

# The Endocrinologist

THE NEWSLETTER OF THE SOCIETY FOR ENDOCRINOLOGY • ISSUE 88

SUMMER 2008

## An Olympic challenge: detecting GH abuse

### PLUS

National  
Osteoporosis  
Society in the  
spotlight

New Andrology SIG

What it really  
means to be  
an expert





► Welcome to the summer issue of *The Endocrinologist*. You can't have escaped the forthcoming Olympics, and to mark the occasion with an endocrine twist, you should turn to the fascinating article by Peter Sonksen on the history and challenges of detecting growth hormone abuse by athletes (page 15).

There is a lot of 'news' in this issue. I am delighted that Professor Julia Buckingham has been elected Chairman of the Society for Endocrinology and will take up office at the 2009 AGM. This is timely recognition of the huge contribution that Julia makes to the Society. It is also hugely encouraging to see that a woman, who is a basic scientist, can become the Society's Chairman. Turn to page 3 for details of the other elected officers.

Amongst other news, Dr H Mistry from Nottingham has become the first member to receive the Society's Diploma (see page 7). I know how much work went into this achievement: many congratulations on a well-deserved award! I would also encourage other young endocrinologists to start work towards the Diploma. The Autumn Retreat is a good place to start: turn to page 14 for details. We have had another fantastic response to the Undergraduate Prize Essay competition, with 62 entries this year. Details of the winner can be found on page 7, and the winning essay will be published in the autumn issue, which will again this year be an 'Education Special'.

Turn to page 4 for photos and reports from April's highly successful Society BES meeting in Harrogate. Congratulations to all the prize winners! Jennie Evans and her colleagues in the Press and Public Relations team are doing an excellent job: you can find out about their latest outing at the Edinburgh Science Festival on page 17. Meanwhile, page 13 features the National Osteoporosis Society, giving you the chance to learn more about this charity's important work. Osteoporosis is a very common and serious disease, and not just in 'ladies of a certain age'.

Several opportunities for members to 'get involved' in the Society are detailed in this issue. Whether you nominate a member for one of the Society's medals or whether you would like to serve on one of the Society's committees (see page 3), there is surely something for everyone. I would really encourage you to stand for committee membership: it can be very rewarding indeed, with a real sense of 'making a difference' to the Society. It is also a good way of getting to work with some of those lovely people in the Bristol office who work so hard for the Society.

This is such a packed issue that some regular items have been trimmed. You may notice that there are fewer 'Hot topics' than usual (page 12) - do you miss them? Let us know. Other regular columns remain though. On page 18, Hotspur focuses on the question of expertise, while Gavin Vinson speaks out 'From the archives' to challenge the use of citation ratings as a measure of scientific success (page 16).

Have a good summer!

JOY HINSON  
([j.p.hinson@qmul.ac.uk](mailto:j.p.hinson@qmul.ac.uk))



Editor: Dr Joy Hinson  
Associate Editor: Dr John Newell-Price  
Co-ordination: Andrew Lowe  
Sub-editing: Caroline Brewster  
Design: Martin Harris

Society for Endocrinology  
22 Apex Court, Woodlands,  
Bradley Stoke, Bristol BS32 4JT, UK  
Fax: 01454-642222  
Email: [info@endocrinology.org](mailto:info@endocrinology.org)  
Web: [www.endocrinology.org](http://www.endocrinology.org)

Company Limited by Guarantee  
Registered in England No. 349408  
Registered Office as above  
Registered Charity No. 266813

©2008 Society for Endocrinology

*The views expressed by contributors  
are not necessarily those of the Society*

#### Officers

Prof JAH Wass (Chairman)  
Prof JC Buckingham (General Secretary)  
Prof MC Sheppard (Treasurer)  
Prof DW Ray (Programme Secretary)

#### Council Members

Dr N Brooks, Prof P Clayton,  
Prof K Docherty, Dr R Fowkes,  
Prof S O'Rahilly, Prof E Simpson,  
Dr M Wallace, Prof G Williams

#### Committee Chairs

Awards: Prof SG Hillier  
Clinical: Prof PJ Trainer  
Corporate Liaison: Prof JMC Connell  
Finance: Prof MC Sheppard  
Nominations: Prof JAH Wass  
Nurse: Ms MN Carson  
Programme: Prof DW Ray  
Publications: Prof JC Buckingham  
Science: Prof AS McNeilly

#### Staff

Executive Director: Sue Thorn  
Personal Assistant: Brenda Parsons  
Tel: 01454-642216 for the above  
Publications Director: Steve Byford  
Tel: 01454-642220 for the above  
Professional Affairs Officers:  
Rachel Evans and Abhi Vora  
Society Services Support Officer: Julie Cragg  
Society Projects Administrator: Ann Lloyd  
Tel: 01454-642200 for the above  
Commercial and Operations Director:  
Nigel Garland  
Secretariats and Events Director:  
Helen Gregson  
Events Manager: Beverly Francis  
Tel: 01454-642210 for the above  
Business Development Manager: Tom Parkhill  
Public and Media Relations Officer: Jennie Evans  
Tel: 01454-642230 for the above

#### 2008 Advertising Rates

Advertise your event in *The Endocrinologist!*  
Members: Mono - Half page £110  
Mono - Full page £170  
Others: Mono - Half page £325  
Mono - Full page £500  
Colour - Full page £1300  
Outside back cover - Full page colour £1600

Deadline for news items for the Autumn  
2008 issue: **1 August 2008**. Please send  
contributions to the above address.

# New Officers and Council Members

► We are pleased to announce that the new Society Officers will be Professor Julia Buckingham (Chairman), Professor Paul Stewart (General Secretary) and Dr Marta Korbonits (Programme Secretary). They were elected at the 2008 AGM, held during the recent Society BES meeting in Harrogate. They will take up their posts with effect from the 2009 AGM.

The AGM also saw Professors Evan Simpson and Graham Williams elected to Council, and we are very pleased to welcome them. Our thanks go to Professor Steve Atkin and Dr Neil Gittoes who have just retired after 4 years of service. The Society is grateful to them both for their time and contributions.

## Clinical Excellence Awards 2009

► The Clinical Excellence Awards scheme seeks to reward those who make the biggest contributions to delivering and improving healthcare. This can be either through clinical service or through teaching and research in academic medicine. Following the Society's success in supporting members' nominations in previous years, we are pleased to be able to offer this service again for the 2009 round.

We can provide bronze, silver, gold and platinum award support to consultants (including honorary consultants) who have been in post for more than 1 year. The Society can only support a limited number of applications, so please contact Abhi Vora at the Bristol office (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 12 September in order to start the support process for 2009, though we do realise the results of the 2008 round will not be known by then.

Further details for members in England can be found at [www.advisorybodies.doh.gov.uk/accea/index.htm](http://www.advisorybodies.doh.gov.uk/accea/index.htm), for those in Scotland at [www.sacda.scot.nhs.uk/guide%20&%20forms/main.htm](http://www.sacda.scot.nhs.uk/guide%20&%20forms/main.htm), for those in Wales at [www.wales.nhs.uk/page.cfm?pid=3928](http://www.wales.nhs.uk/page.cfm?pid=3928) and for those in Northern Ireland at [www.dhsspsni.gov.uk/index/hss/clinical\\_excellence\\_awards\\_scheme.htm](http://www.dhsspsni.gov.uk/index/hss/clinical_excellence_awards_scheme.htm).

## Committee vacancies

It's your chance to play a role in running your Society! Several vacancies are available on the Awards, Clinical, Nurse, Programme and Science Committees. Terms of office start on 1 January 2009 and run for 4 years. Full committee remits and a nomination form can be found at [www.endocrinology.org/about/committee.html](http://www.endocrinology.org/about/committee.html). The deadline for receipt of nominations in the Bristol office is 31 July 2008.

In the case of the programme committee, which meets once a year, new committee members must attend the next meeting, to be held 22-23 April 2009 in London. The Society particularly welcomes nominations from basic scientists.

### SOCIETY CALENDAR

8-10 September 2008

**Society for Endocrinology National Endocrine Nursing Conference**  
University of Exeter

6-8 October 2008

**Society for Endocrinology Clinical Update**  
Royal Marriott Hotel, Bristol

17-19 October 2008

**Society for Endocrinology Autumn Endocrine Retreat**  
Milton Hill House, Steventon, Oxfordshire

8 December 2008

**Society for Endocrinology - Midlands Endocrine Club Clinical Cases Day**  
National Motorcycle Museum, Birmingham

# 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 2010 awards. Nomination forms can be obtained from [www.endocrinology.org/about/medals.html](http://www.endocrinology.org/about/medals.html) or by contacting Christine Davis in the Bristol office (Email: [christine.davis@endocrinology.org](mailto:christine.davis@endocrinology.org)). Please return them by 31 July 2008.

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 M Thorner, AS McNeilly, S Lamberts, JK Findlay, R Kahn, W Vale, SR Bloom and D Baird.

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

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 W Wiersinga, N Skakkebaek, AM Colao, C Strasburger, A Maggi, K Oberg, E Ghigo and I Huhtaneimi.

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

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

# Prize winners at Society BES 2008!

► Our second annual Society for Endocrinology BES meeting in Harrogate was a great success. A total of 855 delegates attended over the 4 days of the meeting, and 27 companies and associations exhibited. The wide range of sessions included 8 excellent plenary lectures and a clinical debate 'This house believes that males become menopausal' which was well-attended and thought-provoking!



Ken Ho with John Wass

Many awards were presented for outstanding work, with 23 prizes going to young endocrinologists. The recipients of £500 prizes for oral communications were R Stimson (Edinburgh) for 'Does 11beta-HSD1 in visceral adipose tissue (VAT) deliver cortisol to the liver? Studies with portal vein sampling and tracer infusion in humans', and L Chan (London) for 'MRAP2 permits the functional expression of the

melanocortin-2-receptor: a new member of a new family of melanocortin receptor accessory proteins'.

The overall winners in the poster section, who each also received £500, were T Barber (Oxford) for 'Association of variants within the fat mass and obesity-associated (FTO) gene and polycystic ovary syndrome', and V Smith (Birmingham) for 'A novel mechanism of NIS repression in differentiated thyroid cancer'.

Other winners for individual categories in the poster section each received £100, as follows. Bone - C Yeh (Taipei, Taiwan) and I Malik (Sunderland); cytokines and growth factors - B Carpenter (Sheffield) and M Banerjee (Manchester); diabetes, metabolism and cardiovascular - S Williams (Oxford) and G Lavery (Birmingham); endocrine tumours and neoplasia - M Lemos (Oxford) and V Smith (Birmingham); growth and development - S Wong (Glasgow); neuroendocrinology and behaviour - V Kasivisvanathan (London) and R Crowley (Dublin, Eire); pituitary - A Munir (Sheffield) and C Higham (Manchester); reproduction - T Barber (Oxford) and V Sharp (London); steroid - A McNeilly (Edinburgh) and T Chung (London); thyroid - F Mitchell (Dundee) and V Panicker (Bristol).

Congratulations to all the winners. We look forward to returning to Harrogate in 2009!

Society Medallist Hillary Critchley (below left), with John Connell (below right). Transatlantic Medallist Ron Rosenfeld (far left), with Dale Medallist Alan McNeilly, (far right).



R Stimson receiving his award from Professor John Wass (above). Other winners included L Chan (left), T Barber (below left) and V Smith (below right).



## Heard about Harrogate...

Just a few of the comments from delegates following April's Society BES meeting.

*'I was impressed by the quality of the talks and the lovely 'family' type of attitude'*

*'As always, your girls and boys put on an incredibly impressive meeting, and were all very helpful and supportive'*

*'Very well done to all the team - it really was a fantastic success, with everything going like clockwork. Everyone I spoke to was extremely positive'*

*'Fun as well as being fantastic scientifically'*

Like **GETTING** the **BADDY**  
and **KISSING** the **GIRL**  
and **RIDING** into the **SUNSET**

**IT'S GOT THE  
INGREDIENTS OF A CLASSIC**



**TESTOGEL**<sup>®</sup>  
testosterone

**PRESCRIBING INFORMATION Testogel<sup>®</sup> (testosterone) Presentation:** Sachet containing 50mg testosterone in 5g colourless gel. **Uses:** Testosterone replacement therapy for male hypogonadism when testosterone deficiency confirmed by clinical features and biochemical tests. **Dosage:** One 5g gel sachet daily. Can be adjusted in 2.5g gel steps, to a maximum of 10g gel daily. Once sachet opened, apply immediately onto clean, dry healthy skin over both shoulders, or both arms or abdomen. Do not apply to genital areas. **Children:** Not for use in children. Not evaluated clinically in males under 18. **Contra-indications:** Known or suspected prostate or breast cancer. Hypersensitivity to testosterone or any constituents of the gel. **Warnings and precautions:** Before therapy exclude prostate cancer. Examine prostate and breast at least annually, or twice yearly in elderly or at risk patients (clinical or familial factors). Monitor serum calcium concentrations in cancer patients at risk of hypercalcaemia (and hypercalcaemia). Testogel may cause oedema with or without congestive cardiac failure in patients with severe cardiac, hepatic or renal insufficiency. In this case, stop treatment immediately. Use with caution in patients with ischaemic heart disease, hypertension, epilepsy and migraine. Periodically check testosterone concentrations, haemoglobin, haematocrit, liver function (tests), lipid profile. Possible increased risk of sleep apnoea especially if obesity or chronic respiratory disease present. Improved insulin sensitivity may occur. Irritability, nervousness, weight gain, prolonged or frequent erections may indicate excessive androgen exposure requiring dose adjustment. If severe application site reactions occur, discontinue if necessary. Testosterone may produce a positive reaction in anti-doping tests. Not for use in women. Testosterone gel can be transferred to others by close skin to skin contact and can lead to adverse effects (inadvertent androgenisation) if repeated contact. Inform patient of transfer risk that is prevented by clothing or washing of application site. Testogel should not be prescribed for patients who may not comply with safety instructions (e.g.

alcoholics, drug abusers, psychiatric patients). Pregnant women must avoid any contact with the application sites. Interactions reported with oral anticoagulants, ACTH or corticosteroids, and thyroxin binding globulin in laboratory tests. **Side-effects:** Most common (10%) were: skin reactions. Also reported were: changes in laboratory tests (polycythaemia, lipids), headache, prostatic disorders, gynecomastia, mastodynia, dizziness, paraesthesia, amnesia, hyperaesthesia, mood disorders, hypertension, diarrhoea, alopecia, urticaria. Other known reactions to testosterone treatments are: muscle cramps; nervousness; depression; hostility; sleep apnoea; skin reactions; libido changes; more frequent erections; hypersensitivity reactions; rarely: jaundice, liver function tests, priapism, prostate abnormalities, prostate cancer (inconclusive), urinary obstruction. During high dose and/or prolonged treatment: weight gain, electrolyte changes, reversible interruption or reduction of spermatogenesis, water retention, oedema, rarely: hepatic neoplasms. Frequent applications may cause irritation and dry skin. **Basic NHS Price:** £33.00 per pack of 30 x 5g sachets **Legal Classification:** POM **Product Licence Number:** 16468/0005 **Product Licence Holder:** Laboratoires BESINS INTERNATIONAL 5, rue du Bourg L'Abbé 75003 Paris France **Distributed by:** Bayer plc., Bayer House, Strawberry Hill, Newbury, Berkshire RG14 1JA Testogel is a registered trademark of Laboratoires BESINS INTERNATIONAL **PI revised:** 1 May 2008 8TEST02b March 2008

Information about adverse reaction reporting in the UK can be found at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk). Alternatively, adverse reactions can be reported to Bayer plc by email: [phdsguk@bayer.co.uk](mailto:phdsguk@bayer.co.uk)

## QUIZ NIGHT SUCCESS

► This year's Society BES meeting saw the dawn of a new tradition - the Young Endocrinologists quiz night! More than 80 young endocrinologists took part in teams captained by some of the Society's esteemed, more senior, endocrinologists, including our Chair Professor John Wass.

The quiz comprised several rounds: general knowledge, sport, music and the (now infamous) 'how well do you know your senior endocrinologists?' baby photo round.

The tense culmination of the evening saw a tie-break among the teams led by Richard Quinton, Peter Trainer and David Ray. Each captain stepped up to represent their team, with Peter Trainer pipping the others to the post to secure victory - and the champagne! Unfortunately Team Topcats did not do so well, and were awarded the wooden spoon for their last place - the *QI Book of General Ignorance*.

The night was a huge success, providing an informal setting for young and senior endocrinologists to mingle, and fun was had by all. We look forward to hosting an even bigger and better quiz at the Society BES 2009.

KIM JONAS, YE STEERING GROUP CHAIR

## MP meets AMEND

Phil Willis MP, the Chair of the Parliamentary Innovation, Universities, Science and Skills Committee, took time out of his busy schedule to visit the Society for Endocrinology BES conference in Harrogate. He met with Liz Dent and her daughter Emily Fazal from the Association for Multiple Endocrine Neoplasia Disorders (AMEND). The MP, who has an interest in rare diseases, also spoke with AMEND trustee Dr Stephen Gilbey and Society Chair Professor John Wass.



## Birthday congratulations

Sue Thorn is seen here presenting Professor Bernard Donovan with an 80th birthday gift and Honorary Membership of the Society. Bernard has been a member since 1953, and was a member of the *Journal of Endocrinology* Editorial Board from 1963 to 1981, serving as Editor from 1974 to 1980.

## Have you seen these members?

► We have lost touch with the members listed below due to changes of address. If you have spotted any of them in your travels, please contact [cherry.mcginnity@endocrinology.org](mailto:cherry.mcginnity@endocrinology.org).

Ms C Bleicken, Ms R Crook, Dr K Hewitt, Miss C Onyimba and Miss A Zeitlin from University of Birmingham; Dr G Bottazzo and Dr N Marshall from Middlesex Hospital, London; Dr I Mackenzie and Dr A Yogendra from Addenbrooke's Hospital, Cambridge; Dr S Lee from Northern General Hospital, Sheffield; Dr B Williams from Western General Hospital, Edinburgh; Dr D Armstrong and Miss H Owen from Roslin Institute, Edinburgh; Dr P Byfield, Dr P O'Shea and Mr White from Hammersmith Hospital, London; Miss S Nadaraja from Imperial College London; Dr R Mallina from St Thomas' Hospital, London; Dr D Gannon from Gloucester Royal Hospital; Dr A Sonibare from Ilford; Dr J Kumar from Mitcham; Dr N Mohammed from Dudley; Professor Klopfer from University of Aberdeen; Mrs D Jackson from Charing Cross Hospital, London; and Professor T Robinson from Duramana, Australia.

## Nursing news

► To better represent the ethos of the Nurses Annual Training Course, this event has been renamed as the National Endocrine Nursing Conference. The next conference will be held in Exeter on 8-10 September. A registration form and programme are available online at [www.endocrinology.org](http://www.endocrinology.org).

The Society's Nurse Committee is pleased to announce that Diana Greenfield from the Cancer Research Centre at Weston Park Hospital in Sheffield has been awarded her Certificate of Adult Endocrine Nursing.

Some endocrine nurses have expressed frustration at a perceived lack of communication between the Society and nurses. There are requests in this newsletter and on the Society's website for clinicians to encourage the nurse members of their teams to contact the Society if they are not receiving copies of either *The Endocrinologist* or *Endocrine Nursing News*.

## CALLING ALL CLINICIANS!

Please let us know if any of your nurse members are not currently receiving copies of the nurse newsletter or *The Endocrinologist*.

### WITH REGRET

We are very sorry to announce the deaths of Honorary Member Professor J Folkman and Senior Member Dr R Bangham.

# Grants update

► Continuing its initiative to provide extra funding for members, we are pleased to announce that the Society for Endocrinology is awarding the following grants. For more information on all the Society's grants, see [www.endocrinology.org/grants](http://www.endocrinology.org/grants).

## Undergraduate essay prize

The March deadline saw 62 applications for this award. The standard was again very high, but a first prize of £1000 was awarded to Marianne Neary, of Fitzwilliam College, Cambridge, for her essay entitled 'Does My Bum LOOK Big? Or is it my jeans?'. An excerpt of the winning essay and details of the runners-up will follow in the autumn issue.

## Summer studentship

This new initiative for undergraduates comprises a stipend for a period of study of up to 10 weeks, together with a sum for the host departments' consumables. All 26 applicants received a grant this year.

## Lab and clinical department visit grants

Applications for these grants of up to £2000 are accepted throughout the year. Andrew Clempson of the Royal Veterinary College, Hatfield, was recently awarded a lab visit grant of £500.

## Undergraduate achievement award

Awards are available of £300 per annum for 3 years. The opening date for applications for this award is 18 June 2008, and the deadline is 17 July.

## Small grants programme

The deadline was 27 May 2008 with grants of up to £15 000 available. Details of successful applications will follow in the autumn issue.

## Sponsored seminars and sponsored poster sessions

Applications for these grants are accepted continuously throughout the year. Grants of up to £3000 are available for each type of award.

# Don't miss out on ICE 2008!

The Society is pleased to announce that it has made funds available for members to travel to the International Congress of Endocrinology (ICE) in Rio de Janeiro, Brazil, to be held on 8-12 November 2008. Applications for travel grants should be submitted by 15 August. Receipt of a grant to attend ICE will not affect your eligibility to apply for other overseas conference grants within the qualifying period.



# Your details online

► The secure website for Society members gives you the added benefit of being able to pay subscriptions online and keep your details up to date via the web.

It is important that we hold accurate and meaningful data about members. The integrity and usefulness of the database depends on you alerting us of such changes. Please can you visit the site to provide the profile information requested or update your details whenever changes occur.

Better member profiles allow us to provide a useful online membership directory. For example, you can search for colleagues by town, country, name and area of interest. In time, we will also be able to provide specific web pages for different categories of members.

If you have difficulties logging on, or any questions relating to your membership, please contact us at [members@endocrinology.org](mailto:members@endocrinology.org) for assistance.

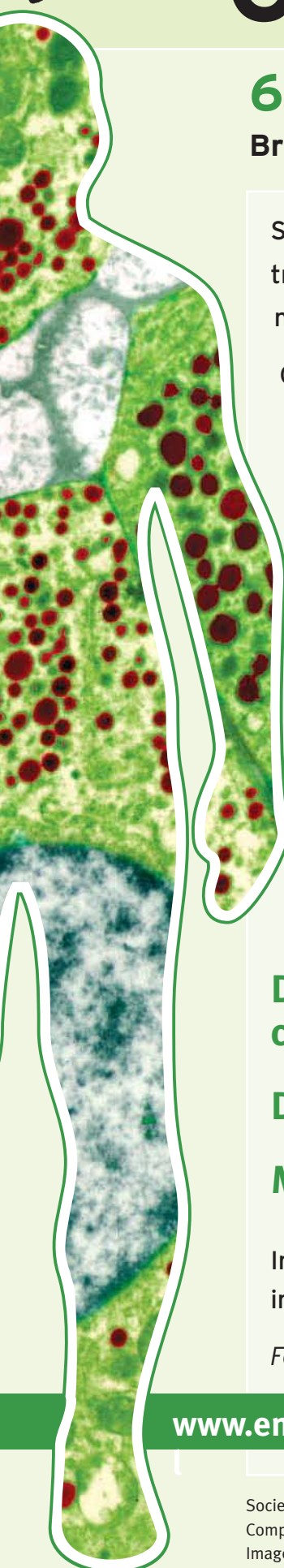
# CONGRATULATIONS...

to Dr H Mistry from Queen's Medical Centre, Nottingham. Dr Mistry is the first Society member to achieve the Postgraduate Diploma in Endocrinology. He was awarded his diploma at the recent Society BES meeting in Harrogate. For details of how to gain the diploma, see [www.endocrinology.org/education/resource/qualification/diploma.html](http://www.endocrinology.org/education/resource/qualification/diploma.html)



# Support network

The Society is keen to set up a support network for endocrinologists who are in the early part of their careers, and for nurse members. If you are willing to provide occasional career advice to Society trainee or nurse members, contact [julie.cragg@endocrinology.org](mailto:julie.cragg@endocrinology.org), indicating which of these groups you could advise.



# Society for Endocrinology Clinical Update

**CU**  
**08**

**6-8 October 2008**

**Bristol Royal Marriott, Bristol**

Second of a new series of clinical training events providing essential training for all trainees and new consultants and an excellent forum for networking opportunities with peers and established endocrinologists.

Over a 3 year period, the programme covers the new national curriculum in endocrinology and diabetes and is fast becoming the UK's premier clinical training event.

Interactive workshops including case-based studies will cover a wide range of topics; provisionally, these are:

**Disorders of the hypothalamus and pituitary**

**Growth and development**

**Disorders of the thyroid gland**

**Disorders of the adrenal gland**

**Disorders of the gonads**

**Disorders of the parathyroid glands,  
calcium metabolism and bone**

**Disorders of appetite, weight and metabolism**

**Miscellaneous endocrine disorders and oncology**

In collaboration with the Dutch Endocrine Society and  
in association with the Clinical Endocrinology Trust

*For further information please visit*

**CU**  
**08**

[www.endocrinology.org/meetings/2008/clinicalupdate2008/index.htm](http://www.endocrinology.org/meetings/2008/clinicalupdate2008/index.htm)



We are pleased to highlight the activities of some of our corporate members in this special section. Companies wishing to join the Society for Endocrinology should contact Nigel Garland in the Bristol office ([nigel.garland@endocrinology.org](mailto:nigel.garland@endocrinology.org)).

### ALMIRALL LTD



Almirall is an international pharmaceutical company based in Spain that researches, develops and commercialises proprietary and licensed specialties, with the aim of improving people's health and well-being. Our approach is to focus on developing and commercialising novel treatments for a number of inflammatory diseases including asthma, COPD, psoriasis and other dermatological diseases, rheumatoid arthritis and multiple sclerosis (MS).

**Almirall Ltd, Pinewood, Chineham Business Park, Basingstoke RG24 8AL, UK (Web: [www.almirall.com](http://www.almirall.com))**

### ASTRAZENECA PLC



AstraZeneca is a major international healthcare business engaged in the research, development, manufacture and marketing of ethical (prescription) pharmaceuticals and the supply of healthcare services. It is one of world's leading pharmaceutical companies, with leadership in gastrointestinal, neuroscience, cardiovascular, respiratory, oncology and infection product sales. With the acquisition of Medimmune, AstraZeneca now has a significant position in biologicals and vaccines.

AstraZeneca is listed in the Dow Jones Sustainability Index (Global) as well as the FTSE4Good Index. With approximately 67 000 employees, AstraZeneca's headquarters are in London. Worldwide, AstraZeneca has 17 principal R&D centres, employing 13 000 people in 8 countries: Canada, China, France, India, Japan, Sweden, the UK and the USA. AstraZeneca has manufacturing activities in more than 20 countries.

Scientists at AstraZeneca have discovered and developed many of today's leading prescription medicines. AstraZeneca, a global leader in the development of cancer therapies, is committed to continuing the fight against cancer, through early detection and awareness programmes and through fundamental medical advances. AstraZeneca scientists are focused on developing a broad portfolio of anti-cancer products to extend and improve the quality of patients' lives. Over the past 30 years, AstraZeneca has developed effective cancer medicines for patients with breast and prostate cancer.

AstraZeneca produces Casodex (bicalutamide), the world's leading anti-androgen, Zoladex (goserelin acetate), the second largest-selling LHRH agonist in the world, Nolvadex, the first anti-oestrogen used in breast cancer, and the pure anti-oestrogen, Faslodex. We have also introduced a highly effective and well-tolerated third generation aromatase inhibitor, Arimidex, that has shown superior efficacy to the previous gold standard hormonal treatment for breast cancer, Tamoxifen. Current R&D focuses on developing treatment options across the prostate and breast cancer continuum, and specifically on novel biologically targeted approaches such as EGFR-TK inhibition, VEGFR-TK inhibition and vascular targeting.

AstraZeneca also has a major interest in diabetes and obesity, and stress-related disorders. In these conditions, AstraZeneca is looking for novel therapies that are a significant improvement on current treatments.

**AstraZeneca, Mereside, Alderley Park, Macclesfield SK10 4TG, UK (Web: [www.astrazeneca.com](http://www.astrazeneca.com))**

### BAYER SCHERING PHARMA



Bayer Schering Pharma's goal is to achieve a leading market position in each of its specialist fields. With its distinctive expertise, the company engages in research on new drugs which, as innovative therapies, make an essential contribution towards improving people's quality of life. Our outstanding research activities, together with our highly motivated staff, secure the sustainable success and growth of our company.

Our men's health portfolio features products for testosterone therapy and erectile dysfunction.

The future of medicine lies in individual approaches and in building bridges between prevention, diagnosis and therapy. Bayer Schering Pharma meets this challenge with proven, successful products based on many decades of knowledge and experience. At the same time we invest a lot of effort in R&D to discover and advance novel therapeutic solutions for the benefit of all people.

**Bayer Schering Pharma, Strawberry Hill, Newbury RG14 1JA, UK (Tel: 01635563000, Web: [www.bayerscheringpharma.co.uk](http://www.bayerscheringpharma.co.uk))**

### BIOSCIENTIFICA LTD



BioScientifica provides a range of services of specific relevance to medical and scientific societies and the pharmaceutical industry. We can manage all aspects of your conference, including abstract management, and handle your secretariat and membership services. An experienced publisher of books, journals, newsletters and conference proceedings, we can also create and maintain websites on your behalf. If you are looking for any of these services, get in touch!

BioScientifica manages conference services for the Society for Endocrinology, British Fertility Society, Cancer and Bone Society, British Oncological Society and Ipsen Pharmaceuticals. We provide a full online abstract publishing service for several clients.

We act as the standing office for five learned societies, offering full membership services, enquiry handling, committee meeting management, production of newsletters and advice regarding governance and other procedural matters. BioScientifica handles the external relations for the Society for Endocrinology and the British Fertility Society.

The following publications are managed by BioScientifica:

- ▷ *European Journal of Endocrinology*, published in print and online with HighWire Press for the European Society of Endocrinology
- ▷ *Reproduction*, published in print and online with HighWire Press for the Society for Reproduction and Fertility
- ▷ a range of books, including the KIMS annual overview, the annual HypoCCS series, titles on the drug octreotide, *Handbook of Acromegaly* (also available as a CD-ROM), *Molecular Pathology and Therapy of Pituitary Disease*, as well as *Pituitary and Periphery: Communication In and Out* and *Handbook of Neuroendocrine Tumours*.

Our in-house website management service has created and maintains more than ten websites for societies and other organisations.

**BioScientifica Ltd, Euro House, 22 Apex Court, Woodlands, Bradley Stoke, Bristol BS32 4JT, UK (Tel: 01454-642240; Web: [www.bioscientifica.com](http://www.bioscientifica.com))**

**ELI LILLY AND COMPANY**

Eli Lilly and Company is one of the world's largest research-based pharmaceutical companies, dedicated to creating and delivering innovative pharmaceutical healthcare solutions that enable people to live longer, healthier and more active lives. Our R&D efforts constantly strive to address urgent unmet medical needs.

Eli Lilly and Company was founded in 1876 in Indianapolis, USA, and has had a long history of producing endocrine products, dating all the way back to the collaboration with Banting and Best and the introduction of the world's first insulin product in 1922.

Another element of Lilly's endocrine portfolio is GH replacement. Lilly manufactures recombinant human GH (somatotropin) at Speke near Liverpool, UK. A full range of products and services is provided for the healthcare professional to use with their patients on GH replacement therapy for both adults and children.

To assist in the therapeutic management of osteoporosis, Lilly has two products, each catering for different patient needs: Raloxifene and Teriparatide.

Finally, Lilly continues to focus significant resources on research into the endocrine area. For additional information about any of our endocrine products or services please log on to the Lilly website: [www.lilly.co.uk](http://www.lilly.co.uk).

**Eli Lilly and Company Ltd, Lilly House, Priestley Road, Basingstoke RG24 9NL, UK (Tel: 01256-315000; Web: [www.lilly.co.uk](http://www.lilly.co.uk))**

**FERRING PHARMACEUTICALS LTD**

Founded in 1950 by Dr Frederik Paulsen, Ferring Pharmaceuticals is focused on the research and commercial development of peptides - natural compounds that play a role in virtually all of the body's systems. Ferring produces pharmaceuticals in specific therapeutic areas to help clinicians treat patients on the body's own terms.

As a dedicated, research-driven biopharmaceutical company, Ferring identifies, develops and markets innovative products in the fields of fertility, obstetrics, endocrinology, urology and gastroenterology.

Ferring continues to invest in R&D to enable the introduction of new and enhanced medicines. At present, there are a number of major projects in the Ferring R&D pipeline, which complement the existing portfolio and offer innovative development of current brands. They also fit neatly into the core expertise areas of peptide chemistry, pharmacology and drug delivery systems.

Ferring's developmental activities are on a global scale and are conducted in collaboration with leading academic centres and teaching hospitals worldwide. Co-ordination of development is maintained from the International PharmaScience Center in Copenhagen, Denmark. The accumulated knowledge and experience of Ferring are paving the way for novel compounds that will become tomorrow's pharmaceuticals.

**Ferring Pharmaceuticals Ltd, The Courtyard, Waterside Drive, Langley SL3 6EZ, UK (Tel: 01753-214800; Web: [www.ferring.co.uk](http://www.ferring.co.uk))**

**GENZYME THERAPEUTICS LTD**

Founded in 1981, Genzyme is now one of the world's largest and most established biotechnology companies. With more than 25 major products and services marketed in over 60 countries, Genzyme is a global leader in the effort to develop and apply the most advanced capabilities in biotechnology, in order to address a range of unmet medical needs.

With corporate headquarters in Cambridge, MA, USA, Genzyme has approximately 4600 employees working in 40 countries throughout the world. The European headquarters are in Naarden, The Netherlands, and the UK headquarters covering the whole of the British Isles are now based in Oxford.

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

Genzyme has a commitment to improving the lives of patients and supporting the work of doctors and other healthcare providers.

**Genzyme Therapeutics Ltd, 4620 Kingsgate, Cascade Way, Oxford Business Park South, Oxford OX4 2SU, UK (Tel: 01865-405200; Web: [www.genzyme.com](http://www.genzyme.com))**

**IPSEN LTD**

Ipsen Ltd is the UK subsidiary of Ipsen, a European pharmaceutical group with over 20 products on the market and a total worldwide staff of nearly 4000.

Ipsen's development strategy is based on a combination of products in targeted therapeutic areas - oncology, endocrinology and neuromuscular disorders - which are growth drivers, and primary care products which contribute significantly to its research financing. This strategy is also supported by an active policy of partnerships.

Ipsen Ltd's Endocrinology and Oncology Business Unit is responsible for a portfolio of products with sophisticated sustained release delivery systems for the management of various hormone-related diseases.

Ipsen's R&D programme is based on four technological platforms: peptide engineering, protein engineering, medicinal chemistry and advanced drug delivery. The location of its four R&D centres (Paris, Boston, Barcelona and London) gives the group a competitive edge in gaining access to leading university research teams and highly qualified personnel. Nearly 700 people in R&D are dedicated to the discovery and development of innovative drugs for patient care.

**Ipsen Ltd, 190 Bath Road, Slough SL1 3XE, UK (Tel: 01753-627777; Fax: 01753-627778; Web: [www.ipsen.co.uk](http://www.ipsen.co.uk))**

## MERCK SERONO LTD



As the UK and Republic of Ireland affiliate of Merck Serono, a global biopharmaceutical leader headquartered in Geneva, Switzerland, Merck Serono Ltd is an integral part of driving the growth and success of the company's global business.

Merck Serono has built its reputation as a leader in the biopharmaceutical industry by integrating cutting-edge science with comprehensive patient support systems to improve people's lives.

With a focus on specialised therapeutic areas, including reproductive health, neurology, dermatology and endocrinology, we are committed to growing our current portfolio and entering into new disease activities.

**Merck Serono Pharmaceuticals Ltd, Bedford Cross, Stanwell Road, Feltham TW14 8NX, UK (Tel: 01371-875876; Web: [www.serono.co.uk](http://www.serono.co.uk))**

## NOVARTIS PHARMACEUTICALS UK LTD



Novartis is a Swiss, research-based company which currently operates in over 140 countries worldwide, employing over 100 000 people, including over 3000 people at 11 sites in the UK. In 2006, the company spent approximately \$4.3 billion on R&D. This is equivalent to almost 19% of all pharmaceutical sales being reinvested in R&D.

Novartis Oncology has a strong heritage in cancer care. Indeed, over the past 25 years, pioneering research has repeatedly resulted in new and innovative products. From the development of the first somatostatin analogue, through advances in bisphosphonate therapy, to the cutting edge of rationally designed molecularly targeted compounds, we continue to build and expand our heritage through focused research programmes across a broad spectrum of cancer care.

**Novartis Pharmaceuticals UK Ltd, Frimley Business Park, Frimley, Camberley GU16 7SR, UK (Tel: 01276-692255; Fax: 01276-698605)**

## NOVO NORDISK LTD



Novo Nordisk is a focused healthcare company. With the broadest diabetes product portfolio in the industry, including the most advanced products within the area of insulin delivery systems, Novo Nordisk is the world leader in diabetes care.

In addition, Novo Nordisk has a leading position within areas such as GH therapy, haemostasis management and hormone replacement therapy.

Within the area of GH, Novo Nordisk has been producing recombinant human GH since 1988. The first, and still the only, liquid GH in the UK was launched by Novo Nordisk in 1999, along with an advanced delivery system. Novo Nordisk also provides the support of a homecare service and the convenience of home delivery.

Novo Nordisk manufactures and markets pharmaceutical products and services that make a significant difference to patients, the medical profession and society. With headquarters in Denmark, Novo Nordisk employs more than 26 000 people in 80 countries and markets its products in 179 countries. For further company information visit [www.novonordisk.co.uk](http://www.novonordisk.co.uk).

**Novo Nordisk Ltd, Broadfield Park, Brighton Road, Crawley RH11 9RT, UK (Tel: 01293-762000; Web: [www.novonordisk.com](http://www.novonordisk.com))**

## NYCOMED UK LTD



Nycomed is a Europe-based pharmaceutical company with a presence in most of the world's major markets. Nycomed has a broad range of products with an emphasis on therapeutic areas which include osteoporosis, gastrointestinal, surgery, respiratory, and pain. As well as internal R&D, Nycomed seeks to be the preferred partner for licensed specialist products.

**Nycomed UK Ltd, Three Globeside Business Park, Fieldhouse Lane, Marlow SL7 1HZ, UK (Tel: 01628-646400; Web: [www.nycomed.com](http://www.nycomed.com))**

## PFIZER LTD



Pfizer, with its UK business headquarters in Surrey and global headquarters in New York, is a research-based global pharmaceutical company. Pfizer discovers, develops, manufactures and markets leading prescription medicines for humans and animals, and many of the world's best-known consumer products.

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

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

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

**Pfizer Ltd, Walton Oaks, Dorking Road, Tadworth KT20 7NS, UK (Tel: 01304-616161; Web: [www.pfizer.co.uk](http://www.pfizer.co.uk))**

## PROSTRAKAN



ProStrakan Group plc is a rapidly growing specialty pharmaceutical company engaged in the development and commercialisation of prescription medicines for the treatment of unmet therapeutic needs in major markets. The company's development facilities are situated at ProStrakan's headquarters in Galashiels in Scotland, UK. EU-wide sales and marketing of ProStrakan's portfolio of products are handled by commercial subsidiaries in the UK, France, Germany, Spain and other EU countries.

**ProStrakan, Galabank Business Park, Galashiels TD1 2HB, UK (Tel: 01896-668060; Web: [www.prostrakan.com](http://www.prostrakan.com))**

**SANDOZ LTD**

Sandoz, a division of the Novartis group, is a world leader in high quality generics and biopharmaceutical medicinal products. Sandoz develops and markets a wide variety of active ingredients and finished products, having a portfolio of more than 840 compounds in over 5000 forms. Novartis is the only major pharmaceutical company to have leadership positions in both patented prescription drugs and generic pharmaceuticals.

In 2005, Hexal AG (Germany) and EonLabs Inc. (US) became part of Sandoz. In 2006, the business employed about 21 000 people worldwide. It sold its products in more than 110 countries and posted sales of US\$6 billion.

Sandoz's recombinant human GH Omnitrope® received marketing authorisation from the European Commission in April 2006 and has been launched subsequently in several European countries. In the US, Omnitrope® was launched in

January 2007. In Australia, Omnitrope® has been on the market since November 2005.

Biosimilar medicines made by Sandoz:

- ▷ fully adhere to the new and rigorous European standards for biosimilar medicinal products
- ▷ guarantee a high quality production process, as Sandoz ranks among the world's largest and most experienced manufacturers of biotechnological products
- ▷ ensure patient care and safety through appropriate preclinical development, clinical trials and post-marketing surveillance, including a state of the art pharmacovigilance system
- ▷ help reduce the burden on healthcare systems by providing the public with safe and effective medicines at competitive prices.

**Sandoz International GmbH, Industriestrasse 25, 83607 Holzkirchen, Germany (Tel: +49-8024-4762591; Fax: +49-8024-4762599; Web: www.sandoz.com)**

Due to the pressures on space in this issue, we publish just two Hot Topics.

## GR polymorphism associated with insulin resistance

The many clinical similarities between the metabolic syndrome and Cushing's syndrome have led to speculation of a genetic link between them, with the human glucocorticoid receptor locus (*GRL*; *NR3C1*) being proposed as a candidate gene. A number of single nucleotide polymorphisms (SNPs) have been identified and associated with obesity and other cardiovascular risk factors, including hypertension, insulin resistance and altered tissue-specific steroid sensitivity.

The intron 2 *Bcl1* polymorphism of *GRL* has been linked with insulin resistance and hyperinsulinaemia, and the common rs2918419 SNP, which causes a T to C substitution downstream of the *Bcl1* locus, also occurs within intron 2. Syed and colleagues have investigated the association between rs2918419 and insulin resistance/hyperinsulinaemia in a subsample of 325 white subjects (116 men) from the Newcastle Heart Project, and assessed the possible interaction between these two polymorphisms.

The authors report that rs2918419 was linked with hyperinsulinaemia and insulin resistance in white men. Contrary to earlier studies, the *Bcl1* polymorphism alone was not

## HOT TOPICS

Summarised by Sarah Esberger and Jayanthi Mondri

associated with insulin resistance/hyperinsulinaemia in either gender, and men with *Bcl1* variant alleles on a background of rs2918419 wild-type alleles had the lowest fasting insulin concentrations. Reports of the association of *Bcl1* polymorphism with obesity-related characteristics may be the result of linkage disequilibrium with rs2918419. **SE**

(See the full article in *Clinical Endocrinology* 68(6), June 2008)

## Wnt signalling and pancreatic $\beta$ -cell proliferation

Mutations in transcription factors involved in the functional regulation of  $\beta$ -cells are known to result in maturity onset diabetes of the young (MODY). Identifying the proteins that are mutated in MODY could clarify the functional control of  $\beta$ -cell integrity.

Welters and colleagues previously showed that increased expression of the MODY5 gene product, HNF1 $\beta$ , led to enhanced rates of apoptosis, altered cell cycle regulation and inhibition of stimulated insulin secretion in pancreatic  $\beta$ -cells. This suggested that control of HNF1 $\beta$

expression may be important in regulating  $\beta$ -cell viability and function. One  $\beta$ -cell gene whose expression is significantly up-regulated in response to HNF1 $\beta$  encodes a protein tyrosine phosphatase, PTP-BL, which has not previously been studied in these cells.

Since PTP-BL is regulated in an HNF1 $\beta$ -sensitive manner in  $\beta$ -cells, the authors have now studied whether some of the phenotypic changes associated with altered expression of HNF1 $\beta$  could be mediated by an increase in PTP-BL, and have verified the prediction that up-regulation of HNF1 $\beta$  causes a decrease in  $\beta$ -catenin protein levels in INS-1 cells exposed to Wnt3a.

Their results suggest that components of the Wnt signalling pathway may be important in regulating the growth of mature  $\beta$ -cells, and show that this pathway is subject to regulation by HNF1 $\beta$ . The study also implicates PTP-BL in mediating some of the effects of HNF1 $\beta$ , and reveals that PTP-BL may influence  $\beta$ -cell proliferation by regulating  $\beta$ -catenin levels. Since HNF1 $\beta$  expression is compromised in patients with MODY5, the results imply that changes in PTP-BL expression, and thereby Wnt signalling, could underlie some of the  $\beta$ -cell dysfunction seen in these patients. **JM**

(See the full article in *Journal of Endocrinology* 197(2), May 2008)

## Spotlight on the...

# National Osteoporosis Society

► **Our bones are made up of a thick outer shell and a strong inner honeycomb mesh of tiny struts of bone. In osteoporosis, which literally means 'porous bones', some of these struts become thin or break. This makes the bone more fragile and prone to fracture.**

Osteoporosis often remains undetected until the time of the first broken bone, which commonly occurs in the wrist, hip or spine. This is why it is sometimes referred to as the 'silent disease'. In the UK, one in two women and one in five men over the age of 50 will break a bone principally because of osteoporosis (though it can affect people at any age). As many as 3 million people have, or are at risk of, osteoporosis, and there are about 230 000 osteoporotic fractures every year. Each month, 1150 people in the UK die as a result of hip fractures. Osteoporosis costs the NHS and government £1.7 billion a year - that's £5 million a day.

The National Osteoporosis Society is the only UK-wide charity dedicated to improving the diagnosis, prevention and treatment of osteoporosis. We campaign to ensure high quality health and social care for those with or at risk of osteoporosis.

The charity was set up in 1986, when doctors at the Royal National Hospital for Rheumatic Diseases in Bath were concerned that so many people were unaware of the risks of osteoporosis. Medical practice regarding the diagnosis, treatment and prevention was variable, so the National Osteoporosis Society was founded with backing from the Department of Health and the Chief Medical Officer. The charity now has over 25 000 members.

We work hard to raise awareness of the disease amongst the general public and health professionals, and lobby for better health care service provision for those with or at risk of osteoporosis. Last October, we delivered a 24 500-strong petition to 10 Downing Street, calling for change to the NICE guidance that recommended only one mandatory treatment for osteoporosis. We successfully appealed, along with the Society for

Endocrinology, against the final set of proposed guidance from NICE.

The National Osteoporosis Society has a wide range of resources designed to support health and social care professionals. The charity currently has over 1500 professional members, including radiographers, GPs, nurses, researchers, nutritionists and, of course, endocrinologists. Professional members receive the quarterly journal, *Osteoporosis Review*, a wide range of publications from the charity and a discounted delegate fee to National Osteoporosis Society conferences and training events. Health professionals can also obtain free resources from the charity on a range of topics.

Both the general public and health and social care professionals can use our telephone helpline service. It is staffed by a team of nurses who are experienced in osteoporosis and bone health. They are supported by a large body of osteoporosis professionals who lend their expertise to the Society. This ensures that our information is based on the most accurate and up-to-date knowledge, helping callers to make informed choices. The nurses are also skilled in providing emotional support and can point callers to other relevant organisations that may also be able to help.

The helpline is open on Monday to Friday from 9am to 5pm. Call 0845-4500230 (UK only) or email [nurses@nos.org.uk](mailto:nurses@nos.org.uk). We also produce a suite of free information on all aspects of osteoporosis and treatments, which is available to download from our website [www.nos.org.uk](http://www.nos.org.uk).

Our conference is the single most important osteoporosis event in the field for education and networking, attracting the largest gathering of UK and overseas health professional delegates, all with a vested interest in the field of osteoporosis. The 13th scientific conference for health professionals takes place in Manchester from 28 June to 1 July 2009.

The Society supports clinical research that is consistent with its aims to improve the diagnosis, treatment, support and services available for people with and at risk of osteoporosis. Since 1994, we have committed almost £2.5 million to research, using income from individual donations, group fundraising, legacies, membership appeals, the Big Lottery Fund and funding from other trusts. More than 100 projects, studentships and fellowships have been funded to date.

To contact the National Osteoporosis Society, telephone 01761-471771 or visit [www.nos.org.uk](http://www.nos.org.uk).

**The National Osteoporosis Society is offering members of the Society for Endocrinology a 10% reduction on its membership fees (usually £50 per annum; £25 per annum for those with salaries less than £25 000). To take advantage of the offer, call 01761-473119, quoting *The Endocrinologist*.**



National  
Osteoporosis  
Society

## Thank you!

The Pituitary Foundation thanks Society members for their fantastic response to the Foundation's recent letter. This concerned the Foundation's new leaflet 'Hydrocortisone, advice for the pituitary patient', aimed at patients who need support to get extra hydrocortisone in medical emergencies. As a result, over 2000 patient leaflets have since been sent to clinics for distribution to patients. For more information see [www.pituitary.org.uk](http://www.pituitary.org.uk).



SIOBHAN HANNA

## Specialist knowledge-based assessment for clinical trainees

► Most clinical trainees and their supervisors will be aware by now that new specialist examinations are on the horizon. The Royal Colleges of Physicians are working with the various specialist societies to develop these specialist knowledge-based assessments (KBAs).

These will be developed in the same format across all clinical specialties, with a series of questions in a 'best-of-five' style. There will be two exams of 3 hours each, comprising a total of 200 multiple-choice questions. It is anticipated that the endocrinology and diabetes KBA will start in 2009.

All run-through trainees will need to pass the examination before they can be awarded the Certificate of Completion of Training. Importantly, traditional SpRs will not be obliged to take the examination, although they may do so if they wish. Its cost is likely to be about £800; the Colleges are investigating the possibility of a

reduced fee for a resit, where needed. It is likely that the KBAs will be taken in the third year of specialist training (although the timing will not be rigidly specified), and will lead to the award of a certificate from the Colleges.

The exam will be open to anyone who has an MRCP (UK). However, for those in the UK higher training programme only, once the Colleges recommend to the PMETB that the trainee has completed their training (which will depend on passing the examination and meeting all of the other requirements of training), the trainee will be entitled to use the letters MRCP (Endocrinology and Diabetes) after their name. Others taking the exam will not be entitled to use these letters, thus preserving the distinction between someone who has gone through the full specialist training programme and someone who has just passed the exam.

The Society for Endocrinology is liaising very closely with the Royal Colleges, Diabetes UK and Association of

British Clinical Diabetologists on this project. The question-setting panel for endocrinology and diabetes is led by Professor John Connell. He and his panel are working very hard to develop the bank of questions, and we are grateful to them for their substantial time and effort. It is anticipated that the certificate will be jointly awarded by the Colleges and the three societies.

It is noteworthy that the multiple-choice question examination is only one part of the overall assessment process that trainees undertake. All components of the new curriculum have an associated means of assessment (approved in principle by the PMETB). In addition to the KBA, these include case-based discussions, mini-clinical evaluation exercises and multisource feedback. Many of these methods are well established, while others are being piloted. Ultimately the e-portfolio will play a central role in recording not only progress through the curriculum but also assessment outcomes.

JAYNE FRANKLYN, JOHN CONNELL,  
JOHN WASS, JOY HINSON,  
PETER TRAINER, SUE THORN



**SOCIETY FOR ENDOCRINOLOGY**

**AUTUMN ENDOCRINE RETREAT**

**FOR OUR TRAINEE MEMBERS**

**17-19 October 2008**

Milton Hill House, Steventon, Oxfordshire

**FREE PLACES AVAILABLE**  
SfE Members Only  
Numbers restricted to 25 places only  
£100 Reservation Fee (refundable upon successful application)

**PRE-REGISTRATION OPEN**  
**1-20 SEPTEMBER 2008**

To register your interest for this meeting, please visit [www.endocrinology.org](http://www.endocrinology.org)

# An Olympic challenge: detecting GH abuse in sport

► It was the *Underground Steroid Handbook*, a cyclostyled leaflet published in California in 1982, that introduced growth hormone (GH) to the world of sport. Subsequently, it was Ben Johnson's admission that he'd used it to help him get a gold medal in the 1988 Olympic Games that gave it 'street cred' with fellow athletes.

A year later, two independent publications revealed the importance of GH in regulating body composition in adults to the medical and scientific community.

In 1992, the International Olympic Committee (IOC) invited me to join their Medical Commission as an expert on GH, because they were aware that it had become an important new drug of abuse in sport. As a peptide hormone, it presented fresh scientific challenges. The existing IOC laboratories were equipped to work mainly with simpler molecules and were unable to provide a suitable methodology for detecting GH abuse.

After a 3-year uphill struggle persuading the IOC that research was required, in 1996 I was privileged to coordinate a consortium of European endocrinologists in an EU Biomed 2-funded project to develop a test to detect GH abuse, known as GH-2000 (BMH4 CT950678). The consortium included endocrine centres in Sweden, Denmark, Italy and the UK, with the two European GH manufacturers NovoNordisk and Pharmacia and the IOC (who themselves contributed \$1 million).

On time, and within budget, GH-2000 delivered its final report confidentially to the EU and IOC in January 1999, 18 months before the Sydney 2000 Olympics. This would allow time, we thought, for the method to be implemented at the Games.

GH-2000 proposed the use of two GH-dependent markers, IGF-I and procollagen type 3 N-terminal peptide (P-III-P), to detect GH abuse. It had a sensitivity of >90% in detecting men taking GH at a specificity of 1:10 000 (chance of false positive <1:10 000) and provided a 'window of opportunity' of as long as 14 days after the last injection.

The IOC convened a quality assurance workshop to review the GH-2000 results in March 1999. This workshop had external experts from around the world, and a representative from the Court of Arbitration in Sport (CAS), the final arbiter of legal disputes in the sporting world. The outcome of the workshop was very positive, with the CAS representative saying that he would be prepared to prosecute on the basis of the evidence he had seen.

There were some caveats, however, including the observation that as most volunteers were white Europeans, would ethnicity affect the interpretation of results? There were also issues about the availability of suitable immunoassays essential for successful implementation. Rather than rely on commercial assays, GH-2000 recommended that the IOC develop their own assays for the two essential markers (IGF-I and P-III-P) so

that they could control the reagents and 'roll the assays out' to their worldwide network of laboratories.

Simultaneously, but separately funded, a team led by Christian Strasburger developed a test for rhGH abuse, based on the measurement of GH itself. This method involved the use of two immunoassays, one specifically targeting 22kDa GH and the other being more 'permissive' and able to detect all isomers. Detection of rhGH (but not pituitary-derived GH) was determined when the ratio of the assays rose above a critical threshold. The sensitivity and specificity of the method have not been published, and because of the rapid clearance of injected rhGH, its window of opportunity is relatively short, probably less than 24 hours.

After years of criticism over a conflict of interest in running both the Games and the dope testing, the IOC created the World Anti-Doping Agency (WADA) in late 1999. Responsibility for sponsoring

research and implementing a test for GH abuse passed to the new agency. WADA has a considerable research

budget and has always had GH as a priority area. GH-2004, funded jointly by WADA and the United States Anti-Doping Agency (USADA)

picked up the points raised by the GH-2000 workshop and went on to show that neither ethnicity nor injury interfered with the validity of the marker method.

WADA implemented the isoform method at the Athens Olympics in 2004 and the Turin Winter Olympics in 2006. Over 400 tests were undertaken and none was positive. Since these tests were all 'post-competition' this is unsurprising. The most effective usage of the isoform method would be for unannounced 'out of competition' testing.

So what about Beijing? WADA has not announced what method(s) of testing for GH it will use. The isoform method has been updated and transferred from academia to commerce. UK Sport has been working with WADA and GH-2004 to complete laboratory validation of the marker method. Both methods could be running and this would, for the first time, provide a matched pair of powerful weapons against athletes attempting to cheat through the use of GH.

PETER SONKSEN



As we await the 2008 Olympic Games, Peter Sonksen gives us an insider's view into the world of dope test development.

“...A MATCHED PAIR OF POWERFUL WEAPONS AGAINST ATHLETES ATTEMPTING TO CHEAT THROUGH THE USE OF GH...”

## OUT OF THE ARCHIVES...

# Poor old Bouin: the mismeasure of scientists

Does an obsession with citations do scientists a disservice? Gavin Vinson certainly thinks so.

► In 1981, Stephen Jay Gould published *The Mismeasure of Man*, in which he traced critically the history of attempts to measure human intelligence, for example either by physical measurement of the skull, or through the farrago of nonsense called intelligence testing. I believe we may need an appendix to this book, about the mismeasure of scientists...

It's further delving in the archives that has led me to this thought: in particular, a detail from Sir Alan Parkes' Dale Medal Lecture in 1965. In the published version, there are photographs of some of the gatherings of luminaries associated with the rise in reproductive endocrinology.

Two of these feature the histologist, Pol Bouin. Bouin doubtless made many contributions, but the one for which his name is instantly recognised is the development of the tissue fixative, Bouin's fluid (or Bouin's fixative). Widely used for many decades because

of the clarity of structure it gives in conventional staining, it occurred to me that, in all the publications in which I have read his name, I have never once seen a reference to the original article in which Bouin's fluid was described. As far as any citation index is concerned, Bouin really hardly features.

“...WHO CAN SUGGEST A WAY OF PLACING THESE NOBEL LAUREATES IN RANK ORDER?”

There are many like him. In a commentary published in *Journal of Endocrinology* in the 1980s, I used Krebs Ringer as an example of an uncited but widely used formulation - with Krebs in mind (though the Krebs-Henseleit publication was cited in earlier days), but overlooking the fact that Ringer himself never got a reference either. Then there are Eagle, Okazaki and Southern. Compare them with O Lowry of protein assay fame who gets a mention every time! The medical profession provides many more examples: Graves, Hashimoto, Addison and Cushing are hardly ever cited directly, except in histories.

Don't misunderstand, this is not a criticism of authors. It's a far greater honour to have your name in the headlines rather than in the footnotes - though I'm not sure whether it happens very much today. It is, however, very much a criticism of information scientists and administrators, who would like us to believe that we can assess scientific merit and contribution by some spurious citation index which, because it's a number, meretriciously conveys a sense of accuracy. We can't, and it doesn't.

For many years, Eugene Garfield, founder of ISI (the company that published *Current Contents*, and which underpins the *Web of Science* and similar products), wrote prefaces to his weekly publication which claimed

to show how citation was related to scientific success, for example winning the Nobel Prize. I have a certain regard for Garfield. Indeed, I inspected every edition of *Current Contents* between October 1960 and December 2003, when I was finally persuaded that the electronic systems were sufficiently developed to allow me to release this comforter. But I don't go along with measuring scientific merit his way.

Let's look at some Nobel Prize winners. In a 1977 article on Peter Medawar (Nobel Laureate in 1960), Garfield states, 'He has written over 150 papers and six books; seven of his articles and one of his books has been cited more than 100 times ... Medawar has been cited more than 2700 times from 1961 to 1976. On our highly cited author list based on total citations received by primary authors from 1961 to 1975, only about 800 names rank above Medawar's, while more than 56 000 rank below him.' In fact, by citation standards, the report on Medawar here is not particularly high, with about 17 citations per publication on average. Look at another Nobel Laureate, Sir John Vane (1982). His list now gives 591 publications, with an average of 95.79 citations each, 56 613 in total, h index 108. More recently Craig C Mello (2006) has 50 publications, 151.28 average citations per paper, 7564 in total, h index 28, and JR Warren (2005) has 26 publications, average citations per paper 238.77, 6208 in total, h index 13.

Now, based on these scores, who can suggest a way of placing these Nobel Laureates in rank order? By citations per paper perhaps? And who would be willing to rank them by other criteria: for example by subjective assessment of scientific contribution? No-one? I thought not. And yet these numbers are strikingly different.

No-one (I hope) would begin to suggest that there is any linear relationship between any of these scores and ability/contribution. And if there is no linear relationship, then I suggest these scores don't actually measure anything or, if they do, we don't know what it is. And if we go from there to assessing scientific merit, not by individual citations, but by the totally absurd concept of the impact factor of the journal the paper is published in, then we progress from the fantastic to the completely surreal. Can't we put a stop to this nonsense?

Poor, or perhaps lucky, old Bouin! Celebrated (in his way) around the world, but if he were trying to pursue his career today, he'd have a very hard time.

GAVIN VINSON



# How hormones rule our lives

► The Edinburgh International Science Festival in April saw the Society's latest venture to communicate science to the public. Our event certainly met the Festival's aim of 'engaging all of society in the wonder and value of science and technology'. Entitled 'How hormones rule our lives', and held in conjunction with the Medical Research Council, the evening explored the effect that hormones, lifestyle and environmental factors can have on our health and that of our children.



The evening began with a reception at the National Museum of Scotland for Society members, MRC-funded researchers, MSPs and research managers from the Chief Scientist's office in Edinburgh, hosted by Society Chairman Professor John Wass. Attendees enjoyed this chance to meet before the main event got

underway. It was a pleasure to see so many Society members there.

Proceeding through to the auditorium for the main event, we were met by the pleasing sight of a lecture theatre full of members of the public. Dr Chris Smith, a lecturer in virology from Cambridge University and a founding member of the Naked Scientists (a radio show, podcast and website; [www.thenakedscientists.com](http://www.thenakedscientists.com)), was our excellent Chair for the evening. He did a great job of keeping the session flowing smoothly and making the public feel relaxed and happy to interact with the speakers during question time.

Professor Richard Sharpe, from Edinburgh's MRC Human Reproductive Sciences Unit, opened up the event with an excellent introduction to hormones. He showed how complex the endocrine system actually is, and how our lifestyle choices can have an impact on our hormones and affect our bodies. He went on to look at how hormones act in the womb to convert a 'female' into a male, and the points at which this process can malfunction. He finished by looking at chemicals in the environment that can affect hormones, and considering whether the media's claims about 'gender-bender' chemicals really are true.

Dr Mandy Drake, from the Centre for Cardiovascular Science at the University of Edinburgh, described research linking low-birth weight and a strikingly increased risk of diseases like high blood pressure, diabetes and heart disease later in life. Once again, hormones are the potential cause - or glucocorticoids, to be precise. Mandy related some fascinating studies examining how effects can be transmitted down the generations, with examples ranging from the Dutch Famine of 1944 to the 9/11 attacks.

Question time followed, with a balanced and very lively debate between the speakers and the audience.

This numbered an impressive total of 150 people, including Heinz Wolff, the TV science presenter. Topics covered included whether people's lives had become increasingly stressful in the past 50 years, and the lifestyle alterations that people can make to improve their health and that of their children.

Communicating science through events like this can be extremely effective and rewarding. The public certainly has an appetite to find out more about new developments in research, directly from scientists themselves, as attested by the large audience that attended this event. The Society now hopes to further its collaborations with science festivals throughout the UK. To this end, we are organising a session on obesity at the BA Festival of Science in September, in conjunction with the Biochemical Society and the Nutrition Society. Details will be available soon at [www.endocrinology.org](http://www.endocrinology.org).

We extend our thanks to Pauline Mullin from the MRC for invaluable help and support in staging 'How hormones rule our lives', to Chris Smith for chairing the session and to all our members who attended the reception and the talks afterwards. And last, but certainly not least, we thank Richard Sharpe and Mandy Drake for giving such thought-provoking, animated and clear talks.

JENNIE EVANS

*The Society captured the public imagination at the Edinburgh International Science Festival in its ongoing mission to communicate science.*



ABOVE: Chris Smith opens proceedings.

BELOW: The packed auditorium saw a lively debate.



# The expert

Hotspur  
ponders upon  
what it really  
means to be  
an expert...

► **Most medical students 'take an elective', spending a period of working time away from their own teaching hospital. I was no exception. In my second clinical year, I spent 2 months 'doing' paediatrics at Stanford University in California.**

The contrast with my own teaching hospital in east London was extreme. Not just the physical beauty of the campus and the wonderful climate, but the type of clinical experience and the attitudes of teachers and students made a big impression upon me. For a start, I only saw three children close-up in the whole elective period, and one of those only because she lived next door. In contrast, at home I could see ten patients in a single outpatient session!

No student at Stanford saw common clinical problems, no teacher taught any topic that was remotely basic, and nobody seemed to mind that I was told very firmly by the professor of paediatrics that these were clever people, and that basic clinical information was covered in textbooks.

Experts of international repute existed all around me, and often in the most unlikely guises. One day, at the start of a lecture on an extremely esoteric topic within paediatric haematology (which I had not heard of before, nor yet have since), a fellow student sitting next to me whispered quietly in my ear.

'You see the guy giving the lecture? He is number two in the world on this disease.'

I nodded absent-mindedly.

'You see the guy on the end of the front row? He is number *three* in the world.'

My head was still nodding.

'You see the woman next to the guy at the end of the front row? She is number *six* in the world.'

Thoughts of where this was going had not yet entered my head, but then he delivered his bombshell.

'And I am number *nine* in the world.'

Now I was awake. This innocuous, softly spoken, first-ever clinical firm medical student was number nine in the world at something medical - yet he didn't even know developmental milestones, how children grow, the stages of puberty, the differential diagnosis of a sore throat... I know, I know all that stuff is in books!

In the right setting though, and certainly within endocrinology, the expert provides intellectual stimulation and practical guidance. To hear Krish Chatterjee talk about thyroid hormone resistance or Steve O'Rahilly on monogenic causes of childhood obesity is undiluted pleasure. These world experts not only stimulate our minds but educate the general endocrinologist on pragmatic issues: the flowchart, the nature and explanation for the algorithm of investigation. They take their topic on further, to new heights, on our behalf, and lead us.

It needs to be understood, however, that the expert usually pays a price for his expertise. So with increasing focus and time spent on special areas of endocrinology, it is usual for knowledge, expertise and competence in dealing with general medical disorders to wane. It is

crucial that the expert be aware of the Faustian trade-off that he has signed up to. If not, a disaster will occur, as was the case recently for a famous member of the Society for Endocrinology, a world-renowned thyroidologist, especially strong in disorders of the left lobe of the thyroid gland, who happens to be a fanatical supporter of West Ham United FC.

Well, as luck would have it, the regular club doctor was unavailable, and so our illustrious endocrinologist stepped into the role of club doctor for a difficult away fixture somewhere 'up north'. At half time, the atmosphere in the dressing room was gloomy, the team was losing 2-0, and the players expected their doctor to administer to them in the usual manner!

'I need my ankle strapped.'

'I must have a ringblock for my ingrowing toenail.'

'I'm feeling tired, I want my B12 injection.'

In this dreadful and unforeseen situation our expert was clueless. What was a ringblock? In his mind, it had something to do with a hold-up on the M25. Can one give B12 injections safely for energy loss in the 38th minute of a football match? He hadn't strapped an ankle for over 20 years. In a state of panic, he realised that the cost of his great expertise in thyroidology meant that his only remaining clinical skills consisted of determining thyroid status and palpation of the thyroid region. The rest of his clinical skills cupboard was bare. But when in doubt, examine the patient - that's what he'd been taught. Without a second thought he palpated the necks of all 11 players!

Well there was fall-out from his unorthodox football doctoring. Driven by fear, the team scored two goals in the second half to draw the match, but subsequently four players requested transfers, citing bullying managerial tactics (i.e. having your neck felt when losing) as the underlying reason. On a positive medical note, however, two previously undiagnosed thyroid nodules came to light...

Expertise exists in all walks of life. For instance, the concept of expertise in sex has led to the never-ending features and programmes detailing the mistakes you might be making, gaps in your knowledge, and new things you simply must do with your body in order not to be exposed as a prude. There is no clear path to becoming a sexpert and no particular qualifications required. 'I wrote a book about sex, was invited on TV and then suddenly I was being introduced as a sexpert,' says Tracey Cox, one of the most celebrated experts in the field of sex and relationships. 'And that's how you become a sexpert! I do find the term difficult, because anyone can call themselves a sexpert and it's not necessarily true.'

Richard Burton (not the film star) who died recently had no such self-doubts. He came to notice as the Duchess of York's employer, but was happier to be remembered as one of the last gentleman racing drivers. A handsome, impeccably dressed boulevardier of the old school, Burton married often (five times) and was considered a fount of knowledge and expert on the art of love-making. Generous in giving his specialist advice to those less experienced in the field (everybody!), he insisted that when making love on a mountainside it was important to be facing downhill.

HOTSPUR

# SIG-nificant developments

## Andrology Special Interest Group

► The last decade has witnessed a burgeoning interest worldwide in the field of andrology. This is reflected by an exponential increase in publication of original papers, paralleled by a rise in interest from the media and public. The main focus has been on the clinical use of testosterone replacement therapy, the abuse of anabolic steroids and advances in treatment of male infertility.

These scientific and clinical advances have stimulated establishment of learned societies in andrology which promote interaction between basic scientists and clinicians sharing a common interest in male (reproductive) health. These include the European Academy of Andrology ([www.uni-leipzig.de/~eaa](http://www.uni-leipzig.de/~eaa)), American Society of Andrology ([www.andrologysociety.com](http://www.andrologysociety.com)) and International Society of Andrology ([www.andrology.org](http://www.andrology.org)). All three societies have a majority membership of endocrinologists interested in male hormone action and disorders. The European Academy of Andrology has a clinical training curriculum and an annual exit examination in clinical andrology, leading to formal accreditation. The Academy also has a network of 20 training centres in Europe (including Manchester), offering clinical experience in all facets of andrology for subspecialist training.

Peer-reviewed basic science and clinical publications are clearly defining important roles for testosterone in metabolism, bone health, muscle function and the immune, cardiovascular and nervous systems. Clinical research has identified links between testosterone deficiency and osteoporosis, frailty, metabolic syndrome, diabetes, cardiovascular disease, cognitive function, Alzheimer's disease and HIV, in addition to the classical effects on reproductive function. Basic research is crucial to progress our understanding of androgen actions at the

cellular and molecular levels. At the same time, four recent epidemiological studies have independently found that low testosterone is associated with an increase in all-cause mortality.

Pharmaceutical companies have shown increased interest in testosterone replacement therapy over the last 10 years. A new class of drugs that selectively target androgen action is currently in development and early clinical trials. These are the SARMs (selective androgen receptor modulators). There is a potential for collaborative research with the pharmaceutical industry where appropriate.

The aims of the Society's newly-formed Andrology SIG are to:

- ▷ promote research in the field of andrology
- ▷ encourage collaboration between research groups
- ▷ promote specialised training in andrology
- ▷ encourage educational and scientific links between the Society and existing andrology societies
- ▷ create a register of members
- ▷ organise meetings for the group and advise on symposia related to androgens for the Society BES and other meetings
- ▷ arrange joint meetings with other SIGs, especially as we have areas of testosterone action in common
- ▷ work with the Society to advise the public and media on issues related to androgens
- ▷ consider helping the Society provide input to patient support groups

To register your interest in any SIG, to receive updates from the convenors and to gain access to the discussion boards, visit [www.endocrinology.org/sig](http://www.endocrinology.org/sig).

HUGH JONES (BARNSELY/SHEFFIELD), FREDRICK WU (MANCHESTER)

### BIT Annual World Cancer Congress 2008

12-17 June 2008, Shanghai, China  
Contact: Annie Sun, 26 Gaoneng St., R401, Dalian Hightech Zone, Dalian, LN 116025, China. (Tel: 0086-411-84799479; Fax 0086-411-84799629; Email [annie@bitlifesciences.com](mailto:annie@bitlifesciences.com); Web <http://www.bitlifesciences.com/cancer2008/>)

### 90th Annual Meeting of The Endocrine Society

15-18 June 2008, San Francisco, USA  
Contact: Endocrine Society  
(Web: <http://www.endo-society.org/educationevents/annual/>)

### Management of Type 2 Diabetes

17 June 2008, London, UK  
Contact: Royal College of Physicians (Tel: 020 7935 1174 Ext. 436/252/300; Email: [conferences@rcplondon.ac.uk](mailto:conferences@rcplondon.ac.uk); Web: <http://www.rcplondon.ac.uk/event/details.aspx?e=1015>)

### 44th DIA Annual Meeting

22-26 June 2008, Boston, USA  
Contact: Marketing Manager, 800 Enterprise Road, Suite 200, Horsham, Pennsylvania 19044, USA (Tel: +1.215.442.6100; Fax: +1.215.442.6199; Email: [dia@diahome.org](mailto:dia@diahome.org); Web: <http://www.diahome.org/DIAHome/Education/FindEducationalOffering.aspx?productID=14235&eventType=Annual Meeting>)

### 2nd Joint Meeting of the Bone Research Society and the British Orthopaedic Research Society

23-25 June 2008, Manchester, UK  
Contact: Janet Crompton, The Old White Hart, North Nibley, Dursley, Gloucestershire, GL11 6DS (Tel: +44 (0) 1453 549929; Fax: +44 (0) 1453 548919; Email: [anet@janet-crompton.com](mailto:anet@janet-crompton.com))

### Pharmacogenetics and Pharmacogenomics: Adverse Drug Reactions

27 June-2 July 2008, Sant Feliu de Guixols, Spain  
Contact: Chiara Orefice (Email: [corefice@esf.org](mailto:corefice@esf.org); Web: <http://www.esf.org/index.php?id=4563>)

### 33rd FEBS Congress & 11th IUBMB Conference

28 June-3 July 2008, Athens, Greece  
Contact: Georgina Alexopoulou, Promotion & Communication, Conventions & Congresses, 16 Paradissou St. GR-15125, Maroussi, Athens, Greece (Tel: + 30 210 6889100; Fax: +30 210 6844777; Email: [febs-iubmb2008@cnc.gr](mailto:febs-iubmb2008@cnc.gr); Web: <http://www.febs-iubmb-2008.org/>)

### VII International Meeting on Cancer Related Bone Disease

29 June-2 July 2008, Edinburgh, UK  
Contact: Kate Openshaw, BioScientifica, 22 Apex Court, Woodlands, Bradley Stoke, Bristol, BS32 4JT, UK (Tel: +44 (0) 1454 642 214; Fax: +44 (0) 1454 642 222; Email: [kate.openshaw@endocrinology.org](mailto:kate.openshaw@endocrinology.org); Web: <http://www.cancerandbonesociety.org/>)

New  
therapy in Europe

  
**increlex**®  
mecasermin  
*Replace what's missing*



*Increlex® - the first and only therapy licensed in Europe for severe primary IGF-1 deficiency*



**Prescribing Information**

**Increlex**® 10mg/mL solution for injection.

**Presentation:** Vial containing 40mg of mecasermin, recombinant DNA-derived human

insulin-like growth factor-1 (IGF-1) produced in *Escherichia coli*. **Indications:** Long-term treatment of growth failure in children and adolescents with severe primary IGF-1 deficiency. **Dosage & Administration:** Administer via subcutaneous injection. Recommended starting dose is 0.04mg/kg twice daily. If no significant treatment-related adverse events occur for at least one week, dose may be raised in increments of 0.04mg/kg to the maximum dose of 0.12mg/kg twice daily. Administer shortly before or after a meal or snack. Injection sites should be rotated. Not recommended in children under 2 years of age. **Contraindications:** Hypersensitivity to the active substance or to any excipients, intravenous administration, active or suspected neoplasia. Benzyl alcohol, must not be given to premature babies or neonates, and it may cause toxic and anaphylactoid reactions in infants and children up to 3 years old. **Precautions & Warnings:** Do not use in patients with closed epiphyses. Thyroid and nutritional deficiencies should be corrected before starting treatment. Administer shortly before or after a meal or snack due to insulin-like hypoglycaemic effects. Avoid high-risk activities within 2-3 hours of

dosing. Persons with a history of severe hypoglycaemia should have glucagon available. Doses of insulin and/or other hypoglycaemic agents may need to be reduced. Echocardiogram recommended before starting treatment. Patients should have examinations of the ear, nose and throat periodically, and at the occurrence of clinical symptoms, to rule out potential complications or to initiate appropriate treatment. Fundoscopic examination recommended at the start of, and periodically during the course of treatment, and at the occurrence of clinical symptoms of intracranial hypertension. Monitor patients for slipped capital femoral epiphysis and progression of scoliosis. Patients and parents should be advised to seek prompt medical attention in the event of an allergic reaction. **Pregnancy & Lactation:** Mecasermin should not be used in pregnancy unless clearly necessary as there are no adequate data. Breastfeeding while taking mecasermin is not recommended. **Undesirable effects:** Very common: hypoglycaemia, thymus hypertrophy, headache, hypoaacusis, tonsillar hypertrophy, snoring, injection site hypertrophy; Common: cardiomegaly, ventricular hypertrophy, tachycardia, convulsions, benign intracranial hypertension, sleep apnoea syndrome, dizziness, papilloedema, otorrhea, ear pain, fluid in the middle ear, adenoidal hypertrophy, nasal congestion, mouth breathing, vomiting, skin hypertrophy, arthralgia, pain in extremity, myalgia, hypoglycaemic seizure, hyperglycaemia, otitis media, otitis media serous, tonsillitis,

ear infection, adenoidectomy, ear tube insertion, mucosal membrane hyperplasia, injection site pain, injection site bruising, gynaecomastia, sleep terror, nervousness. **Overdose:** Treatment should be directed at alleviating any hypoglycaemic effects. Oral glucose or food should be consumed. If loss of consciousness occurs, intravenous glucose or parenteral glucagon may be required. **Storage:** 2°C-8°C. Do not freeze. **Legal Category:** POM. **Basic NHS Cost:** £384 (40mg/4mL vial). **Pack size:** 1 vial. **Marketing Authorisation Number:** EU/1/07/402/001. **Marketing Authorisation Holder:** Tercica Europe Ltd, Riverside One, Sir John Rogerson's Quay, Dublin 2, Republic of Ireland. For information contact the local representative of the MAH: Ipsen Ltd, 190 Bath Rd, Slough, Berkshire, SL1 3XE. Tel. 01753 627777. **Date of preparation of PI:** August 2007. **Ref:** INC05796.

Suspected adverse drug reactions (ADRs) should be reported at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk)  
ADRs should also be reported to the Ipsen UK Medical Information department at  
[medical.information.uk@ipсен.com](mailto:medical.information.uk@ipсен.com)  
Prescribers should consult the Summary of Product Characteristics in relation to other side effects.

Code: INC05922

Date of preparation: October 2007