In this issue

Department of Health . . .
New Year Update

Local Leaders Sought

Markers of Hip Joint Wear in Swansea

Harmonisation of Biochemistry Reference Intervals

Workforce Advisory Committee Survey 2010
Early diagnosis of Acute Kidney Injury (AKI)

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www.acb.org.uk

ACB News
The monthly magazine for clinical science
Issue 573 • January 2011

Editorial
General News
Practice FRCPath Style Calculations
Council Matters
Current Topics – Department of Health
New Year Update
Pathology Harmony Biochemistry Recommendations
Workforce Advisory Committee
Meeting Reports
Corporate News
Obituaries
New Members
ACB News Crossword
Council Nomination Form
Situations Vacant

Front cover: Participants at the Wales Autumn Scientific Meeting held at The Towers Hotel, Swansea. Gareth Davies, Catrin Searell, Hilary Durrant and Alan Dodd

Focus
Association for Clinical Biochemistry
National Meeting
Harrogate 2011
Harrogate International Centre
23 – 26 May 2011

www.focus-acb.org.uk
Local Leadership Vital for Testing Times Ahead

Jonathan Berg, Editor

It was difficult to keep this issue of ACB News to our normal maximum size of a “32 pager”. Key things to consider include:

Pathology Harmony: The formal support of the IBMS, College and ACB for the first set of Pathology Harmony reference intervals, units and test names in Clinical Biochemistry is a major achievement. Now this needs to extend locally, with implementation of harmonised reference intervals, units and names for a number of common clinical biochemistry tests targeted for April 2011. There has never been an excuse for scientifically unfounded variation in reference intervals, units and test names. Now we have a foundation on which we can show that we can address such issues.

DofH New Year Message: The article by Ian Barnes needs to be read carefully by everyone who is charged with taking Clinical Science forward in 2011. Ian is clearly dedicated to driving forward key areas which can easily be discerned from his article.

Workforce Pressures and Lack of Local Leaders: The Workforce Advisory Committee article offers pragmatic suggestions, but issues of lost and converted posts are complex. We must do everything to retain good final year trainees and it is suggested this could be done by converting vacant higher grade posts. Some have advocated that the 2011 funding for recruitment of new Trainees should instead fund higher specialist training positions. In Wales that is happening while in Scotland it is suggested no new Trainees are being taken on but it is not clear if funding is to be used for HST posts. ACB News understands that in England 2011 entry training posts are to be advertised in the New Scientist on 14th January, also appearing on NHS Jobs website; this despite representations from some in the profession that this year’s funding should be used to retain current trainees in HST posts.

Local leadership needed now: At the other end of the profession there are major issues, with a lack of candidates applying for higher grade consultant posts. Clinical laboratory leadership locally is crucial at this time. As a Pathology Director for a number of years I know just how hard it is to encourage Consultants from other disciplines to take on leadership roles and this is an area that consultants, medical and non-medical, in Biochemistry have excelled at. We must encourage capable Principal and lower grade Consultant post-holders to get out of their comfort zones and apply for such leadership roles.

So, read on and consider the interesting times ahead in 2011.

Jonathan Berg
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Answers for life.
**Call for Nominations 2011**

**Election of Directors**

Nominations are called for the following elected Directors: Director of Finance, Director of Publications and Communications (Company Secretary), Director of Education, Training and Workforce, Director of Scientific Affairs, Director of Clinical Practice and Director of Regulatory Affairs.

These posts are for a maximum term of five years commencing at the AGM in 2011. All the current Directors are willing to continue for a further term of office.

**National Members**

In accordance with the provision of Articles 14 and Bye-law 6, nominations are called for the position of National Member of Council for a term of three years. There are 2 vacancies. National Members may be asked to take on additional roles during their term of office.

Nominations for all the positions above, duly countersigned, should be made on the nomination form in this issue of ACB News and sent to and sent to the ACB Administrative Office by the closing date of 3rd March 2011.

**Biomarkers Survey . . . Please Help**

ACB Members based in the UK should have received an email from the ACB office, regarding a survey on the views and experience of Clinical Biochemistry staff in biomarker research programmes which is part of a project being undertaken by Sophie Hepburn in Leeds.

Doubts have been raised regarding the capacity and resources of routine Clinical Biochemistry laboratories to help in the clinically important area of biomarkers.

There may be a lack of awareness of the ongoing work in clinical proteomics for the discovery of new protein biomarkers.

Sophie is very keen to collect data on this and would be very grateful if you could complete a short survey which can be accessed at: www.survey.bris.ac.uk/lthtpathology/expanded

**Lab Tests Online Editor**

We are looking for a new Managing Editor of Lab Tests Online UK. The post holder is responsible for the accuracy, appropriateness and future development of the editorial content and associated editorial procedures and the appointment and maintenance of an efficient and effective editorial team. Support is provided from the Offices of the Association for Clinical Biochemistry and particularly with the appointed LTO administrator to ensure all editorial material is published in a timely and accurate manner. For further details please contact: Stephen Halloran, Chairman, Lab Tests Online Board. Email: s.halloran@nhs.net

Closing date January 31st 2011.

**Sudoku**

**This month’s puzzle**

**Last month’s solution**

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Introducing the ADAMS HA-8180

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ACP Leadership Courses 2011

The Association for Clinical Pathologists offers three levels of Leadership & Management Courses. All courses aim to deliver training and updates in the key competencies outlined in the Medical Leadership Competency Framework which has been developed by the Academy of Royal Colleges and the NHS Institute for Innovation and Improvement.

The courses are delivered at a level that is appropriate for the participants' stage of training, in the five key leadership domains of personal qualities, working with others, managing services, improving services and setting direction.

**Challenges to Pathology: An Update**

24th February 2011
Institute of Physics, London

This one-day annual update is aimed at established consultants and provides updates on a variety of professional and management issues. Topics include:

- Update on the Development of Networks
- Update on the New Department of Public Health
- Pathology Commissioning in the Brave New World
- Recent Developments in CPA Accreditation (with a look forward to possible developments with CQC and Government arm's length bodies)
- Update on College Workforce Planning; Update on Revalidation and Recertification
- Update on the Royal College of Pathologists and International Links

**Basic Level Leadership & Management**

2nd March 2011
Copthorne Hotel, Newcastle upon Tyne

This course is aimed at Pathology Trainees and covers:

- NHS Structure
- Laboratory Management Structure and how to Manage a Pathology Department
- Laboratory Documentation
- Accountability and External Monitoring – CPA/EQA/Audit
- Personal Development including Publications/Time Management/CV Development/Passing Exams
- Research
- How to be a Good Registrar

**Advanced Level Leadership & Management**

28th - 30th September 2011
Hardwick Hall Hotel, Sedgefield

This is a wide-ranging, residential, 3-day course introducing management issues relevant to the running of a modern pathology service. It is intended for Specialist Registrars and Trainees in Pathology in their final year of training, Clinical Scientists and those who have held their first consultant post for less than 2 years. Topics include:

- The NHS Reforms
- Funding & Structure of the NHS
- Clinical Governance
- Role of PCTs and SHAs
- Financial Management
- Business Planning
- Demand Management
- Managing Staff
- Appraisal and Job Planning
- Self Management
- Future Organisation of Pathology Services

Details from: Jacqui Rush, Tel: 01273-775700. Email: jacqui@pathologists.org.uk
www.pathologists.org.uk
Nominations for this year's Awards are invited from Regional Committees, together with a citation of about 500 words, outlining the basis of the nomination.

The Award must be approved by Council at its meeting in March 2011, and it is important that the Regional representative is able to extol the virtues of the nominee as it is possible that Council members may not know some of the activities of nominated individuals.

The three award categories are:

**Emeritus Member**
Persons who have been Ordinary Members of the Association for at least ten years and have retired from full-time employment and who have made an exceptional contribution to the objects of the Association may, on the recommendation of Council and by a majority of at least two-thirds of those voting at a General Meeting, be elected Emeritus Members of the Association.

**Fellow**
Persons who have been Ordinary or Affiliate Members of the Association for at least ten preceding consecutive years and have retired from full-time employment may, on the recommendation of Council and by a majority of at least two-thirds of those voting at a General Meeting, be elected to the category of Fellow of the Association. The recipients should have made a significant contribution to the profession in one or more of the following areas:

- Continually led and instigated changes to meet the needs of Clinical Biochemistry and Laboratory Medicine services on behalf of a region, or nationally.
- Developed exceptional educational and/or training facilities for the profession.
- Led in setting up and developing over a considerable period of time, a well-respected and valued specialised service that had a major impact either within a region or nationally.
- Raised the profile of the profession over many years, within the lay or clinical community, either regionally or nationally.

**Honorary Member**
Persons who have made a distinguished contribution to Clinical Biochemistry and Laboratory Medicine at international level may, following the recommendation of Council and by a majority of at least two-thirds of those voting at a General Meeting, be elected Honorary Members of the Association.

If you would like to propose someone then contact your ACB Regional Secretary. Proposals must be supported by the Regional Committee and the nomination submitted through the Regional Committee at the Council meeting in March 2011.

The closing date for nominations received by Council is 3rd March 2011.
ACB News Moves On In 2011 With Your Help

During 2011 ACB News aims to bring readers topical news, views and comment across the world of Clinical Science. The Editors are increasingly aware that the PDF version of ACB News is being downloaded by many people interested in what is happening in UK pathology far beyond our membership. Last year was eventful and this year is already looking like it will be fun as well. If you have something to say then you are very welcome to send in some copy for consideration. In particular, do consider contributing to our editorial if:

- You are involved with one of the ACB’s structured committees. Here you have a clear responsibility to let everyone know about all the good stuff you are doing.
- Meeting Organisers: Many people decide to come to scientific meetings due to publicity in ACB News. For important topics people are prepared to travel a long way even for a one day meeting. We appreciate that just getting the scientific programme together is hard enough but you do need to send it to ACB News to get total coverage.
- Innovators: If you have done something you are proud of in your pathology environment then why not write it up and give others the benefit of all your hard work.

Important Change to the Process for CPD Accreditation of Scientific Meetings

As of 1st April 2011, the Royal College of Pathologists is changing their process for awarding CPD Accreditation for scientific meetings. At present, the ACB has an agreement that, provided appropriate paperwork is completed and sent to the Office, all national and regional ACB scientific meetings are accredited through ‘Advanced CPD Approval’.

For all meetings on or after 1st April 2011, we must apply for accreditation for each meeting through the national approval process. At the ACB Executive meeting on 9th December 2010, it was agreed that this will be the responsibility of the National Meetings Secretary for national meetings and the Regional Meetings Secretary for regional meetings.

Further details will follow once full guidance is received from the College. If you urgently require more information, please do not hesitate to contact Ian Hanning, ACB National Meetings Secretary, Email: ian.hanning@hey.nhs.uk
Professors’ Prize 2011
Applications Invited

The Professors and Heads of Academic Clinical Biochemistry Departments have endowed a prize for original research in the medical sciences. Applications are invited for the Professors’ Prize for Research in Clinical Biochemistry 2011.

The prize is awarded in open competition to any researcher in the field, but is particularly intended for early career investigators who have made a substantial and sustained contribution to research in Clinical Biochemistry in its broadest context. The successful applicant will be expected to give a plenary lecture describing his/her work at the national meeting of the Association of Clinical Biochemistry to be held in Harrogate in May 2011 where the official award will be made. This meeting is the premier meeting of the Association and hosts both UK and International delegates. Previous incumbents have secured high level academic posts both in the UK and abroad.

Applications should be submitted by 28th January 2011 to the Secretary of the National Association of the Heads of Clinical Biochemistry, Professor William Fraser, School of Clinical Sciences, The University of Liverpool, 4th Floor, Duncan Building, Daulby Street, Liverpool L69 3GA, or email: W.D.Fraser@liverpool.ac.uk, with a full CV, a brief summary of the work and contribution made by the applicant (no more than 300 words), and letters of support from academic colleagues if appropriate. Applications should be submitted electronically with a hard copy sent by post to the above address. Those who wish to discuss their application are invited to contact Professor Gordon Ferns, Director, Institute for Science & Technology in Medicine, University of Keele, Thornburrow Drive, Stoke on Trent, Staffordshire ST4 7QB, or email: g.a.a.ferns@istm.keele.ac.uk or telephone: 01782-554253.

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Dudley Road, Birmingham B18 7QH

* see Barlow, Graham & Berg in
Annals of Clinical Biochemistry
2010; 47: 408–414
ACB Trent, Northern & Yorkshire Region Scientific Meeting

Cystic Fibrosis and the Geoffrey Walker Award

Thursday 17th March 2011
York Hospital, Wigginton Road, York, YO31 8HE

09:15  Coffee & Registration
09:55  Morning session Chair
       Dr Ian Holbrook
10:00  Living with Cystic Fibrosis
       Lynsey Morton, CF Patient Advocate
10:30  Physiotherapy for Cystic Fibrosis - Airway Clearance and Beyond
       Tracey Daniels, Specialist Physiotherapist for Cystic Fibrosis, York Teaching Hospital Foundation NHS Trust
11:00  New Developments in the Treatment of Cystic Fibrosis
       Dr Kevin Southern, Paediatrician, Reader and Honorary Consultant in Paediatric Respiratory Medicine, Liverpool University
11:40  How Should Labs Interpret Sweat Test Results to Serve a Newborn Screened Population?
       Dr Jean Kirk, Consultant Clinical Biochemist, Royal Hospital for Sick Children, Edinburgh
12:20  Lunch
13:15  ACB TNY Region AGM
14:15  Short presentations from candidates for the Geoffrey Walker Award
       – Titles to be announced
15:45  Tea break
16:15  Presentation of the Geoffrey Walker Award to the successful candidate

Organiser: Dr Ian Holbrook, Department of Clinical Biochemistry, York Hospital, York, YO31 8HE
Tel: 01904-725786. Fax: 01904-726358
E-mail: ian.b.holbrook@york.nhs.uk

Fee: £10 Members and £15 non-Members.

Registration form and directions are available at:
www.acb.org.uk/site/meetings.asp
A metabolic disease is known to result in decreased plasma activity of enzyme X. X was measured in 100 normal subjects and 100 individuals with the disease in question:

95% confidence limits

**Normal subjects** 830 - 1222 U/L
**Disease group** 108 - 892 U/L

Calculate the diagnostic sensitivity and specificity of this test at a decision limit (diagnostic cut-off point) of 830 U/L.

Values of the normal deviate (z-score) and P are:

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**Specificity** is the percentage of negative results obtained in individuals which do not have the disease. In this question the decision level used (830 U/L) is actually identical to the lower reference limit of the normal population. The 95% confidence interval includes 95% of results, 5% of these will fall outside of this range; 2.5% below the lower limit and 2.5% above the upper limit. Since the diseased group have reduced enzyme activity, 2.5% of results from the normal group will be classified as false positives, the remainder will be true negatives. Therefore:

\[
\text{Specificity} = 100\% - 2.5\% = 97.5\%
\]

**Sensitivity** is obtained from data in the diseased group. First calculate the z-score for this group at the decision level used:

\[
z = \frac{\text{Decision level} - \text{Mean}}{\text{SD}}
\]

The 95% confidence limits include the mean ± 1.96 SD and so spans 2 x 1.96 SD

\[
\text{SD} = \frac{\text{Upper limit} - \text{lower limit}}{2 \times 1.96} = \frac{892 - 108}{3.92} = 200 \text{ U/L}
\]

The population mean is the mean of the 95% confidence limits:

\[
\text{Mean} = \frac{892 + 108}{2} = \frac{1000}{2} = 500 \text{ U/L}
\]

\[
z = \frac{\text{Decision level} - \text{Mean}}{\text{SD}} = \frac{830 - 500}{200} = \frac{330}{200} = 1.65
\]
From the z-score table a z value of 1.65 corresponds to a probability of 10%. Therefore 10% of results will fall outside of the range for mean±decision level. 5% will be greater than mean + decision level and will be false negatives, the remainder are true positives. Since sensitivity is the percentage of positive results obtained for individuals with the disease it follows that:

\[
\text{Sensitivity} = 100\% - 5\% = 95\%
\]

**Question 117**

A 75-year old patient had a convulsion four days after a partial hip replacement. She is found to have a serum sodium concentration of 108 mmol/L. Her estimated weight is 55 kg. Estimate the volume of 2.7% saline required to increase her serum sodium concentration to 125 mmol/L. State clearly any assumptions you make.

(Atomic weights of sodium 23, chlorine 35.5).

*FRCPath, Spring 2010*

---

**Intensive Course on Screening for Down’s Syndrome**

9th–11th May 2011

Wolfson Institute of Preventive Medicine

Barts & The London School of Medicine & Dentistry

- Comprehensive coverage of theoretical and practical aspects of screening for Down’s syndrome
- New information on advances in first and second trimester biochemical and ultrasound screening

*Further details are available from the Wolfson Institute website:*

[www.wolfson.qmul.ac.uk/epm/screening/](http://www.wolfson.qmul.ac.uk/epm/screening/)

*or from Cecily Cromby, Wolfson Institute of Preventive Medicine, Charterhouse Square, London EC1M 6BQ*

Tel: 020 7882 6258  Fax: 020 7882 6290  Email: c.f.cromby@qmul.ac.uk
Climate Change Addressed by Awareness and Harmonisation

Ruth Lapworth, ACB Secretary

A Report from ACB Council Meeting, 4th November 2010

The first “Topic of the Day” concentrated on the ways in which the science agenda can improve patient outcomes.

Dr Robert Hill gave various examples where scientific knowledge can be used to promote best practice and have a positive effect on patient care. However, there is often little evidence available to support laboratory best practice and research in these topics is deemed to be of little value. He challenged us to make science fun, to participate in evidence based reviews and then implement best practice to benefit patient care. It was suggested that this could be done nationally in a coordinated way to avoid unnecessary duplication of effort.

All members are to be encouraged to engage in this process by getting involved with specific ACB task-setting groups, but also with colleagues outside the profession.

Recruitment Processes

The change to the Clinical Scientist recruitment process was the second topic of the day. Dr David Cassidy reported that from 2011 recruitment of Clinical Scientists will be through a scheme administered by the Department of Health and that these interim arrangements are likely to continue for 3 years during the transition to new arrangements under Modernising Scientific Careers.

Concern Over Frozen Posts

There was considerable concern over the news from many Regions of posts being permanently lost or not recruited to until arrangements for networking between groups of laboratories have been defined. A temporary reduction in the number of trainee posts this year could have a permanent impact on future numbers whilst the effects of reorganisation on Clinical Scientists generally will require careful monitoring.

There is obviously going to be a great deal of change and uncertainty for many members and it was thought that some changes in the current climate were inevitable. However, it was felt that raising awareness of the profession and initiatives such as Pathology Harmony will help demonstrate our value to users, commissioners and patients.
The White Paper ‘Equity and Excellence: Liberating the NHS’, published on 12th July 2010, sets out proposals for the NHS to become a truly world-class service that is easy to access, treats people as individuals and offers care that is safe and of the highest quality. It sets out a vision for an NHS that:

- Puts patients at the heart of everything that we do (‘no decision about me, without me’).
- Achieves outcomes that are amongst the best in the world.
- Empowers clinicians to deliver results based on the needs of patients.

We all share a common ambition to make pathology services the best they can be but at the same time recognise the challenges we face as the NHS seeks to achieve £15-20 billion of efficiency savings to be reinvested in health services through the Quality, Innovation, Productivity and Prevention (QIPP) programme. You can read more about QIPP at [www.dh.gov.uk/en/Healthcare/Qualityandproductivity/QIPPworkstreams/DH_115473](http://www.dh.gov.uk/en/Healthcare/Qualityandproductivity/QIPPworkstreams/DH_115473).

While local delivery will be the deciding factor in the success of QIPP, national coordination, support and monitoring will underpin the changes made.

### Pathology QIPP

Pathology is one of a number of priority workstreams working closely with the DH QIPP team to deliver the programme with the SHAs responsible for drawing up plans with implementation from April 2011. A National Pathology Forum has been established since January 2010 which has representatives from each SHA and meets bimonthly to share knowledge and provide peer support through the change process. There are Pathology QIPP leads in each SHA and monthly performance reports are sent to the central QIPP team.

Draft proposals for transforming pathology services across the SHAs were received in May, updated for November, with a further iteration expected in January. The plans are based on the Carter recommendations for releasing £500m in efficiency savings by consolidation and service improvement, whilst ensuring a service which provides the highest standards of care for patients and the best possible service to clinicians. Radical transformation is required to meet the rapidly changing needs of healthcare and this will have to be done by structural change and innovation of workforce underpinned by technology.

### Information in Health and Care

Following the publication of the White Paper a consultation has started on the future uses of information within health and care with the publication of ‘Liberating the NHS: An Information Revolution’ (consultation closes 14th January 2011). The principle of ‘no decision about me, without me’ requires a move from information ‘belonging’ to the system to one where ‘patients and service users’ are clearly in control. Key to this concept is co-production of the clinical record between patient and clinicians, and social services, with which they interact. Greater transparency and openness in how information is held is required. From a technological perspective the key shift is from “replace all’ to one of ‘connect all’. This requires the profession to agree and adopt standards for the naming of analytes, coding and units of measurement and this is being delivered by the National Laboratory Medicine Catalogue. The next set
of standards required are those relating to the communication of requests from clinician, or patient, to the laboratory and back. IT interoperability and information management is a critical part of the DH Pathology programme and is being led by Professor Gifford Batstone with the involvement and support of wide ranging group of pathology and DH Informatics Directorate colleagues.

**Diagnostic Choice**

The NHS White Paper set out that we will ‘Begin to introduce choice for diagnostic testing, and choice post-diagnosis, from 2011’. A consultation has started with the publication of ‘Liberating the NHS: Greater Choice and Control’ which runs until 14th January 2011. The National Clinical Directors for each of the diagnostic pillars (Imaging, Physiological Measurement, Pathology, Endoscopy) and their teams are engaged in the consultation process.

**Quality**

Access to safe and high quality diagnostic tests is central to all clinical pathways. Improving health outcomes will require adoption of innovation across diagnostic services in technology, workforce and service models. There is a requirement to reduce variability, define quality standards (there are no NICE standards covering diagnostic services), improve the measurement of performance and improve information on performance to support patients, clinicians and service commissioners in their choice of provider.

We are working with professional bodies and other organisations to provide a robust and transparent quality framework for pathology. This includes defining key performance indicators (KPIs) for SHAs for the QIPP transformation of services, and an example of a pathology provider service specification with discipline specific KPIs has been circulated. It is important to note that diagnostics will be included in the scope of the Care Quality Commission (CQC) registration requirements for healthcare providers. The criteria for acceptable pathology performance is yet to be finalised.

**Modernising Scientific Careers**

Delivering the QIPP agenda by transforming pathology services will both require an appropriately qualified and competent workforce and drive changes in working practices and workforce profile through structural reform and technology innovation. The changing settings for delivering pathology, such as a shift of appropriate testing to primary care, patient self management and the need for enhanced information and knowledge management will provide new opportunities for the workforce. Future pathology workforce requirements can only be met by being fully integrated with the Modernising Scientific Careers (MSC) programme, which has its own QIPP challenge. Following the Comprehensive Spending Review this autumn, implementation of MSC has been confirmed as a priority and we are working closely with Sue Hill and her team. Pathology is at the forefront of MSC implementation and there are currently 17 early adopter sites across the country.

**Clinical Leadership**

The Department launched a leadership programme for senior pathology staff in two SHAs, South East Coast and NHS West Midlands, which was successfully completed through 2009/2010 (Influencing the future - A leadership programme for senior pathologists). I am pleased to say that we have been able to launch the programme in three more SHAs – East of England, North East, South West. This is open to all senior medical and non-medical staff and acceptance on to the programme is by application and interview. Independent evaluation has shown high levels of satisfaction. Over a nine month period the programme will offer participants four two-day learning modules focusing on different aspects of leadership development; self-directed PACE (problem solving, application, challenge and encouragement) support groups; and mentoring sessions. Participants will also be supported to develop and implement a project which will be linked with their SHA’s QIPP plans.
Further programmes in the remaining five SHAs will be announced shortly.

**Service Improvement**

For the last few years we have worked closely with Lesley Wright and the service improvement team. We have sponsored a wide ranging set of service improvement projects which utilize LEAN principles to improve the quality and efficiency of pathology services. These have produced impressive results across all disciplines and adopting this approach is a fundamental part of delivering service transformation and QIPP. A significant part of the savings indicated in the Carter Review was achieved by this process and Lesley and her team will be providing further support to selected local pathology teams implementing their QIPP plans over the coming year.

**Atlas of Variation**

Sir Muir Gray and his team have been leading a QIPP work stream called Right Care (see www.rightcare.nhs.uk). An output from this has been the recent publication which highlights the variation in activity, expenditure, quality, outcome, value and equity of a range of clinical services in providers across the country: The NHS Atlas of Variation in Healthcare. Reducing unwarranted variation to increase value and improve quality. November 2010. (Order from: rightcare@informationpress.com)

We know from the Carter Review and a range of pathology performance measures that there is, in my opinion, unacceptable variation in the quality of pathology services between different providers. Pathology is not included in the Atlas but I will be working with the Right Care team to see whether a comparative dataset can be included for pathology.

**Communication**

We have updated the QIPP pathology pages on the DH website to reflect some of the key activities of the pathology work stream and also published Issue 2 of the Pathology Newsletter. Both can be viewed at the link given at the beginning of this update.

In the last year we have seen considerable progress, with the Department working in a number of areas to support and facilitate the change processes that we know must be implemented. In 2011 I have every expectation that this will see some substantial benefits for all this hard work.

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**Doris-Ann Receives MBE**

Congratulations to Doris-Ann Williams, Director-General, British In Vitro Diagnostics Association (BIVDA), who has received an MBE in the New Year honours for services to the healthcare industry.

Speaking of this accolade, Julian Barth, ACB President said: “This is great news and well deserved. Doris-Ann has done a tremendous amount to give BIVDA a voice at all levels and she is a keen supporter of ACB initiatives to promote Clinical Science”.

*Doris-Ann addressing a recent Corporate Members’ Meeting*
Harmonisation of Reference Intervals

In recent times it has become clear to the users and commissioners of hospital diagnostic services that there are differences in reference intervals and units of measurement between laboratories. We, in the profession, recognise that there are sometimes genuine scientific reasons for these differences, for example differences in local populations or analytical methodology. However, it is important to differentiate those analytes for which there is no clearly identifiable reason for a difference. It is these analytes that have been considered by the Pathology Harmony group. This is a professionally led group supported by a grant from the Department of Health.

The identification of harmonisable analytes has been achieved through a process of consensus involving a large number of laboratory scientists supported by professional bodies. Clearly many analytes, particularly those measured by immunoassay, cannot be easily harmonised. This has been recognised by Pathology Harmony and further work will be necessary. In addition, this group has made recommendations on units of measurement that should be used to minimise possibility of confusion.

The Association for Clinical Biochemistry, the Institute of Biomedical Science and Royal College of Pathologists support this process and believe that the introduction of common reference ranges and units of measurement will improve patient safety.

We recommend that our members should introduce these changes and would hope that this can be achieved by April 2011.

J. Barth
President, Association for Clinical Biochemistry

James Kenneth Rae
President, Institute of Biomedical Science

Danielle Freedman Rae
Chair, SAC Clinical Biochemistry and Vice-President, Royal College of Pathologists
## Agreed Adult Clinical Biochemistry Reference Intervals

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Units</th>
<th>Range low</th>
<th>Range high</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>mmol/L</td>
<td>133</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>Potassium</td>
<td>mmol/L</td>
<td>3.5</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Urea</td>
<td>mmol/L</td>
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<td>7.8</td>
<td></td>
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<td>Chloride</td>
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<td>Bicarbonate</td>
<td>mmol/L</td>
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<td>29</td>
<td></td>
</tr>
<tr>
<td>Phosphate</td>
<td>mmol/L</td>
<td>0.8</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
<td>mmol/L</td>
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<td>1.0</td>
<td></td>
</tr>
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<td>Albumin</td>
<td>g/L</td>
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<td>50</td>
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</tr>
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<td>Total Protein</td>
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<td>320 (M)</td>
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<td></td>
<td></td>
</tr>
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<td>2.6</td>
<td>Use adjustment equations normalised to mean calcium of 2.4 mmol/L</td>
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<td>430 (M)</td>
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<td>Phenobarbitone</td>
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<td>mg/L</td>
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<td>20</td>
<td></td>
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<td>Theophylline</td>
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<td>20</td>
<td></td>
</tr>
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<td></td>
<td>No range should be quoted</td>
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<td>mg/L</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Salicylate</td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
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<td>Methotrexate</td>
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<td>Tacrolimus</td>
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<td>No ranges recommended</td>
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<td></td>
</tr>
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<td>pmol/L</td>
<td></td>
<td></td>
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</tr>
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<td>BNP/NTproBNP</td>
<td>ng/L</td>
<td></td>
<td></td>
<td>Method dependent</td>
</tr>
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<td>Troponin I</td>
<td>ng/L</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Troponin T</td>
<td>ng/L</td>
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<td>7.5</td>
<td></td>
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<tr>
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<td>4.5</td>
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<tr>
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<td>50</td>
<td></td>
</tr>
<tr>
<td>24 h Urine Magnesium</td>
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<td>6.5</td>
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Agreed Paediatric Clinical Biochemistry Reference Intervals

<table>
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<tr>
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<th>Units</th>
<th>Range low</th>
<th>Range high</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>Sodium</td>
<td>No age-related differences</td>
<td>mmol/L</td>
<td>133</td>
<td>146</td>
<td></td>
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<tr>
<td>Plasma Potassium</td>
<td>Neonate</td>
<td>mmol/L</td>
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<td>6.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infant</td>
<td>mmol/L</td>
<td>3.5</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-16 yrs</td>
<td>mmol/L</td>
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<td>5.0</td>
<td></td>
</tr>
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<td>Urea</td>
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<td>mmol/L</td>
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<tr>
<td></td>
<td>Infant</td>
<td>mmol/L</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1-16 yrs</td>
<td>mmol/L</td>
<td>2.5</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Magnesium</td>
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<td>1.0</td>
<td></td>
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<td></td>
<td>Infant</td>
<td>mmol/L</td>
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<td>1.0</td>
<td></td>
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<td>Enzymatic method only</td>
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<tr>
<td></td>
<td>Infant</td>
<td>g/L</td>
<td>30</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-16 yrs</td>
<td>g/L</td>
<td>30</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
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<td>mmol/L</td>
<td>2.0</td>
<td>2.7</td>
<td>Actual not adjusted</td>
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<td></td>
<td>Infant - 16 yrs</td>
<td>mmol/L</td>
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<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Phosphate</td>
<td>Neonate</td>
<td>mmol/L</td>
<td>1.3</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Infant</td>
<td>mmol/L</td>
<td>1.3</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-16 yrs</td>
<td>mmol/L</td>
<td>0.9</td>
<td>1.8</td>
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<td>Alkaline Phosphatase (ALP)</td>
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<td>380</td>
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<td>U/L</td>
<td>60</td>
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<td></td>
<td>Neonate</td>
<td>µmol/L</td>
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<td></td>
<td>&lt;100</td>
</tr>
<tr>
<td></td>
<td>Infant - 16 yrs</td>
<td>µmol/L</td>
<td></td>
<td></td>
<td>&lt;50</td>
</tr>
<tr>
<td>Plasma Bicarbonate</td>
<td>No age-related differences</td>
<td>mmol/L</td>
<td>19</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

Definitions: Neonate <4 weeks; Infant 4 weeks – 1 year

What Happens Next . . .

The Pathology Harmony project was conceived as an action learning set in the West Midlands SHA and more recently has received support from Dr Ian Barnes and the Department of Health. In Phase II of the project laboratory staff were joined by representatives from the Royal College of Pathologists, Association for Clinical Biochemistry and Institute of Biomedical Science.

The results of Phase I and II of the project have culminated in recommendations that have been widely consulted on, including consideration by professional groups. Phase II of this work included studies in Immunology and Haematology but here we present just the harmonised reference intervals and units in Clinical Biochemistry.

Details of the members of Pathology Harmony group and approaches taken and background information behind the decisions that are presented here can be found on the Pathology Harmony website.

What Next?

Early in 2011 the Pathology Harmony group will be meeting to consider how to take forward new areas of activity. If you have comments or suggestions then you can contact Pathology Harmony by emailing: secretary@pathologyharmony.co.uk
Lost and Found: The ACB Workforce Advisory Committee Survey 2010

Sally Brady, Steve Frost & Adrian Miller, ACB Workforce Advisory Committee

During the summer of 2010, the ACB Workforce Advisory Committee (WAC) performed a survey to collect information on the ACB membership. This has provided a snapshot of the current situation regarding jobs and posts. Thanks to all of the members who responded. The survey indicates a current net loss of posts, presenting challenges to the profession.

The WAC maintains a database of workforce statistics to follow the number of Clinical Scientist posts across the country to help with planning workforce requirements. In recent years, we have collected this data by means of surveys. This year a survey was sent to all ACB members to get a consensus view of the current workforce situation. Previous surveys were only sent to senior staff but we hoped to get a better picture of current opinion by asking members at all stages of their career. Earlier surveys showed that the number of posts lost generally balanced the number of posts created (2006 survey). However, more recently we found that more posts were being lost than created (2007 and 2009 surveys).

This year’s survey assessed numbers of lost, vacant and new posts over the previous 12 months. We received 760 responses from 233 laboratories (nearly 100% hospitals replied) compared with a 75% return in the 2009 survey which looked at the previous 2 years.

The Winds of Change

Despite differences in methodology between surveys, the overall trend seems clear; that more posts are being lost than created. This will come as no surprise, as we all are aware in our own laboratories of current trends. Comparing numbers of lost, vacant and new posts between the 2009 and 2010 surveys, it can be seen that despite similar numbers being lost (itself a cause for concern), the number of new posts created in 2010 is less than half of that reported in 2009 (Table 1).

Focussing on 2010, we looked at lost and new posts by staff grade (Figure 1). We are losing Consultants at a rate not seen previously. We believe that this is in part due to lower staff numbers in Principal positions.

The View from the Trainees

Although there has been a previous contraction of the workforce in the early

Table 1: Overall Changes in the Workforce

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost posts</td>
<td>78 (77.6)</td>
<td>73 (65.3)</td>
</tr>
<tr>
<td>Vacant posts</td>
<td>14 (14.0)</td>
<td>21 (20.4)</td>
</tr>
<tr>
<td>New posts</td>
<td>30 (29.4)</td>
<td>71 (68.1)</td>
</tr>
</tbody>
</table>

Figures in brackets refer to whole time equivalents. A “vacant” post is defined as a post which has remained vacant for 12 months but has not had funding officially withdrawn.
1990s, followed by an expansion some years later, this offers little comfort to the Trainees on contract extensions or approaching completion of their training, and such an expansion is unlikely to happen again. While Trainees are recruited with the caveat that there are no guaranteed posts upon completion of training, most usually manage to progress. However, extrapolating the recent trickle of posts appearing on NHS Jobs, by September 2011 there may be as many as 50 Trainees looking for employment. While this presents the worst-case scenario, it is a marked increase in the number of Trainees available for progression compared with previous years (Figure 2). Only this summer, 3 Trainees in the London area were forced to leave the profession due to lack of available posts, quashing the theory that “it will all work out OK in the end”.

While such career casualties may be considered a harsh but inevitable consequence of these frugal times, the wider picture cannot be ignored. Trainees go through a rigorous selection process to ensure only the brightest, most-dedicated and enthusiastic candidates are recruited. Coupled with an excellent training programme, this ensures a continued

Table 2: Survey Responses of Reasons for Lost and New Posts

<table>
<thead>
<tr>
<th>Reasons given for lost posts</th>
<th>Reasons given for new posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal restructuring: post converted from another grade 11 (13)</td>
<td>Internal restructuring: post converted from another grade 11 (13)</td>
</tr>
<tr>
<td>Internal restructuring/merger 7 (3)</td>
<td>New trainee posts 3 (11)</td>
</tr>
<tr>
<td>CS converted to Medical 0 (4)</td>
<td>Trainees converted to Band 7 1 (-)</td>
</tr>
<tr>
<td>Medical converted to CS 4 (0)</td>
<td>QM post created 1 (-)</td>
</tr>
<tr>
<td>Retirement not replaced 9 (7)</td>
<td>Service development 1 (-)</td>
</tr>
<tr>
<td>Failed to recruit 8 (15)</td>
<td>New HST post 1 (2)</td>
</tr>
<tr>
<td>Post converted to QM/BMS/MLA 1 (7)</td>
<td>Restructuring of work 2 (16)</td>
</tr>
<tr>
<td>Soft money ended 1 (1)</td>
<td>BMS converted to CS 1 (1)</td>
</tr>
<tr>
<td>General freeze on recruitment 4 (-)</td>
<td></td>
</tr>
<tr>
<td>Financial cost saving 13 (11)</td>
<td></td>
</tr>
<tr>
<td>Resignation 1 (-)</td>
<td></td>
</tr>
<tr>
<td>Redundancy 1 (-)</td>
<td></td>
</tr>
</tbody>
</table>

Figures in brackets refer to last year’s figures. (-) = data not available for the previous year.
supply of high calibre Biochemists and the provision of quality Biochemistry services: an excellent return on the valuable NHS resources used to fund training.

While extremely difficult to implement, it is therefore imperative that every effort is made to ensure Trainees aren’t lost to the profession. A lot of time, effort and energy is invested by all to deliver exceptional Trainees to follow in the footsteps of their esteemed predecessors, qualities that may be only too readily embraced by competitor private companies. So, when discussing funding for a Principal post with HR, common ground may be found by suggesting recruiting at a lower grade post instead.

**Conclusions**

Although our survey is only a snapshot of the year up to summer 2010, it appears that posts continue to be lost, and overall the fewer number of posts that are created are mainly at lower grades. Changes are probably in response to the current economic situation and we are aware of local freezes on recruitment across a significant number of hospital Trusts. The question is whether this is a permanent reduction or a trend that will be reversible once the economic situation improves, and any gaps in service provision become apparent to those who control the purse strings.

**What Can Be Done?**

Some of the pressures on staffing undoubtedly are common to the NHS and its staff as a whole and may be beyond our control. Nonetheless, the view of the WAC is that, whatever our role in the profession, we should try to be proactive when we can. No-one wishes to see Consultant posts lost but when times are tight, the loss may become inevitable. If possible, consider advertising and recruiting at a lower grade rather than lose the post completely. This at least will help retain a core of talented and highly-qualified staff within the profession to sustain it in the future, and of course, hospital finance departments love a cost saving. Furthermore, we should encourage Principal grade staff to apply for Consultant posts. If you are in that position why not have a go? You may be doing yourself and the profession a favour.

Trainees should try to be proactive as well, by considering alternative ways to progress their careers if they find permanent posts aren’t easy to come by after training. A short term research position, for example, can look great on your CV. Conversely, Heads of Department and other senior staff may be able to suggest options or actively make positions available rather than risk losing talented Trainees completely from the profession.

Let’s hope 2011 brings good news.
The ACB Wales Region Autumn Scientific Meeting was held in the picturesque Towers Hotel in the marine area of Swansea. To kick off we were given a useful introduction to ICP-MS by Raimond Wahlen, from Agilent. This was followed with an issue for many NHS hospitals at the moment; the role of cobalt and chromium analyses as surrogate markers for measuring wear in metal-on-metal hip joints. Barry Sampson (Charing Cross Hospital) first gave us the laboratory and research perspective. Normal cobalt and chromium concentration in a patient should be less than 10 nmol/L. In a patient with a well functioning metal-on-metal joint, median concentrations of cobalt and chromium were found to be 30 nmol/L and 45 nmol/L, respectively. The MHRA have recommended that if cobalt is greater than 119 nmol/L or chromium is greater than 134.5 nmol/L then a second test should be performed three months later to identify patients who require further surveillance. He then reported his experience of seeing concentrations of up to 2000 nmol/L and the resulting hazards that can occur from this; bone and soft tissue necrosis among many.

**Surgeon’s Perspective on MoM**

We then had a fascinating insight into a surgeon’s point of view on hip replacement from Mr Alun John, Consultant Orthopaedic Surgeon at the University Hospital of Wales. He first discussed dislocation and osteolysis caused by macrophage activation in response to the polyethylene fragments produced through wear of the hip joints. The alternative metal-on-metal (MoM) hip replacements have become increasingly popular and numerous patients now have these joints. Alun showed us some rather gruesome pictures of the patients having surgery to revise the joints, demonstrating the degree of soft tissue necrosis. The final presentation of the morning was two trace metal toxicology cases presented by Dr Krishna (University Hospital of Wales): lead poisoning in a young male decorator working in an old monastery and manganese toxicity in a young female due to parenteral nutrition.

**Services to the Coroner and Insulin Interpretation**

The afternoon session continued the toxicology theme with Dr Keith Griffiths (Ysbyty Gwynedd) talking about the issues involved with providing a clinical toxicology service to the coroner and also how this service ought to be delivered across Wales. He emphasised the key relationships required with the coroner, histopathologist, police and also clinicians. Dr Gwen Wark (Royal Surrey County Hospital) then followed with a fascinating insight into the forensic aspects of insulin analysis. She highlighted the importance of being aware of assay specificity and also the need to consider other interferences. It was really interesting to hear her experience of presenting her laboratory’s results for cross-examination in a forensic...
setting. Lewis Couchman, from Kings College Hospital, made us aware of the factors that are important when introducing a new mass spectrometry assay. He also gave us an insight into Turbo flow HPLC technology. With this technology a size exclusion column is initially used to retain the required analyte; the flow through the column is then reversed and the analyte is injected onto the analytical column.

**Siemen’s Award**

Gareth Davies (WEQAS), Dr Alan Dodd, Dr Hilary Durrant and Dr Catrin Searell (University Hospital of Wales) then entertained us for the last hour of the day with their presentations for the Siemens award. Although the competition was very fierce, Catrin Searell was awarded the prize for her talk on the development of a chemiluminescent immunoassay for Chromogranin A. After selecting her antibodies, the results of randomised patients were compared with the results currently being issued and those from a commercial assay. Dinner that evening was in honour of Dr Penney, who has recently retired from The Royal Gwent, Newport.

Day two of the meeting revolved around the IT issues for laboratory medicine, particularly focusing on the introduction of a more integrated approach across Wales. Dr Robin Howe (Public Health Wales) started the session with an update on the All Wales LIMS. Implementation will be starting next year with Bangor and a fully integrated LIMS should be in operation across Wales by January 2013. In preparation for this there has been a great deal of hard work across all pathology disciplines throughout Wales to achieve harmonisation. Gethin Roberts (Bronlais General Hospital), one of the key figures within this project, gave us an update on the progress so far, along with the pitfalls and the view for the future. Dr Gifford Batstone (NHS
Connecting For Health) then updated us on the development of the National Laboratory Medicine Catalogue. A massive task as indicated by the different ways in which one test can be referred to, without even considering units and reference ranges!

Chris Blower (West Wales General Hospital) gave us the lab perspective on the use of the Welsh Clinical Portal. This system will allow clinicians to request investigations, read clinic letters and prescribe through one interface. Eventually this will be available across the country, to improve current patient care by allowing a complete patient record to be available wherever treatment is being administered. Steve Tandy (Wrexham Maelor Hospital) then talked about his experience of primary care test requesting.

The last speaker on IT was Dr Jonathan Kay (John Radcliffe Hospital, Oxford) who discussed the future of information management in the laboratory. This was a fantastic finish to this topic as it sent us away with something to think about and also related pathology to other ordering systems that work efficiently. The final slot was an All Wales Clinical Biochemistry audit session which allowed feedback on the some of the audits carried out throughout Wales since the last meeting. This was a thoroughly captivating and well organised autumn scientific meeting!
Beckman Coulter has created a new, direct sales operation, Beckman Coulter Diagnostics Ltd, to serve laboratory customers in the Republic of Ireland. It unites and integrates the existing team from distributor Brennan & Company with Beckman Coulter, formerly Olympus Diagnostics.

Piers Devereux, Managing Director of Beckman Coulter comments: “Our objective is to provide our customers with easy and direct access to a complete range of solutions from a single provider”. Beckman Coulter has a long history in Ireland stretching back almost 40 years, with significant manufacturing presence across two facilities in Galway, established in 1972, and County Clare, established in 1985. These modern plants are amongst the company’s largest manufacturing operations, making reagents and rotor products for customers throughout Europe, the Middle East and Africa, with a range of 200 diagnostic tests and products.

The company has a reagent R&D team in Ireland and is actively collaborating with research teams at Galway’s prestigious National University of Ireland where Beckman Coulter has signed a research partnership in the area of molecular diagnostics, with a specific focus on microbiology and infectious disease. This will enable the development of infectious disease tests for the company’s future molecular diagnostic instrument, the DxN, which is being developed as a simplified, automated solution that brings labour-intensive diagnostic tests within the scope of routine hospital laboratory work.

Further details from email: infouk@beckmancoulter.com

Lisa Truslove, Ross Warner, Dermot Deverell, Isabelle de Gardelle, Frances Sherry, Leanne Annereau, Emma Casey and Gemma Duane celebrating the new Irish Operation with a giant cake.
Fun and Science Made for Great Mix

Alan Michael Wallace

Mike Wallace died suddenly in New York on his way home from the American Association of Clinical Chemistry congress. He was just 60 years of age. Prior to his premature death Mike had been Consultant Clinical Scientist in the Department of Clinical Biochemistry at Glasgow Royal Infirmary and Honorary Professor at the University of Strathclyde.

Mike was born and raised in St Andrews and studied biochemistry at St Andrews University, where he met his wife Pat. In 1972 Mike moved to the University of Glasgow and commenced a PhD in the Department of Steroid Biochemistry on androgens. Thus began his lifelong interest in biochemical endocrinology.

After a two year sabbatical in London to complete his training as a clinical biochemist Mike returned to his former department in Glasgow as an NHS Clinical Biochemist, rising through the grades and gaining FRCPath and achieving Consultant status in 2000. He became the Consultant in charge of the Endocrine Biochemistry Unit in Glasgow, which provides many of the specialist assays for Scotland and beyond.

Mike was an excellent research scientist with more than 100 peer reviewed original scientific publications, all in the area of endocrinology. He developed an interest in paediatric steroid biochemistry and introduced novel assays, including the first neonatal screening programme for congenital adrenal hyperplasia. He became and remained the Clinical Biochemist advisor to the Scottish Paediatric Endocrine Group. Later Mike became interested in polycystic ovarian disease and then took the short step to involvement in the biochemical endocrinology of adipose tissue and clinical obesity. Another new area followed pioneering the assessment of ovarian reserve using anti-mullerian hormone. Most recently Mike introduced liquid chromatography tandem mass spectrometry into the laboratory and developed the first automated mass spectrometric assay for 25-hydroxyvitamin D. This last project led to him becoming Scottish Healthcare Scientist of the Year in 2008.

Partnership Approach

Throughout his research career Mike understood the value of working in partnership with clinical colleagues and he developed collaborative clinical research partners across the UK, in Europe and in the United States. He also worked closely with key diagnostic companies. As a result Mike was an invited speaker at several international conferences. His expertise and reputation in endocrinology were recognised when he was elected to serve as the only Clinical Biochemist on the Society for Endocrinology Council.

Mike also found time to work for the Association for Clinical Biochemistry, serving with distinction as Scottish tutor for many years. Mike was an enthusiastic and talented teacher, especially in small groups and a generation of Clinical Biochemists have appreciated his encouragement and support.

But above all Mike was a great person – his middle name should have been ‘fun’. He had a constant twinkle in his eye that told you that the next quip, tease or story was imminent. He always remained positive; the glass was always overflowing and tomorrow would be even better than today. Evidence of Mike’s popularity and respect was shown by the ‘standing room only’ service in celebration of his life with a huge contingent of professional colleagues joining Pat, his two children Julian and Jenny, family, friends and neighbours. Clinical biochemistry has lost a great scientist and many have lost a great friend.
Drinking Water Contamination Pioneer

Hugh Vaughan Smith

Huw Vaughan Smith, Consultant Clinical Scientist and Director of the Scottish Parasite Diagnostic Laboratory, was born on 21st November 1946. He died on 25th October 2010, aged 63.

Born in Bangor, North Wales, Huw Smith became one of Scotland’s best known Parasitologists and Consultant Clinical Scientists. Huw graduated in 1969 with a BSc in Zoology and was awarded a Sir William Roberts Scholarship for a 3 year PhD research study on ‘The development of the immune response in pigs infected with the red stomach worm *Hyostronglus rubidus* (Nematoda)’.

During his career, Huw was employed at the Skin Department of the Royal Marsden Hospital, London, and as Research Assistant in the Zoology Department, University of Glasgow. In 1982, he co-founded the Scottish Parasite Diagnostic Laboratory (SPDL) at Stobhill Hospital, Glasgow. The SPDL was the first central laboratory established for the diagnosis and identification of parasites in clinical material in Scotland. It soon established a reputation as a centre of excellence for laboratory diagnosis and research.

**Honoured Link with Indonesia**

He was appointed Director of the SPDL in 2001 and Consultant Clinical Parasitologist in 2002. Over the years he undertook research on a diverse range of helminth and protozoan parasites in conjunction with colleagues at the University of Glasgow, University of Strathclyde, Stobhill Hospital and other Universities and Hospitals throughout the UK and worldwide. His main interests centred on the immunopathology, epidemiology, diagnosis and detection of the parasites that cause toxocariasis, ascariasis, schistosomiasis, giardiasis and cryptosporidiosis. Huw’s contribution to the development of the current statutory method used by UK water authorities, and throughout the world, for the recovery and detection of *Cryptosporidium spp.* oocysts in drinking water is widely acknowledged.

His scientific research and publications attracted national and international interest from scientists throughout the world, whose research interests ranged across diverse fields, from public health engineering to molecular epidemiology. In 2009 Huw was made a Fellow of the Indonesian Association of Medical Specialists in Clinical Parasitology, based on the impact that his work had on the field of medical parasitology in Indonesia. Huw accepted the nomination with great pleasure as this was the first time that the Society had awarded a Fellowship to a non-medical practitioner. In addition, he continued to act as a Visiting or Honorary Professor at a number of UK (notably Strathclyde University) & Asian Universities. Our thoughts are with all of his friends, colleagues and his wife Anne and relations.

CA
ACB Members who have achieved CSci since last published list:
Mr A S Davison
Mrs A T Kwarteng-Amaniampong
Mr M Nur

New Members of the ACB since the publication of the 2010/2011 Members’ Handbook:
Alhaq, Dr A, King’s College Hospital, LONDON
Bennett, Miss C A, Northern General Hospital, SHEFFIELD
Broster, Miss N S, Southampton University Hospital NHS Trust, SOUTHAMPTON
Brown, Mr R J, Royal Devon & Exeter Hospital, EXETER
Cross, Miss G, King’s College Hospital, LONDON
Davies, Miss S L, Wythenshawe Hospital, MANCHESTER
Davis, Miss K, St Thomas’ Hospital, LONDON
Duff, Mr C J, University Hospital of North Staffordshire, STOKE-ON-TRENT
Evans, Miss L, King’s College Hospital, LONDON
Ewang, Dr M, Kings College Hospital, LONDON
Falconer, Dr H, Western General Hospital, EDINBURGH
Flynn, Mr N, UCL Hospitals, LONDON
Francis, Miss L, Northampton General Hospital, NORTHAMPTON
Green, Dr L, Manchester Royal Infirmary, MANCHESTER
Guy, Mr C J, Ninewells Hospital, DUNDEE
Hadfield, Miss K, St Mary’s Hospital, LONDON
Jones, Dr B, Charing Cross Hospital, LONDON
Kift, Miss R L, St James’s University Hospital, LEEDS
Kirby, Dr H R, Royal Free Hospital, LONDON
Lawson, Dr A J F, Birmingham Heartlands Hospital, BIRMINGHAM
Lee, Dr M, Manchester Royal Infirmary, MANCHESTER
Livingston, Dr M L, Royal Derby Hospital, DERBY
MacMahon, Dr M, Mater Misericordiae University Hospital, DUBLIN
Maghsoodi, Dr N, St Helier Hospital, CARshalton
Mavraki, Ms E, Ninewells Hospital, DUNDEE
McHugh, Mr M P, Wythenshawe Hospital, MANCHESTER
Min, Dr S S, Newham General Hospital, LONDON
Mozley, Miss E C, Southampton General Hospital, SOUTHAMPTON
Niebel, Mr M O, Gartnavel General Hospital, GLASGOW
Pantelidis, Dr P, Imperial College Healthcare Trust, LONDON
Pitkin, Dr S L, Barts and the London NHS Trust, LONDON
Rajiah, Dr I, Addenbrooke’s Hospital, CAMBRIDGE
Russell, Dr L, Ninewells Hospital, DUNDEE
Sanki, Miss G, Prince Charles Hospital, MERTHYR TYDFIL
Seaward, Miss N, Royal Gwent Hospital, NEWPORT
Simhadri, Dr A, Leicester Royal Infirmary, LEICESTER
Stevens, Dr M, Royal London, LONDON
Tooth, Miss L, St George’s Hospital, LONDON
Treslove, Miss C, Salford Royal NHS Foundation Trust, SALFORD
Wilson, Miss R, Kings College Hospital, LONDON
Wright, Mr C, Charing Cross Hospital, LONDON
ACB News Crossword

Set by Rugosa

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: 0121-507-5290) 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.

Solution to the Colley Christmas Crossword

Across
1. The Spanish follow, steal costly metal (6)
5. Coins yet might be base (8)
9. Single circuit superlative data processor (6)
10. Metabolic problem - solved by changing information code holding operating system of old 9? (8)
11. Serious condition when men leave maidens (4)
12. Unusual coherent mix lacking nitrogen, producing 27 (10)
13. Perceived content worsens edict (6)
14. Correspondence sorted final metabolism mystery (8)
16. Be red hot, upset, irritated (8)
20. Some would overtax an adulated ancient Chinese capital (6)
23. Carelessness of non-rectilinear electrical engineering work (10)
25. State of being unaware of first cache only memory architecture (4)
26. Distributing aid along sloping line (8)
27. Generally dissipated, all lacking get-up-and-go (6)
28. Spin of coin says clinically things look blue (8)
29. Check collar (6)

Down
2. Think about revised organised crime records being lost (7)
3. Takes improper kiss to note condition with diagnostic odour (7)
4. Interpreter of the unheard spoken word (3,6)
5. His 25 can be processed into suede (7)
6. Part of leg tissues start smelling off (5)
7. Beat plague (7)
8. Had no part in respiration becoming louder (7)
15. Condition of my exam ode presentation could result in 25 (9)
17. Sit, do as you are told about excess weight (7)
18. Lane hog dealt with for one matter of five (7)
19. Information carriers for a 9, for example (7)
21. Complex, unclear form of 27 (7)
22. Harms compensation (7)
24. Kind of informal information held over us (5)
Association for Clinical Biochemistry
Council Nomination Form 2011

Election of Directors and National Members of Council of
the Association for Clinical Biochemistry

We, the undersigned, being Members* of the Association nominate

Name ...........................................................................................................................................

Address ........................................................................................................................................

...........................................................................................................................................

...........................................................................................................................................

for election as ** Director of Finance/Director of Publications and Communications (Company Secretary)/Director of Education, Training and Workforce/Director of Scientific Affairs/Director of Clinical Practice/Director of Regulatory Affairs/National Member according to Articles 11 and 14 as outlined in Bye-Law 6, subsections 6.2 and 6.3 of the Articles of the Association.

Name 1. .......................................................... ........................................................................

  Capitals ........................................................................................................

  Signature ........................................................................................................

Name 2. .......................................................... ........................................................................

  Capitals ........................................................................................................

  Signature ........................................................................................................

Name 3. .......................................................... ........................................................................

  Capitals ........................................................................................................

  Signature ........................................................................................................

I am willing to undertake the duties and responsibilities of this office if elected.

...........................................................................................................................................

  Signature ........................................................................................................

...........................................................................................................................................

  Date ........................................................................................................

* Every Member other than a Corporate, Retired, Temporary Retired, Temporary, Federation, Affiliate or Student Member shall have one vote and is therefore entitled to support a nomination. Federation Members can nominate and vote for the election of the Director of Regulatory Affairs. Only Ordinary Members are eligible to hold office.

** Please make the appropriate deletions.

This form, duly countersigned, to be returned to
The Administrative Office, Association for Clinical Biochemistry,
130-132 Tooley Street, London SE1 2TU, before 3rd March 2011
Care to join us
recruitment@lanarkshire.scot.nhs.uk

Senior Clinical Scientist T2.1110.13.JH
Band 7, £30,460 - £40,157, 37.5 Hours
Biochemistry, Monklands Hospital

NHS Lanarkshire provides comprehensive Laboratory Diagnostic Services at the three Acute Hospital Sites of Monklands, Hairmyres and Wishaw General Hospitals. The wide departmental repertoire includes routine chemistry analyses, endocrine tests, tumour markers, drugs of abuse, specific proteins, therapeutic drugs, trace metals and metabolic tests. Lanarkshire lies in the heart of Scotland, only 30 minutes drive South East from Glasgow City Centre and 40 minutes from the city of Edinburgh. All hospitals lie on good rail links to the centre of Glasgow and Lanarkshire is easily accessed by both the main East Coast and West Coast rail lines.

NHS Lanarkshire requires a Senior Clinical Biochemist to join our team of Biochemistry staff, initially based at Monklands Hospital. The post will offer the opportunity to experience and practice a broad range of Clinical Biochemistry as well as develop a specialist interest. For this post you must have an Honours Degree in a relevant science and have completed a nationally accredited Clinical Scientist training programme (3 years) with an MSc in Clinical Biochemistry or PhD in a relevant field. It is essential that you are able to demonstrate continued participation in Higher Specialist Training and have registration with HPC. Applications are also welcomed from those individuals who have completed a recognised Grade training scheme in Clinical Biochemistry and are in the process of compiling a portfolio for HPC state registration, or from Higher Specialist Trainees seeking a permanent post. NHS Lanarkshire has an excellent training record and resources will be made available in order to support the successful applicant to continue training towards Fellowship of the Royal College of Pathologists.

Informal enquiries to Dr Ian Godber, Consultant Clinical Scientist on 01236 712109.

Closing date: 14th February 2011

Visit our website at www.nhslanarkshire.org.uk download and complete an application form and return by email to recruitment@lanarkshire.scot.nhs.uk or contact us on 01698 377740 to request an application pack quoting appropriate reference number.
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