team led by Pat Barter, the Bristol office led by Sue Thorn, and Michael Sheppard our outgoing Treasurer, to whom I am indebted. I am pleased to be able to thank them all on behalf of the membership for their commitment, enthusiasm and hard work, which has kept the Society in such a healthy financial position in these difficult economic times.

It is with some trepidation that I succeed Michael as Treasurer and consider what the future might hold. The only certainty I can offer is that we are in for a period of uncertainty! A general election beckons and savings of £600m by 2012 in higher education, science and research funding have already been announced by the government. The pre-budget report for 2009 made grim reading and charitable organisations such as ours are vulnerable in the current fiscal climate.

We nevertheless have a charitable obligation to provide benefit to endocrinology as a whole, to all our membership

and to the community. The duty of the Finance Committee is to maintain financial health to ensure the Society's viability, but at the same time to provide funds in support of our activities and development. This poses a real challenge in the uncertain times ahead.

The Finance Committee must maintain an income stream that relies heavily on the success of BioScientifica and the Society's journals, and manage the Society's investment portfolio and assets, while setting expenditure budgets that can facilitate growth and development for the benefit of all. The health of the Society has been built on detailed financial scenario planning, regular review and adjustment of budgets in the light of economic instability, and prudence. We undertake reviews of investment management, audit policy and financial strategy. All of these sound practices will continue; they are continually being refined and have stood the test of time.

So I am optimistic that we can look forward to a future with a flourishing Society that is able to develop new initiatives and support its membership. In spite of the economic gloom predicted elsewhere, the Society has stability and the opportunity for growth and development. It is a real honour for me to be able to contribute, but most importantly I will enjoy working closely with Pat and Sue, all the office staff and the members of the Finance Committee. The future is certain to be challenging but the outlook for endocrinology is bright!

GRAHAM R WILLIAMS

## Michael Sheppard takes BioScientifica chair



► Professor Michael Sheppard has been appointed Chairman of BioScientifica Ltd for 3 years from January 2010. He brings substantial expertise, with his understanding of the Society's activities gained as Treasurer, and his experience as Provost and Vice-Principal of the University of Birmingham. He is keen to embrace his new role, remarking, 'I am thoroughly looking forward to being involved in

further strengthening the significant contribution that BioScientifica makes to the Society for Endocrinology.'

BioScientifica was established 16 years ago as a wholly owned subsidiary of the Society. It has become a real force in providing medically based services to a wide variety of clients.

Currently, BioScientifica specialises in peer-reviewed journal publications, with contracts to publish the *European Journal of Endocrinology* for the European Society of Endocrinology and *Reproduction* for the Society for Reproduction and Fertility. BioScientifica also plays a major role in managing five learned societies in the UK and mainland Europe, including organising membership services and committee meetings. The company manages

major congresses and training meetings for several of these societies throughout Europe, including the European Congress of Endocrinology.

BioScientifica handles a wide spectrum of publications - therapy area handbooks, journal supplements and review papers - as well as a variety of events, in particular satellite symposia for pharmaceutical companies.

This portfolio provides BioScientifica with a broad base for its business, and there are ambitious plans for expansion. As Michael reflected, 'The current economic climate doesn't provide the ideal environment for achieving growth plans. However, I relish the challenge, together with my fellow directors and the staff, of achieving the significant expansion we have planned in a number of BioScientifica's business fields.'

He added, 'The contribution made by BioScientifica to the Society is a key element in assisting the Society to achieve its aims in furthering endocrinology, through impacting the areas of basic science, clinical and public information. I look forward to my term of office with the confidence that BioScientifica will continue to increase its importance in assisting the Society to achieve its ambitious aims.'

# 'Rapid reading' in endocrine cancer

► Readers and authors alike value *Endocrine-Related Cancer* (ERC) as the premier journal for basic, translational and clinical discussions on hormones and cancer.

Because the latest articles must be made available to readers as quickly as possible, we have, for some time, published new manuscripts submitted to ERC online as soon as they are accepted, in the form of 'accepted preprints'.

Now, a further exciting development means even better access to ERC's content. Since January, all ERC papers have been published online in their final format as soon as each individual article is ready, well ahead of the completed print edition of the journal. This new 'continuous publication' format is particularly important, as it gives authors the fastest possible exposure of their work.

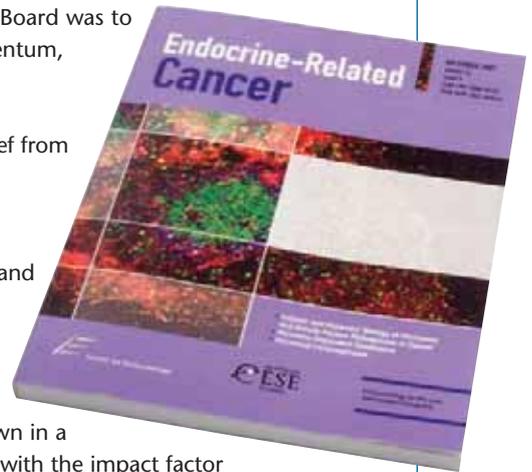
The very popular ERC reviews also continue to be freely accessible online. In addition, ERC contributes 136 articles, published in 1994-1997, to the Society's 'retrodigitised' archive ([www.endocrinology-journals.org/archive](http://www.endocrinology-journals.org/archive)).

Launched in 1994, ERC has enjoyed rapid development into the established global forum it provides today. Founding Editor, Vivian James, took the journal's precursor, *Reviews on Endocrine-Related Cancer*, and set ERC on a firm footing for development and expansion. Taking over in 2000, the visionary leadership of Marc Lippman successfully managed the fourfold

increase in published pages to increase the impact factor of the journal from 0.933 in 1999 to 4.597 in 2004. With such a high impact factor attracting a huge volume of submissions, the challenge then facing the Editorial Board was to build on this momentum, rather than to be overwhelmed by it.

As Editor-in-Chief from 2006, James Fagin introduced further policies to increase ERC's performance and keep a tight rein on acceptance rates. His inspired tenure has ensured that the journal has grown in a controlled manner, with the impact factor continuing its steady rise to 5.236 in 2009, while retaining the strong presence of review articles for which ERC is renowned. The 5-year impact factor of 5.827 is testament to the fact that ERC is the most widely read journal devoted to hormones and cancer.

To investigate the new continuous publication format of ERC, see [www.try-erc.org](http://www.try-erc.org).



## THE DREAM GOES ON...

*Can all elements of life be found in Kevin Costner movies?*

► In the 1989 film, 'Field of Dreams', Costner's character hears a voice saying 'build it ... and they will come'. So our hero builds a baseball field in the middle of Iowa, convinces a few of the old greats to play there and waits for the crowds to pour in.

I thought a lot about this movie as I contemplated the initial planning meetings for the Society's Clinical Update meetings. *Build it ... and they will come*. I'd heard the voice. I was keen to build it. But would they come?

Trainees and newly appointed consultants in diabetes and endocrinology value learning opportunities in basic clinical endocrinology. Knowledge-based assessment and revalidation within the clinical specialty added impetus for the development of a new forum to address this need. *Build it ... and they will come*. Enter the Society's Clinical Update meetings: a series of annual teaching and learning events designed to cover the Specialty Training Curriculum in diabetes and endocrinology over a 3-year cycle – case-based teaching, national and local faculty committed to the programme, residential, central city location. Not Iowa.

As we embark on the next cycle of Clinical Update, beginning in Bristol on 8-10 November 2010, I look back on 2007, 2008 and 2009. More than 200 delegates each year. Good delegate feedback. A happy faculty. Success. *Build it ... and they will come*. Well we did build it, you have come, and long may the game go on.

STEVE BALL

CLINICAL UPDATE PROGRAMME COORDINATOR 2007-2009

## SOCIETY FOR ENDOCRINOLOGY CLINICAL UPDATE

CU  
10

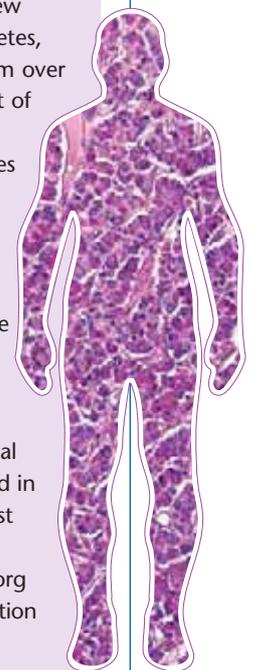
8-10 November 2010

Bristol Marriott Royal Hotel, Bristol, UK

The Clinical Update programme provides essential training for all trainees and new consultants in endocrinology and diabetes, covering the PMETB national curriculum over a three year period. 2010 sees the start of a new cycle.

The three day programme comprises didactic lectures and small interactive workshops based around the presentation of routine cases by delegates. This mixed format ensures the generation of an excellent collegiate atmosphere that promotes an effective forum for networking with peers and more established endocrinologists.

This highly successful, premier clinical training course has been over-subscribed in the past and registration will be on a first come, first served basis, so register your interest at [conferences@endocrinology.org](mailto:conferences@endocrinology.org) to be notified by email of when registration will go live.



## Edinburgh success for Clinical Cases



► In December, the Society held its second Regional Clinical Cases Meeting in association with the Caledonian Society for Endocrinology at the prestigious Royal Society in Edinburgh.

A total of 26 abstracts were chosen for presentation (10 oral, 15 as posters and 1 prize lecture). Dr Roderick Warren (Edinburgh)

received first prize for his oral presentation, with Dr Rachel Green (Edinburgh) as runner-up. The two poster prize winners were Dr Frances McManus (Glasgow) and Dr Anna Dover (Edinburgh). Dr Stuart Ritchie's abstract was selected for the Caledonian Society for Endocrinology Prize Lecture.

The meeting attracted 39 delegates, of whom 5 (including Dr Green) qualified for the Society's free registration scheme. Free registration was introduced to allow trainees who have not yet started their specialist training to gain a better appreciation of the wide range of interesting cases seen in endocrinology clinics.

The next Regional Clinical Cases Meeting will be held in association with the South East Regional Endocrine Club in December 2010. Details will be available on the Society's website and in our email alerts.

## Biology in the real world

► Aimed at secondary school science teachers, the annual Association for Science Education conference is the largest meeting of its type in the UK. The Society worked with organisations such as the Society of Biology, the Association of the British Pharmaceutical Industry and the Wellcome Trust to develop a day-long symposium entitled 'Biology in the real world: design for life' for this year's meeting in Nottingham.

It covered areas of the biology syllabus that have seen new developments in recent years, to help update teachers' knowledge and translate this into practical information for the classroom.

We collaborated with the Physiological Society to produce a session called 'Making new genes: the role of hormones in reproduction' with Dr Tony Michael, St George's, University of London (pictured). Tony gave an extremely engaging and comprehensive presentation, providing delegates with an update on the latest developments in our understanding of the role of hormones in reproduction. He then discussed how these findings are now being used to regulate fertility, both positively through assisted reproduction and negatively through contraception. The session was extremely well attended and was followed by a lively question and answer session.

The other six symposium talks covered a wide range of subjects, from 'Stem cells: medicine's future hope?' to 'Snog, marry, avoid? Mate choice and parental care in the animal kingdom'. Feedback suggests that teachers valued hearing about advances in science from the researchers themselves, and the chance to gain in-depth knowledge that is directly applicable to the curriculum.

The accompanying 'Biology in the real world' resource booklet for teachers can be found at [www.bps.ac.uk/uploadedfiles/schools/BPSResourceBooklet.pdf](http://www.bps.ac.uk/uploadedfiles/schools/BPSResourceBooklet.pdf). For more information on secondary level biology experiments, visit [www.practicalbiology.org](http://www.practicalbiology.org), and to learn about public engagement opportunities with the Society, email [public@endocrinology.org](mailto:public@endocrinology.org).



## A CAREER IN ENDOCRINOLOGY?

► Once again, the Society has been busy encouraging students towards a career in endocrinology. We part-sponsored last November's 2009 Life Sciences Careers Conference at King's College London, organised by the Society of Biology. It was attended by 200 life science undergraduate and postgraduate students, who wanted to know more about career options after university.

Our stand was equipped with careers information and plenty of freebies to entice students into endocrinology. Many students visited the stand over lunch and signed up to receive our monthly email alerts, taking away details of grants, prizes and membership options. A lot had experience of endocrinology modules or research projects and were interested in staying within the discipline, which was very encouraging.

After lunch, students attended talks by bioscientists covering several career pathways, including biomedical and clinical science, postgraduate study options and careers in industry. Dr Ian Lyne (BBSRC) discussed careers in scientific research and described the core skills, such as time management, self-discipline, and oral and written presentation, that you develop whilst carrying out a PhD. Dr Daniel Simpson from Aspect Ecology talked about environmental careers, followed by an introduction to careers in science communication by Dominique Driver from the Science Museum.

A CV workshop provided advice on securing interviews for the perfect job, included tips on writing a life sciences CV using an informative but attention-grabbing style, and on tailoring your CV to specific job applications.

The afternoon was a huge success and armed students with ideas and career information. Presentations from the day can be accessed via [www.endocrinology.org/careers](http://www.endocrinology.org/careers). Send details of vacancies that you wish to advertise on our site to [careers@endocrinology.org](mailto:careers@endocrinology.org).

# LACE: THE SOCIETY'S NEWEST SIG

► **LACE stands for laboratory aspects of clinical endocrinology, and its topicality as the subject of the Society's latest Special Interest Group (SIG) reflects the fact that measurement of hormones is key to the clinical practice of endocrinology.**

Developments in hormone analysis over the past decades have made diagnosis and management more precise. Yet, despite general availability and apparent quality of routine hormone analysis, these assays have failings which are not widely understood. There are issues of specificity and precision, choice of molecular form of peptide hormones, analyte stability and immunoassay interference. Moreover, there are problems of assay standardisation and lack of consensus of units for reporting.

Training for both clinical endocrinologists and laboratory scientists is becoming shorter and the opportunities for training in the complementary disciplines are therefore diminishing. This has the potential for decreased understanding and consequently poorer clinical management.

The next 5 years pose specific challenges to the long-standing relationship between clinical and laboratory medicine in endocrinology. An NHS commissioning process is set to extend into laboratory medicine. Furthermore, the developing role of NICE in patient management pathways means that it is inevitable that diagnostic testing will be taken under the umbrella of evidence-based appraisal in new forms.

This changing landscape means we must review the effectiveness of current structures for engagement, and, in particular, the fitness for purpose of separate approaches to areas of mutual interest.

The new LACE SIG, formed in collaboration with the Association for Clinical Biochemistry (ACB), will draw clinicians and scientists with an interest in diagnostics and laboratory methods from both the Society and the ACB. The SIG's exact aims are to be confirmed, but will include strategic areas such as:

- exploring the limits of the evidence base for laboratory endocrinology diagnostics
- establishing a joint forum from which to develop standards and best practice (e.g. ACB sponsored systematic review of GH tests)
- guiding the appropriate introduction of new tests into clinical practice, possibly through advice to the Supra-regional Assay Service
- forming a group that can effectively identify emerging issues of joint interest in the changing clinical and academic landscape
- providing an effective vehicle for developing and addressing mutual training issues and leading cross-education
- enabling effective engagement with national commissioning and appraisal processes across both disciplines

To register interest with the LACE SIG and to receive communications from the convenors about relevant issues and forthcoming meetings please visit [www.endocrinology.org/sig](http://www.endocrinology.org/sig).

**STEVE BALL (SOCIETY FOR ENDOCRINOLOGY, NEWCASTLE UPON TYNE)  
JULIAN BARTH (ASSOCIATION FOR CLINICAL BIOCHEMISTRY, LEEDS)  
SIG CONVENORS**

*For details of the Society's 8 other SIGs, please see the flyer included in this mailing.*

## BioSciAlliance

*BioScientifica continues to develop BioSciAlliance, the online portal for medical and scientific societies.*

► **Members can use BioSciAlliance to build a comprehensive personal profile (see illustration). One benefit this provides is the ability to list the member's published abstracts. When you build a profile, the programme, on request, will search for your published abstracts by name and provide a full list. You can then select the abstracts you wish to list and the system will add a link to the full abstract. The list can subsequently be updated with links to new abstracts.**

Your 'easy to access' list of abstracts, can be added to your private and/or public profiles. Each member's public profile can be accessed via a friendly web address, i.e. [www.bioscialliance.org/membersname](http://www.bioscialliance.org/membersname), just like Jens Christiansen's public profile here.

Visit [www.bioscialliance.org](http://www.bioscialliance.org) to make use of its features today!

The screenshot displays the BioSciAlliance website interface. At the top, there is a navigation bar with 'Home', 'About Us', 'Contact Us', and 'Help'. The main content area features a user profile for 'Professor Jens Christiansen'. The profile includes a photo, contact details (Email: jens.christiansen@hospitalet.dk, Phone: +45 4674 1234), and a list of affiliations (European Society of Endocrinology, European Society for Reproductive Endocrinology). Below the profile, there is a section for 'Published Abstracts' with a search bar and a list of abstracts. One abstract is highlighted: 'Short term elevation of estradiol concentrations does not affect hepatic VLDL-TG production' by Jens Christiansen, Julian Barth, and Steve Ball. The abstract text indicates it was presented at the European Congress of Endocrinology 2009 in Berlin, Germany, on 21 June 2009. A 'Full Abstract' link is provided for this abstract.

## JIM BROWN

► James B Brown, one of the early leaders in research on fertility and cancer, has died at the age of 90. Born and educated in New Zealand, Jim worked in the laboratories of Auckland Hospital during World War II. He then moved to Scotland, working with Guy Marrian on improving oestrogen assays, which made it possible to follow changes in oestrogens during the menstrual cycle, pregnancy and lactation. With colleagues he developed methods to purify gonadotrophins, which could be used to induce ovulation.

In the 1960s, he made great progress in safely inducing human ovulation, as part of a team at the Royal Victoria Hospital, Melbourne. He also refined his urinary oestrogen assays, enabling them to be performed quickly. From this work he developed his threshold theory of ovarian follicle stimulation, which is still accepted.

In 1971, he joined the IVF team in Melbourne. Always a 'hands-on' person, here Jim's skills in developing IVF egg picking played an important role, and his techniques were used in the first successful IVF pregnancy in England.

Despite becoming emeritus in 1985, he continued to work from a laboratory in his garage. Here, with longtime colleagues, he worked on changes in cervical mucus as a measure of fertility, which formed the basis of natural fertility planning. He continued development of the home ovarian monitor, a kit for women to determine their fertile period. He worked until his death. A kind and modest man, Jim Brown is fondly remembered by his fellow old-timers and by younger scientists whom he generously mentored.

H LEON BRADLOW

*Jim Brown's 1957 paper, 'The relationship between urinary oestrogens and oestrogens produced in the body' (Journal of Endocrinology 16 202-212) can be freely viewed on the Society's online journal archive at <http://joe.endocrinology-journals.org/cgi/reprint/16/2/202>. Those interested in his work may also like to track down two of his other papers from Lancet (1955 268 (6859) 320-323) and Acta Endocrinologica (1954 17 250-263).*

## ELIZABETH BLACK

► Elizabeth Black and Raymond Hoffenberg together created the endocrine research laboratories of the Department of Medicine, University of Birmingham, at the Queen Elizabeth Hospital.

Elizabeth had worked previously in South Africa, at the National Institute for Medical Research and at the Clinical Research Centre, Northwick Park, on numerous aspects of thyroid disease. She pioneered a thyroglobulin radioimmunoassay to monitor thyroid cancer patients that remains in use today. Over the years, many postgraduate endocrine trainees benefited from her guidance, and will have fond memories of her.

Elizabeth enjoyed 13 years of very happy retirement from her position as the major-domo of the laboratories. She leaves behind many close friends from different walks of life. Her fortitude in her illness has been exemplary and an inspiration to all.

MARGARET C EGGO

# ENDOCRINE PRACTICE

CLINICAL AND INVESTIGATIVE ENDOCRINOLOGY AND DIABETES

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**Endocrine Practice** (EP) is the official journal of the American College of Endocrinology (ACE) and the American Association of Clinical Endocrinologists (AACE). A peer-reviewed medical journal published six times a year, *Endocrine Practice* features the latest information in the treatment of diabetes, thyroid disease, obesity, growth hormone deficiency, sexual dysfunction and osteoporosis.

Editor-in-Chief:  
**Lewis Braverman, MD, FACE**

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For additional information about any of our endocrine products or services please see the Lilly website: [www.lilly.co.uk](http://www.lilly.co.uk).

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Genzyme-sponsored research and development has led to the introduction of new treatments for many serious health problems, from rare and debilitating genetic diseases to renal disease, orthopaedic injuries, transplantation and thyroid cancer. One of Genzyme's most significant successes is Thyrogen (thyrotropin alfa), which contains a highly purified recombinant form of human TSH. It can be used to eliminate the devastating and painful symptoms of thyroid hormone withdrawal that patients may experience when they are tested for a recurrence of thyroid cancer. Thyrogen will also lead to more accurate thyroglobulin measurements on thyroid hormone suppression.

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We have been pleased to support the field of endocrinology since 1998, and Ipsen's expanding portfolio includes a range of products with sophisticated sustained release delivery systems for the management of various hormone-related diseases. The location of its four research and development centres (Paris, Boston, Barcelona, London) and its peptide and protein engineering platform give the group a competitive edge in gaining access to leading university research teams and highly qualified personnel. More than 800 people in research and development are dedicated to the discovery and development of innovative drugs for patient care.

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Since 1998, Pfizer has made a capital investment of more than £1 billion in the UK and, following its acquisition of Pharmacia in April 2003, is the largest supplier of medicines to the NHS. It is estimated that on any given day, 40 million people around the world are treated with a Pfizer medicine.

Pfizer is excited to add the Pharmacia endocrine care portfolio of Genotropin (somatropin recombinant) and Somavert (pegvisomant powder and solvent for solution for injection) to the organisation. Pfizer is highly committed to these important products and to continued investment in this key therapeutic category.

Pfizer wishes to continue to help enhance patient care today while refining therapy for future generations. Pfizer will be using its resources and capabilities to help provide the greatest value to patients.

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In 2005, Hexal AG (Germany) and EonLabs Inc. (USA) became part of Sandoz. In 2006, the business employed about 21 000 people worldwide. It sold its products in more than 110 countries and posted sales of US\$6 billion. Sandoz's recombinant human GH Omnitrope® received marketing authorisation from the European Commission in April 2006 and has been launched subsequently in several European countries. In the USA, Omnitrope® was launched in

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Biosimilar medicines made by Sandoz:

- ▷ fully adhere to the new and rigorous European standards for biosimilar medicinal products
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**Sandoz International GmbH, Industriestrasse 25, 83607 Holzkirchen, Germany (Tel: +49-8024-4762591; Fax: +49-8024-4762599; Web: [www.sandoz.com](http://www.sandoz.com))**

## CLINICAL ENDOCRINOLOGY

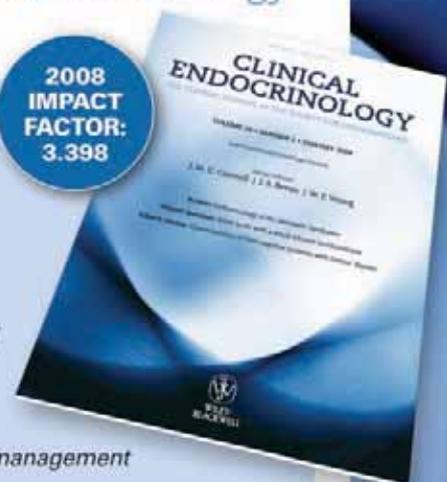
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# Can your fat make you thin?

Congratulations to Kylie Beale of Imperial College London, who won the Society's new Postgraduate Essay Prize. A summarised version of her essay appears here. Read the full referenced version at [www.endocrinology.org/grants/prize\\_postgraduateessay.html](http://www.endocrinology.org/grants/prize_postgraduateessay.html).

► **Hoping to shift a few pounds? You could subject yourself to a gruelling exercise regime, try the latest fad diet, take the newest blockbuster weight-loss pill - or simply chill out in the fridge for a couple of hours a day... Recent findings have suggested that specialised fat stores known as brown adipose tissue (BAT), which are activated by the cold, can help control body weight and may be a target for new anti-obesity therapies.**

Obesity is defined as a surplus of body fat which is detrimental to health. This fat, or white adipose tissue (WAT), is located underneath the skin and around the internal organs, and stores excess energy in the form of triglycerides.

In mammals the other, less well known, type of fat is BAT. Brown adipocytes are structurally very different from white fat cells, storing lipid in many small droplets rather than one big one. They contain large numbers of mitochondria which are packed with a specialised protein: uncoupling protein 1 (UCP-1). Usually, the chemical process respiration in mitochondria generates ATP, the main energy substrate in living organisms. UCP-1 disrupts respiration and prevents ATP production. Hence, energy acquired from the uptake of free fatty acids and glucose from the circulation is burned off as heat, rather than being stored. UCP-1 is almost exclusively expressed in BAT.

BAT is activated by the sympathetic nervous system (SNS) and thyroid hormones. The release of noradrenaline by the SNS stimulates brown adipocyte proliferation and local production of tri-iodothyronine within BAT, which stimulates the production of UCP-1. The SNS is activated by exposure to cold temperatures and the ingestion of high-calorie foods. Hence, BAT can regulate both core body temperature and body weight by increasing energy expenditure.

BAT is commonly found between the shoulder blades and around the internal organs and blood vessels. It is present in most small mammals and the newborns of larger animals, including humans. It is particularly important for babies to be able to produce heat via BAT as they have a large body surface area and so lose heat more easily. They are also unable to shiver, which is the normal mechanism for generating body heat.

It was previously thought that BAT regresses in humans by approximately 1 year of age and loses its heat-generating properties, except in very rare circumstances, such as lumberjacks in Norway, who were found to have deposits of BAT around their neck arteries which correlated in size with the length of time they worked in the cold.

Research has challenged the view that BAT is neither present nor functional in most adult humans. In a specialised type of positron emission tomography (PET) scanning, patients are injected with <sup>18</sup>F-fluorodeoxyglucose (<sup>18</sup>F-FDG), a radioactive form of glucose which is taken up by metabolically active tissues. Unlike glucose, once inside cells, <sup>18</sup>F-FDG only undergoes the first step of metabolism and becomes 'trapped'; its emissions can

then be detected. This type of scan is used to detect tumours as cancer cells take up large quantities of glucose to fuel their growth. It led to an unexpected discovery when a symmetrical area of glucose uptake commonly seen on scans around the neck and shoulders, originally thought to be muscle, turned out to be BAT.

Three recent studies used <sup>18</sup>F-FDG PET to determine the physiological relevance of BAT in adult humans. All demonstrated that BAT is present in adults, predominantly above the collar bones and around the neck. Interestingly, lean participants had, on average, more active BAT than overweight participants, suggesting BAT may help protect against obesity. As expected, exposure to cold temperatures increased BAT activity. The probability of detecting BAT depended on the outdoor temperature at the time of scanning, with detection rates higher in winter than summer. BAT was identified more readily in young women than older men, suggesting there may be age and sex differences.

The potential use of BAT as a target tissue for anti-obesity therapies in humans might be limited, as obese people have smaller BAT stores to begin with. It would be useful if these stores could be increased, to boost calorie-burning capacity.

PRDM16 is a protein which is thought to control the development of brown adipocytes. It is expressed at much higher levels in BAT than WAT, and 'knocking out' PRDM16 in BAT causes abnormal tissue development and a loss of heat-producing capacity. When PRDM16 is artificially over-expressed in the precursors of white fat cells it induces them to become brown fat cells instead. This causes the cells to express markers of BAT such as UCP-1.

Brown fat cells were recently found to arise from the same progenitor as muscle cells, whereas white adipocytes emerge from an independent source. Increasing the expression of PRDM16 in muscle cells also causes them to differentiate into brown adipocytes. So a drug which increases PRDM16 in either white fat cell precursors or muscle cells could be a potential future anti-obesity therapy.

Alternatively, PRDM16 could be used to transform stem cells into brown fat cells in a test tube, which could then be transplanted into humans. However, the effectiveness of any weight loss therapy is limited, as the body has many compensatory mechanisms in place to ensure your weight stays constant.

If we conclude that BAT in adult humans may be a target for future anti-obesity treatments, perhaps next winter we should try turning down the central heating and embracing the cold weather, and maybe the pounds will fall off!

KYLIE BEALE

*The Society also awarded two prizes of £250 to runners-up Errol Richardson (London) for 'Darwin's hormonal problem' and Emma Wilmot (Leicester) for 'Get up, stand up!'. Highly commended certificates were presented to Charlotte Boughton (London), Simon Biddie (Bristol) and Madhu Prasai (Leeds).*

## THE ENDO TRAIN

all aboard for...

## Barts

Located within 20 minutes of all London's railway terminals and yards from the point at which the north-south Thameslink and east-west Crosslink lines will intersect, the Department of Endocrinology at St Bartholomew's Hospital has to be an important destination for the endocrine train, as Adrian Clarke relates.



Adrian Clarke

► Here is the country's oldest hospital - founded almost 900 years ago - and the base for many of the great names in medicine, including Harvey, Pott, Paget, Parkinson and Garrod. Endocrinology at 'Barts' is, by comparison, a recent development, coming to prominence with the department's establishment under Mike Besser in the 1970s. Mike's expertise in clinical endocrinology and the

development of dynamic *in vivo* endocrine tests, combined with the radioimmunoassay skills of Lesley Rees and John Landon and the peptide biochemistry of Phil Lowry, created an astonishing and inspiring centre that made enormous contributions to modern endocrinology, and trained many of the world's leading clinical endocrinologists.

Passengers will see a distinct department at Barts (now Barts & the London School of Medicine & Dentistry) when the endocrine train visits today. The heritage is still strongly visible in the Clinical Endocrinology Department, which continues to see complex endocrine patients from all over the world, and the clinical practice is state-of-the-art.

Led by Ashley Grossman on the academic side and Will Drake on the clinical side, ably supported by Shern Chew, Scott Akker and Maralyn Druce, the number of patients has risen and increasing numbers of neuroendocrine and adrenal tumours, in addition to a steady flow of complicated Cushing's and other hypothalamo-pituitary disorders, continue. Whilst the clinical complexity of our patients has changed little, the

investigational tools (e.g. PET-CT, DWI MRI) and therapeutic options (e.g. gamma-knife) embrace the latest developments.

In the near future, the principal in-patient and investigation wards, Garrod and Francis Fraser, will move into the newly built 21st century hospital. The traditional Friday meetings remain one of the most stimulating clinical meetings, in which everyone from the Emeritus Professors Besser, Monson and Burrin to medical students and international visitors have their say in discussing the diagnosis and management of the week's patients.



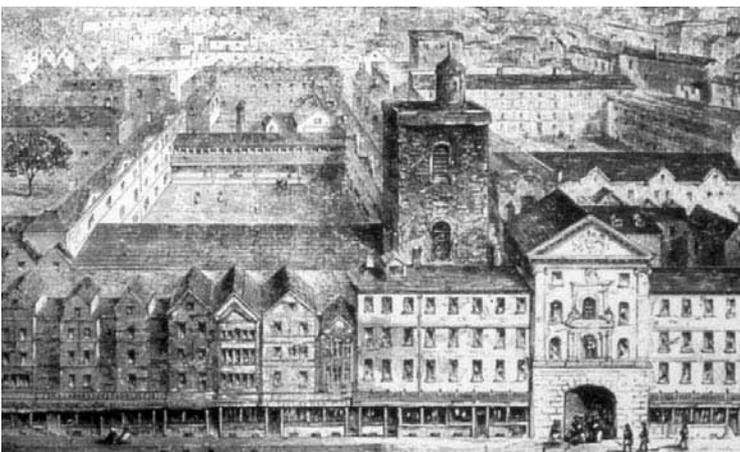
Charterhouse Square looking towards 'the Charterhouse'

To view current endocrine research, the train will need to take a short extra excursion to the picturesque and historically eventful Charterhouse Square. This was initially the site of a Carthusian monastery founded in 1371 and subsequently Lord North's house (1545) and Sutton Hospital and Charterhouse School (1614) before it was purchased for the medical school. It was to this site that endocrinology research moved about 4 years ago, to occupy modern, purpose-built laboratory space in the heart of the world famous William Harvey Research Institute.

Endocrine research has thrived in this environment, as demonstrated by an increasing list of high impact publications and outstanding success in winning major MRC, BBSRC and Wellcome Trust awards and fellowships. Currently, 80% of our research income is from the Research Councils, and this supports an array of clinician scientists, new investigators, research training fellows and research grants. Such 'blue chip' funding for endocrinology is supported by local schemes such as the Joan Adams Fellowship scheme, the result of a generous endowment to the department that supports a new clinical fellow for a year to gain experience and preliminary data, together with Walport Fellowships supporting post-doctoral clinical research.

Our main research interests centre around the adrenal cortex, growth, the pituitary and metabolism. We exploit the local strengths in molecular genetic technology to discover and characterise new genes for

Old Barts in 18th century



endocrine disease, and to characterise the function of these genes in detail, with a view towards manipulating this function for therapeutic benefit.

My own research interests in hormone resistance syndromes are ably supported at a senior level by outstanding basic scientists - Paul Chapple (cell biology), Peter King (developmental biology) and Lou Metherell (endocrine genetics) - who have each developed their own sphere of interest with independent Research Council funding. Márta Korbonits, together with Ashley Grossman, drives research into the molecular genetics and molecular oncology of pituitary, adrenal and neuroendocrine

tumours, with a highly active programme in familial isolated pituitary adenoma gene discovery. Additional information about all of these research interests is available at [www.whri.qmul.ac.uk/research/endocrinology.html](http://www.whri.qmul.ac.uk/research/endocrinology.html).

These activities are greatly facilitated by a close interaction at all levels between laboratory scientists and clinicians and between paediatric and adult endocrinologists - a key characteristic of research at Barts for many years. In support of this, the research environment in the School of Medicine and Dentistry has developed dramatically in recent times, with the appointment of 26 new Chairs. This contributed significantly to our outstanding performance in RAE 2008, in which the medical school was ranked fourth in the country in terms of world leading and internationally recognised (3\*/4\*) outputs (*Times Higher Education Supplement*). Endocrinology, returned with the inflammation sciences and cardiovascular research strengths of the William Harvey Research Institute, was ranked third in its unit of assessment.

Within endocrinology, we have recently welcomed Carol Shoulders from Imperial College as Professor of Lipidology. She is actively recruiting to build and develop her group, with a focus on the molecular genetics of lipid disorders. Our recent fundraising appeal for a new Chair of Paediatric Endocrinology was to develop this key area (so admirably begun by Martin Savage) for our research and clinical practice. The appeal's success has already led to the creation of a new consultant post to support Jeremy Allgrove and Helen Storr, and funding for the Chair has now been secured. Further details of the appeal are available at [www.qmul.ac.uk/chrca](http://www.qmul.ac.uk/chrca).

Just like all the Endocrine Train's previous stops, Barts has seen an astonishing development of facilities and



An architect's model of the 'new' Barts

infrastructure over the last 25 years. As a medical student here in the early 1970s, I would attend lectures and work in labs in the building where I still work, but its interior is completely unrecognisable following modernisation over the last decade. The same is true for the clinical services, where Europe's largest hospital building programme is creating astonishing modern hospitals at both the Barts site and the Royal London site, whilst very carefully preserving the historic architectural features of the old Barts. Dedicated clinical endocrinology space in the new build is almost complete, and will provide outstanding in-patient and day patient investigation facilities.

The surrounding environment has also changed almost beyond recognition. As a student, West Smithfield was the site of the nation's meat market, several old pubs, a few greasy spoon restaurants and not much else. Now, while the meat market survives, West Smithfield has become one of the most sought-after areas in London, and is peppered with smart Michelin-starred restaurants and trendy bars (though the Bishops Finger, the Sutton Arms and the Hand and Shears survive).

Whilst it would be foolish to pretend that there are not challenging times ahead across the country for endocrinology (and research in general), we believe that the recent developments in infrastructure and environment at Barts and the London, combined with a unique clinical experience and expertise amassed over the last four decades, leave us in a strong position to weather this period.



Will Drake



Ashley Grossman



Márta Korbonits



Carol Shoulders

ADRIAN CLARK

John Vane Science Centre in Charterhouse Square  
- home of academic endocrinology today



# Supporting patient support

► **Patient support groups serve to help people with a wide variety of disorders, as well as their carers and families. While some groups are small, others are larger and better established. The Society for Endocrinology is pleased to award grants to these groups periodically, to provide support for specific projects.**

For instance, grants may be provided to support logistics, such as running helplines, to obtain computing facilities for specific tasks, to train support workers, to provide patient information documents, and to stage meetings where expert speakers are invited.

Starting in 2000, there have been four rounds of awards, on a 2-yearly basis. The first three rounds were supported jointly by the Society and the Clinical Endocrinology Trust. The last round was supported solely by the Society. Approximately half the applications have been successful, leading to 34 grants totalling £54 500. In 2008, grants worth £20 000 were divided among nine support groups.

*'The grant was used to finance our AMN Day, which is a day for all those affected by and involved with treatment of and research into adrenomyeloneuropathy (AMN) and adrenoleukodystrophy (ALD). It included talks on how to manage symptoms, alternative therapies and practical issues including talks from sufferers. Feedback was very supportive and participants look forward to the next meeting in 2010. Please accept our heartfelt thanks for your generosity.'*

**Sara Hunt**  
Chair, ALD Life

*'I cannot thank the Society enough for awarding a grant to the ASG in July 2008. As we are such a small support group, funding for basic items such as telephone line rental, internet connection costs, upgrading equipment, programmes, printing, and postage costs can become a struggle at times, and the grant received has made helping with the services and support that we provide much easier.'*

**Lorraine Bookless**  
Founder, Anorchidism Support Group (ASG)

*'Thanks to your support, we successfully held our Patient Support Group Exchange Weekend. The event brought together our volunteers, who act as telephone contacts and local co-ordinators, in order to exchange experiences, gather information, share ideas and further develop their roles. Carrying out a weekend of training for both staff and volunteers has proved extremely useful, as counselling and listening skills will not only benefit the trainees, but will provide a better service for the callers. Again we would like to thank the Society for their very generous support.'*

**Janis Hickey**  
Director, British Thyroid Foundation

The rigorous review process for applications means that groups must have a written constitution, with minuted board meetings. They should have charitable status and be supported by appropriately experienced external experts. Support workers must have appropriate training. The application must include a clear rationale and realistic costings. The group must provide a written report on completion of the project.

The Society takes a broad view of the proposals that should be supported. The main criteria are that the support group should have an endocrine focus and that the request is for a real unmet need. The grants are an important component in strengthening links between the Society and patient support groups. The groups clearly value the help they have been given, as is evident from the comments below, made by recipients of the 2008 grant round.

**PHILIP HARRIS**  
CHAIR, PATIENT SUPPORT GRANTS PANEL

*'We were delighted to receive our first grant from the Society for Endocrinology last year and found the advice coupled with the freedom of choice that you gave us most helpful. Thanks to your grant, HPTH UK has been able to move up to another level in terms of provision and recognition, and we have had a very successful year. We have been instrumental in getting the UK included in a global trial of parathyroid hormone in the treatment of HPTH, which is now recruiting in Oxford and Liverpool. We hope that building an HPTH community of patients, professionals, researchers and donors with different perspectives, yet common goals, will form a fruitful alliance. We have learnt a lot from this monetary experience and look forward to further progress.'*

**Liz Glenister**  
Chair and Founder, Hypoparathyroidism UK (HPTH UK)

*'The grant has enabled the KSA to produce a new tri-fold leaflet on Klinefelter's syndrome targeted at GPs and their patients, which would not have been affordable without this grant. The response to these leaflets by the delegates who visited our stand was very good, with many saying that anything that could help them diagnose Klinefelter's syndrome (which they found difficult) was a blessing. The KSA will attend more medical conferences to distribute the remaining leaflets, as and when funds are available.'*

**Dr Povl Larsen**  
Chair of Trustees, Klinefelter's Syndrome Association (KSA)

*'We were able to use this grant to fund most of the improvements made to our office IT provision. As anticipated, this has made a huge difference to our ability to communicate effectively with our client group: sufferers of premenstrual syndrome and the healthcare professionals tasked with their care. Links with the media are important in publicising our work, and this is another area that has*

benefited from the improved system. I should like to thank you on behalf of the trustees of the charity for making these funds available and thereby making a difference to so many who need our support.'

**Jackie Howe**

Acting CEO and Hon Treasurer,  
National Association for Premenstrual Syndrome

*'The Society for Endocrinology Patient Support Grant has assisted us greatly in the enormous Pituitary Foundation leaflet project. The project not only aims to update current titles, but also to add the titles necessary to address the concerns that our community conveyed to us through our social research projects. We would like to thank the Society for funding this grant.'*

**Kit Ashley**

Executive Director, Pituitary Foundation

*'The PWSA spent their patient support grant on sending support staff to visit multidisciplinary clinics and to meet families with Prader-Willi Syndrome. Families found our presence very helpful and staff supported a wide range of issues. The grant allowed us to strengthen ties with clinics and co-work with endocrinologists and other clinic staff, and various possible projects were discussed. We have made a bid to the Department of Health to continue and extend this work and to promote the idea of multidisciplinary clinics to other parts of the country. Thank you very much!'*

**Jackie Waters**

Director of Services, Prader-Willi Syndrome Association (PWSA) UK

*'The TSSS thank the Society very much for the grant, which we think will be extremely beneficial to both the TSSS and its members. Thanks to the grant we now have a professional, informative and well-designed series of factsheets. Our intention is to continue to add to the series as and when required. We view this as an ongoing project. Being able to use the services of a company for the writing and continuity of the factsheets was a great help, and we are truly grateful for the grant.'*

**Arlene Smyth**

Executive Officer, Turner Syndrome Support Society (TSSS)

## SCE IN ENDOCRINOLOGY AND DIABETES

► The Specialty Certificate Examinations (SCEs) were launched in 2008. They aim to assess a candidate's understanding of the clinical sciences and disorders, relevant to their specialist medical practice, to a level appropriate for a newly appointed consultant.

In 2009, eight different SCEs were taken in the UK and internationally by 291 candidates. The SCE in Endocrinology and Diabetes was developed by the Federation of the Royal Colleges of Physicians in partnership with the Society for Endocrinology, the Association of British Clinical Diabetologists and Diabetes UK. It was taken for the first time in May 2009 by 39 candidates including 14 UK trainees, for whom the pass rate was 64%.

In the UK, the SCE is now a compulsory component of assessment for a Certificate of Completion of Training (CCT) for trainees whose specialist training began in or after August 2007. Trainees should make their first attempt by the penultimate year of their assessment.

**The next exam takes place on 30 June 2010.**

Registration for UK centres is open from 29 March to 26 April and for overseas centres 1–29 March. See [www.mrcpuk.org](http://www.mrcpuk.org) or email [sce.queries@mrcpuk.org](mailto:sce.queries@mrcpuk.org) for more details, including registration at international test centres.

### Advice to candidates

- The exam runs once per year (usually May/June), so if you are more than halfway through your training, make sure you plan the exam into your assessment timetable
- Register early to secure your preferred test centre
- If you wish to sit the exam in a country that is not listed, let MRCP(UK) Central Office know and they will advise you
- When you revise, read broadly and cover the entire curriculum. Sample questions are available in My MRCP(UK) on the MRCP(UK) website (you will need to log-in)

### £10 000 RESEARCH AWARD

The British Thyroid Foundation (BTF) offers an annual award of up to £10 000 to support 1-year research projects into thyroid function or disorders. The award can be used to supplement existing projects or to help get research ideas started. Funds will be awarded for consumables, running costs and equipment.

The BTF is an NIHR partner organisation in respect of its research awards funding stream. Studies funded through this funding stream are eligible for inclusion in the NIHR Clinical Research Network Portfolio and are therefore able to access NHS support via the NIHR Clinical Research Network infrastructure.

For further information and an application form, see [www.btf-thyroid.org](http://www.btf-thyroid.org), email [research-award@btf-thyroid.org](mailto:research-award@btf-thyroid.org) or phone 01423-709707. The closing date for receipt of applications is 31 August 2010.



### £500 AWARD FOR NURSES

The British Thyroid Foundation (BTF) is offering an award of £500 to help a nurse, endocrine nurse or midwife in the UK or Eire improve care for patients with thyroid disorders.

The Evelyn Ashley Smith Award 2010 can be used to:

- support training needs including conference attendance
- support a specific project lasting 1 year, or
- reward a piece of work that has been completed, but not yet published

For an application form see [www.btf-thyroid.org](http://www.btf-thyroid.org), email [nurse-award@btf-thyroid.org](mailto:nurse-award@btf-thyroid.org) or phone 01423-709707. The closing date for receipt of applications is 1 July 2010.

# Ethics, morals and medical needs

Hotspur  
muses on  
some moral  
dilemmas

► The 'black spot' is a fictional literary device invented by Robert Louis Stevenson for his novel *Treasure Island*. In the book, a pirate is presented with a 'black spot' to officially pronounce judgment - a verdict of guilty. It was a source of much fear because it meant that the pirate would die imminently. In *Treasure Island*, Billy Bones is so frightened by it that he suffers a stroke and dies - thus fulfilling the prediction.

Now, in the London teaching hospital at which I trained, we had our own version of the black spot. He was known as the Professor of Pathology or, rather unaffectionately, as the Grim Reaper. Tall, lean and ascetic-looking with taut, cadaveric facial features, one of his research interests concerned the clinical ability to estimate splenic size in life.

To provide further data on this topic, he regularly visited patients, whom, he had reliably been informed, were expected soon to exit this world, on the evening before their expected demise. At his visit he would percuss and palpate the abdomen to estimate splenic size

and then compare the findings with splenic weight and dimensions at autopsy. On the ward, his appearance elicited a fear that was palpable, the silent prayer almost audible from the patients' facial expressions:

'please don't let him stop at my bed!'

Leaving aside the question of the value of his research, his interests raised ethical and moral dilemmas for the Grim Reaper. Should he explain to the patient the reason for his visit? What explanation could avoid inducing further anxiety? Many such questions are raised by clinical practice as well as research protocols.

A few years ago I was flying home from the USA after a family holiday. On my return I had to fly off again on the very same day to Spain to speak at an endocrine meeting. The timetable just allowed me enough time to go home, unpack, repack, and return to the airport for the flight to Spain. Unfortunately, however, a female fellow passenger became ill on the flight from the USA. Over the tannoy there was a request for a doctor and, before I had time to consider the request, I was volunteered by 'she who must be obeyed' - presumably because she was anxious to secure further seat space.

So, off I went to seat 27B, where Mrs X was slumped with the obligatory oxygen mask over her face. Mr X told me about his wife's heart condition - and her three large gin and tonics and very full lunch. At this point, the steward whispered in my ear, 'You need to make a decision. If she is seriously ill we will have to turn back, but, if this is not too serious, then the flight can continue to the UK.'

Now, people say that I am indecisive but I don't know about that. On this occasion, I was desperate for the flight to continue without a pause. However, whilst I was reassuring the steward that Mrs X would be fine (at the same time laying her flat on the floor), it dawned on me that this may not be the case. What if she died one hour further into the flight? How would I feel about that and how would I explain things to her husband?

I decided that, if that were the outcome, I could reassure Mr X that his wife had died in a good cause - my lecture! It was a cracker and even contained new data! I felt confident that the husband would understand that the loss of his wife for the sake of medical education was a sacrifice of which he could be proud. Having sorted out the morals and ethics in my own mind, it was almost disappointing when Mrs X sat bolt upright after 20 minutes, pronouncing that she felt fine.

I wandered back to my seat so deep in thought that I failed to notice Mr X standing over me. He was full of compliments about my care for his wife and shook my hand with a grip like a steel clamp. I was certain that he had broken two of my fingers. Had he read my mind? Did he know my plans? It didn't matter; there was no way the lecture could be ruined - I could use the laser pointer with either hand.

This episode reminded me of an occasion when, as a first year clinical student, I was allowed, on the understanding that I was not to speak, to accompany the senior surgeon on his working ward round. On this round, he decided which patients could be discharged home, and when.

We stopped at the bedside of a small, elderly lady with very thick-rimmed glasses and a hearing aid. Given the timing of the round, it was soon apparent that she had mistaken our surgical entourage for the tea ladies and their trolley. The boss whispered to his juniors, 'Why is she here?' The registrar whispered back, 'Gangrene of all toes of the left foot, sir. We are waiting for the line of demarcation and then we plan to take her to theatre to remove them.' 'Let me look,' he said.

Having done so, he gently grasped the dead toes in his right hand and snapped them off. The whole procedure lasted less than 10 seconds and had been clearly painless. Nonetheless, I was stunned - and even more so when he approached her, proffered the black digits towards her face and pronounced, 'Madam, your toes.'

No conversation, no consent form but, at the same time, no anaesthetic and no post-operative complications. My head was spinning and I recovered my composure only when I heard her reply, 'Toast is fine but I like my cup of tea at the same time.'

'HOTSPUR'

*I felt confident that the husband would understand that the loss of his wife for the sake of medical education was a sacrifice of which he could be proud.*

# Hot Topics

Journal of Endocrinology

Journal of  
Endocrinology

## Living-cell imaging of folliculo-stellate cells

Knowing their topographic features is essential in understanding the cell-cell interactions amongst folliculo-stellate (FS) cells and hormone-producing cells in the anterior pituitary. Horiguchi and colleagues have used transgenic S100b-GFP rats to investigate the topographic affinity of FS cells for other pituitary cells. The novel characteristics observed suggest that FS cells play important roles in determining and/or maintaining the local cellular arrangement in the presence of extracellular matrix components.

[DOI: 10.1677/JOE-09-0333](https://doi.org/10.1677/JOE-09-0333)

## Maternal parity and adipokines

Hyatt and co-workers used an established sheep model to investigate the impact of maternal parity on adipose tissue development with regard to glucocorticoid sensitivity and adipokine gene expression. The increase in fat mass associated with the firstborn was accompanied by a resetting of the leptin and glucocorticoid axis within the adipocyte. This shows the importance of parity in determining adipose tissue development and that firstborn offspring have an increased capacity for adipogenesis that may be critical in determining their adiposity.

[DOI: 10.1677/JOE-09-0358](https://doi.org/10.1677/JOE-09-0358)

## Prostacyclin in bone metabolism

Nakalekha *et al.* investigated skeletal abnormalities in young and adult prostacyclin-deficient mice. Increased bone mass in adult prostacyclin-deficient mice was associated with increases in bone formation and resorption. This suggests that prostacyclin deficiency accelerates high bone turnover activity with a greater increase in bone mass associated with ageing. This imbalance was reversed in knockout animals by the insertion of prostacyclin synthase overexpression. Prostacyclin may act as a regulator in maintaining normal bone mass and micro-architecture.

[DOI: 10.1677/JOE-09-0376](https://doi.org/10.1677/JOE-09-0376)

JOURNAL OF  
MOLECULAR ENDOCRINOLOGY

JOURNAL OF  
MOLECULAR  
ENDOCRINOLOGY

## Visfatin in metabolism

Our understanding of the adipocyte-derived factor visfatin's role in metabolism is controversial. Brown *et al.* have investigated its effects in clonal mouse pancreatic  $\beta$ -cells. Visfatin significantly increased insulin secretion, and regulated insulin receptor activation and mRNA expression of genes associated with  $\beta$ -cell function. These findings help us understand obesity's role in type 2 diabetes.

[DOI: 10.1677/JME-09-0071](https://doi.org/10.1677/JME-09-0071)

## Short prolactin receptor downregulates long form

Multiple isoforms of the human prolactin receptor are produced by alternative splicing, and the different ratios have been associated with disease. In a study on human embryonic kidney cells by Tan and Walker, the short form SF1b downregulated the expression of the long form (LF), affecting prolactin expression and cell number. The ratio of SF1b:LF may have implications for tumour growth.

[DOI: 10.1677/JME-09-0101](https://doi.org/10.1677/JME-09-0101)

Endocrine-Related Cancer

Endocrine-Related  
Cancer

## Array-painting in breast cancer

Unger *et al.* describe an ambitious approach to discover radiation-induced oncogenic rearrangements in breast cancer cell lines. Several chromosomal translocations were identified and mapped, and the aberrant expression of genes participating in the rearrangements was demonstrated. Although the functional consequence of these rearrangements on mammary cell tumorigenesis needs further study, this is a valuable approach to scan the genome for potentially novel radiation-induced fusion genes.

[DOI: 10.1677/ERC-09-0065](https://doi.org/10.1677/ERC-09-0065)

## Plasma sex hormones and breast cancer

This nested case-control study by Woolcott and colleagues extends the existing evidence of the association between sex hormones and breast cancer risk from mainly white study populations into a multiethnic cohort. The study demonstrates, for the first time, that high levels of sex hormones and low levels of sex hormone-binding globulin are associated with increased breast cancer risk in an ethnically diverse population.

[DOI: 10.1677/ERC-09-0211](https://doi.org/10.1677/ERC-09-0211)

Clinical Endocrinology

CLINICAL  
ENDOCRINOLOGY

## Prevalence of pituitary adenomas in Banbury

Fernandez and co-workers have provided an up to date epidemiological survey of pituitary adenomas in a well defined geographical area in the UK. The data confirm that pituitary adenomas have a higher than previously estimated prevalence and consequently higher burden on the UK health care system. Advances in diagnostic techniques probably account for this disparity.

[DOI: 10.1111/j.1365-2265.2009.03667.x](https://doi.org/10.1111/j.1365-2265.2009.03667.x)

## Radioiodine uptake and scintigraphy in hyperthyroidism

Radioisotope uptake measurements and radioisotope scanning (scintigraphy) are used in the management of patients with hyperthyroidism. In this commentary, Franklyn discusses the recent findings by Okosieme *et al.* that, in most patients, isotope studies do not provide any useful information in addition to that obtained from clinical examination and standard laboratory tests. She suggests that centres routinely performing these tests should evaluate their cost-effectiveness.

[DOI: 10.1111/j.1365-2265.2009.03633.x](https://doi.org/10.1111/j.1365-2265.2009.03633.x)

## Is acromegaly underdiagnosed?

Historically, acromegaly has been under-recognised until its later stages, when clinical characteristics are more apparent but treatment is more difficult. Reid and colleagues examined data from 324 patients presenting with acromegaly from 1981 to 2006. They found that signs, symptoms and associated comorbidities, tumour size and preoperative GH levels did not change significantly in the 26 years since the patients' diagnoses, indicating that their acromegaly was already advanced when they were diagnosed. The authors conclude that clinical recognition of acromegaly has not improved much in the last 25 years, and that increased awareness of acromegaly amongst practitioners is required.

[DOI: 10.1111/j.1365-2265.2009.03626.x](https://doi.org/10.1111/j.1365-2265.2009.03626.x)

HOT TOPICS  
HT

The latest  
research in the  
Society's  
journals.  
Resolve the  
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# Control



## Tostran - The only 2% metered dose testosterone gel

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The first metered dose



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A simple solution to a serious problem

**Tostran Abbreviated Prescribing Information** Please refer to Summary of Product Characteristics before prescribing. **Presentation** Tostran 2% gel, contains testosterone, 20 mg/g. **Indications** Replacement therapy with testosterone for male hypogonadism when testosterone deficiency has been confirmed by clinical symptoms and laboratory analyses. **Posology** The recommended starting dose is 3 g gel (60 mg testosterone) applied once daily at approximately the same time each morning to clean, dry, intact skin, alternately on the abdomen or to both inner thighs. Application elsewhere should be avoided. The dose should be adjusted to the clinical or laboratory response. The daily dose should not exceed 4 g of gel (80 mg testosterone). The gel must not be applied to the genitals. Not for use in women, or children under the age of 18 years. **Contraindications** Androgens are contraindicated in known or suspected carcinoma of the breast or the prostate, known hypersensitivity to testosterone or any of the excipients, and in women. **Warnings and Precautions** Tostran should not be used to treat non-specific symptoms suggestive of hypogonadism if testosterone deficiency has not been demonstrated and if other aetiologies responsible for the symptoms have not been excluded. Tostran is not indicated for treatment of male sterility or sexual impotence. Prior to initiation of therapy, all patients must be examined to exclude a risk of pre-existing prostatic cancer. Careful and regular monitoring of breast and prostate must be performed. Testosterone may accelerate the development of subclinical prostatic carcinoma and benign prostatic hypertrophy. Oedema with or without congestive heart failure may be a serious complication in patients with pre-existing cardiac, renal or hepatic disease. The treatment

must be discontinued immediately if such complications occur. Testosterone may cause a rise in blood pressure and Tostran should be used with caution in men with hypertension. Tostran should be used with caution in patients with ischemic heart disease, epilepsy, migraine and sleep apnoea as these conditions may be aggravated. Care should be taken in patients with skeletal metastases due to risk of hypercalcaemia/hypercalcuria. In diabetic patients, the metabolic effects of androgens may decrease blood glucose and therefore insulin requirements. Patients who wash in the morning should apply Tostran after washing, bathing or showering. Avoid the potential for transfer of testosterone from the patient to another person by careful hand washing and the wearing of loose clothing after the gel has been applied and has thoroughly dried. Bathe or shower before any close contact with another person. Particular care must be taken to prevent transfer of testosterone to pregnant women or children via skin contact. **Interactions** When androgens are given simultaneously with anticoagulants, the anticoagulant effect can increase and patients receiving anticoagulants require close monitoring of their INR. Concurrent administration of testosterone with ACTH or corticosteroids may increase the likelihood of oedema and caution should be exercised. **Undesirable effects** Very common (>1/10): application site reactions (including paresthesia, xerosis, pruritis, rash or erythema); common (>1/100, <1/10): peripheral oedema, hypertension, polycythemia, increased prostate specific antigen, hirsutism, gynaecomastia. Certain excipients may cause irritation and dry skin. **Pack Size and Price** Packs containing one or three 60 g metered-dose canisters per pack. Price £26.67 per

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Adverse events should be reported. Reporting forms and information can be found at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk). Adverse events should also be reported to ProStrakan Limited on 01896 664000.

#### References:

1. Dumas C. Poster presented at the 25th Scandinavian Meeting of Urology, Göteborg, June 2005 2. MIMS April 2009 3. Tostran® Summary of Product Characteristics October 2006 4. Testogel® Summary of Product Characteristics November 2006

M015/1064 Date of preparation April 2009

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