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# The Endocrinology · ISSUE 92 THE NEWSLETTER OF THE SOCIETY FOR ENDOCRINOLOGY • ISSUE 92







We were absolutely sure that it was going to be birds. The media and some areas of society had come to demonise certain farms in Norfolk, whilst sales of the 'Norwegian Blue' plummeted. How wrong we were. Who could have foreseen that the likely forthcoming pandemic would have its origins in an eclectic mix of porcine, avian and human DNA? Such chance events highlight the uncertainty of biological processes, an aspect familiar to us all.

In contrast, the Society BES meeting at Harrogate this year was, predictably, a great success (page 12).

Clearly, David Ray and the Programme Organising Committee got it right again, and created a very popular event. This was clear not only from the greater overall number of delegates, but also from the fact that so many were in attendance from the morning of day one until the final sessions at the very end of day four.

The younger members of the Society were in great form (pages 12 and 13). Podcasts of the medal lectures are a new innovation for the meeting, and allow members to relive the event, or indeed to 'capture the moment' if they were unfortunate enough to miss a session at the meeting. As you can see on page 14, the meeting was also notable for its high level of press coverage.

The Society BES was also the final meeting for John Wass as outgoing Chairman. The Society is deeply indebted to him for all his tireless work. He gives his reflections on page 7. There is much change for the Society's officers. Incoming Chairman Julia Buckingham looks to the future on page 4, as do General Secretary Paul Stewart and Programme Secretary Márta Korbonits on

The meeting also highlighted a quiet 'epidemic' - the late endocrine effects of cancer survivorship. This has resulted in the need for a new special interest group (SIG) in this area. All those interested are encouraged to take a look at page 16 and make contact.

This issue is, as usual, packed with information about Society activities and related news.

On page 9, you can learn more about the Society's key work in public and patient engagement. By working closely with the Biosciences Federation (BSF), the Society aims to enhance science outreach projects. This should be aided by the unification of the BSF with the Institute of Biology, to form a single Society of Biology, a leading organisation for biology in the UK. Find out more about this merger on page 17.

What if you have a great idea for research, but lack the funds to make it real? Although funding for endocrine research may appear limited, there are new opportunities for basic, translational and clinical research. Society members are closely involved with these initiatives, as they relate on pages 20-21.

Having made its first stop at Manchester, 'The Endo Train' has steamed on to the metropolis of Birmingham (page 18). Paul Stewart gives a personal account of 20 years of progress in what is now one of Europe's largest endocrine units, with outstanding endocrine science, teaching and clinical practice. Do get in touch if you'd like one of the train's future stops to be at your centre.

Despite all these excellent ventures, it is with sadness that I write a second editorial with the news of the untimely death of another well-known member of the Society, Michael Reed (page 11). Endocrinology has lost another outstanding scientist.

And finally, by definition one cannot anticipate unpredictable events, but I can only hope that endocrine meetings (both international and, perhaps, national) remain as colourful as those encountered in Hotspur's extensive experience (page 22)!

JOHN NEWELL-PRICE



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#### 2009 Advertising

For more information, contact advertising@endocrinology.org

Deadline for news items for the Autumn 2009 issue: 31 July 2009. Please send contributions to the above address.

# Win £1000-

# **NEW** postgraduate essay competition!

► The Society's new essay competition is available to members and non-members alike. It is open to all students registered for a higher degree in the UK or Ireland (e.g. a masters course or research degree equivalent to an MPhil, PhD, MDRes etc). Full details can be found at  $www.endocrinology.org/grants/prize\_postgraduateessay.html.\\$ The deadline for receipt of essays is 14 September 2009.

### SHARE YOUR GRANT SUCCESS

Do you sit on a fellowship-awarding panel? Have you successfully obtained a fellowship? Would you be prepared to help others gain a fellowship?

The Society is aware that research fellowships can be invaluable tools in enabling talented young scientists to build independent careers. To support members who wish to obtain fellowships, we intend to establish a virtual 'Fellowship panel', comprising established researchers and successful fellowship holders. The panel would provide advice (via the Bristol office) to Society members embarking on the process of obtaining a fellowship. We anticipate creating an expert database to enable us to match queries with experts.

To be part of this scheme, please contact Rachel Evans at the Bristol office (rachel.evans@endocrinology.org), with a short résumé of your fellowship experience. We will advertise the advice service to members once we have recruited a suitable number of experts.

#### Nominations needed for committee members

This is your chance to participate in running your Society! There are currently two vacancies on each of the Clinical, Corporate Liaison, Finance, Nurse and Programme Committees, and three vacancies on the Science Committee. Full remits and a nomination form can be found at

www.endocrinology.org/about/committee.html. Terms of office generally run from 1 January 2010 for 4 years. Nominations need to be received in the Bristol office by 31 July 2009.

## **Small Grants Programme**

► We congratulate the following successful recipients of awards made under the Small Grants Programme:

Dr Tim Boswell (School of Biology, Newcastle University), awarded £10 000 for 'Leptin and reproductive function in an amphibian, the axolotl'

Prof Julian Davis (Endocrine Sciences Research Group, University of Manchester), awarded £13 601 for 'Transcriptional networks in the pituitary'

Dr Barbara McGowan (Investigative Medicine, Imperial College London), awarded £14 218 for 'The effect of central and peripheral administration of relaxin-1 on food intake in male rodents'

Dr Alison McNeilly (Centre for Neuroscience, University of Dundee), awarded £7348 for 'A potential role for glucocorticoids and insulin resistance in Alzheimer's disease'

Dr Dany Muller (Beta Cell Development and Function Group, King's College London), awarded £14 622 for 'Role of Ninjurin-1 and STRA13 in β-cells'

Dr Joanne Murray (School of Biosciences, University of Westminster), awarded £11 895 for 'Melanocortin 3 receptors (MC3R) in the testes'



SOCIETY

The Society currently advertises a number of MSc courses on the website (www.endocrinology.org/careers/ education.html). If you are currently aware of MSc courses where the syllabus contains strong elements of endocrinology, please contact Rachel Evans (rachel.evans@endocrinology.org), so that the Society can publicise them.

#### New Treasurer

We are delighted to announce that Professor Graham Williams will take over from Professor Michael Sheppard when he retires as Treasurer in December 2009.

### European Journal of Endocrinology Prize 2009

We are delighted to congratulate the Society's nominee for this prize, Professor Wiebke Arlt (Birmingham), who successfully won the award. She presented her winning lecture during the ECE 2009 meeting in Istanbul on 25-29 April.

**SOCIETY CALENDAR** 

7-9 September 2009 Society for Endocrinology **National Endocrine Nursing Conference** Newcastle upon Tyne

24-25 September 2009 **Obesity Management Symposium** Cambridge

16-18 October 2009 **Society for Endocrinology Autumn Endocrine Retreat 2009** Steventon, Oxfordshire

2-4 November 2009 Society for Endocrinology **Clinical Update** Manchester

4 December 2009 Society for Endocrinology/ Caledonian Society for Endocrinology Regional Clinical Cases Meeting Edinburgh

15–18 March 2010 Society for Endocrinology BES 2010 Manchester

### NEW MEMBERS

We welcome the new members who were approved by Council in February. There are 55 from UK, 1 from Europe and 2 from the rest of the world.





# Onwards and upwards: your new Chairman looks ahead

▶ I am delighted and honoured to have been elected as the Society's Chairman. The Society is almost in my blood. I gave my first paper midway through my PhD and I have attended most, if not all, of the Society's meetings since then. I have also had the privilege of being involved in many other aspects of the Society's activities, most recently as General Secretary.

My new role poses many challenges and opportunities. Our outgoing Chairman, John Wass, has done an outstanding job. Under his leadership, the Society has grown its portfolio of activities. The many new initiatives include new prizes and awards, increased opportunity for grant funding, development of the training programmes we offer to clinicians and basic scientists, and increased emphasis on public engagement. The Society has flourished financially and the surpluses, which have been bolstered substantially by the success of BioScientifica (which 'gift-aids' its profits to the Society), have been used to support these new initiatives.

With the 'credit crunch', we will inevitably need to tighten our belts. I will be working very closely with my fellow Officers and Council, together with Sue Thorn and her colleagues in Bristol, to monitor our position, review our strategy and our priorities, and ensure we keep our overheads to a minimum. The continued financial success of both BioScientifica and the Society's journals will be critical.

Regarding the latter, open access publishing and the establishment of institutional depositories both pose threats. The Society strongly supports the principle of open access, provided rigorous peer-review is maintained, but the challenge remains to develop a financial model to make it a viable option. Sue Thorn is driving this forward and leading a team of representatives from other learned societies to reach a solution.

Aside from the economic gloom, there is much to do and plenty of scope for development - onward and upward are our goals! One of my priorities is to enhance the opportunities we provide for scientists and clinicians in training, and to engage them more in the processes that shape our activities, through both committee membership and direct feedback. I am anxious to ensure that the Society provides the best possible forum for scientific debate, education and professional development for our younger members and also the opportunity to build professional networks beyond their immediate work group.

I am also interested in fostering our relationships with other societies, both at home and overseas, and in working in partnership with them where there is clear added value. Many are engaged directly or indirectly with endocrinology, and there may be much to be gained for our discipline by working together through, for example, joint meetings or symposia.



Within the UK, the Biosciences Federation (BSF) is currently at the forefront of my mind. As many of you will know, the BSF is currently engaged in merger talks with the Institute of Biology, with a view to forming a Society of Biology. It is envisaged that this new Society will provide a single voice for biology in the UK and will stand alongside the Academy of Medical Sciences, the Institute of Physics, the Royal Society of Chemistry and the Royal Academy of Engineers, all of which have been powerful voices for their respective disciplines for many years. This will be an important development for Biology in the UK. It will also provide the Society with a new avenue for activities such as lobbying government on important issues (e.g. science funding, teaching of STEM subjects), engaging with the public and developing educational material for outreach activities.

There may be clouds on the horizon, but I look forward to my term of office with great enthusiasm. I have a superb team of officers to work with - Paul Stewart, Michael Sheppard and Márta Korbonits - together with the many members who contribute to the Society as trustees, committee members etc. And we are all supported by the first class team in the Bristol office, led by Sue Thorn, who are both highly professional and great fun to work with. I am always interested to hear your thoughts and ideas about the Society, so do please feel free to contact me: j.buckingham@imperial.ac.uk.

JULIA BUCKINGHAM

### **Congratulations**

Members who provided their membership profiles at the Society stand during the recent Society for Endocrinology BES meeting were entered into a draw to receive a £25 book voucher. Congratulations to the winners: Dr Sanjeev Mehta, Miss Tijana Mitic, Dr A Panahloo and Dr N Thorogood.

# Society for Endocrinology Clinical Update 09



# 2-4 November 2009

Renaissance Manchester Hotel, Manchester, UK

Third in the highly successful new series of clinical training events essential for all trainees and new consultants in endocrinology and diabetes.

Over a 3-year period, the programme covers the PMETB national curriculum in endocrinology and diabetes and is now regarded as the UK's premier clinical training event. Moreover, the meeting also provides an excellent forum for networking with peers and established endocrinologists.

Didactic lectures and interactive workshops that include case-based studies will cover a wide range of topics; provisionally these are:

Disorders of the hypothalamus and pituitary

**Disorders of the pituitary** 

Disorders of the thyroid gland

Disorders of the adrenal glands

**Disorders of the gonads** 

Disorders of parathyroid glands, calcium, metabolism and bone

DEADLINE: 1 October 2009 - early bird online registration

In association with the Clinical Endocrinology Trust

For further information please visit

www.endocrinology.org/meetings/2009/clinicalupdate2009/index.html



# Rising to the challenge: Meeting your needs: your new General Secretary



It is a great personal honour to be asked to take on a senior role within the Society for Endocrinology - our national professional body.

My own involvement with the Society began in 1987, when I joined as a Clinical Research Fellow. It has been fascinating to see how the Society has grown from strength to strength over the last 20 years, largely through effective

management of our evolving strategic plans.

An outstanding office staff led by Sue Thorn, and prudent financial management, have enabled the Society to support innovative meetings, educational programmes, grants, a vibrant publication portfolio and provision of a voice for endocrinology. So, given this flourishing background, what challenges face us? What can any 'new kid on the block' achieve?

We are likely to encounter some storms ahead. First, all not-for-profit organisations like the Society have suffered as a result of the 'credit crunch', and this will require a renewed look at our strategic priorities. Some of our aspirations may now have to be put on hold. Prioritising these will require input from the membership through our robust committee structures. Whilst curtailing expenditure, we must look harder to secure new revenue opportunities. Here we are well placed, with BioScientifica leading the way.

Secondly, the publication landscape is changing, with the move to instant access publications. UK libraries are emptying as scientists demand up to date information at their desktops. This brings threats, but also new opportunities for our publications.

Thirdly, the Society is here first and foremost for its membership. Although membership is at an all-time high, there are real threats to our discipline. Increasingly, the boundaries of endocrinology have become 'blurred' scientifically with other areas such as cell signalling, cancer biology, neuroscience, systems biology and metabolomics. Likewise, the future of clinical endocrinology is threatened by changes in professional training and working practices, while it must evolve to take on new challenges such as obesity and diabetes, nutrition and exercise, and ageing. The reality is that endocrinology is embedded in most basic and clinical arenas and outreach is required to ensure we continue to succeed. This must extend not only to other biomedical disciplines, but also to national and international endocrine bodies, ensuring that UK endocrinologists can continue to have an impact at a global level.

Finally, any 'new kid on the block' can achieve very little in isolation. The Society's outstanding office staff and hard-working committees provide a team structure, which extends to leadership. Here I relish the prospect of working closely with Julia Buckingham and Sue Thorn and her team in the years to come. Challenging but exciting times are ahead!

# your new Programme Secretary

As I step into the shoes of Programme Secretary, I am delighted at the success of the 2009 Society BES meeting in Harrogate. It attracted 988 delegates, 6.8% up from last year, and the talks were well attended throughout. Feedback indicates that the programme struck just the right balance between clinical, basic and translational topics.



The Society is very grateful to the Programme Committee, and especially to David Ray (retiring Programme Secretary) and Steve Ball (Programme Advisor) for putting together such a successful meeting. I hope I can continue the good work next year, helped by Waljit Dhillo as Programme Advisor.

The last 3 years have seen major changes under David's guidance. These greatly improved the quality and variety of Society conferences and training events. They included the demise of the November London-based meeting, the establishment of the Clinical Update series and the Autumn Endocrine Retreat, rebranding of the nurse training course as the National Endocrine Nursing Conference, and launching the regional Clinical Cases meetings.

The extremely positive feedback from delegates indicates that the Society is building a reputation for providing first class training and conference opportunities that cater for all members.

It was the large number of translational symposia at the Harrogate meeting that overcame any bias towards either clinical or basic endocrinology, as the audience enjoyed development of topics from the molecular basis to the clinical therapeutic stage. The clinical and basic science prizes for young endocrinologists provided excellent opportunities to hear the work of our top young colleagues.

Attendance of the meeting by our more junior members was boosted by the Society's conference grant scheme, which fully covered their costs. In addition, more than 40 free places were awarded to trainee endocrinologists (science, clinical or nurse) who are not (yet) formally committed to endocrinology. We hope to continue this support for future meetings, to allow upcoming cohorts of trainees to discover more about endocrinology and the exciting opportunities that it can offer.

Planning is well underway for the next conference, on 15-19 March 2010 in Manchester. We rely heavily on members' suggestions for topics and speakers which they believe are upcoming and engaging. You can submit suggestions via www.endocrinology.org/meetings; these can take the form of a single speaker or topic, or a full plan for a symposium!

The Society was privileged to have such an outstanding Programme Secretary in David Ray. Now I aim to develop the innovative structures he set up, to provide entertaining, educational fora for the Society's UK and international members to meet and enjoy endocrinology. I look forward to welcoming you all to Manchester next year!

PAUL STEWART

**MÁRTA KORBONITS** 



# And a fond farewell...

It has been a huge pleasure and a privilege to be Chairman of the Society for Endocrinology over the last 3 years, and to witness and be part of so many changes that have occurred during this time.

One of our main drives has been to improve support for endocrinologists. The grants programme has been very effective, having awarded £230 000 in the 2008-2009 financial year (up to the time of writing). Small grants have been given to 28 different groups since their establishment, and these will have helped launch young endocrine research workers at the beginning of their careers. We have unfortunately had more applicants than there have been grants available, but this competition is the reality of the world. I am grateful to the Science Committee who have overseen this whole project. We have also given out summer studentships (26 in 2008); these, together with the student essay competition (which received 53 entries this year), aim to encourage young people into endocrine science or medicine.

Another goal has been to set up mechanisms to give young academics access to knowledge and support at the beginning of their careers. Steve O'Rahilly has been incredibly helpful here. We are currently establishing a system whereby people will be able to turn to endocrinologists in major academic centres for advice and guidance in research. Furthermore, the main annual Society BES meeting and the Clinical Update will both provide help and advice for young people wanting to undertake academic endocrinology. Never have the opportunities been so great in the field of academic medicine.

Another way of encouraging young people into endocrinology is the provision of free places at the Society BES meeting. This year, 44 people took this opportunity to have their registration fees, accomodation and travel paid by the Society, and so obtained a taste of academic and clinical endocrine science.

The last few years have seen the Society's meetings change considerably. David Ray, our outgoing Programme Secretary, has been incredibly diligent and listened carefully to our members. The Society BES meetings have got steadily better over the years, and this year's was particularly successful, with a mix of workshops, clinical expert sessions, debates and symposia in both basic and clinical science. There was a very high level of satisfaction and our visitors from abroad also seemed to be impressed.

The Clinical Update is about to enter its third year and it too has flourished, providing the educational needs in endocrinology for 200 trainees each year. The curriculum-based syllabus is ongoing, with leaders in each field; this seems to have gone down well.

The mid-term review of our objectives highlighted the importance of engaging the public and media in endocrinology. This included helping to educate the public about endocrine conditions, providing access to patient information about different conditions, and making sure that the media represent and publicise endocrinology as

accurately as possible. This initiative has just been set up under the chairmanship of Ashley Grossman, but already is on its way to success, with huge numbers of ideas at the



first Public Engagement Committee meeting.

Our journals continue to thrive, with rising impact factors for both Endocrine-Related Cancer and Clinical Endocrinology.

So the Society is going from strength to strength and, despite some care that we will obviously have to exhibit in the current economic climate, there seems to be a wealth of both ideas and enthusiasm to carry endocrinology into the future.

IOHN WASS

### **CALL FOR MEDAL NOMINATIONS**

The Society awards several medals annually, in recognition of outstanding contributions to endocrinology. All members are invited to make nominations for the 2011 awards. Nomination forms can be obtained at www.endocrinology.org/about/ medals.html or from christine.davis@endocrinology.org. Please return them by 31 July 2009.

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 S O'Rahilly, M Thorner, AS McNeilly, S Lamberts, JK Findlay, R Kahn, W Vale and SR Bloom.

The Society Medal is awarded to an endocrinologist working in the UK, in recognition of outstanding studies. It has previously been awarded to W Arlt, A Hattersley, HOD Critchley, BR Walker, VKK Chatterjee, JMC Connell, R Eastell and PJ Lowry.

The other medals are intended to promote links between the UK and other areas of the globe. The European Medal, presented to an endocrinologist in mainland Europe, has been awarded in the past to B Allolio, W Wiersinga, N Skakkebaek, AM Colao, C Strasburger, A Maggi, K Oberg and E Ghigo.

The Hoffenberg International Medal (formerly known as the Asia & Oceania Medal and the International Medal) is awarded to an endocrinologist from outside the UK, to promote international collaboration. Previous recipients include T Yoshimura, M Kawata, K Ho, K Morohashi, G Risbridger, K Kangawa, P Leedman and MJ Waters.

The Transatlantic Medal is awarded to an endocrinologist working in North America, and has previously been received by S Melmed, L Jameson, R Rosenfeld, B Spiegelman, DJ Mangelsdorf, K Korach, IS Flier and K Parker.



# NEW 'ONE-STOP' ONLINE SERVICE!

O BioSciAlliance

From June, Society members will be amongst the first to access a new website, providing a single gateway to exciting and innovative services, including tools to encourage communication and collaboration, as well as more convenient payment services.

The BioSciAlliance website (www.bioscialliance.org) will offer the members of all the associated societies a range of benefits, including:

- automatic renewal of membership and memberrate journal subscriptions through continuous credit card authorisation
- online application for membership of other societies, where permitted
- a broad search facility to locate collaborators and other contacts
- access to all BioScientifica abstract and registration systems, with alerting when they open
- a single interface to update all societies' membership details (e.g. address changes or interests)
- ability to view all abstracts submitted via BioScientifica, and to send colleagues links to abstracts by email

part, so the benefits will increase, as members who belong to more than one society will have the convenience of managing all their details (e.g. contact and membership details) through a single interface.

CPD-tracking for BioScientifica conferences the facility to select how much information can be seen by other societies' members and/or the public (e.g. interests, abstract details) The website will be offered to all clients of the BioScientifica Secretariat service. As more societies take



Welcome to BioSciAlliance - a gateway to a huge range of services

BioSciAlliance will enable members to build their own personal profiles, and share these with colleagues and friends through a simple web address. By default, the only information visible in this profile will be the member's name and interests. You can, however, choose to add your photograph, a personal statement and references to publications hosted on the Endocrine Abstracts website.

Within the website, members will be able to search the membership lists of all societies of which they are a member, to find colleagues based upon their geographical location, interests or areas of research.

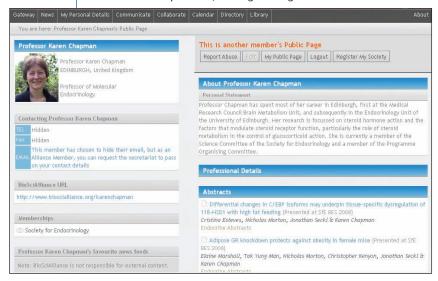
BioSciAlliance will offer members the convenience of continuous credit card authorisation for membership and journal subscriptions, and the assurance that their subscriptions will be automatically paid during the renewal period. This will be particularly useful for members who have been unable to use direct debit because they pay in euros or dollars.

This gateway will provide a breadth of useful

information at a single location. For instance, it will provide access to all BioScientifica abstract and registration systems with opening and closing deadline alerts. These include such events as the Society for Endocrinology BES meetings, European Congresses of Endocrinology and the EMBO Beta Cell Differentiation and Regeneration Workshop. The gateway will also act as a route to view and manage membership subscriptions and to access journal content.

It will also include a calendar service, to allow members to browse and search the BioScientifica World Calendar of Events, and a news service, presenting small articles on a range of biomedical specialties. There will be information about specific organisations, grants and other items that may be interesting and useful.

A sample customised profile page from BioSciAlliance





# Empowering the people

One of the Society's main aims is 'to educate and inform the public on all aspects of endocrinology'. The Society's charitable remit is education, and therefore we have a responsibility to educate the general public and our members alike about endocrinology.

Recent changes to the Charity Commission guidelines have emphasised this issue, so it is more important than ever for us to actively engage with the public through a variety of channels.

But public engagement with science and medicine provides many more benefits for the Society, and indeed for society as a whole, than simply fulfilling Charity Commission guidelines. This is best summarised by a recent Government-led initiative entitled Science and Society, which aims 'to create a scientifically aware society that understands its value and is able to debate scientific developments'.

The rationale behind this is the importance to society as a whole of being excited by science and of understanding its value to our social and economic wellbeing. This is key in maintaining a scientific knowledgebase in the UK, and ensuring that we have a well-qualified scientific workforce both now and in the future.

This initiative is especially significant considering current advances in medicine and science. It is important that the public can understand and evaluate these developments and their impact on people's health and everyday lives. With these technological advances comes responsibility, and the general public must be able to comprehend and make decisions on the ethical implications of science to society as a whole.

It is, of course, also crucial that we communicate to children how fascinating science and medicine can be, and so hopefully inspire the next generation of endocrinologists!

Last year, as part of the Society's mid-cycle strategic review, increasing our public engagement activities was identified as a key priority for the next 3 years. In order to oversee our increased activities in this area, the Society decided to establish a Public Engagement Committee, which first met in February 2009. Chaired by Ashley Grossman, the committee comprises 12 members, each of whom oversees a specific area of public engagement.

Through this committee, the Society aims to build on its current activities and to take centre stage in communicating endocrinology to the public. We are already undertaking a wide range of public engagement activities, which are summarised here.

We are always keen to hear from any member who would like to get involved with public engagement. For further information, please contact me at jennie.evans@endocrinology.org.

JENNIE EVANS

### **Public events**

▶ We have recently increased efforts to inform and educate the public about endocrinology by holding a number of events at science festivals around the country. Our aim is to entertain the public, providing them with an opportunity to interact directly with research scientists and clinicians. Last year, we held successful events at the Edinburgh International Science Festival and at the BA Festival of Science, gaining good attendance and media coverage from both events.

In May 2009, we attended Science Oxford, as part of their Sex and Evolution series, where Stephen Franks discussed the role of hormones in shaping our lives. You can view this event via a webcast archive available at www.scienceoxfordlive.com/watch-us. Later this year will see

us at the British Science Festival, in Guildford - one of Europe's largest science festivals. Here we will look at new developments in the treatment and prevention of osteoporosis. Watch our website to find out more about this event!

Behind the scenes, the Society also works closely with the Biosciences Federation (BSF) to promote a co-ordinated approach amongst biological learned societies to science outreach projects. While chemistry, physics and engineering are all strongly represented by their respective organisations, this type of unified approach has been lacking in the bioscience sector, with bioscience consequently missing out on vital exposure and funding. With the anticipated merger between the BSF and the Institute of Biology to form one main body for UK bioscience, we hope that this programme will be taken forward into the new organisation, and will eventually facilitate the Society's involvement in more public events by reducing both financial and time constraints.







# **Patient groups**

► The Society also has an important role to play with endocrine patient groups. These groups carry out fantastic work, providing information and support and bringing a sense of community to patients with a wide range of endocrine conditions.

We are very keen to support them, and see this as a primary aim in fulfilling our charitable remit. To this end, we run a number of projects, and promote interaction

between the groups and the Society and its members.

We offer patient support grants to provide funding for specific projects, such as the development of information leaflets or training opportunities for the groups' volunteers. This scheme always proves very popular, and in the last financial year we provided small grants totalling £20 000 to nine patient groups. We also helped widen the attendance of patient groups at Society events by providing free exhibition stands at the Society BES meeting, Clinical Update and the National Endocrine Nursing Conference. Patient groups value this initiative very highly, as it provides them with a unique opportunity to raise their profiles and to network with medical professionals and inform them of their work.

We also run an annual patient group liaison meeting to promote discussion between the Society and the groups about common issues, where we can more effectively promote the viewpoint of the endocrine community to the wider world.

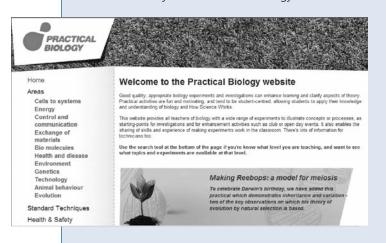


Patient support group meeting at BES 2008

### **Under-18s education**

► The Society has recently begun promoting good teaching in secondary schools and colleges.

In January 2009, we collaborated with several other biological learned societies and educational organisations to construct a day of talks entitled 'Biology in the real



world: bringing the curriculum to life', at the Association for Science Education national conference. This aimed to provide teachers with research updates from scientists on the latest developments from the lab and practical teaching ideas to translate these for the classroom. The symposium was one of the most popular and highly attended events at the conference and we intend to build on its success in future years.

The Society has also provided substantial support to the *Practical Biology* website (www.practicalbiology.org). This website, developed by the Nuffield Curriculum Centre and the BSF, aims to provide secondary school teachers with ideas and information about tried and tested biology experiments that should work in any school laboratory. With its older 'sister' websites, Practical Chemistry and Practical Physics, gaining over 40 000 individual users a month, we hope that *Practical Biology* will become similarly established and provide teachers with an innovative resource to improve the practical skills of school leavers.

### **Public website**

► The major new project for the Society this year will be establishing a public website. It will have a separate web address from the existing Society site, and will be aimed primarily at patients and members of the public.

Through this website, we aim to provide the public with reliable, scientifically accurate information on all areas of endocrinology. We also intend this website to act as a portal for endocrinology, providing links to the best

hormone-related resources currently available on the internet. This is obviously going to be a huge undertaking and, as such, the website will undergo several phases of development to ensure that we cover the breath of endocrinology.

This is an exciting new venture for the Society, and forms an important part of our public engagement strategy over the next couple of years. We hope to bring you more news on this initiative later in 2009.

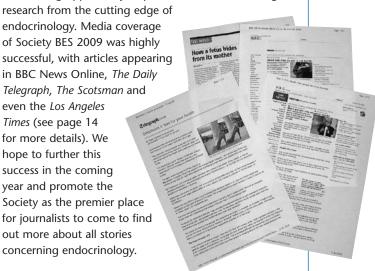
### The media

Our interaction with the media aims to promote knowledge, understanding and awareness of endocrinology. When stories relevant to endocrinology appear in the news, we act as a reference point, putting journalists in contact with experts to give them a background briefing and provide quotes on the topic.

We proactively promote studies published in the Society's journals, notably in Clinical Endocrinology. This involves treading the narrow line between communicating scientific papers in language which is easy to understand, while maintaining accuracy and retaining the paper's core message. We realise the importance of promoting research to the media in a responsible and realistic light, and of not sensationalising the stories in any way. This approach has led to significant success, with research from the Society's journals often featuring prominently in the health sections of both national and international publications.

Our other major annual media event is, of course, the Society BES meeting, which provides us with an outstanding opportunity to publicise new and exciting research from the cutting edge of

endocrinology. Media coverage of Society BES 2009 was highly successful, with articles appearing in BBC News Online, The Daily Telegraph, The Scotsman and even the Los Angeles Times (see page 14 for more details). We hope to further this success in the coming year and promote the Society as the premier place



#### **OBITUARY**

# MICHAEL REED

Michael Reed came to the Department of Chemical Pathology at St Mary's from Hammersmith Hospital in the late 1970s. He joined the group examining the role of hormones in endocrine-dependent cancers. This field was new to him, but he rapidly meshed with the group and contributed to studies of oestrogen metabolism in endometrial cancer patients. This work began an interest in cancer endocrinology that developed throughout his career.

He was very productive, publishing an impressive list of high quality papers. Characteristically, he planned his work carefully, but perhaps his



particular gift was his ability not just to devise informative experiments, but also to bring them to a fruitful conclusion. This was evident in his innovative and highly successful studies of enzyme inhibitors as therapeutic tools for the treatment of breast cancer.

He was a very well liked member of staff. On a personal level, my appreciation of Mike was as a completely straightforward person, who was always very supportive and very loyal, both to me and to the department. I am deeply saddened by his untimely

**VIVIAN JAMES** 

### Clinical Excellence Awards 2010

Clinical Excellence awards are given to recognise and reward the exceptional contribution of NHS consultants, over and above that normally expected in a job, to the values and goals of the NHS and to patient care. The Society has successfully supported members' nominations in previous years, and we are pleased to offer this service again for the 2010 round. Please contact abhi.vora@endocrinology.org as soon as possible if you wish the Society to support your nomination. All applications for Society support must be submitted by Friday 11 September.

Members in England should visit www.advisorybodies.doh.gov.uk/ accea/index.htm

Scotland: www.sacda.scot.nhs.uk/ guide%20&%20forms/main.htm

Wales: www.wales.nhs.uk/ page.cfm?pid=3928

Northern Ireland: www.dhsspsni.gov.uk/ index/hss/ clinical\_excellence\_ awards scheme.htm.



# BES 2009 - Hooray for Harrogate!

Society for Endocrinology BES 2009 met with success from everyone's perspective. With yet another steady increase in attendees, to 988 people, it was a busy meeting. Here's just a selection of the news.

### Prize winners

Many awards were presented for outstanding work, with 24 prizes going to young endocrinologists. The recipients of £2,500 prizes for the Young Endocrinologist Prize Lectures were G Papacleovoulou (Edinburgh) with 'An anti-inflammatory role for interleukin-4 in human ovarian surface epithelium', and T Barber (Oxford) with 'In search of the genetic basis of polycystic ovary syndrome and its metabolic consquences'.

Other winners for individual categories in the poster section each received £100, as follows: Growth and development - A David (London) and I Grigorieva (Oxford); Cytokines and growth factors - K Forbes (Manchester); Pituitary - E Gayton (Cambridge) and A Giles (Manchester); Bone - B Gharibi (Cardiff); Steroids -K Hughes (Edinburgh); Reproduction - J Joharatnam (London) and J Waung (Harlow); Thyroid - A Mitchell (Newcastle upon Tyne) and E Vasilopoulou (Birmingham); Endocrine tumours - P Newey (Oxford); Diabetes - S Rice (Cardiff) and J Logie (Edinburgh); Clinical practice - A Kalhan (Cardiff).



G Papacleovoulou receivina her award from Professor John Wass



T Barber receiving his award from Professor John Wass



(L-R) John Wass, Janis Hickey and Phil Willis MP

## Select Committee Chair visits Society BES

Phil Willis MP, the Chair of the House of Commons Innovation, Universities, Science and Skills Select Committee, paid an early visit to the Society for Endocrinology BES meeting in Harrogate.

Mr Willis met with Janis Hickey from the British Thyroid Foundation (BTF) to discuss the BTF's recent campaign for a review of present prescribing policies for repeat prescriptions. He also met with the Society's Chair Professor John Wass and our Chief Executive Sue Thorn, to discuss some of the Society's latest projects.

### **Medallists**

The most prestigious Medal awarded on an annual basis and highest accolade bestowed by the Society is the Dale Medal, this year justly awarded to Michael Thorner. Special recognition also went with the awarding of the Jubilee Medal to John Wass, for his energy and diligence as Society Chairman and General Secretary since 2003. The Society for Endocrinology Medal is awarded on an annual basis to a British endocrinologist who has demonstrated consistently outstanding work, this year the medal was awarded to Andrew Hattersley. The European Medal was this year awarded to Wilmar Wiersinga and the International Medal to Mitsuhiro Kawata.











# The youthful view

Society for Endocrinology BES 2009 saw the second Young Endocrinologists' Quiz Night. This lighthearted evening enabled younger members to mingle with one other and with senior endocrinologists, and unwind after the first day of the conference.

This year's theme for the guiz was 'endocrinology', and quiz rounds ranged from 'endocrine-related Nobel laureates' to 'endocrine diseases in the famous'. Teams were captained by esteemed and senior members of the Society, including John Wass, Melissa Westwood, Alan McNeilly and Márta Kobonits, to mention but a few. The quizmasters were members of the Young Endocrinologists Steering Group.

'Paddy's Team' (captained by Ruth Andrew) took an early lead, which they maintained throughout, emerging as clear winners at the end of the evening. Their prize was celebratory champagne for their efforts and superior endocrine knowledge! John Wass' team escaped the wooden spoon this year, instead achieving a respectable centre board placement. Instead, Rob Fowkes' team 'Winner, Winner Chicken Dinner' brought up the rear, despite achieving top marks in the final round on basic endocrinology.

The guiz was a really fun evening enjoyed by everyone who took part. We look forward to Ruth Andrew defending her title next year.

The Young Endocrinologists' Symposium on Scientific Communication was a great success and very well attended. The session enabled us to gain insights from Julian Davis, past Editor-in-Chief of Journal of Endocrinology, on how to publish your work. Gareth Lavery and Tony Michael showed us how to make the most of conference presentation opportunities, providing useful information on the dos and don'ts regarding posters and oral communications respectively. Steve Hiller closed the session with tips on scientific networking, particularly about networking through publications, but also providing useful ideas for everyone to put into practice for the remainder of the conference. KIM IONAS



## **Revisit SfE BES 2009** on your iPod!

For the first time, the Society has been able to make recordings of Medal Lectures available on the web. The following lectures are available at https://www.bioscientifica.info/sfe/sfemembers/ meetings/2009/sfebes2009/sfebes2009.aspx

#### **Jubilee Medal Lecture**

Per ardua ad pituita – more than just phlegm J Wass (Oxford)

#### **Dale Medal Lecture**

Healthspan: how far can it be extended into aging? M Thorner (Charlottesville, USA)

#### **Transatlantic Medal Lecture**

Estrogen action: two decades of humbling predictions L Jameson (Chicago, USA)

#### **European Medal Lecture**

Early stages of thyroid autoimmunity W Wiersinga (Amsterdam, The Netherlands)

#### International Medal Lecture

Hormones and behaviour: new insights from GFP molecular imaging and neuroanatomy M Kawata (Kyoto, Japan)

#### **Society for Endocrinology Medal Lecture**

New genes, new diabetes and new treatments A Hattersley (Exeter)

#### **Clinical Endocrinology Trust Lecture**

The metabolic consequences of pituitary insufficiency D Johnston (London)

Members will be required to log-in to the members' area of the website to access the lectures. Members who do not have log-in credentials should obtain them by following the instructions https://www.bioscientifica.info/ sfe/sfemembers/login.aspx?action=nopassword



# **BES 2009 -**Hooray for Harrogate!

# Making the headlines

"Hormone 'to restart reproduction'" (BBC NEWS ONLINE)

"'Fat gene' can damage fertility" (BBC NEWS ONLINE)

"A bowl of porridge in the morning 'will make you feel fuller for longer'" (THE DAILY TELEGRAPH)

"Short-term prescriptions attacked" (BBC NEWS ONLINE)

These are just a few of the headlines generated by research presented at this year's Society for Endocrinology BES meeting in Harrogate.

Research by Dr Waljit Dhillo (Imperial College London) on kisspeptin and how the hormone could be a potential new treatment for infertility was also the subject of interviews on BBC Radio 4's Women's Hour and BBC Radio York. Meanwhile, Dr Tom Barber (University of Oxford) talked to BBC Radio Oxford about his team's new research on polycystic ovary syndrome, which shows it is genetically linked with obesity (via the FTO gene). And the importance of getting one's daily oats stemmed from research by Dr Reza Norouzy (King's College London) on how a single low GI meal leads to an increase in gut hormone levels which suppresses appetite.

Meanwhile, BBC News Online reported a survey presented by the British Thyroid Foundation which raised concerns over 28-day prescriptions for thyroid patients.

Other stories covered Dr Karen Spencer (University of Glasgow) and her study on how the early effects of stress last for life in birds, and the call by Dr Kristien Boelaert (University of Birmingham) and colleagues for a lower threshold for thyroid function tests in older patients.

The Society was very pleased with the extensive media coverage received from the conference and would like to thank all the speakers involved for their time and effort.



# Promoting patient support

The Turner Syndrome Support Society (TSSS) was very pleased to have a stand once again at this year's Society for Endocrinology BES conference. This is a special year for us, as it's our 10th anniversary.

We were especially grateful for the opportunity to have two excellent 'Meet the expert' sessions relating to Turner syndrome (TS) on the conference programme. These were generously sponsored by Ipsen Ltd, and led by Ms Melanie Davies and Dr Gerry Conway. Both were extremely interesting and different in their approach, the first being more information-based, and the second a discussion session looking at a number of case histories.

We always benefit greatly from being able to talk to professionals who deal with TS in the informal surroundings of the exhibition, where we are able to gather and share information and gauge opinions. We were glad that so many people showed interest in our main goal this year: trying to improving rates of diagnosis and find the estimated 10 000 women with TS in the UK who are currently undiagnosed and therefore untreated.

As many reading this article will be aware, this lack of diagnosis and treatment may have profound physical and psychological effects. Even now, women still contact the Society, or arrive at clinic for the first time, unaware of their needs, and there are still many more such women to be found.

It is also good to have the chance to record our thanks to all the medical professionals who have given their time and expertise to the TSSS during the last 10 years. The girls, women and families affected by TS sometimes find it difficult to talk about the condition. The way in which so many experts have passed on sometimes complex medical information with care and compassion within TSSS events has allowed them to grow in their understanding of the condition. It has also given the Society the information and help which it needed to grow and provide much needed further support.

It is not overstating the case that we in the TSSS have seen lives changed by this. Many of the professionals attending events have told us that they have benefited from their contact with the Society, and the chance to hear the questions and views expressed during talks and workshops.

Until you have experience of this two-way relationship, the way in which medical professionals and a support society can work together for the benefit of the patients is not generally appreciated. It is something of which we can all be proud. Here's to the next 10 years!

ARLENE SMYTH, EXECUTIVE OFFICER, TSSS

Please note the new details for the TSSS: 13 Simpson Court, 11 South Avenue, Clydebank Business Park, Clydebank G81 2NR, UK (Tel: 0141-9528006; Helpline: 0845-2307520; Email: turner.syndrome@tss.org.uk; Web: www.tss.org.uk)









# **Visiting Professor**

It was a pleasure to welcome Professor Mark Molitch to Harrogate to give the Clinical Endocrinology Trust Visiting Professor Lecture 2009.

I chair the Clinical Endocrinology Trust, which uses profits from the journal Clinical Endocrinology to support clinical endocrine education and research through a wide range of initiatives. The Visiting Professorship is one of the annual highlights. The lecture itself is the culmination of a fortnight's tour, by the visitor, of UK clinical endocrinology departments - so a degree of stamina, as well as outstanding scientific credentials, is required.

This year's visitor was Mark Molitch, Professor of Medicine and a member of the Division of Endocrinology, Metabolism and Molecular Medicine at Northwestern University Feinberg School of Medicine, Chicago. His research has focused on the pathogenesis of pituitary tumours and their treatment, and he has been involved in many ground-breaking trials of agents such as bromocriptine, cabergoline and octreotide. He has also made major contributions to the prevention and treatment of diabetes and is currently an editor of Pituitary and a member of the council of the Endocrine Society.

In his lecture entitled 'What have we learned about the management of patients with prolactinomas?', Professor Molitch gave a masterly summary of the best way to diagnose and treat these common tumours, based on his extensive experience.

Medical treatment with dopamine agonists is the most effective treatment in the majority of patients. However, problems requiring additional surgery or radiotherapy may arise in cases with giant or malignant prolactinomas or with resistance to dopamine agonists. He reviewed the outcomes after medical treatment, with accumulating studies showing that, after drug treatment for 1-7 years, around 30% of patients with prolactinomas maintain normal prolactin levels once dopamine agonist treatment is withdrawn. He also provided useful guidance on how to institute and monitor such withdrawal.

The most interesting and contentious part of his lecture was the contrast between the European and American attitudes to the risks imposed by dopamine agonists, both with regard to cardiac valve abnormalities and pregnancy.

Readers of The Endocrinologist will be familiar with the unequivocal recommendations of the European Medicines Agency and the Medicines and Healthcare Products Regulatory Agency (MHRA) regarding the potential for dopamine agonists to cause valve fibrosis. The Society for Endocrinology has produced a very useful position statement (www.endocrinology.org/



Mark Molitch

policy/docs/09-02\_Dopamine\_Agonists.pdf) and has recommended that echocardiography is performed within 3-6 months of starting a dopamine agonist and thereafter at 6- to 12-monthly intervals, while pointing to the need for trials to underpin these guidelines.

Reviewing the available evidence, Professor Molitch pointed to the lack of any consensus on the risk posed by dopamine agonists at the doses normally used for prolactinoma treatment, with only one study so far showing any major problem.

His personal practice is not to perform routine echocardiography in those prolactinoma patients who are treated with less than 2mg cabergoline per week. Above this dose he performs a baseline echocardiogram and then repeats this if the dose of dopamine agonist remains high. He also pointed to the huge numbers of echocardiograms that will need to be done if the current quidance is followed to the letter; the cost-benefit ratio of this remains unknown.

Professor Molitch also questioned the current guidance which states that cabergoline should be withdrawn a month before conception, pointing out that hyperprolactinaemia may recur within that month, thus defeating the objective of treatment. Data so far are reassuring with regard to pregnancies that have occurred during cabergoline treatment.

In summary, this was an excellent lecture, in particular putting the concerns about dopamine agonist treatment into perspective. Clinical endocrinologists need to heed his advice that we should stand up when we believe regulatory agencies may have over-interpreted data. In the case of prolactinoma management, we clearly need better information on which to base our treatment decisions.

**TONY WEETMAN** 



# **COMPLICATIONS OF CANCER** THERAPY: A HIDDEN EPIDEMIC?

While survival rates from cancer are on the increase, so is the need to monitor the long-term endocrine consequences of treatment. And that's the basis behind the Society's proposed new Special Interest Group.

► The last 40 years have witnessed one of the great success stories of modern medicine. The evolution of techniques used to diagnose and treat malignant disease that occurs in childhood and adolescence has had a remarkable effect on outcome.

Overall survival has increased from 20-30% during the 1960s to 75% today. This success comes, however, with a considerable cost attached. It is estimated that up to 70% of patients have one or more on-going medical conditions that can be attributed to the treatment they received. The most frequently reported problems, affecting 41%, are disorders of the endocrine system, including hypothyroidism, malignant thyroid disease and pan-hypopituitarism, while an additional 15% report impaired fertility.

Recognition of the success of treatment and the frequency of long-term complications has provided the impetus for long-term follow-up for this patient cohort, some of whom are now into their 40s. Many centres have long-term follow-up clinics that provide care for those with ongoing problems and appropriate screening for others. Despite this, a recent report from the British Childhood Cancer Survivor Study found that only 35% of childhood cancer survivors were under long-term follow-up.

Several models of care exist, but most clinics include input from paediatric oncologists, nurse specialists, paediatric and, increasingly, adult endocrinologists. Input is also required from other specialties, including gynaecology, neurosurgery, neurology, cardiology and respiratory medicine, who may choose to attend the clinic or provide a link for referral.

As the age of the cohort increases there is a requirement for general physicians to manage hypertension, lipid abnormalities, cardiovascular disease and heart failure, as well as to identify unexpected conditions which may relate to the previous treatment.

Much has been learned from the long-term follow-up of patients treated for cancer during childhood in the last 40 years. Now, the success of the paediatric oncologists is being repeated with adults with similar long-term consequences. The numbers of patients experiencing treatment-related complications is potentially enormous. Aapproximately 2 million adults in the UK, have been successfully treated for cancer. The subsequent morbidity is not known, but extrapolation suggests it is considerable.

The Cancer Reform Strategy, published in 2007, announced the National Cancer Survivorship Initiative (NCSI), in conjunction with Macmillan Cancer Support. The NCSI aims to determine the optimum resources required following cancer treatment, to inform the Department of Health and Commissioners of those needs.

This is an exciting time, which presents a great opportunity to improve the long-term health of those being treated for cancer. The Society has recognised that endocrinologists have a major role to play. There are opportunities to develop services in any centre where patients receive treatment for malignant disease. The scale of the problem is such that primary care will almost certainly need to take the lead, but endocrinologists should be informing the process, defining the protocols for follow-up of patients at risk of developing endocrinopathy.

A Clinical Management Workshop was held at the Society BES Meeting this year on this topic. After the workshop, a proposal to set up a Special Interest Group (SIG) for the Long-Term Consequences of Cancer Therapy was discussed. This group would be convened by myself (Andy Toogood, Birmingham) and Steve Ball (Newcastle). To keep updated on the formation of the SIG, please visit the Society's SIG web page: http://www.endocrinology.org/sig/.

ANDY TOOGOOD, (ANDREW.TOOGOOD@UHB.NHS.UK)



# Journal of Endocrinology 70th anniversary dinner

The Society held a dinner at the Royal Society in February to celebrate the 70th anniversary of Journal of Endocrinology and to recognise the contribution of the editors, past and present, to its success. The photo shows (L-R) Gavin Vinson (Editor 1984-1992), the current Editor-in-Chief, Adrian Clark, Steve Hillier (2000-2004) and Julian Davis (2004-2007), pictured with the portrait of Sir Henry Dale FRS, one of the journal's founders.



# BSF SUPPORTS OPEN ACCESS **GUIDELINES**

- ► The Biosciences Federation (BSF) has welcomed recommendations made by the recent Universities UK report on open access publishing. This report lays out quidelines to make it easier for researchers to access funds to satisfy funding bodies' open access mandates. The report recommends that:
- higher education institutions should each set up a dedicated budget to pay author-side open access publication charges
- funding bodies should clarify how they will provide support for researchers to meet their open access policies, especially regarding the payment of open access publishing fees

The guidelines also note that authors should make use of resources such as the BSF's Authors' guide to UK funders' policies on open access.

An earlier report by the BSF identified that, although funders were increasingly insistent on published research being open access, researchers experienced considerable difficulty in accessing the appropriate funds to achieve this.

This new report, produced by Universities UK and the Research Information Network, brought together representatives from relevant stakeholders including funding bodies, publishers, institutional administrators and the BSF to produce guidelines for implementing feepaid open access sustainably.

Dr Richard Dyer OBE, Chief Executive of the BSF commented that, 'The BSF has been aware for some time that the main stumbling block to effectively implementing open access policies is the need for a sustainable model of funding. This report represents an important step towards achieving this. If these guidelines are implemented, we will have a joined-up approach that will enable authors to satisfy funding bodies' requirements without relying on unfunded mandates. This can only be good for science, researchers and the learned societies to which they belong. The learned societies are important because of the huge financial and professional support they provide to the scientific community in the UK and beyond.'

# Vitamin D supplies

In the past, vitamin D deficiency was judged to be present when the plasma concentrations were low enough to lead to osteomalacia or rickets (i.e. 25hydroxyvitamin D (250HD) <25nmol/l or 10ng/ml). Recent reports have suggested that, to preserve optimum health, it may be necessary for plasma 25OHD to exceed 75nmol/l (30ng/ml).

In order to achieve higher circulating 25OHD, it has become common practice to prescribe stronger calciferol preparations, usually ergocalciferol (vitamin D2) 1.25mg (50 000IU). A single 50 000IU tablet, once per month, was often all that was necessary to maintain satisfactory vitamin D status.

However, in spring 2008, it became increasingly difficult to obtain supplies of ergocalciferol. This was because of problems obtaining sufficient pure raw materials to generate ergocalciferol that satisfied British pharmaceutical requirements. It has been possible to import alternative ergocalciferol preparations from the USA via IDIS, but this is substantially more expensive, and the quality standards in the USA are not as stringent as those in the UK.

As an alternative, it is possible to obtain colecalciferol (vitamin D3), again via IDIS, but this time from Jenapharm in Germany under the name Dekristol. This is supplied in 20 000IU capsules, and can be given in a dose of two capsules per month in order to achieve a suitable vitamin D status. It may be useful to give a initial higher dose (e.g. two capsules daily for 10 days or two capsules weekly for 6 weeks) to replenish vitamin D stores in severe deficiency.

> PETER L SELBY (PETER.SELBY@MANCHESTER.AC.UK) BILL FRASER (W.D.FRASER@LIV.AC.UK)

# **Biology organisations** agree to unify

Members of the UK's two leading biology organisations, the Institute of Biology (IoB) and the Biosciences Federation, voted overwhelmingly in April to form a single organisation, the Society of Biology. This body would combine the expertise of biology organisations with the professional skills of the IoB and its individual members.

The Government's Chief Scientific Adviser, Professor John Beddington, said, 'I am delighted to hear this news. The life sciences have suffered in the past through fragmentation. The future health and wealth of this nation will depend increasingly on progress made in the biological sciences, and it is excellent that the scientists involved are now all pulling together.'

This development coincides with Lord Drayson's establishment of a team within the Department for Innovation, Universities and Skills to monitor the UK's standing in biotechnology and its applications.

For more information, see www.newbio.info.



# Birmingham

In this issue, we travel to Birmingham as Paul Stewart looks back at 20 years of progress in the heart of the Midlands.



The omens were not good. It was cold, wet and grey and, after a 5-hour train journey, Birmingham New Street was not aesthetically comparable with Waverley station in Edinburgh. I didn't know it at the time, but Lockerbie station's closure - a victim of

Career progression in a new

Pan-Am flight 103 would make the journey back north, just a few days before Christmas, a sad and prolonged affair. But I was here for an interview.

environment, and the fact that Birmingham in the late 1980s was clearly not in the world's top 10 weekendbreak destinations, did not dampen my ardour. The job description for clinical lecturer was impressive. Together, Raymond Hoffenberg and David London had built an endocrine unit of some repute and now, with Michael Sheppard at the helm, supported by Jayne Franklyn and Kevin Docherty, Birmingham could offer unique opportunities in training in molecular endocrinology.

In addition, the huge population of the West Midlands (exceeding the total population of Scotland, let alone Edinburgh) offered unrivalled exposure to pathology! Clinical endocrinology, diabetes and acute medicine were in abundance, and organised through rotations across the city (with Alex Wright/Malcolm Nattrass, Tony Barnett, David Heath, in addition to the Professorial Sheppard-Franklyn-London firms). The track records of previous incumbents and trainees (Peter Bayliss, Dick Clayton, Steve Franks, John Marshall, Diana Wood) were stellar. My difficult task was to fill the shoes of Julian Davis, who had just left for Manchester.

Now, almost 20 years to the day later, many people do chose a weekend break in Birmingham. The city has undergone immense urban reform and redevelopment. Endocrinology too has evolved. Sadly Sir Raymond Hoffenberg has passed away. David London joked about moving from Professor of Endocrinology to a registrar post - albeit of the Royal College of Physicians! Michael Sheppard has recently moved on to be Pro-Vice Chancellor of the University of Birmingham. But endocrinology still retains the same aims it had in 1989: excellence in the clinical care and management of endocrine patients, training the next generation of endocrinologists, education platforms for medical students and scientists, and (of great importance) worldleading research.

Here endocrinology and metabolism now form a major part of the research strategy of the newly formed College of Medical and Dental Sciences at the University of Birmingham, with academic excellence evident through the recent RAE2008 exercise (UoA4) where over 65% of the research outputs were assigned top international or world-leading scores. Major research subthemes include endocrine cancers (adrenal, thyroid, pituitary), steroid and thyroid hormone action and metabolism (notably the 11β-hydroxysteroid dehydrogenase enzymes), obesity, metabolic bone disease, growth factors and genetics.

A key aim here is the multidisciplinary approach to research, uniting both clinical and basic researchers. Martin Hewison, who took Kevin Docherty's Chair, recently left the university to take up a full professorship at Cedars Sinai in Los Angeles. Chris McCabe, Ann Logan, Margaret Eggo and Elizabeth Walker now offer leadership in basic science and technology-driven research.

Clinical university leadership is provided by myself and Jayne Franklyn (Head of School of Clinical and Experimental Medicine), working closely alongside NHS consultant colleagues - John Ayuk, Neil Gittoes and Andy Toogood - to oversee clinical service delivery. This is now delivered through 15 multidisciplinary clinics that cater for over 10 000 consultations per year - providing one of





the largest endocrine centres in Europe. Clinics led by endocrine specialist nurses are operational in many areas, notably growth, transitional, pituitary and genetics. Clinical laboratory excellence is overseen by Penny Clark, consultant clinical biochemist in our regional endocrine assays laboratory.

Training tomorrow's endocrinologists and academics is an essential part of our strategy. Many regional SpRs rotate through the multidisciplinary clinics on offer to gain their CCTs, and we supervise and mentor a steady stream of externally funded clinical training fellows. In addition, the university has preserved its vibrant clinical lectureship programme that, in turn, has trained numerous academic consultants in the last 10 years, most recently Mark Cooper (GSK Senior Fellow), Jeremy Tomlinson and Nils Krone (who both hold Wellcome Trust Clinician Scientist Fellowships) and Kristien Boelaert (who has been awarded an MRC Clinician Scientist Award). Wiebke Arlt who joined us from Germany as an MRC Senior Clinical Fellow, has been promoted to Chair and will move to an HEFCE-funded post this summer; she is pushing ahead with her exciting adrenal and DHEA research programme.

Endocrinology is taught in years 1 and 2 of the new Birmingham MBChB curriculum. There are also specific endocrinology modules in our successful BMedSci degree courses, which in turn generate some outstanding PhD applicants for our broad portfolio of postgraduate research posts (MRC, Wellcome, BBSRC, EU FP7).

The group works hard to foster both internal and external collaborations. Internally endocrinology is increasingly integrated with diabetes and metabolic medicine, particularly on the Queen Elizabeth Hospital site (Steve Gough, Parth Nathendran) and at Birmingham Heartlands Hospital (Tony Barnett, Martin Stevens, Shahrad Taheri). Tarekegn Hiwot is a recent consultant appointment to oversee our large inherited metabolic disease patient cohort.

Close collaboration through joint clinics and research projects with our paediatric colleagues (Tim Barrett, Jeremy Kirk, Nick Shaw, Wolfgang Hogler) provides an 'ageless' approach to endocrinology in Birmingham, with excellent transitional care. Reproductive endocrinology is well established in joint clinics with colleagues from the Birmingham Women's Hospital (Masoud Afnan). Academically, this is underpinned by Mark Kilby, and a recent Health Foundation Clinician Scientist Award to Shiao Chan.

Our weekly Tuesday evening endocrine meetings bring in fellow endocrinologists from across the city and region to discuss cases, new advances and mutually agree investigation protocols and clinical guidelines.

Externally, endocrinologists in Birmingham put in endless hours of work for not-for-profit organisations, furthering our specialty nationally (Society for Endocrinology, Royal College of Physicians, MRC, Wellcome, British Heart Foundation) and internationally (European Society of Endocrinology, US Endocrine Society, International Society for Endocrinology).

Like the city itself, the infrastructure underpinning endocrinology in Birmingham has been significantly



Clinical service base University Hospital Birmingham

revitalised. Clinically, the endocrine unit will move into a new £580m hospital on the Queen Elizabeth Hospital site in 2010. Endocrinologists are one of the major users of the prestigious Wellcome Trust Clinical Research Facility within the hospital. Immediately adjacent are outstanding university facilities: state of the art laboratory accommodation, animal facilities, technology platforms and clinical trials units. This focus of basic, translational and clinical research activity on a single site of excellence remains a major strength of endocrinology in Birmingham.

So, although the original omens may have been poor, the outcome was optimal. As it did 20 years ago, Birmingham truly offers an outstanding environment for endocrinology, be it clinical practice, research or education. We continue to evolve.

If you are interested to hear more about endocrinology across the city, please feel free to contact either myself (p.m.stewart@bham.ac.uk), our clinical service lead Andy Toogood (andrew.toogood@uhb.nhs.uk) or our research lead Wiebke Arlt (w.arlt@bham.ac.uk).

PAUL M STEWART

On our tour of the UK, we're looking to spread the word about the latest endocrine research and the pioneers that made it possible. Your ideas and contributions would be warmly welcomed. Please contactinfo@endocrinology.org.

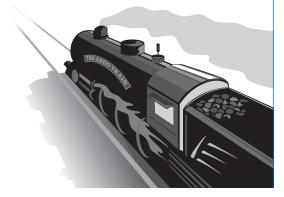




Figure 1.

from the

The critical

path within UK

health research.

Cooksey review

# Money makes the world go round

Ever wish you could spend less time looking for funding and more time on endocrinology? Hopefully these suggestions will help.

# **New opportunities**

UK research funding has recently been reorganised to ensure that there are opportunities for all researchers in basic science, translational medicine and clinical trials.

The Cooksey Review (Cooksey D 2006 A review of UK health research funding; www.hm-treasury.gov.uk/d/ pbr06\_cooksey\_final\_report\_636.pdf) identified two gaps in translational medicine (see Fig. 1). The first gap was between preclinical studies and evidence of clinical efficacy. The MRC Experimental Medicine and the Efficacy and Mechanism Evaluation (EME) Programmes were set up to help bridge this gap. The aim is to secure the progress of new technologies and interventions through their early clinical trials and onto larger, later clinical trials.

The EME Programme was created as part of the new National Institute for Health Research (NIHR) and MRC co-ordinated strategy for clinical trials and was launched in 2008. It is funded by the MRC and managed by the NIHR as the lead organisation for clinical trials and evaluation.

The remit of the EME Programme includes clinical trials and evaluative studies, in patients, which evaluate

Critical Path within UK health research

the clinical efficacy of interventions (where proof of concept in humans has already been achieved). They may also add significantly to our understanding of biological or behavioural mechanisms and processes.

The programme budget is expected to be around £15 million per annum in steady state. The EME board is multidisciplinary and meets three times per year. The programme provides an ongoing research opportunity with cut-off dates for submission of applications prior to each board meeting.

This partnership between the MRC and the NIHR has resulted in a managed translational pathway where (in simple terms): MRC Programmes consider whether an intervention can work; the EME Programme considers whether an intervention does work; and the NIHR Health Technology Assessment (HTA) Programme decides whether it is worth doing (i.e. whether it is effective both clinically and in terms of cost).

There is a certain degree of planned overlap between the different funding programmes, to ensure that there are no gaps. In addition, there is the opportunity to 'pullthrough' promising interventions, but also to 'push-back' when necessary.

You can find out more about all the funding programmes mentioned, or apply for funding through the following websites: MRC Experimental Medicine (www.mrc.ac.uk), EME Programme (www.eme.ac.uk) and HTA Programme (www.ncchta.ac.uk).

DANIELLE PREEDY, IAN CREE AND RAJESH THAKKER

Society for Endocrinology

# **OBESITY MANAGEMENT SYMPOSIUM** FOR THE ENDOCRINOLOGIST

24 - 25 September 2009 Institute of Metabolic Science, Addenbrooke's Hospital, Cambridge

This 1½-day interactive symposium has been specifically designed for specialty registrars and consultants with an interest in the practicalities of obesity management. It will be based around small, practical workshops with some didactic lectures from leaders in the field, including the organisers, Sadaf Farooqi and John Wilding, as well as Nick Finer, Jonathan Pinkney and Andrew Johnson.

Topics covered include:

- setting up and running a specialist obesity clinic, an in-patient obesity service and bariatric surgery
- history, examination and investigation of the severely obese patient (interactive with patients)
- motivational interviewing, dietary and medical approaches to treatment

The course has been restricted to 40 delegates to aid informal interaction amongst the delegates themselves and between the delegates and members of the faculty.

Please register your interest as soon as possible by emailing conferences@endocrinology.org.

For further details of the symposium see www.endocrinology.org/meetings/2009/oms2009

## Help from the **Research Network**

► The NIHR Clinical Research Networks were created as part of a process designed to establish a world-class research infrastructure in the UK. There are six topic-specific networks, which cover areas such as diabetes, medicines for children and primary care, and a comprehensive research network that covers 26 subject areas (speciality groups), including metabolic and endocrine disease (also covering obesity). There are 25 local comprehensive research network offices, and although not all will have identified metabolic/endocrine disease as a priority area, this does not preclude that particular network office from supporting relevant studies if appropriate.

The key functions of the network are to provide the necessary infrastructure and support to facilitate high quality, clinically relevant research (commercial and noncommercial), including clinical trials and other welldesigned studies. This incorporates generic network staff with governance and management roles, an industry manager, and staff to help recruit and conduct the study, such as study nurses, funding for clinical staff (e.g. consultant PAs), pharmacy support, pathology and radiology. Another key area is provision of links with the primary care network, so that studies can be jointly adopted, to allow seamless recruitment into studies from primary care.

Research studies funded by the MRC, NIHR, Wellcome Trust and AMRC charities are automatically eligible for network adoption. Commercial studies can be adopted following a peer-review process; this should be initiated by the commercial sponsor, ideally at the feasibility stage. Investigators may be asked to complete feasibility questionnaires, and these should be completed promptly with realistic estimates for patient recruitment numbers.

Other projects, such as those funded by the EU and investigator-initiated studies (including those funded by industry), can also be adopted and become eligible for network support following peer-review.

All new studies should be registered for potential network support when submitting for ethics and research governance approval via the IRAS system. It is important to note that ongoing studies cannot now be adopted retrospectively.

To identify your local speciality lead, see the map (Fig. 2), which shows the local leads appointed so far, together with their contact details.

This is an important opportunity for endocrine research in the UK. Clinical research is changing rapidly. Clinical endocrinologists see a lot of rare disease that lends itself to collaborative studies. Although the network speciality group's remit does not include development of the research portfolio, the network can run a feasibility study that would strengthen any grant application. The network can facilitate recruitment of patients into studies in large numbers that might have seemed impossible only a few years ago.

IOHN WILDING

# New way of funding translational research

Five universities (King's College London, the University of Dundee, the University of Edinburgh, the University of Nottingham and a partnership between the Universities of Bristol and Cardiff) have been selected to take part in the MRC's Developmental Pathway Funding Scheme (DPFS).

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The five already hold several grants under the DPFS, but providing them with devolved portfolios allows the universities to stop a particular project and recycle the money allocated to it into other proposals. Or they could decide to raise private funding as soon as the project becomes commercially interesting, while channelling unspent funds to the rest of the portfolio. If these novel devolved portfolios are successful, they will be rolled out more widely in summer 2010. DPFS funding for individual projects remains unchanged.

Funding under the DPFS is designed to address needs that are currently unmet. It is goal-orientated (not hypothesis-driven) and milestone-driven. Further details of the DPFS can be found at: www.mrc.ac.uk/fundingopportunities/grants/DPFS.

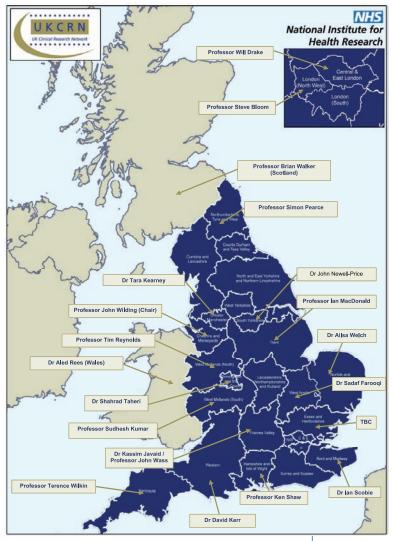


Figure 2. Map of local research network leads



# The unpredictable nature of question time

A tale of sabotage, sideswipes and the surreal. Hotspur's seen it all.

In 2008, when Robert Dee moved level with the Guatemalan, Diego Beltranena, at 54 consecutive International Tennis Federation (ITF) defeats, for one glorious moment he stood on the threshold of a defining achievement for British tennis: the longest official losing streak in the history of the sport.

In classic British style, Dee blew his chance of immortality by beating Arzhang Derkshani, a 17-year-old unranked American, 6-4 6-3, to record his first victory in 55 attempts in an ITF competition or qualifying event.

He compiled the losing streak over 3 years. Before his unexpected victory, Dee's arduous and expensive 3-year itinerary had taken in defeats in Sudan, Iran, Colombia, Venezuela, Botswana, Rwanda and Senegal, as well as Europe and the USA.

So, in the context of meetings of national or international endocrine societies, where might we anticipate finding such unexpected or unpredictable events? Surely not in the calibre of the majority of presentations, the choice of speaker by the Programme Organising Committee being substantially dependent on their established reputation to give an excellent talk; the latter being both desired and highly predictable.

No, if one wants unpredictability - the dark edge to the proceedings - then one has to wait for question time. Therein is the only place where the unknown puts in an appearance.

Certain types of individual who journey to the microphone are, of course, readily classified and easily remembered. First we find the bore who, on a regular basis, takes 3 minutes to ask a nine-part question exposing the speaker's faulty hearing, memory or both. Then there's the competitor, who is compelled to ask a question after every talk, as if in pursuit of the golden microphone award. Finally we encounter the terrorist, who waits until the young and inexperienced chairman attempts to wrap up the session with 'Just time for one more short question', before striding purposefully to the microphone, in the full knowledge that they have never asked a short question in their whole professional life, and are not about to start now.

My initial personal experience of what can go wrong in question time occurred at a European meeting. Having finished my first ever 10-minute oral presentation in such august company, I awaited the questions with eager anticipation - whereupon a European professor took the opportunity, unsolicited, to show eight slides of her work in the field, and my 5 minutes had passed. My question time had been stolen!

Giving a 'Meet the Professor' talk at the US Endocrine Society meeting 25 years later induced similar disappointment. The talk was on adult GH deficiency, and the required preparation and form filling, disclosures, etc, are considerable. Nonetheless the sense of achievement at being asked to give such a talk is real -

and lasted until the first question: 'I have one patient on GH, a male who tells me that he now masturbates more often - is it the GH?'

At the same meeting, however, I experienced the most extraordinary speaker-audience interaction of my life. I had been sitting quietly in the audience listening to a talk, the subject matter of which escapes me. The dialogue in question time, however, will remain with me forever. Pertinent to what took place is that the lights in the room were such that the speaker could not identify visually who was at the microphone when the questions were asked.

'Is it true that the wearing of green socks influences melatonin levels?' (Fabricated question, as I cannot remember lecture.)

'That voice, I recognise that voice. Is that Billy-Bob?' 'Yep it's me, Tommy.'

'Billy-Bob, I haven't seen you for must be 10 years; I've missed you man.'

'How've you been? Whatever happened to that girl you were going out with? You know, the one with the big hooter.'

'I married her!'

Thankfully, the coffee break saved us from any further disclosures about other body parts.

Even as a medical student, however, I realised that question time did not need to induce angst. One day in the old-fashioned multi-tiered lecture theatre, our reader in physiology had arranged for the world famous neurologist, Lord Brain, to demonstrate neurological signs on a patient. At the end of the demonstration, the Lord was asked if he would be prepared to answer questions from the students. Lord Brain replied 'no' immediately, spun round and left the lecture theatre. I was astonished: a speaker that declined to answer questions.

I had never seen that happen before, nor have I since, but I later realised that Lord Brain was simply acting out Proverbs 3:5-6, Matthew 6:25-34, 'Trust in the Lord, do not worry'.

'HOTSPUR'

# Hot Topics

#### Journal of Endocrinology

#### Intrahepatic epithelial cells induced to produce insulin

A recent study by Nagaya et al. used a newly devised method to isolate intrahepatic biliary epithelial cells from mouse liver. These were then successfully induced to become insulin-producing cells. The results show that there is, potentially, a new source of cells for beta cell transplantation, which could lead to huge advances in the treatment of patients with diabetes.

**⇒** DOI: 10.1677/JOE-08-0482

#### Bovine GH increases cell genesis in the brain

A ground-breaking study by Aberg and colleagues is the first to demonstrate that bGH treatment can successfully increase cell genesis in the brain. Using subcutaneous injections of bovine GH, the authors aimed to investigate cell proliferation in the brains of hypophysectomised rats. The results of the study could affect the future treatment protocol for patients with hypopituitarism.

**⇒** DOI: 10.1677/JOE-08-0495

#### Molecular Endocrinology

MOLECULAR ENDOCRINGLO

#### Somatastatin, dopamine and their receptors in pituitary pathophysiology

A review by Ferone and co-workers summarises the novel insights developed in recent years into somatostatin and dopamine receptors in pituitary pathophysiology. The authors discuss recent advances that represent the possibility of new complex interactions which could be used in future treatment strategies for patients with pituitary adenomas.

**DOI:** 10.1677/JME-08-0162

#### Effects of polymorphisms on IGF2-dependent growth

A study by Rezgui et al. has shown that the Gly1619Arg polymorphism in IGF2R, a transport receptor implicated in growth phenotype, has no direct effects on receptor function. The authors conclude that further evaluation of genetic polymorphisms is needed to understand the correlation between IGF2R and impaired childhood growth.

**⊃** DOI: 10.1677/JME-08-0154

#### **Endocrine-Related Cancer**



#### Cistromics of hormone-dependent cancer

Mathieu Lupien and Myles Brown review the wealth of information derived from cistrome-based studies and describe how this reveals the core concepts of transcriptional regulation. Since this has a direct impact on signaling through nuclear receptors, these discoveries should significantly influence the development of novel therapeutic strategies directed against multiple types of cancer.

⇒ DOI: 10.1677/ERC-09-0038

#### Loss of p27KIP1 function in thyroid carcinogenesis

This study by Fedele et al. used a mouse model (expressing the TRK-T1 oncogene) of papillary thyroid cancer to investigate the consequences of the loss of p27KIP1 expression. Their results suggest a dose-dependent role of p27<sup>KIP1</sup> function in papillary thyroid cancer development.

**⇒** DOI: 10.1677/ERC-08-0272

#### **Clinical Endocrinology**

Clinical Endocrinolog

#### Selective venous sampling for androgen-producing ovarian pathology

The value of selective venous sampling (SVS) as an aid to the diagnosis of androgen-secreting ovarian tumours is not well established. Levens and co-workers evaluated 4 patients and an additional 132 previously reported cases with SVS data and a pathological diagnosis. They found that a serum testosterone >4.5 mmol/l was associated with increased risk of tumour and that a R:L ovarian testosterone ratio >1.4 correctly identified 90% of R-sided tumours and a ratio <1.4 correctly identified 86% of L-sided or bilateral lesions. Overall, SVS enabled correct localisation in 66% of cases, suggesting the technique may be useful when conventional imaging is unrevealing.

DOI: 10.1111/j.1365-2265.2008.03389.x

#### Clinical studies of familial adrenal Cushing's

This study by Gagliardi et al. outlines the preclinical phenotype of vasopressin-sensitive familial ACTHindependent macronodular adrenal hyperplasia in three familial groups, and investigates the aetiology of vasopressin sensitivity in one of these groups. Their clinical, biochemical and radiological methods may afford the opportunity to detect preclinical disease and bring about early treatment of some forms of Cushing's syndrome.

DOI: 10.1111/j.1365-2265.2008.03471.x



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Tostran Abbreviated Prescribing Information Please refer to Summary of Product Characteristics before prescribing. PresentationTostran 2% gel, contains testosterone, 20 mg/g. Indications Replacement therapy with testosterone for male hypogonadism 20 mg/s. Inuctions Replacement interlay with inscissorions or binne inprogramment 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 doily at approximately the same time each morning to clean, dry, intact skin, alternately on the abdomen or to both inner highs. Application elsewhere should be avoided. The dose should be adjusted to the clinical or laboratory responses. 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 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, lostran 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 diobetic 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 dothing after the gel has been applied and has thoroughly dried. Bathe or shower before any dose contact with another person. Particular care must be taken to prevent transfer of testosterone to merganny women or rhildren via Skir rantact. Herestrions. 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, hisuitism, 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

canister. Legal Category Prescription Only Medicine Further information is available from the Marketing Authorisation Holder ProStrakan Limited, Galabank Business Park, Galashiels, TD1 1QH, United Kingdom Marketing Authorisation Number PL16508/0025 © ProStrakan. ® Registered Trade Mark. Date of PI Preparation: November 2008

Adverse events should be reported. Reporting forms and information can be found at www.yellowcard.gov.uk. Adverse events should also be reported to ProStrakan Limited on 01896 664000.

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

