MGUS at Frenchay

National Assessors . . . What is Going On?

Organisational Change for ACB

Over the Counter in Wrexham
Evolution of HbA1c Testing

COMING SOON...

G8

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The monthly magazine for Clinical Science

The Editor is responsible for the final content. Views expressed are not necessarily those of the ACB.

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Front cover: Graham Beastall, ACB President, with Sir Muir Gray and Alan Freke of Dade Behring

May 2007 • ACB News Issue 529

ACB News
Number 529 • May 2007
Rigour, Respect and Responsibility: A Universal Ethical Code for Scientists

Reported by Graham Beastall, ACB President

The Association has agreed to adopt the universal ethical code for scientists – ‘Rigour, respect and responsibility’. This code was developed following discussions between Sir David King (Chief Scientific Advisor to H.M. Government) and international colleagues at a Carnegie meeting (a regular informal meeting of science ministers and advisors from G8 countries).

Individuals, institutions and professional bodies have been encouraged to adopt and promote the code, which is meant to capture a small number of broad principles. The code is intended to complement rather than replace existing codes of conduct or ethics relating to specific professions or areas of research.

The principles within the code are:

**Rigour, honest and integrity**
- Act with skill and care in all scientific work. Maintain up to date skills and assist their development in others.
- Take steps to prevent corrupt practices and professional misconduct. Declare conflicts of interest.
- Be alert to the ways in which research derives from and affects the work of other people, and respect the rights and reputations of others.

**Respect for life, the law and the public good**
- Ensure that your work is lawful and justified.
- Minimise and justify any adverse effect your work may have on people, animals and the natural environment.

**Responsible communication: listening and informing**
- Seek to discuss the issues that science raises for society. Listen to the aspirations and concerns of others.
- Do not knowingly mislead, or allow others to be misled, about scientific matters. Present and review scientific evidence, theory or interpretation honestly and accurately.

Further information is available from www.dti.gov.uk/science.

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**Last Month’s Solution**

```
R E C H Y I M T S
H Y S T M C I E R
I T M S R E Y H C
S R T E C Y H I M
C H E M I S T R Y
M I Y R T H C S E
E M I C S T R Y H
Y C H I E R S M T
T S R Y H M E C I
```

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**This Month’s Sudoku**

```
C H I E
T H S
S T T
I Y M E
R Y H I S
T H T
R E C
S C M I
```

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**Workforce Advisory Committee**

Katy Cooper, Trainees Committee Chair

Congratulations to Gareth Jones who has been voted in as the Workforce Advisory Committee representative for the Trainees Committee. Thanks to those who took the trouble to vote.
A giant step forward
not a leap of faith

When you’re heading into new territory, it’s reassuring to know someone who’s been there before.

At Roche Diagnostics, we’ve spent the last 6 years constantly advancing and fine-tuning our fully-automated MODULAR PRE-ANALYTICS – cutting edge, tailor-made solutions, that allow you to handle your ever-growing service demands, while freeing up your staff to put their skills to best use.

This potent mix of innovation and experience is just one reason why we now have more integrated solutions installed, in more sites, than all the other diagnostics companies in the UK, put together!

So if you’re looking to take a giant step forward, join someone who knows the way.
Muir Gray at Focus

The Dade Behring Plenary Lecture at Focus this year was given by Sir Muir Gray who looked at key changes in the way healthcare is delivered in the future. After his lecture Muir spent time talking to ACB members who are working on aspects of pathology harmonisation.

BIVDA Presidential Moves

The British In Vitro Diagnostics Association (BIVDA) announced the appointment of a new President, Mr William Burns. Willie is retiring from Ortho-Clinical Diagnostics where he has been Vice-President, International for the past six years. He has worked in the Biotech and Healthcare industries for the past 30 years and for 25 of these has specialised in the in vitro diagnostics sector. Prior to joining Ortho-Clinical Diagnostics Willie was the General Manager for Medical Products, Northern Europe at Dupont and is a graduate of Queens University, Belfast. Willie is a past member of the BIVDA Executive Committee and a former President of the European Diagnostic Manufacturers Association.

The current Chairman of BIVDA, Jag Grewal commented “BIVDA is delighted to welcome Willie Burns as President and to have such an experienced and dynamic individual to follow Brian Fishwick in this role. I look forward to working closely with Willie during the next few years. I would also like to thank Brian for his own invaluable contribution to the Association, not just over the past three years as President but in all the previous time when he was heavily involved on the BIVDA Executive Committee while running Beckman Coulter.”

ACB Southern Region Summer Scientific Meeting

Drugs Abuse, Traceable Measurement and Renal Disease

Monday 2nd July 2007
Postgraduate Medical Centre, Epsom General Hospital

09.15-10.15 Coffee and Registration
10.20-10.30 Welcome
10.30-11.00 Addiction and Dual Diagnosis  
Mike Flanagan
11.00-11.45 Management of Addiction in Primary Care  
Dr Margaret Birtwistle
11.45-12.30 Traceability in Analytical Measurement  
Mike Sargent
12.30-13.45 Lunch
13.45-14.15 A Laboratory Skills Training Handbook  
Vicki Barwick
14.15-15.05 Journey through the Tubule  
Dr David Makanjuola
15.05-15.25 Tea
15.25-16.15 Dialysis Nuts and Bolts  
Dr Pauline Swift
16.15-16.45 Effect of Uraemia on Blood Vessels in Children  
Dr Rukshana Shroff

Cost of meeting: £25.00 - ACB members  
(Free – Grade A trainees/temporarily retired or retired members) £40.00 - Non-members  
Closing date for registration: Wednesday 27th June 2007

For further information contact: Martyn Egerton, Chemical Pathology Department, West Park Hospital, Epsom, Surrey KT19 8PB.  Email: martyn.egerton@epsom-sthelier.nhs.uk  Tel: 01372-734720  Fax 01372-748339

Meeting details: www.acbsouth.org.uk
HA-8160 Evolution
The complete solution goes one better

The pinnacle in detecting and measuring HbA1c and haemoglobin variants

Hb complete mode:
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- Antenatal screening
- No column changes
- No reagent changes
- Universal Host Interface included
- Fast and reliable
- Market leading support
- Complimentary referral service
- MenaSoft data manager

Universal Host Interface now included

The Diabetes Diagnostics Company
ACB Scotland National Autumn Meeting

Crieff Hydro Hotel, Perthshire
3rd-4th October 2007

Wednesday 3rd October 2007

Thyroid Update
- Monitoring Thyroid Cancer and Technical Issues - Dr G Beckett
- Managing Hypothyroidism - Dr P Abraham
- Managing Hyperthyroidism - Dr A Toft
- Interactive Discussion – Controversies in Thyroid Disease

Lab Policies and Politics
- Laboratory Workload - Changing Demands - Dr B Croal
- Putting Knowledge to Work – Added Value in Clinical Biochemistry - Dr WSA Smellie
- Impact of eGFR Across Scotland - Mr J Allison
- eGFR: Whatever Next? - Dr W Bartlett
- Current Guidelines for Faecal Tests in Colorectal Cancer - Prof CG Fraser
- Impact of Lipid-Lowering Therapy on Cholesterol - Dr M Murphy

Conference Dinner

Thursday 4th October 2007

Junior Members Papers including the John King Award

The Gemmell Morgan Memorial Lecture
- Prediction, Prognosis, and Prevention of Cardiovascular Events - Prof MJ McQueen

Recent Advances in Understanding the Aetiology of Chronic Diseases
- Advances in the Study of Hypertension - Prof J Connell
- Advances in the Study of Obesity - Dr C le Roux
- Advances in the Study of Osteoporosis - Dr J Homer

Interactive Clinical Cases

Diagnostic Research Discussion

Conference package rate is £140, day delegate rate is £50.
Full registration closes on 1st August.

Full details are available on the ACB Scotland website www.acbscot.org.uk
or from Dr Ian Godber on 01698-366338 or ian.godber@lanarkshire.scot.nhs.uk
The ACB has decided to adopt the universal ethical code for scientists—we must now be completely honest......

In that case your management skills are non-existent, you're indecisive, vague and you can't implement new ideas....

It's going to be tougher than I thought....
Deacon’s Challenge
No. 74 Answer

Calculate the loading dose of intravenous aminophylline required to achieve a plasma theophylline concentration of 15 mg/L in a 55 kg man, given that the volume of distribution of theophylline is 0.5 L/kg and that aminophylline is 80 % w/w theophylline. What infusion rate would be required to maintain this concentration if the half-life is 8 hours?

MRCPath, Autumn 2006

It is helpful to think of the body as a volumetric flask! The volume of the flask is the hypothetical volume in which the drug is dissolved i.e. the volume of distribution ($V_d$). The concentration of the drug in the volumetric flask is equivalent to the plasma drug concentration ($C_p$). The weight of drug required to achieve the desired concentration in the “volumetric flask” i.e. the loading dose (LD) is the product of concentration and volume (ensuring that the units are compatible):

$$LD = V_d \times C_p$$

If the drug is not given in the free form but as a salt or other derivative then this figure is divided by the salt factor ($S$). $S$ is the proportion of free drug in the preparation (expressed on a weight basis). Therefore the above formula becomes:

$$LD = \frac{V_d \times C_p}{S}$$

If the drug was not given intravenously then it would also be necessary to correct for bioavailability.

$V_d = 0.5$ L/kg. Patient’s weight is 55 kg. Therefore total $V_d = 0.5 \times 55$ L

$C_p = \text{target plasma concentration} = 15$ mg/L

$S = \text{“salt factor”}. \text{ Since preparation is } 80\% \text{ theophylline, } S = 80/100 = 0.8$

Substituting these values to obtain LD:

$$LD = \frac{0.5 \times 55 \times 15}{0.8} = 520 \text{ mg} \quad (2 \text{ sig figs})$$

The maintenance dose is the amount required to replace drug cleared by metabolism and/or excretion. The aim is to achieve the following steady state:

Rate of administration = Rate of clearance
The rate of drug clearance is the product of plasma concentration ($C_p$) and clearance ($Cl$) and the rate of administration is the maintenance dose (in this case infusion rate) corrected for any salt factor (and bioavailability if given orally). Therefore the steady state can also be written:

$$\text{Infusion rate} = \frac{C_p \times Cl}{S}$$

We are given the drug half-life ($t_{1/2}$) not its clearance. The clearance is calculated from the elimination rate constant ($k_d$) and the volume of distribution ($V_d$):

$$Cl = V_d \times k_d$$

The value for $k_d$ can be calculated from the half-life using the expression $k_d = \frac{0.693}{t_{1/2}}$.

Therefore $Cl = \frac{0.693 \times V_d}{t_{1/2}}$

Combining expressions for infusion rate and clearance gives:

$$\text{Infusion rate} = C_p \times \frac{0.693 \times V_d}{S \times t_{1/2}}$$

where $C_p$ = target plasma concentration = 15 mg/L

$V_d$ = volume of distribution = 55 x 0.5 L

$t_{1/2}$ = half-life = 8 h

$S$ = “salt factor” = 0.8

Substituting these values gives the infusion rate (in mg/h):

$$\text{Infusion rate} = \frac{15 \times 0.693 \times 55 \times 0.5}{0.8 \times 8} = 45 \text{ mg/h} \ (2 \text{ sig figs})$$

**Question 75**

A man with a weight of 70 kg was admitted in a diabetic coma with a plasma sodium concentration of 135 mmol/L and a glucose concentration of 40 mmol/L. During the first two hours of treatment with 2 L 0.9% saline and insulin, he produced two litres of urine with a total sodium excretion of 40 mmol and his plasma glucose concentration had fallen to 15 mmol/L. What would you expect his plasma sodium concentration to be at this stage?

MRCPATH, November 2006
Organisational Change for ACB...

Reported by Steve Goodall, Assistant Secretary

Miss Katy Cooper, new Chair of the Trainees Committee, and Dr Jo Sheldon, representing the Immunologists, were welcomed to Council. The Office of Chair of the Association is a position that is determined annually. The Chair is elected by Council and the decision is reported to the Annual General Meeting (AGM). Dr Ian Watson, who has served one year of a possible three as Chair, left the Council meeting whilst the election took place. In his absence Dr Graham Beastall, the Association President, proposed Dr Watson for a further year, and this was carried unanimously by Council. Dr Watson is to be congratulated on his re-election.

Association Articles, Memorandum, Byelaws and Rules

A change to the organisation of the ACB had started with a report from the Council National Members who had consulted with the Regions and Membership prior to producing the report. Some months on, now, proposed changes to the organisation of the ACB have been discussed at length by Council, Executive, Regions and by the Membership. The new structure necessitated a major re-write of the Articles, Memorandum, Byelaws and Rules of the Association. These had to be scrutinised by the ACB solicitors to ensure they were legally correct and binding. During the re-writing of the above, several anomalies in the documents have been removed and some pieces that were open to more than one interpretation have been tidied up to remove confusion.

All these had been pre-circulated to Council members to give them adequate time to consider the proposals and the re-write. It had been important that the new Articles etc were written taking into account the Immunology Members joining the Association, and with a view to future co-operation between other organisations. Council agreed unanimously to recommend the changes and they will be circulated to the Membership prior to the AGM in April.

In line with the above changes, the Federation of Clinical Scientists (FCS) also tabled amendments to their constitution. These will be tabled at the FCS AGM prior to the Association AGM.

Association Finances

The Honorary Treasurer, Dr Steve Smith, had proposed to Regional Treasurers that some of the Regional accounting procedures could be processed in a more central fashion, by the Honorary Treasurer and the ACB Office. Regions had discussed the proposals and the Regional Representatives reported to Council that, by and large, this would be an
unwelcome move. In the absence of the Honorary Treasurer, Council agreed to leave procedures as at present, but to discuss the topic at a future Council meeting.

**College Education Centre**

Dr Watson reported on the recent increased co-operation between the ACB and the Royal College of Pathologists (RCPath). A major driver for this co-working has been the need for Pathology to speak as a single voice, a view made very clear when Pathology organisations’ views were sought for the Carter Report.

The College is seeking sponsorship for the construction of its new Education Centre, and the ACB had been specifically invited to co-operate and had been asked for £150,000 towards the cost of the enterprise. In return one of the Education Centre rooms would be named after the ACB. The ACB would obtain unique access to the rooms, free of charge, for five days per annum over a period of seven years and thereafter at preferential rates. Other groups would use the rooms and see the name of the ACB in the Centre. The Pathological Society and the Haematological Society have already signed up.

The proposals have been scrutinised very carefully and, using the venue for meetings such as FiLM, the venture would be effectively cost-neutral.

Council Members were very supportive of the idea, and saw it as an excellent, and unique, opportunity to work closer with colleagues in not only the College, but also other organisations similar to the ACB. Council agreed to go ahead with the proposal.

**Regional Reports**

The Regional Representatives, as ever, had pre-circulated their reports to Council Members. There was good and bad news.

Regional scientific meetings continue to prove to be excellent education vehicles with good attendance at meetings covering a diversity of topics. Reports of the meetings that contain competition for the trainees in the ACB demonstrate the extremely high calibre of the Association’s younger Members. However, many Regions reported the adverse effect that Agenda for Change had had on the number of trainees recruited in the recent round. The lack of Higher Specialist Trainee posts was also noted.

**Association Awards**

A number of nominations for Honorary Membership, Emeritus Membership and Fellow of the Association were received by Council. These were discussed and recommendations to be tabled at the AGM were agreed.

It was re-iterated that the none of the Awards are superior to the others in their importance, rather they reflect the relative areas of contribution of individuals, and the areas of their expertise and work.

**Nomenclature**

In discussions following the Trainees’ Committee report, presented by Miss Katy Cooper, it was noted that the terms Grade “A” and Grade “B” are now obsolete. The terms “Pre-registration Trainee”, Grade 7 or Higher Specialist Trainee should be used in future. Council agreed that a 50p donation should be made into a swear box should any Member use the obsolete terms!
A report on the Southwest & Wessex ACB Meeting held at Frenchay Hospital, Bristol on 13th March in honour of Dr Robert Beetham who is retiring at the end of April

How Different Life Could Have Been!

Reported by Anna Barton, Royal Cornwall Hospital, Truro

Once everyone settled down into a full lecture room Dr Ceridwen Coulson from Frenchay started the day with a synopsis of Dr Beetham’s work in Clinical Biochemistry. Unbeknown to many, his journey in the beginning was not completely smooth. After being disheartened while training at London Hospital he left the NHS for a few months to work in the papermaking industry, as a Mill Chemist, at Bowter Scott in Walthamstow. Luckily for us after a “change of heart” he rejoined the NHS by working at Rochford/Southend Hospital and during this time took the MSc at Battersea & Guildford. In 1972 he moved to the Children’s Hospital, Birmingham, returning to London in 1975, this time working at St Bartholomew’s Hospital, where he completed his MCB & MRCPath. He joined the Westminster Hospital Protein Reference Unit in 1986 and finally left London for Bristol in 1991.

Dr Coulson expressed how Dr Beetham had become “a fantastic colleague”, who had embraced the development of the laboratory. As well as his interest in proteins he has also enjoyed tackling areas that required “taking by the scruff of the neck” such as CSF bilirubin. She also happily announced that although he was retiring from full-time work he would be returning from May for two days a week. The first talk was by Dr Beetham himself, giving an overview of his time in Clinical Biochemistry. Notably the talk included an aerial photograph of Frenchay Hospital surrounded by green fields; also allotments, a swimming pool and a cricket field are very conveniently found on the outskirts of the hospital. Enabling him to pursue his three favourite hobbies: cricket, swimming and gardening, with retirement allowing
him to indulge more in these pursuits! Dr Keith Wakelin (Dorset County Hospital) presented Dr Beetham with a gift along with many thanks for his work over the years.

**Modern Aspects of Myeloma**

Dr Jenny Bird (Avon Haematology Unit, Bristol) brought us up-to-date on treatment of myeloma, particularly reminding us that although better treatments are now dramatically improving patient outcome, they are still not a cure. Treatment protocols are now based on fitness rather than age. Other changes over the years include regrouping patients into clearly defined symptomatic and non-symptomatic (previously ’smouldering myeloma’) groups. She presented data showing that aggressively treated patients have a 2-year remission period compared to standard treatment with 1-years remission. The three main drugs now in use are Thalidomide, Lenalidomide and Bortezomib. Thalidomide, notorious for its teratogenesis properties, is an effective myeloma treatment due to its cellular effect on angiogenesis, apoptosis, cytokine secretion and host immunity. However its side effects: peripheral neuropathy, venous thrombosis and cardiac toxicity have to be closely monitored. Lenalidomide and Bortezomib are considered a breakthrough for myeloma treatment, the former is structurally very similar, but functionally different, to Thalidomide and the latter is a proteasome inhibitor activating apoptosis in myeloma cells.

**MGUS, Margaritas and CRP... Now Hang On!**

Post-lunch Dr Judith Behrens (St Helier Hospital) talked us through the challenges of MGUS, most cases of which are found during investigation of polyclonal increases, reflex/further investigations and testing initiated by the laboratory. There is still no accurate way to predict who will progress to myeloma. She described how devastating the news of MGUS could be on patients, in some cases cancelling future holidays or even remaining in their homes waiting for myeloma to coming knocking on the door. This was a sharp reminder of what impact laboratory results can have on patients and how important it is that we provide the best service possible. More work and guidelines are required to standardise investigations, improve reporting to clinicians and around MGUS monitoring. Dr Behrens advocated the use of the free light chain assay; although the result may not be a ‘true’ figure any falls in levels do match the success of treatment and rises are due to relapse, allowing early treatment and thus preventing kidney damage. There is also the added benefit of using a serum sample that is already available in the laboratory.

Dr Peter Gosling (Selly Oak Hospital) suggested that as the meeting was called ‘A Protein Cocktail’ then perhaps his talk should be ‘Make mine a Margarita’ as he concentrated on the kidney in non-renal disease. He described how the kidney is an amazing organ allowing us to adapt to our surroundings albeit it standing in a hot desert or standing in the pub having a few pints, by maintaining our plasma osmolarity. Problems that do arise are from human intervention particularly prior to and post surgery and a stay in intensive care. The simple fact is that a ‘normal’ kidney cannot cope with surgery, stress and intravenous drips, which cause oedema; that ‘normal saline’ and other intravenous drips are anything but normal as they are often high in sodium and chloride. He also explained how urinary micro-albumin could be a predictor of intensive care survival as it peaks at two hours post surgery and then falls, but remains high in systemic inflammatory response syndrome.

We enjoyed a very bubbly and lively talk about CRP by Dr Joanna Sheldon (St George’s Hospital). She considers CRP to be a very important protein, as there is no known genetic deficiency and within minutes of an acute phase reaction, CRP mRNA is increased 4,000 fold. However its misuse, under-use and abuse by clinicians is exasperating. This was aptly demonstrated by an example of an A&E request for a CRP on a patient with clinical details of “knife in chest”! Three main uses for CRP should be: bacterial infection e.g. monitoring the effectiveness of antibiotics; organic disease e.g. testing non-specific/unwell patients and
chronic inflammatory conditions e.g. monitoring rheumatoid arthritis where a rise in CRP precedes any clinical changes, allowing for early effective treatment. Her “CRP . . . ‘Now hang on’” title was a tribute to Dr Beetham, who would say to her “now hang on” to make her think, so she asked us: why is CRP requesting increasing? Are patients getting sicker? Are doctors more reliant on tests? Is the test more available? She suggested that perhaps we have created the workload increase and therefore should try stemming the flood of requests by demand management. Education is the key to make sure CRP is correctly requested, so clinicians know why they need CRP and of what value it will be.

**Diagnosis of Tubular Proteinuria**

Dr Marta Lapsley (Epsom Hospital) provided us with the last talk of the day. From the start she pointed out how clinicians have looked at urine for clues on illness for centuries. She provided a neat overview of proteinuria, reminding us that the main mechanisms are: overflow from plasma, increased glomerular permeability, failure of tubular reabsorption and secretion into the renal tract. There are both low molecular weight (LMW) e.g. retinol binding protein, and high molecular weight e.g. NAG (N-acetyl-β-D-glucosaminidase), protein markers of tubular disease. Conditions associated with a rise in such markers can be split into functional deficits e.g. inherited & glomerular disease, or active damage e.g. infection & drug toxicity. Dr Lapsley rounded off the talk with an interesting case of Dents disease, a X-linked mutation in the voltage gated chloride channel CLCN5, expressed in the proximal renal tubules. In non-affected individuals megalin binds to LMW proteins before being internalised into the cell where acidification of the endosome causes ligand release thus recycling megalin. In Dent’s disease it’s believed that the acidification and therefore the recycling does not occur. It is clinically silent in females causing hypercalciuria and LMW proteinuria, whereas males also have nephrolithiasis, nephrocalcinosis and renal failure.

Many thanks to Dr Roy Fisher for organising the meeting and we all hope Dr Beetham has an enjoyable retirement. Some presentations are available on: www.acbsww.org.uk/meetings-and-events/past.html

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**Speakers at the Meeting**
As an exercise in raising public awareness of the work of the ACB, the Wales Region, in discussion with Joe O’Meara, sponsored a public meeting at the 9th Wrexham Science Festival held at the North East Wales Institute of Higher Education in March.

Dr Gary Thorpe of the Wolfson Applied Technology Laboratory was commissioned by the Wales Region to present a talk on “Over the Counter Diagnostics”.

Dr Thorpe was introduced by Mr Thomas Moore (Director of Policy and Planning at NEWI) who also acknowledged the contribution of the ACB to the Science Festival.

Setting the scene, Dr Thorpe outlined the range of tests that are currently available as Over the Counter (OTC) products but pointed out that procedures that are currently healthcare professional-delivered POCT tests could well become OTC, patient-performed tests in the future, and although general chemistry and immunology tests were available now, molecular biology-based tests are on the way. Progress is being driven by developments in materials science, miniaturisation, micro-electronics and micro-fluidics with an expanding application area.

Get the Simple Stuff Right . . .

Reminding us that there is “no end to man’s ingenuity to do simple things incorrectly”, Dr Thorpe suggested that the ideal requirements for an OTC test procedure would include simplicity, minimal operator steps, rapid, inexpensive, internal reagents, no calibration requirement, internal controls and room temperature stability. Non-instrumental methods (e.g. dip-sticks) fulfil many of these requirements but instrumental methods have a need for as many operator steps as possible to be engineered out. Many instrumental OTC procedures are now capable of producing results to the same levels of quality expected of laboratory-based technologies. The emphasis was on complex technology behind a simple procedure.

Whilst it is a requirement for all in vitro diagnosis on sale in Europe to carry the CE mark, this is not the case in the USA and several products available in the States are not legally available here, although the internet allows some items to slip through.

It was emphasised that one of the limitations of self-testing is that guidance on how to interpret the results are necessarily brief, leaving the patient to organise their own follow-up and/or counselling. Additionally, the products are aimed at untrained individuals with little or no help available and a requirement to take their own sample. The OTC test can only be considered suitable for monitoring and screening,
Promoting the Profession

not for diagnosis and there is no equivalent OTC confirmatory test for example in drug testing. There is also an educational requirement, a CHD risk is not just a raised cholesterol, rather a wider life-style issue.

The range of tests is probably wider than many would imagine. Besides pregnancy testing and glucose monitoring there are OTC products for occult blood, drugs of abuse, drink-spiking, H. pylori, allergy testing, male and female infertility and infectious diseases (including anthrax spores). In the USA, problems with lack of specificity in prostate cancer screening products has led to their withdrawal from sale. Home test kits for Alzheimer’s disease and infidelity remain available.

Although not a full house, the talk was well received by the audience who entered into a lively discussion afterwards. Thomas Moore once again thanked Dr Thorpe and the ACB on behalf of NEWI and the Science Festival Organisers.

Staff from all pathology disciplines at the Wrexham Maelor Hospital took part in the Scientriffic event of the Science Festival which ran all day on Saturday 31st March. The laboratory has produced a display and exhibition every year for the Science Festival and it remains very popular, particularly amongst children.

The full programme of events can be found at:
http://www.newi.ac.uk/en/aboutNEWI/whatson/WrexhamScienceFestival

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ACB West Midlands Scientific Meeting

Current Topics in Clinical Biochemistry

Thursday June 21st 2007 10.30-17.00
Austin Court, Birmingham

- Role of Laboratories in CF Screening
  Mr Paul Griffiths/Ms Kate Hall, Birmingham Children’s Hospital
- View from a Carter Pilot Site
  Mr Stewart Messer, University Hospitals Birmingham
- Strong Ion Gap
  Dr Paul Holloway, St Mary’s Hospital, London
- Interpretation of Synacthen Stimulation Tests
  Dr Penny Clarke, University Hospitals Birmingham
- Current and Future Applications of MS in Clinical Biochemistry
  Mr Brian Keevil, Wythenshawe Hospital, Manchester
- UK Guidelines for the Use of Thyroid Function Tests
  Dr Graham Beastall, Glasgow Royal Infirmary
- Metabolic Complications of HIV
  Dr D Nair, The Royal Free Hospital, London Hospitals Birmingham

Meeting sponsored by Abbott Diagnostics and Siemens Medical
Registration fee £20 (ACB Members), £10 for Trainees
Booking and further information via:
www.ukneqas.org.uk/special/acbwmmeet.htm
National Assessor Scheme for the Appointment of Clinical Scientists in Clinical Biochemistry

By Ian Watson, Graham Beastall and Keith Griffiths

Background

A feature of the 1990 re-grading exercise for Clinical Scientists was the development of the National Assessor scheme to bring external advice and objectivity to the appointment process. For each clinical science discipline the Department of Health held a list of suitable assessors who had been approved by relevant professional bodies. The Department of Health also nominated a lead person for appointments in England & Wales. In clinical biochemistry the Association approved nominations to serve on the panel of National Assessors and recent lead persons have been Chris Price, Ian Barnes, Mike Hallworth and Keith Griffiths. Similar arrangements existed in Scotland and Northern Ireland although management oversight was slightly different.

National Assessors have had three roles in the appointment process:

• Provision of advice on the content of the job description.
• Recommendation of candidates suitable for short-listing and interview.
• Attendance at the interviews and recommendation of the eligibility of each candidate for appointment.

In general one National Assessor (external to the immediate area) was used for appointments to Clinical Scientist posts graded up to Grade B16 and two National Assessors (one of whom was external to the immediate area) were used for appointments to posts graded above Grade B17, including the Grade C Consultant level posts.

The National Assessor scheme has been a great success, enjoying the confidence and support of employing authorities, the profession and the Departments of Health. Furthermore, the National Assessor scheme has received the support of the Royal College of Pathologists for it provides a directly comparable external assessment scheme to that in use for the appointment of Medical Consultants in Pathology and Laboratory Medicine.

The Current Situation – Department of Health

There is currently confusion concerning the status and role of the National Assessor scheme. Whilst the scheme continues to be
recommended by the Departments of Health in Scotland and Northern Ireland advice on the use of National Assessors has been removed from the website of the Departments of Health in England and Wales. It is the understanding of the Association that this change of advice is a consequence of the introduction of Agenda for Change and confusion over grading outcomes and Clinical Scientist versus Healthcare Scientist appointments.

The publication in November 2005 by the Department of Health (England) of the Healthcare Scientists Career Framework contained specific recommendations for the establishment of an Adviser scheme to succeed the National Assessor scheme. Despite repeated promptings from the Association and other professional bodies the Department of Health has failed to implement the Adviser scheme and there seems little prospect of this happening in the near future.

The Current Situation – Clinical Biochemistry in Practice

The Association position is clear – the National Assessor scheme should continue across the UK until the Department of Health Adviser scheme or a different successor arrangement is brought into being. The Association believes that the overwhelming majority of its members and of employing authorities will support this position. The Association also believes that the Royal College of Pathologists will endorse this recommendation and it is entering into discussions with the College on this point. External credibility to the appointment of senior professionals is an important part of clinical governance.

Therefore, the Association will continue to support the National Assessor scheme for the appointment to senior Clinical Scientist posts in Clinical Biochemistry. The Association will continue to approve recommendation of the appointment of new National Assessors and to the Department of Health accordingly. The final approval of the suitability of assessors will be the Chief Scientific Officer. The lead for National Assessors in Clinical Biochemistry will continue to be Dr Keith Griffiths.

The Association recommends that at least one National Assessor (external to the immediate area) should be used for all Clinical Scientist appointments in Clinical Biochemistry at Agenda for Change Bands 7 and above. It further recommends that two National Assessors (at least one external to the immediate area) should be used for Clinical Scientist appointments in Clinical Biochemistry at Bands 8c, 8d and 9.

Senior members of the profession are encouraged to make the continued existence of the National Assessor scheme known to employing authorities and recommend its use in line with the previous paragraph. For further details of the scheme, including the allocation of National Assessors to specific appointments please contact Keith Griffiths (Keith.Griffiths@nww-tr.wales.nhs.uk).

Ian Watson (Association Chair)
Graham Beastall        (Association President)
Keith Griffiths (Lead for National Assessors in Clinical Biochemistry)

Reference
Bye, Bye Boys . . . Hello Girls!

Reported by Jen Vikeo, Hope Hospital, Salford

The Trainee’s night at the recent ACB training course, held in Manchester, firstly addressed workforce planning after being highlighted as an important issue to current trainees. There are concerns over the diminishing number of grade B/Higher Specialist Training (HST) posts nationally for Trainees to progress into. This was recently emphasised by the twenty-six nationwide applicants for two Higher Specialist Training (HST) posts in Manchester. John Kane, the chair of the Workforce Advisory Committee and Lesley Tetlow, the North West Regional Tutor, were invited to the Trainee’s evening to address some of the concerns and shed some light on the current situation.
Retirement Looms for the Boys . . .

John presented some workforce statistics for Clinical Biochemists which illustrated that the demographics of the profession mainly consisted of older males and younger females, with a noticeable shortage of clinical biochemists in between these age bands. Due to the large number of Clinical Biochemists forecasted for retirement over the coming years, the recent large intake of trainees can be fully justified. However, due to current apparent short term cuts in both workforce and training commissions imposed by individual Trusts and SHAs, a number of posts have not been re-filled. The ACB Workforce Advisory Committee continues to maintain an efficient list of Clinical Biochemists across the country which has enabled successful workforce evaluation. The demand for Clinical Biochemists is very difficult to predict and is largely dependent on policies within local SHAs and individual Trusts. John discussed his work with the NHS Workforce Review Team and stated that they are very keen this year, to produce data on the demand for clinical scientists rather than just concentrating on supply. John also presented a synopsis of a recent House of Commons Health Committee report which highlighted the disastrous failure of workforce planning currently in the NHS and recommended that more time, effort and resources are devoted to workforce planning.

More Jobs Required for the Girls . . .

On a positive note Lesley has recently secured the funding from the SHA in Manchester for the six current HST posts. Lesley emphasised that the possession of good local and national workforce statistics was vital in securing these posts. It is important for all trainees to understand that the current situation concerning trainee employment is being fought on every front and there are dedicated members of the ACB who are continuing to protect the future of our profession.

In addition to workforce planning discussions, Katy Cooper, Chairman of the ACB Trainees Committee, presented information on the Department of Health’s proposals to align training schemes for health care scientists. The ACB Education Committee has replied to the ‘Skills for health – modernising healthcare science careers’ consultation document on behalf of the ACB. Concerns were apparent with regard to how trainees would achieve laboratory experience equivalent to current trainees and how candidates would be selected for the training programmes. Would Universities alone be able to provide the same quality of training that is currently provided by our ACB approved training centres and specialised Masters programmes? Although these proposals would not affect the current trainees training, it may effect the future roles of Clinical Biochemists in the training of healthcare scientists.
Keep sane at coffee time with the ACB News Crossword. Always relating to the science and practice of Clinical Chemistry, you will never cease to be astounded by the convoluted mind of the ACB News Crossword compiler.

Prizes for your department: The first five correct solutions to appear on the ACB News fax machine (Fax: 0121-765-4224) will receive a copy of the new educational Calcium Cases CD-ROM by Aubrey Blumsohn, Christina Gray, Neil McConnell, John O’Connor, Anne Pollock & Roy Sherwood and which retails at over £50. Please state clearly the name and address of the Department that is entering the competition.

Remember that ACB News appears first as a PDF on www.ACB.org.uk around the 7th of each month.

Crossword set by Rugosa

Across
1 A poison 3: disturbing executions don’t ensue (5)
3 This describes a precipitous fall encompassing the investment of a ton in Whitby jewellery (9)
8 A language 3: way rebel leader is given new start (6)
10 Medicine containing iodine compound cured it (8)
12 A movement 3: treat a Biomed with oxygen (8)
13 Muslim dresses upper arm injections? (6)
15 A temperature 3: discord conciliated, ‘anti’ removed (3–4)
16 Abundant sexless examples (5)
17 A state 3: sick of uncivil layabouts (3)
19 A knowing 3: undisciplined tearaways stay away (5)
20 Basis of most ale brewed (7)
22 Hold collection (6)
23 Adopted, depose us with difficulty (8)
24 A gland 3: could self-destruct - don’t fret (8)
26 A tree 3: forbid, no return (6)
27 I leave confused geriatric head of department to get equipment module (9)
28 Tells a story having several threads (5)

Down
1 A membrane 3: Henman scare? (8)
2 An accident 3: process clearer about complex curbs surrounding eggs (15)
4 Executed in sordid surroundings (3)
5 A resuscitation 3: bottling up a mild coronary (15)
6 Doctor ruins a novelty method for feeding patients (13)
7 Surplus part of many policies (6)
9 Incorrect clue led around GI tract problem (8,5)
11 An air 3: rising CD type takes in independent pop group (7)
14 A sea 3: change Spice girl in cast (7)
18 Ceremonies leading to princes becoming 23 (8)
21 A chemical 3: a 101, 500, 99 series (6)
25 Lose tension by shortening story (3)

Answers to Last Month’s Crossword
Across: 1 Acetic, 5 Ease, 7 Ape, 10 Automate, 11 Reason, 12 Inattentive, 14 Once, 15 Overcome, 17 Forsooth, 18 Etch, 20 posteriari, 22 Finals, 23 Sometime, 25 Odes, 26 Riyals

Down: 2 Clue, 3/24/5D Two-dimensional gel electrophoresis, 4 Cravat, 6 Stranger, 8 Proteomics, 9 Radiochemistry, 13 Innovative, 16 Contused, 19 Former, 21 Amyl
The Department of Clinical Biochemistry in association with the Olympic Medical Institute wish to appoint a Clinical Biochemist to undertake development of innovative tests for the management and assessment of performance in athletes. The post is supported by a grant from UK Sport to develop a series of non-invasive tests and will offer a unique opportunity to develop both theoretical and practical skills in sports biochemistry and physiology and to develop new and exciting applications of tests for both fitness monitoring and potentially clinical use. In addition the successful candidate will be expected to undertake routine duties within the Clinical Biochemistry Department.

You will be expected to have completed Grade A training as a Clinical Biochemist, have R&D experience, either be registered or working towards Registration as a Clinical Scientist with The Health Professions Council and actively pursuing further career development within Clinical Biochemistry.

For further information, please contact Dr Sandra Rainbow, Consultant Clinical Biochemist on 020 8869 2120, email: sandra.rainbow@nwh.nhs.uk or Dr Dennis Wright, Head of Department and Consultant Clinical Biochemist on 020 8869 2121.

Apply on-line at nwh.nhs.uk/jobs, alternatively call 0870 787 6857 to receive an application pack.

Wexham Park Hospital, Slough

Principal Clinical Scientist: Biochemistry

Band 7 - 8a (Depending on Qualifications) Ref: AOJ204
Band 7 £26,043 - £37,882 per annum (pay award pending)
Band 8a £34,387 - £43,744 per annum (pay award pending)

Applications are invited from enthusiastic and forward thinking Clinical Scientists for the post of Principal Clinical Scientist: Biochemistry, within the newly established and developing Blood Sciences section at Heatherwood and Wexham Park Hospitals NHS Trust. The Pathology Department, of which Blood Sciences is a key component, forms part of the Clinical Support Services Directorate, which provides services to primary and secondary care across East Berkshire and parts of South Buckinghamshire, from two Hospital sites. The Trust is a busy district general hospital serving a population of 430,000 and provides a comprehensive range of healthcare services including a busy Accident and Emergency Department. The Blood Sciences department currently performs approximately 2.6 million biochemistry tests from 330,000 requests annually.

You will join a progressive Blood Sciences team and you will be asked to significantly contribute to the clinical direction of Routine Clinical Chemistry and to support the educational and clinical development of the Blood Sciences team, across the combined repertoire of that section. The section has recently been well equipped with Roche Modular chemistry, immunoassay systems and the Sysmex Haematology System. In addition the Trust is in the process of purchasing; pre-analytical robotics, a medium scale immunoassay system for Serology and other smaller systems to support the repertoire to be offered by Blood Sciences. The Pathology Department is fully computerised, Clinisys Lab Centre and is in the process of purchasing a GP order communication and results reporting system.

You must be a HPC registered Clinical Scientist, have an MSc in Clinical Biochemistry or equivalent qualification, and ideally possess MRCPath/DipRCPath or equivalent verifiable experience.

For further information, or to arrange a visit, please contact Dr Ian Walker, consultant in Medical Biochemistry on 01753 633448/e-mail Ian.Walker@hwph-tr.nhs.uk or the Pathology Service Manager Mr Gavin Bennett on 01753 633718 e-mail Gavin.Bennett@hwph-tr.nhs.uk

For an application pack, please contact the Recruitment Shop on 01753 633498 (24 hour answerphone) or via email at recruitment.shop@hwph-tr.nhs.uk quoting the above reference number.

Closing date: 3rd June 2007.

Heatherwood and Wexham Park Hospitals NHS Trust

www.heatherwoodandwexham.nhs.uk
To advertise your vacancy contact:
ACB Administrative Office, 130-132 Tooley Street, London SE1 2TU
Tel: 0207-403-8001 Fax: 0207-403-8006 Email: ACBNewsAdverts@ACB.org.uk
Deadline: 26th of the month prior to the month of publication

Training Posts: When applying for such posts you should ensure that appropriate supervision and training support will be available to enable you to proceed towards state registration and the MRCPath examinations. For advice, contact your Regional Tutor. The editor reserves the right to amend or reject advertisements deemed unacceptable to the Association. Advertising rates are available on request.
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