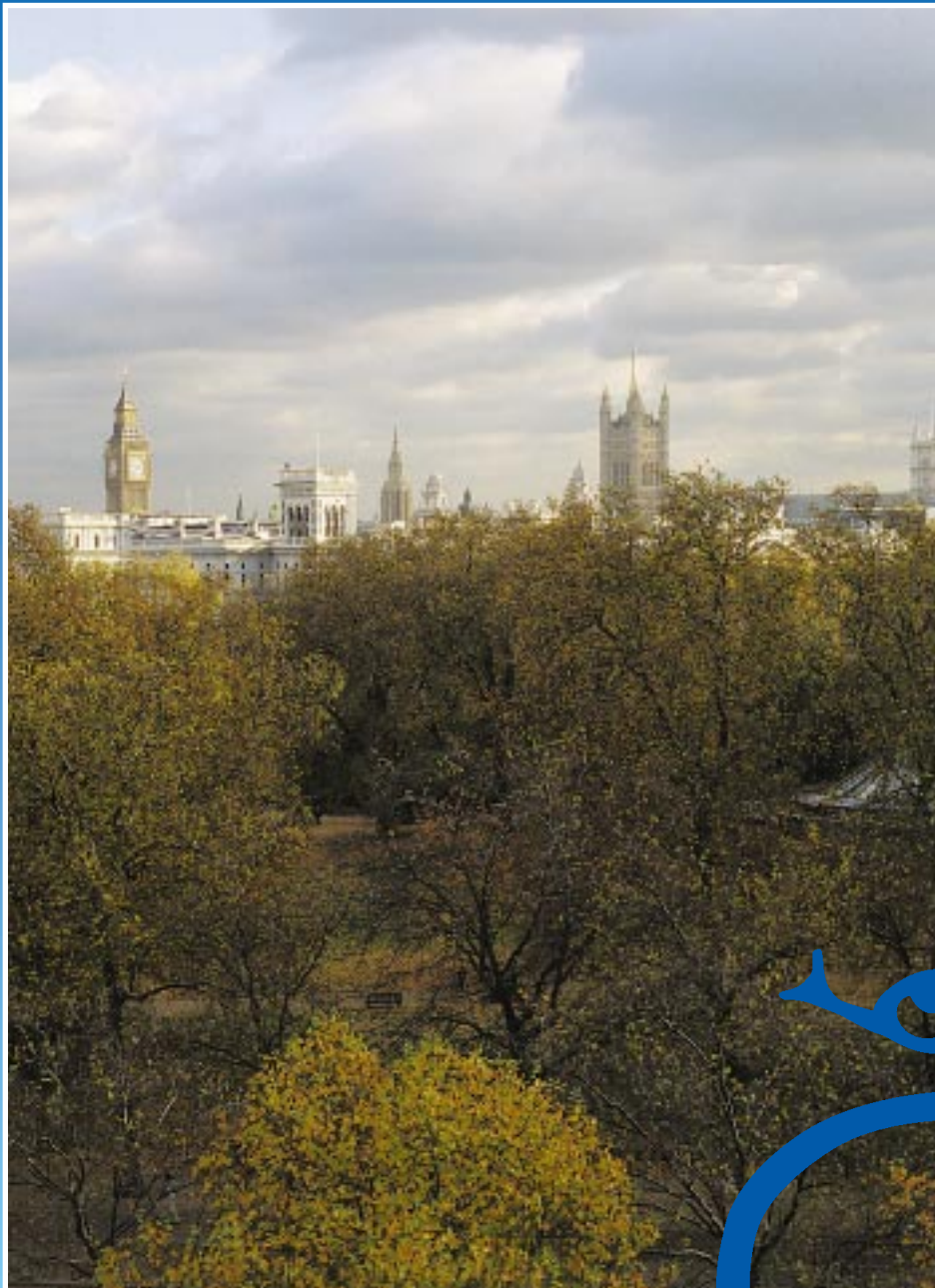


ACB News

The Association of Clinical Biochemists • Issue 427 • 20th November 1998



**London to
Birmingham
Bike Ride**

Pay Scales

**Cystic
Fibrosis
Updates**

**Brain Marker
Potential**

**Corporate
News**



About ACB News

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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The proof reader for this issue was Dr Rosanna Penn, Birmingham.

Front cover:

A view over Whitehall from the ACB office.



**The ACB National Scientific
Meeting and Exhibition**

17 - 21 May 1999

Tel: 01223-516103

Fax: 01223-500978 for details

Drop Dead Gorgeous

Friday . . . Bye, Bye Party

I end my week with a leaving party for an MLSO 1 in my department. He has taken the plunge as a 'Product Specialist' after nineteen years with us at Sandwell General. Must edit ACB News this weekend!

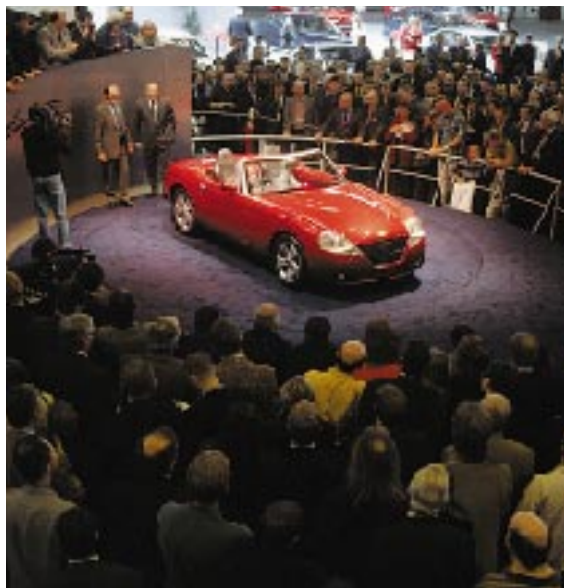
Who can blame him for moving on. The £27K he earned as an MLSO 1***, including a night every week away from his family on-call, compared badly with the company package. Now as we start our search for a replacement we wonder if anyone has been thinking through manpower planning for MLSO staff. Increasingly we use a head-hunting and opportunistic approach to recruit, but we cannot rely on this much longer. I can't help feeling that greater flexibility for registration of graduates as MLSOs is urgently required.

Monday . . . ACB News Hits the Street

I went to a CPA Inspectors update today. Something of a dry experience. However, I am always interested to overhear discussion about ACB News items and today in Sheffield there was plenty of it about . . . for the October issue had just hit the streets.

I have recently become aware that behind the scenes not everyone supports the application to CPSM for registration of scientists. **Apparently, it is argued in some quarters that the training of clinical scientists and MLSOs is indistinguishable.**

In comes the unassuming John Gurney. For 25 years John worked in Essex as a biochemist, by all accounts dedicated to his immunoassay laboratory. Recently this post became redundant but openings existed for MLSO posts. John wanted to continue working in the department, so applied to become state-registered with CPSM. **The MLT Board explained that the training of a biochemist is quite different from an MLSO**, and that his years as a biochemist do not meet the minimum education and training requirement for State Registration as an MLSO. This 'uncompromising statement', as John describes it, certainly clarifies things for us all. Yes, we have voted overwhelmingly for registration of clinical scientists. We now expect it to be delivered as



The prototype Jensen S-V8 is unveiled at the 1998 Motorshow

quickly as possible. If behind the scenes people are blocking this process let us be told who and why.

Tuesday . . . Jensen Brothers Back in Town

Got in the laboratory at 7.30 am to sort out the external quality control samples and so that I could justify a longer than normal lunch. The MLSO 1 used to do all this external QA stuff for us. A lot of it while he was working on-call. At last . . . away round the M6 to lunch at the Motorshow press day, proudly presenting my photographers pass. What an amazing fantasy world this is! Coming from Sandwell General in West Bromwich, the home of the Jensen brothers, I was lucky to get a photo of the all-new aluminium Jensen being unveiled. I take back a Jensen brochure and stick it on the noticeboard near the lottery syndicate details – just in case! ■

Jonathan Berg

Bristol Blue for Doug

Many people enjoyed the article 'Doug Speaks Out' in the June edition of ACB News. Venting his spleen in a lengthy and almost unedited article, Doug must have wondered if that was it! However, he was welcomed back into the fold of the Federation of Clinical Scientists training course in Manchester last month, where a dinner was held in his honour. Special dinner guests included previous chairmen of the Regulating Committee (the forerunner of the Federation) and current members of the ACB Executive as well as ACB Chairman Ian Barnes.

After receiving a Bristol Blue beer tankard upon which was engraved the Federation logo, Doug made his final comments. He thanked everyone for their help and support and pointed once again to the future being founded on bringing in younger members of the profession to the Federation. ■



Geoff Lester, Federation of Clinical Scientists' Secretary, and Doug with the Bristol Blue tankard



Alan Penny, Chairman of the Federation of Clinical Scientists thanks Doug for all his hard work on the Regulating Committee and in helping to create the Federation of Clinical Scientists

Pathology 2000 London to Birmingham Bike Ride Friday 21st to Sunday 23rd May 1999

The Pathology 2000 Congress Committee is establishing a bursary fund to help those who cannot get the full costs of attending Pathology 2000. A sponsored bike ride along the route of the Grand Union canal from London to Birmingham is being proposed to help raise funds for the bursary scheme.

The bike ride will start at the Royal College of Pathologists offices near the Mall in London and finish at the International Convention Centre in Birmingham. The 150 mile ride takes in the full length of the Grand Union canal tow-path. The ride will be accomplished over a long weekend. A support vehicle will be on hand to transport luggage and provide mechanical back-up for bicycles. This and other support for the event is jointly being provided by Euro/DPC, the Llanberis-based immuno-diagnostic company, and AVL, the Staffordshire-based blood gas and point-of-care equipment company.

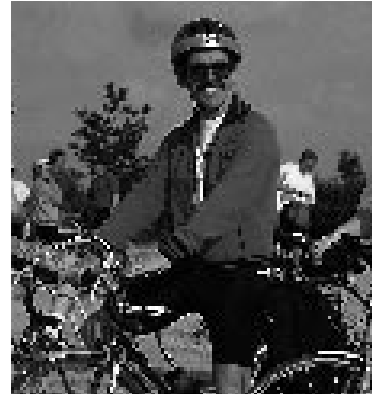
The bike ride will take place over the weekend of Friday 21 to Sunday

23 May 1999. Overnight stops will be at suitable places on the Friday and Saturday night and a welcome party will be held in central Birmingham on the Sunday.

Corporate Bikers

Those already committed to the event include staff from all pathology disciplines as well as riders from firms in the diagnostics industry. Indeed the list of proposed corporate riders already includes Judy Jackson, General Manager of Euro/DPC and Philip Wood and Andy Whiles from Instrumentation Laboratory. Elizabeth Murphy has also expressed an interest. Dominic Mason, MLW editor, has put his name in the frame as have Gary, Jonathan, Mike and Craig from Sandwell Pathology. Ian from the Haematology Department at Stornaway on the Isle of Lewis is so keen he is considering cycling down to London for the start!

The bike ride has set a target of raising £10,000 for the bursary scheme. Enquiries are invited from anyone who is interested in taking



Mike Sullivan wrote an article in ACB News last year on the Bordeaux to Barcelona bike ride, so this ride should be a piece of cake for him!

part. To help with event planning please express your interest as soon as possible. If you would like to consider joining in this event, please contact Mike Sullivan, the event co-ordinator for an information pack:

Clinical Biochemistry Department
Southend General Hospital
Prittlewell Chase
Westcliffe on Sea SS0 0RY
Tel: 01702-435555 ext 2042
Fax: 01702-2210591 ■

The New UK NEQAS Consortium Executive Committee

At the UK NEQAS Organisers' Consortium AGM in Birmingham on October 15th 1998, changes to the Officers of the UK NEQAS Consortium Executive Committee were made as follows:

Chairman (& Marketing)

Jonathan Middle

Chemical Pathology

Vice-Chairman (& Marketing)

Tim Woods

Haematology

Treasurer

Tony Milford-Ward

Immunology

Scientific Development Officer

Les White

Microbiology

Other member

Keith Miller

Histopathology

International Relations Director

David Bullock

co-opted

Secretary

Julie Gelder

UK NEQAS Office

Constructive comment to the Chairman from anyone actively involved in laboratory medicine as to how UK NEQAS should service participants and engage in the fundamental issues facing them and the professions, are welcome.

Contact points:

UK NEQAS (Bham), PO Box 3909, Birmingham B15 2UE Tel: 0121-414-7300. Fax: 0121-414-1179 email: j.g.middle@bham.ac.uk
UK NEQAS Office, PO Box 401, Sheffield S5 7YZ. Tel: 0114-261-1689. Fax: 0114-261-1049. Email: office@ukneqas.org.uk

Updated Inborn Error Directory

The UK Directory of Laboratories Diagnosing Inborn Errors of Metabolism has been updated and the 6th edition is now available for purchase.

The cost of the directory is £10.00 inclusive of postage and packing.

Please contact either Dr C. A. Peacock or Dr J. Stone at Paediatric Chemical Pathology

St Michael's Hospital

Southwell Street

Bristol

BS2 8EG

Tel: 0117-9285317. ■

Focus 99 Web Site

The Focus 99 Web site is now ready to receive visitors. This site has been produced by Trevor Hine of Royal Liverpool and has a large amount of information on all aspects of the meeting. To get to it, simply click on the Focus 99 logo from the front page of the ACB site at www.acb.org.uk

The Focus 99 site has background information about various aspects of the meeting. The site also links to information about G-MEX and things to experience in Manchester. It is hoped that speakers' abstracts will be posted on the site early in the new year. Remember it will also be possible to send your abstract electronically on the site. ■

Suggest Some Science for Pathology 2000

The Pathology 2000 web site now allows you to suggest a topic or speaker for the scientific programme. The site also has additional information on it and can be viewed at www.pathology2000.org.

Included on the site is the first edition of Pathology 2000 News, which gives details of various aspects of the meeting. This 4-page A4 newsletter has been placed on the site as a "pdf" file. You can download and read the newsletter or print it out, but you do need to have the Adobe Acrobat reader installed on your PC. This reader can be obtained free of charge from the Adobe site and there is a link to this on the ACB web site front page. ■



Why not visit the Pathology 2000 Internet Site and suggest a topic for the Scientific Programme?

ACB Training Course No. 4: Brighton

Sunday 11th March to Friday 16th April 1999

The next ACB training course will be held at the University of Sussex in Brighton. Lectures will be held on site. This course is primarily aimed at those intending to take the MRCPATH but the course is also registered for CME and will welcome everyone who wishes to update and refresh their current knowledge.

The course, which includes a range of teaching styles, will be limited to 50 places, allocated on a first-come, first-served basis.

- **Porphyrrias**
- **Iron**
- **Haematology**
- **Genetics**
- **Clinical Cases**
- **Medical Informatics**
- **Management Topics**



For further information please contact:

Dr Bernard Rocks or Elizabeth Hall on

Tel: 01273-696955 at the Royal Sussex County Hospital.

*Application forms are available from the Association of Clinical Biochemists Office,
2 Carlton House Terrace, London SW1Y 5AF. Tel: 0171-930-3333. Fax: 0171-930-3553*

The Royal College of Pathologists

Part I Examination – September 1998

Chemical Pathology

First Paper

Candidates must answer FOUR questions ONLY

Time allowed – Three Hours

- 1 Discuss the advantages and disadvantages of providing the non-urgent analytical clinical biochemistry services for several hospitals from a single laboratory.
- 2 Explain the analytical principles of tandem mass spectrometry and give examples of its application in clinical biochemistry.
- 3 Write a critical account of the methods available for estimating the glomerular filtration rate.
- 4 Describe the metabolism of aromatic amino acids and the associated inherited disorders.
- 5 Write an account of the processes involved in the transport of oxygen from the air to the body's tissues. How can inadequate oxygenation be detected by laboratory measurements?

Second Paper

Candidates must answer FOUR questions ONLY

Time allowed – Three Hours

- 1 Either:
Discuss the clinical management of an adult following the surgical resection of a major part of the small intestine for ischaemia due to a superior mesenteric arterial occlusion.
or:
Write a critical account of the methods available for assessing the clinical utility of biochemical tests for diagnostic purposes.
- 2 Describe the metabolic sequelae of chronic alcohol abuse.
- 3 Write an essay on the mechanisms and consequences of resistance to the action of hormones.
- 4 Discuss the pathogenesis of chronic normovolaemic hyponatraemia.
- 5 Write short notes on
 - a. the amplification resistant mutation system (ARMS)
 - b. Southern blotting
 - c. variable numbers of tandem repeats (VNTR)

Many thanks to the Royal College of Pathologists for allowing ACB News to re-print these examination papers ■

Vacancy for Trainee Representative

Heather Clark has resigned from the post of Grade B Trainees' representative to the Committee of the Federation by virtue of completing her training and achieving a regrading.

Congratulations Heather! She is not being let off completely though as Heather has now been elected as one of the Southern Region representatives.

Nominations are now invited from members in Grades A and B on points 0-17 of the pay spine, to this post which, ex-officio, includes membership of the FCS Executive. More details of the role can be obtained by contacting Heather (Tel: 0171-377-7011) or the FCS secretary (Tel: 0117-975-3798, e-mail: ghester@compuserve.com). We believe that participation in this role provides an excellent early insight into issues of departmental and personnel management as well as into the operation of the ACB. The FCS takes the views and problems of its more junior membership very seriously but needs your first-hand input.

Nominations should be made in writing by two members at the appropriate grades and should be accompanied by an undertaking from the nominee that they are willing to accept the post. In the event of more than one nomination being received a ballot will be organised.

Nominations should reach the secretary by Tuesday 15th December 1998 and should be sent to: Geoff Lester, FCS Secretary, Department of Chemical Pathology, Frenchay Hospital, Bristol BS16 1LE. ■



Heather Clark won the snooker league at this year's Federation of Clinical Scientists training week in Manchester

Clinical Scientists Pay Award 1998-99

Geoff Lester, Secretary, Federation of Clinical Scientists

The pay claim for 1998/99 has now been settled and was issued to employers dated 15th July 1998 as AL(SP)1/98.

The award is the same as that received by nurses, PAMs and other Whitley groups other than those covered by the Doctors and Dentists Pay Review Body, i.e. with effect from 1st April 1998, an increase of 2% above the pay scales at 31st March 1998 rising to 3.8% from 1st December 1998.

Copies of the complete advance letter containing the full pay scales should be available from your Trust management. In case of difficulty members should contact their FCS regional representative or the FCS secretary. ■

Recent Modifications to NHS Pension Scheme

Members who joined the NHS Pension Scheme on or after 17th March 1998 may be able to take advantage of improved terms allowing many members to buy additional scheme membership for the first time or to buy more than they could before.

Those who may be interested should get booklet SD AVC, 'Increasing Your Benefits', from your Trust pensions officer or from the Pension Scheme.

NHS Pensions Agency
Hesketh House
200/220 Broadway
Fleetwood
Lancashire
FY7 8LG
Tel: 01253-774774 ■

Pay Scales

1st April 1998

Appendix A of AL (SP) 1/1998

G	00	13059		
r	01	13582		
a	02	14126		
d	03	14690		
e	04	15277		
	05	15889		
A	06	16525		
	07	17183		
G	<i>individual</i>	08	17872	
r	<i>posts will be</i>	09	18587	
a	<i>assigned a</i>	10	19330	
d	<i>payscale of three</i>	11	20103	
e	<i>consecutive</i>	12	20907	
	<i>points within the</i>	13	21743	
B	<i>range 08 to 24</i>	14	22614	
	<i>on the spine</i>	15	23516	
		16	24460	
		17	25436	
		18	26453	
		19	27512	
		20	28613	
		21	29757	
		22	30948	
		23	32185	32185 23 G
		24	33474	33474 24 r
				34812 25 a
				36205 26 d
				37653 27 e
				39160 28
				40725 29 C
				42354 30
				44048 31
				45811 32 *
				47644 33 *
				49550 34 *
				51533 35 *
				53593 36 *

Pay Scales

1st December 1998

Appendix C of AL (SP) 1/1998

G	00	13290		
r	01	13822		
a	02	14375		
d	03	14949		
e	04	15546		
	05	16169		
A	06	16817		
	07	17486		
G	<i>individual</i>	08	18188	
r	<i>posts will be</i>	09	18915	
a	<i>assigned a</i>	10	19671	
d	<i>payscale of three</i>	11	20458	
e	<i>consecutive</i>	12	21276	
	<i>points within the</i>	13	22127	
B	<i>range 08 to 24</i>	14	23013	
	<i>on the spine</i>	15	23931	
		16	24891	
		17	25885	
		18	26919	
		19	27998	
		20	29118	
		21	30283	
		22	31494	
		23	32753	32753 23 G
		24	34065	34065 24 r
				35426 25 a
				36844 26 d
				38318 27 e
				39851 28
				41443 29 C
				43102 30
				44825 31
				46620 32 *
				48485 33 *
				50424 34 *
				52443 35 *
				54539 36 *

Spine points marked * are for use only when salary scales have been advanced in accordance with paragraph 9.3 in Appendix B of AL (SP) 1/90.
 Pay rates should be applied pro rata to sessional staff under Appendix D to AL (SP) 2/84.

Birmingham Sweat Shop

Reported by Dr Jean Kirk Edinburgh

What common test whose methodology was described in detail in 1959 still has no EQAS and wide variability in its performance? This workshop was organised to pool experience and discuss possible ways forward in improving and standardising sweat test performance. More than 30 delegates attended, mainly from laboratories providing the sweat testing service for the UK Cystic Fibrosis centres.

Dr Peter Weller of Birmingham Children's Hospital began the session with an overview of the spectrum of cystic fibrosis seen today, and how this differs from fifteen or twenty years ago. He introduced us to the concept of equivocal CF characterised by mild clinical features, an equivocal sweat test, and no identified CF mutations in the CFTR gene. In recent years many equivocal cases have made the transition to atypical CF as further CFTR mutations have been identified. They include patients who may have normal sweat test results.

Dr Jean Kirk analysed questionnaire returns from 15 specialist centres and 15 ACB Focus Workshop participants. Within this self-selected group there was great variation in the number of sweat tests carried out by individual centres and in the number and grade of staff collecting the sweat (MLA to Consultant Biochemist!). Concern was expressed at the number of centres where one or more operator carried out very few sweat tests. There was considerable debate on the definition of minimum acceptable sweat weight, which should be expressed as sweat rate to take account of collection area and time. This may be irrelevant as almost all laboratories analyse and report samples that they class as insufficient!

Most laboratories measure both sodium and chloride, but use a different method from that used for plasma and urine samples. Flame photometry is the most commonly used sodium method while coulometric and colorimetric methods are equally popular for chloride. For standardisation and IQC many laboratories use commercial materials intended for use with plasma or urine. Reference ranges are mainly literature-derived, but vary quite widely.

The American Experience

Dr Vicky le Grys is Chair of the Sweat Testing Subcommittee of the American National Committee for Clinical Laboratory Standards (NCCLS), and the organiser of the American CAP Sweat Analysis Surveys. She compared and contrasted the American experience of sweat testing. The NCCLS Guidelines on Sweat Testing are manda-

*A Workshop
organised by
UK NEQAS
Paediatric
Specialist Advisory
Group (SAG), held
in Birmingham
July 1st 1998*

tory for CF centres. An EQAS scheme established in 1994, has highlighted problems. Commercial conductivity analysers are more widely used than in the UK - several labs measuring conductivity thought that they were analysing chloride. She expressed concern about Orion Chloride Electrode users, who perform well in the artificial EQAS conditions, but whose performance on real patients is affected by factors (such as pressure) not tested by EQAS.

Around the Country

After lunch we heard reports from three UK regions. The Welsh Sweat Standard was produced in 1993 and largely adopted by the local sweat testing laboratories. Following the introduction of neonatal CF screening, a new requirement was to diagnose cystic fibrosis in younger infants with unusual and possibly milder mutations. From Thames Region Mike Fahie-Wilson reported that the Welsh Standard had been adopted with minor modifications. Their patient information sheet was found to be particularly useful. This region also piloted an EQA scheme, which identified some calibration problems when participants were asked to spot EQAS material onto filter paper and elute as they would patient samples. Participants were keen to continue. Eddie Legg described an audit in the West Midlands which raised similar questions. Are insufficient yields linked to lower current flux? Is there evidence for a higher failure rate in infants tested at <6weeks? From East Anglia where neonatal screening has been in place for many years, Dr Anthony Heeley reviewed his extensive experience of sweat testing very young infants with high risk of CF. His data for chloride, sodium, osmolality and conductivity showed that all four analytes were capable of satisfactory discrimination in this particular patient group.

Where do we go from here?

Participants showed unanimous interest in EQAS. Look out for a questionnaire this autumn from NEQAS, where a pilot scheme is under consideration. The Welsh standard was seen as a carefully worked out document that could usefully form the basis of a UK standard. Any such standard must have input from clinicians as well as laboratories, and could be written as a joint venture. This is currently being explored by the Paediatric SAG. ■

Should we be Screening for Cystic Fibrosis?

Reported by Dr Leanie Shapiro, Leeds

Among the delegates to the Fifth International Conference on Neonatal Screening for Cystic Fibrosis (CF) in Caen, France, in September, there seemed to be no doubts – everyone there was either screening for CF or extremely interested in doing so. In that respect, this small meeting was in some ways like a large family reunion.

Neonatal screening for CF is very patchy worldwide. Approximately 92% of babies in Australia are screened for CF while no babies in Canada are screened. In between these extremes 22% of UK babies, 15% of French babies and 6% of US babies are screened.

First, we had an update on CF genetics. The basic defect is in the CF transmembrane regulator (CFTR) protein which has been mapped to chromosome 7. More than 800 different mutations have been identified with different molecular consequences e.g. no synthesis (G542X), block in processing (Delta F508), block in regulation (G551D), altered conductance (R117H), or reduced synthesis (Delta 1507). It is also possible for a single gene to have two mutations – the affected individual would be a carrier. This gave us a moment of horror as the potential for misdiagnosis was realised. The answer, of course, was to look at the parental genotypes. There is a weak genotype-phenotype correlation e.g. Delta F508 homozygotes are usually pancreatic insufficient, while patients with the milder mutations are usually pancreatic sufficient.

Benefits of Early Detection

There was agreement on many aspects of neonatal screening and inevitably much controversy. Oral communications and posters gave ample opportunity for exchange of ideas. The thirty-two posters covered relevant topics such as mutational analysis, methods and approaches to screening, sweat testing of infants and clinical evaluation of CF children identified by

screening. I was co-author on a paper from the Yorkshire Regional CF Unit on 'Neonatal CF Screening – Co-ordination and Communication'.

If there is no screening service, there is delay in making the diagnosis of CF – in 50% of cases diagnosis is delayed beyond three months of age. If sought, the symptoms of CF are present early and there is benefit for both baby and parents in early detection. Screened patients have been shown to do better than non-screened in the short term, as early diagnosis and treatment delays the onset of irreversible chronic respiratory infections. However, once lung damage has occurred, the only possible cure is transplantation. Thus the long-term benefits of screening is debatable.

Ethical Issues

We now have a fairly good test strategy in the form of immunoreactive trypsin (IRT) with DNA analysis, from the dried blood spots taken for phenylketonuria and congenital hypothyroidism screening. However, standardisation of IRT is a problem and for each population it is necessary to define the best buy in genetic markers. Perhaps we should be screening antenatally, rather than postnatally, for CF.

Advances in genetics have led to a number of ethical problems. For example, should we be screening for mild mutations which are really CFTR-related gene diseases rather than CF? Are we causing more harm than good by identifying Delta F508 carriers who may in the future be at increased risk of male infertility, asthma or chronic pancreatitis? Should patients with mild CF be treated differently from those with severe CF?

In the meantime, the CF Trust is pushing for neonatal screening for CF throughout the UK. The report of the DHSS National Screening Advisory Committee is eagerly awaited. ■

Scientific Programme for Focus 99

By Dr Bill Fraser, Liverpool

A combination of the best features from previous Focus meetings with some innovative approaches, including interactive symposia, has been incorporated into the scientific programme for Focus 99. The programme has been designed to appeal to all clinical chemists whether at the forefront of scientific investigation or at the coalface of routine practice. Within the programme two important milestones will be celebrated. Fifty years of lipoprotein meetings will be recognised with a symposium on the lipid hypothesis and 25 years of the Supra Regional Assay and Advisory Service (SAS) will be commemorated with the SAS Award Lecture.

Successful Format Continues

A well-recognised and successful format has been followed for Focus 99. The training day, management sessions and update sessions will be held at the beginning of the week. Each day will commence with workshops and reviews on a variety of subjects to suit the varied interests of delegates. Posters will be presented across lunchtime with discussion periods staggered to enable fruitful interaction without hypoglycaemia intervening.

Plenary speakers, who are pre-eminent in their field, have chosen subjects which will integrate with one of the symposia which follows.

Plenary Speakers and Associated Symposia

Professor H. G. Burger will receive the Roche Award and will lecture on the important and expanding area of inhibins prior to a session devoted to "Inhibins, activins and gonadotrophins".

Professor R. P. Ekins will present the SAS Award Lecture and will talk about microarray technology, which will precede a symposium that promises to be a fascinating insight into the future, looking at "New tools and advanced analytical techniques".

Looking "Beyond diabetes", a symposium on insulin resistance will be introduced in the Kone Award lecture by the important idea of early programming of insulin resistance by Professor C. N. Hales.

The provision of the correct substances in clinical nutrition will be addressed by Professor P. Furst who will give the Kohn Memorial Lecture with a subsequent symposium discussing energy requirements, the importance of fatty acids and trace elements in critical illness.

ACB Foundation Award recipient, Professor J. Shepherd, will celebrate 50 Years of Lipoprotein Meetings by validating the lipid hypothesis using trial based verification and this theme will be continued with



Professor R. P. Ekins

further support for the hypothesis from animal, metabolic and genetic studies.

Audience Participation

Thursday will see a departure from the traditional approach and the main lecture theatre will be converted to accommodate computerised interactive sessions. In the morning, the successful format of the bulletin board will be enacted in real time with case studies presented by Drs G. S. Challand and W. J. Marshall. This will give all participants the chance to test their knowledge and question the experts in the less forbidding environment of the interactive session rather than across the "lone microphone" of the lecture theatre.

In the afternoon, Professor M. J. McQueen will set the scene during the AACC Transatlantic lecture by discussing the future of laboratory medicine from an international perspective. A question time debate will follow this lecture with the panel chosen to represent several different forthright viewpoints. Audience participation is encouraged with questions and then overall opinions available for further debate.

And Finally . . .

An important aspect of the national meeting is to encourage our younger members as well as our established members to discuss and present their work. In recognition of the importance of these presentations within the Focus 99 programme there will be two sessions on separate days devoted to members' papers and the Bayer Award competition has been moved to Tuesday afternoon.

This year all abstracts will be assessed "blind" and the selection process for oral will follow a detailed set of guidelines.

If none of the above has managed to whet your appetite, then there are symposia on laboratory compromise, addiction as a disease, the Health Technology Assessment exercise and the insulin-like growth factors, as alternatives. There will also be a programme of lectures organised on the associated pathology specialties of microbiology and haematology which will be of obvious interest to those who are involved in providing integrated laboratory services. (See Forthcoming Meetings – see Ed.).

I do hope you will be able to attend Focus 99 in Manchester and take part in what promises to be a highly entertaining and educational scientific programme. ■



Professor P. Furst

Bone Markers Down Under

Reported by Penny Blackwell, Nottingham City Hospital

After hearing Professor Jack Martin speak at the IFCC in Wembley in 1996, it was obvious that he and the Institute of which he is Director had long been involved in PTHrP. Their group along with two other teams have published prolifically on the subject since their isolation of the molecule in 1987. As I was about to embark on a PhD in bone metabolism, particularly looking at PTHrP, it seemed a good time to visit St Vincent's Institute of Medical Research in Melbourne, Australia. So, after writing many letters to companies and foundations, I raised enough money to support this venture.

Sunday 26th June saw me leaving Manchester Airport for a long and tedious flight for what should have been sunnier climes had I chosen the right time of year to travel to Australia. I was greeted in a cold, but beautifully sunny Melbourne, and taken for a quick tour of the city, which, although awesome in its size and wealth of high rise buildings, was immensely pretty and green with much open space and parkland. To prevent jet lag (I was now nine hours ahead of British Summer Time), I kept going for the rest of the day - getting used to the trams and acquainting myself with 'Aussie tucker'. I finally appeared in work, looking a bit worse for wear, to be shown around by Jane Moseley, Associate Professor at the Institute. I managed until 10pm when, lulled along by a blazing log fire I couldn't keep my eyes open a moment longer.

Astonishing Output

Wednesday morning saw me looking somewhat brighter and I turned up for the regular 8.30am meeting with other members of the department. Unfortunately at the beginning of my trip, Jack was attending conferences in the UK - I don't know who got the better deal weather - wise.

St. Vincent's Institute of Medical Research employs nearly 100 members of staff researching areas such as bone physiology and metastatic spread to bone, protein chemistry and crystallography, diabetes, hypertension and heart disease, which are supported by a wealth of grants. The output of the Institute is astonishing in terms of poster presentations, publications and collaborative projects making me feel very humbled to be there.

PTHrP Assay

Working with Patricia Ho, I learned the PTHrP assays which she had helped to develop. The 'in-house' assays currently up and running measure N-terminal, mid-molecule and C-terminal fragments of the molecule. The group are involved in many clinical studies within the hospital and the University of Melbourne, where Jack has been Professor of Medicine. Pat is kept incredibly busy, assaying anything up



Penny Blackwell reports on a visit to St Vincent's Institute of Medical Research in Melbourne

to 300 plasma and tissue samples for various PTHrP fragments each week, and under her watchful eye, I was allowed to do some of these. The issue about measuring different fragments of the PTHrP molecule is one about which they feel very strongly, since it is becoming clearer that different regions of the molecule have different and even, opposing effects. The potential for post - translational modification of PTHrP to create these fragments is large and they are currently investigating exactly how the molecule is secreted and fragmented. This leads on to another thorny issue regarding the nature of circulatory PTHrP and which fragments we should be measuring in different clinical situations. Time and persistence should resolve these issues.

Their studies cross several disciplines, and staff were trained in many different complementary techniques. I had the opportunity to observe some of these such as immunohistochemistry, in situ hybridisation, cell culture and molecular biology including the use of gene filters; techniques which I wouldn't necessarily be able to learn in a Clinical Chemistry department.

Pathology Shops

Fridays were clinic days, which I attended with Vivian Grill. The medics here seem to be much more tuned in to the clinical use of biochemical bone markers and take much more stock of the results, routinely requesting urinary deoxyypyridinoline. Surprisingly, despite the fact that Melbourne enjoys long summers and very short winters, Vitamin D insufficiency was a common problem.

Although St. Vincents had a pathology department, many of the laboratories in Australia are privately run, and in Melbourne, Gribbles 'Pathology Shops' could be seen in most suburbs next to the grocers or the chemists. Patients could call in at a lab near their home, prior to coming in for their next hospital visit, and bring their results with them. Clinics were very busy and informal with four clinicians working on metabolic bone disorders and rheumatology and allowed time to learn interpretation of isotope bone scans, plain X-rays and DEXA scans.

I also found time to visit a busy hospital clinical chemistry department headed by Vivians' husband, Hans Schneider who is Consultant Chemical Pathologist and also practices as an Endocrinologist. He had just been elected onto the Australian ACB Education Committee, so we had a long discussion about training in the two countries. The lab wasn't so different from others I have seen in England, but it was interesting to note that they had successfully been running a combined clinical chemistry, toxicology, haematology and blood bank system for some time.

I feel very honoured to have worked at St. Vincent's Institute and I've come home much the wiser, and with a wealth of knowledge which I'm very grateful to Jack and his staff for imparting.

After Melbourne we flew to Kangaroo Island and Adelaide with time to do the 'wildlife and wine' part of the trip. I have to confess to eating Kangaroo Steaks with Roasted Roo Tail, made all the nicer as it was washed down with a Black Pepper Shiraz. We flew on to Sydney, where, as my husband and I are both French Horn players, we had to buy a didgeridoo. This took some choosing, settling in the end for a concert 'E' as this was small enough to feasibly carry home!

I would like to thank my sponsors for giving me this wonderful opportunity to work in Melbourne. Special thanks go to Jack Martin and his family for their hospitality and kindness and for all of the clan for making my time in Melbourne a varied and interesting one! Finally I would like to thank Professor David Hosking and Dr Nigel Lawson for their support and encouragement in this adventure. ■

The Pancreas à la Grecque

Reported by Jean Deenamamode, King's College Hospital, London

My research interests in the exocrine pancreas and the accidental encounter of the EPC web site resulted in my attendance at this gathering of just under 300 delegates from 23 countries. The opening ceremony took place in the grounds of the Statehouse, Karabournaki and was accompanied by a demonstration of traditional Macedonian dancing and Greek cuisine at its best.

The main sessions were pancreatic cancer, acute, chronic and hereditary pancreatitis. The presentations covered basic science and clinical studies. The opening review lecture by Professor Man (London) set the scene for two and a half days of intense lectures, oral presentations and poster discussions.

In England and Wales, during the 1950s, pancreatic cancer deaths in men rose from 7.9 cases per 100,000 to a peak of 12.3 in the mid 1980s and there has been a downward trend to 11.6 per 100,000 in the mid 1990s. Interestingly, the mortality rate in women rose from 6.5 to 12 per 100,000 in the late 1980s and has stabilised since then. Thus, recent time trends in pancreatic cancer revealed the sex ratio of pancreatic cancer mortality to be equal with a predicted declining trend in the mortality rate in the next decade. Smoking appears to be a major risk factor, and alcohol possibly, in contributing to the occurrence of pancreatic cancer but these are difficult and overlapping areas which require further clarification (Southampton).

Initial *in vitro* studies of gene therapy in pancreatic cancer employing adenoviral-mediated transfer of wild-type tumour suppressor genes, p53 and p16, have demonstrated significant growth inhibition and increased rates of apoptosis in human pancreatic cancer cells (Liverpool). Although numerous complications will have to be overcome, the use of combination gene therapy in the treatment of pancreatic cancer appears to be a real possibility.

Another interesting session was hereditary pancreatitis which is a rare, autosomal dominant condition with variable penetrance. Mutations have been identified in the cationic trypsinogen genes at 7q35, resulting in impaired inactivation of trypsin, thereby leading to autodigestion of the pancreas. Twenty-six families in the UK and Ireland are recognised to have hereditary pancreatitis and of 15 tested so far, 6 have tested positive for one of the 2 mutations. An ongoing study in Italy, has for the first time shown the existence of a chronic increase in total pancreatic amylase and lipase in various members of the same family.

NO and Oxidative Stress

Nitric oxide (NO) and oxidative stress were heavily discussed with respect to hypotension derived from severe acute pancreatitis (Spain).

Overproduction of NO appears to be an important player in the inflammatory response and could be involved in the control of blood pressure.

Inhibition of nitric oxide synthases reduced pancreatic enzyme secretion

*XXX Annual
Meeting of
the European
Pancreatic Club,
10th-13th
June 1998*

and plasma insulin in human studies and it was suggested that NO could affect both endocrine and exocrine secretion. The NO synthase in pancreatic acini appears to be activated by an increase in cytosolic calcium ions linked to the activation of guanylate cyclase, cGMP and calcium influx. The system would be under regulation by several feedback mechanisms requiring further elucidation.

Immunohistochemical detection of oxygen-derived free radicals (OFR), from activated neutrophils, oxidised to cerium-perhydroxide precipitates in experimental pancreatitis, were visualised by reflectance confocal laser scanning microscopy (France). The colourful results revealed the upregulation of cell adhesion molecules in acute necrotising pancreatitis. The major source of OFRs appeared to be the pancreatic acinar cells (xanthine oxidase activity) initially and followed later by the adherent polymorphonuclear neutrophils, thereby worsening pancreatic damage.

Investigative Approaches

A survey by the European Practice in Acute Pancreatitis study group comparing the management of acute pancreatitis in non-University/teaching hospitals involving 160 internists, gastroenterologists and surgeons in 6 countries (UK, France, Italy, Sweden, Spain and Germany) revealed some interesting findings. 73 ± 114 (mean \pm SD) acute pancreatitis cases/hospital/year are encountered in Europe with the major aetiological factors being biliary disease and alcohol-related. Serum amylase was used by all, but the more specific and sensitive lipase measurement had yet to be recognised in the UK and Sweden, unlike its concomitant use in other countries.

Ultrasound scanning was most popular in France where it is used routinely, but not at all used in Sweden. Ultrasound scanning was generally noted to be inappropriately used in assessing the severity of pancreatitis. Germany admits the greatest number of patients in intensive care but the patients have the shortest stays. Overall $9 \pm 12\%$ of patients die from acute pancreatitis with the UK having the highest percentage. Of these $91 \pm 11\%$ die because of multiple organ failure with the remaining deaths being caused by single organ failure. There were few clear trends with respect to presentation, diagnosis, or treatment of acute pancreatitis across Europe. The availability of resources appeared to have a profound effect on treatment choices for acute pancreatitis.

One of my research interests was the study of serum isoamylase, lipase and pancreatitis-associated protein (PAP) in preterm neonates. PAP has been reported to be overexpressed by the pancreas in pancreatitis. The role of PAP as a marker of pancreatitis has further diminished, as the protein appeared to provide cellular protection against hydrogen peroxide and oxidative stress (*in vitro*) and also appeared to have a role in apoptosis (Spain and France). At King's we have observed an apparent age-related developmental expression of PAP in preterm neonates. The exact role of this interesting protein which looks likely to be renamed in the future, remains to be elucidated.

Although the pathophysiology of pancreatic disease is being better understood, numerous fundamental, including epidemiological and biochemical questions about the exocrine pancreas alone, will probably remain unanswered well into the next millennium.

I am most thankful for the travel bursaries granted by the ACB (Education committee and Southern region) and Sigma Diagnostics which enabled me to attend a most interesting, topical and educational meeting. ■

Brain Marker Potential

Reported by Hagosa Abraha, King's College Hospital, London

The conference was organised by Dr P. Johnsson (Department of Cardiac Surgery, Malamo/Sweden) and Dr Bertil Rommer (Department of Neurosurgery, Lund/Sweden) with support from AB Sangtec Medical at the Kulturem auditorium in Lund. The participants of the conference were mainly drawn from Europe, with a few from the USA, Canada and Australia. The meeting provided an overview of studies carried out on biochemical markers of brain damage. It was divided into basic lectures from the faculty lecturers and abstract presentations from the participating delegates.

An overall review of biochemical markers of brain damage was presented by Professor Lars Rosengren (University of Gotheburg, Sweden). The main biochemical markers of brain damage that have been evaluated to date include: S100 protein, Neurone specific enolase (NSE), Glial proteins and Neurofilament protein (NFP). The clinical applications of these markers have been evaluated in both acute (stroke, cardiac arrest, anoxia, head injury, trauma) and chronic (MS, CJD, Parkinson disease etc) neuronal damage. He highlighted that among the markers measured in both CSF and blood, S100 protein and NSE appeared to be the best markers of the extent of brain damage in the acute state. S100 protein may have merits over NSE as it is more stable and there is no interference from haemolysis. On the contrary, there is no single marker which adequately reflects the extent of neuronal damage in chronic disorders. Although a few studies demonstrate that NFP is a good marker of brain damage in this group, assay sensitivity needs to be improved and further studies are required to determine its clinical significance as a marker of chronic neuronal damage.

No Firm Conclusion was Reached

The application of serum S100 protein and NSE as a marker of head injury was discussed by a number of speakers. A group from Germany (Raabe et al) demonstrated clearly the correlation of serum S100 and NSE with the severity of head injury visible on a Computed Tomography scan and the clinical outcome assessed using the Glasgow coma score. They suggested that measuring serum S100 would be a better predictor of poor outcome in head injuries compared to established parameters such as age, cerebral perfusion pressure, intracranial pressure etc. Moreover, the sensitivity and specificity of serum S100 protein for predicting clinical outcome in patients with head injuries, was better than NSE. The theme of the session was the mechanisms that cause serum markers to be raised following head injury. Could it be loss of integrity of brain cells; or increased permeability of the blood brain carrier due to trauma or cytokine activation? No firm conclusions were

1st International Conference on Biochemical Markers for Brain Damage May 14th-16th

reached and further follow-up studies are required to establish the value of routine measurement of the markers.

It was highlighted that neurological complications after cardiac surgery are well known. Neuropsychological tests and neurological examinations are expensive, time consuming and must be delayed until the patient recovers from the anaesthesia. A series of presenters reported that measuring serum S100 and NSE has a potential use for predicting cerebral damage following heart surgery in both adult and paediatric groups. S100 protein is believed to be involved in the development of the central nervous system in early life. There was no single study that showed when the protein peaks, nor normal reference ranges in children. There is a concern, therefore, whether the high values of S100 protein concentration observed in post-operative children, was a normal phenomenon. It was suggested that there is a need for further prospective studies before the serum markers can be used to predict the clinical outcome in paediatric heart surgery.

A preliminary study from Cambridge showed that serum S100 protein was also raised in liver transplant patients, particularly those with encephalopathy, and there is a need for further studies in this area.

In the final session of the conference the clinical use of biochemical markers in CJD patients was discussed. A study from Germany (Otto *et al*) demonstrated that serum S100 protein was significantly raised in CJD compared to other diseases causing dementia. They concluded that measuring serum S100 protein would improve the diagnostic accuracy in CJD patients. Alternatively, the National Hospital for Neurology in London (Green *et al*) measure CSF S100 protein, NSE, Tau protein and 14-3-3 protein. They reported that there was no single marker which is reliable for use in CJD diagnosis.

Generally, the conference was fruitful and a remarkable opportunity for the scientists and clinicians to interact and exchange ideas and information. I believe that in the near future clinical biochemistry will have a significant role in assessing patients for neurosurgery, or with suspected brain injuries. ■



Letters

Readers speak out

Sack the Sub-Editor!

Avidly reading the September issue of ACB News your title "Danielle Freedman Celebrates Fiftieth at No. 10" could be misconstrued as Danielle's 50th birthday. Not very gallant! – but we all know it is no time since she was celebrating her 40th riding a motorbike across your pages.

Hazel Wilkinson

York District Hospital
Wiggington Road
York
YO3 7HE

Editors Comment: I will reprimand the sub-editor for these ridiculous attempts at humour in sub-headings. He must be a Guardian reader!

Unite to Promote Clinical Biochemistry

I have read with great interest in recent editions of ACB News about an affiliate membership of the ACB and the possibility of admitting MLSOs.

As an MLSO myself I fully support the idea of an

affiliate membership grade. The chance to join the ACB would be welcomed by myself and many other MLSOs. One of the aims of the ACB is the advancement of Clinical Biochemistry. I feel many of us are more than capable of contributing. We are now an all graduate entry profession, with many studying for higher qualifications, but access to meetings and publications, although not impossible, is not easy if we are unable to be members.

I recently sent an e-mail to the discussion group on the ACB web site on this subject and was greatly encouraged by the response I received, and I hope this letter can further stimulate the debate. I realise that such a radical change to membership will necessitate serious and careful consideration. In an era where numbers of both Clinical Scientists and MLSOs are diminishing, surely an association with a large membership base will be better able to promote and advance Clinical Biochemistry?

Paul Eaton

Chief MLSO

Eastbourne District General Hospital
King's Drive
Eastbourne
East Sussex
BN21 2UD

Focus 99 Abstracts



Now is the time to start work on your Focus 99 abstracts. The deadline for submission is:

15th January 1999

Remember that you can send your abstracts in on the submission form to be found on page 5 of the Invitation to Participate. Alternatively you can e-mail them on the Focus 99 website, which is linked from the front page of the ACB site. (www.acb.org.uk)

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Olympus ACB Travel Bursary supports NEQA Lebanon Head

Dr Ghassan Hallak, Head of the Pathology Laboratory at the Bikfaya Hospital in Lebanon, was awarded an Olympus ACB Travel Bursary to help fund his visit to Focus 98. Held in the Scottish Exhibition Centre in Glasgow, the exhibition, plenary lectures and symposia were attended by over 650 delegates.

As head of a newly established National External Quality Assurance (NEQA) scheme in Lebanon, Dr Hallak was keen to exchange ideas with fellow clinical biochemists at the conference. National External Quality Assessment (NEQA) Schemes are an essential component to ensure acceptable standards of laboratory performance. They provide an agreed methodology for objectively checking pathology results through an external agency. This enables compatibility to be established between different laboratories.

Dr Hallak is also a senior lecturer in graduate courses in Clinical Chemistry to train technicians in laboratory procedures. His main area of research concerns the prevalence of *I_p(a)* in Lebanon.

The Olympus ACB Travel Bursary is open to all ACB members to support professional activities including conference attendance, meetings support

and field study activities. Awards of up to £500 will be made at intervals during 1999.

Entry forms can be obtained from:

Jayne van Aswegen
Olympus Optical Co. (UK) Ltd
2-8 Honduras Street
London
EC1Y 0TX ■



Dr Hallak (front left), Head of the Pathology Laboratory at the Bikfaya Hospital in Lebanon, and his team

Beckman Coulter Concord

Following the acquisition of the Coulter Corporation by Beckman Instruments last year, a newly formed Beckman Coulter organisation has begun the process of integration of the two companies and their product ranges.

Beckman Coulter United Kingdom Ltd unites staff from both companies at the Beckman UK headquarters in High Wycombe. Brian Fishwick leads the diagnostics business as Director of Commercial Operations with responsibility for combined ranges. Brian has seen steady growth over the twenty-six years he has spent

with Beckman, heading the successful team that brought autochemistry and protein systems to the market lead position in the UK.

Brian now takes charge of the combined grouping of specialist sales and support staff bringing a total package of systems and services to provide progressive automation for the clinical laboratory.

In order to ensure a smooth transitional flow for all clinical laboratories, a Transition Co-ordinator is available to customers to assist with any questions – fax number 01494-429100.

The new Beckman Coulter operation adds strength to the combined product ranges of two highly successful companies where product quality and soundly professional support services have been major points of concord.

For further details please contact:

Beckman Coulter United
Kingdom Ltd
Oakley Court
Kingsmead Business Park
High Wycombe
Buckinghamshire
HP11 1JU
Tel: 01494-441181
Fax: 01494-447558
www.beckmancoulter.com ■

Radiometer Launches New Range

A totally new range of fully automated blood gas analysers that can measure a panel of 15 parameters from just 95 µL of whole blood has been launched by Radiometer. The ABL700 series combines ease of use and rapid turnaround times with accuracy and cost efficiency. The minimal size of sample required makes the analyser ideal for use in neonatal intensive care units.

The upgradeable parameter configuration can be customised to measure pH, blood gases and any combination of oximetry, electrolyte and metabolite parameters. Micro modes down to just 35 µL, for glucose and lactate, provide further sampling flexibility.

The ABL700 is equally suited to laboratory testing and point-of-care

environments. Its colour touch screen and logical menus mean that the ABL700 series is highly intuitive. However, video tutorials are available on screen with quick instructions if needed and on-line assistance and context-sensitive troubleshooting make for fast and convenient problem solving.

To enhance accuracy and eliminate the effects of a wide range of interfering substances, such as HbF, bilirubin and Evans Blue, the ABL700 series has been designed to measure at 128 different wavelengths. This new measurement technology means that the ABL700 series now excludes more interfering substances than any other analyser.

An exciting innovation currently in preparation is the Radiance Data

Management Program. This will allow all ABL700 series installations within a hospital to be monitored and controlled remotely from a central computer, thereby removing the need for staff to constantly visit remote installations. To ensure accurate and rapid results transfer, the ABL700 series can already interface directly with hospital and laboratory information systems.

For further details please contact:
Radiometer Ltd
The Manor
Manor Royal
Crawley
West Sussex
RH10 2PY
Tel: 01293-517599
Fax: 01293-531597 ■

Homocysteine from Drew

Drew Scientific has launched a system for the measurement of total homocysteine. The DS30 system is based on the established chromatographic procedure, but uses novel instrument design to overcome some of the drawbacks of HPLC. An associated kit contains all the reagents necessary to perform homocysteine measurement.

Drew Scientific, whose headquarters are in Barrow-in-Furness, Cumbria, have developed the system over the last year and will be commencing the global launch of the DS30 in the UK market. The system was conceived, developed and designed in Drew's R&D facility in Barrow-in-Furness and is being produced in their manufacturing facility.

The company will be arranging a number of 'Homocysteine Forums' where there will be a chance for attendees to discuss some of the latest findings in

homocysteine testing. To get further information contact Jeff Appleyard at Drew Scientific.

The Drew website is now also available and contains over 100 recent papers relevant to the homocysteine topic.

For further information please contact:
Jeff Appleyard
Drew Scientific Ltd
Park Road
Barrow-in-Furness
Cumbria
LA14 4QR
Tel: 01229-432089
Fax: 01229-432096
Email: jeffa@drew-scientific.com
Website: www.drew-scientific.com ■

The Retort Courteous

Gordon Challand, History Group Chairman

In August, the ACB's Chairman, Ian Barnes, presented a glass retort to the President of the American Association for Clinical Chemistry to commemorate its 50th anniversary. Made in 'ACB blue' borosilicate glass by Frank Daysh Glassblowing of Lichfield, and mounted on a symbolic tripod, the retort is engraved with the ACB logo and the words *American Association for Clinical Chemistry, 1948-1998, presented by the Association of Clinical Biochemists*.

The logo of a retort surmounted by a serpent-entwined staff symbolises the union of chemistry and medicine. It was apparently first developed for the IFCC Congress held in Stockholm in 1957, and then used by the ACB for the 1960 Edinburgh IFCC Congress. With a small change in wording, it was adopted as the ACB logo late in 1960. Peter Broughton published an article about the serpent-entwined staff in News Sheet 384 which provoked an antipodean response from John Whitfield (News Sheet 387). But although the logo has featured on the cover of News Sheets since 1988, the significance of the retort has not been previously explored within these pages.

Mankind has long been interested in distillation. The earliest distillation device to be described in English was the curcurbit (a gourd-shaped beaker) and alembic, or cap for this, which had a beak through which vapour could pass into a receiver where it was condensed. Many versions were developed – the *Book of Simples* of 1562 describes a horned

still, a pelican still, and a bagpipe still. Whether the latter had multiple spouts, or whether the bagpipe refers to its country of origin is not clear.

The retort (from the Latin *retorquatum*, twisted back) was probably introduced into England early in the sixteenth century from France, where it had been developed for the production of brandy. It found many uses, from chemical to medical:

- 1605 *Those saltes being put into a retort, stilleth forth a volatile salt*
- 1608 *The still where he had the Spirit of Wine distilling over out of a Retorto*
- 1712 *The black oil of tartar [creosote?] by the retort is admirable for the cure of scabs.*

Something Borrowed ... Something Blue

Although technically superseded in the seventeenth century by the worm still, the retort was still in widespread use until early this century, and dusty examples can still be found in school chemistry cupboards. The retort stand is still a useful piece of laboratory equipment.

Distillation has been used for analytical biochemistry for many hundreds of years: a text of 1398 states *Yf blood be sodde and dystylled, therof we maye make talow and grees*. But I have so far been unable to identify a clinical chemistry method in which the retort was used.

Probably because of its elegant shape and distinctive outline, the retort has been used as a symbol of chemistry for many years. Holme's *Armoury* of 1688 quotes one coat of arms as *Sable, a siller's Retort, or a Retort Glass Argent*. It is therefore highly appropriate as part of the logo of the ACB. Although the ACB borrowed it from an IFCC Congress, I am pleased to be able to report that this compliment has been returned. A medium blue was chosen as the official colour for the News Sheet at a saloon bar meeting between Andrew de Bats, John Mount and myself late in 1979; and later became the official colour for ACB publications. The IFCC Publications Committee has recently chosen a virtually identical blue to be the official IFCC colour. ■



The Genome: Opportunities for Diagnostics?

Frenchay Campus

University of the West of England

Bristol

Thursday 7th January 1999

09.00-10.00 Registration and coffee

Pre-lunch Chair: Dr Lisa Hall

10.00 Welcome

Professor Colin Hawkes

10.05 Future applications of molecular biology in the pharmaceutical industry (tbc)

Dr David Bailey, Incyte Pharmaceuticals

10.40 In vitro mimetics and drug screening: toxicogenomics

Professor Wendy Purcell, UWE

11.15 Coffee and posters

11.35 Pre-natal molecular genetic diagnostics in the UK and developing countries

Dr John Old, John Radcliffe Hospital

12.10 HLA tissue typing for transplantation (tbc)

Dr David Parker, Murex Biotech Ltd

12.45 Lunch, posters and networking

Post-lunch Chair: David Gee

14.00 Overview of technology (tbc)

Dr Lisa Hall, Visiting Professor, UWE

14.35 A Lab-on-a-Chip: Fact or Fiction?

Dr Andrew J. de Mello, Imperial College of Science, Technology and Medicine

15.10 Technology capabilities and customer sensibilities

Dr Paul Debenham

15.45 Discussion

16.00 Tea and posters

Those interested in presenting posters or table-top displays please contact The Diagnostics Club.

Cost: Diagnostics Club members £64.63 (£55 plus VAT), others: £99.88 (£85 plus VAT).

For further information contact: Dr Valerie Owen, Diagnostics Club Manager on:

Tel: +44-1908-647417

Fax: +44-1908-271612

Email: The_Diagnostics_Club@compuserve.com

Web url - <http://www.diagclub.co.uk> ■

Additional Symposia – Focus 99

Some additional symposia have been arranged for Focus 99 in Manchester, as follows

Tuesday 18th May Recent Advances in Haematology

- Molecular diagnosis in haemophilia A
Dr A M Cumming (Manchester)
- Thrombophilia
Professor A. M. Greaves (Aberdeen)
- Bisphosphonates in cancer treatment and prophylaxis
Dr W D Fraser (Liverpool)

Cardiovascular Disorders

- Platelet activation and function
Professor S. J. Machin (London)
- Haematological predictors of cardiovascular disease
Professor G. D. O. Lowe (Glasgow)
- Homocysteine and thrombosis
Dr M Makris (Sheffield)

Wednesday 19th May Haematological Oncology

- New developments in the treatment of leukaemias and lymphomas
Professor A. C. Newland (London)
- Application of cytogenetics and molecular techniques in the management of patients with leukaemia
Dr C. J. Harrison (London)
- Molecular epidemiology of acute leukaemias
Dr G. J. Morgan (Leeds)

Technology and Laboratory Medicine

- PCR chip technology
Dr G. Corbitt (Manchester)
- The first steps towards total laboratory automation
Mr D. L. Guthrie (London)
- The IT interface
Dr R. G. Jones (Leeds)

Thursday 20th May Diagnostic Challenges in Microbiology

- *E. Coli* and the food chain
Professor T. H. Pennington (Aberdeen)
- Mycobacterial infections
Dr B. Watt (Edinburgh)
- The laboratory diagnosis of *Chlamydia Trachomatis*
Dr G. L. Ridgway (London)

Infection Control

- Antibiotic resistant bacteria
Dr D. M. Livermore (London)
- Control of MRSA
Dr B. D. Cookson (London)
- Intravascular catheter infection
Dr M. H. Wilcox (Leeds)

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£27,147 TO £29,260 INC LONDON WEIGHTING - (THIS INCLUDES THE FULL 1998/99 PAY SETTLEMENT)

Applications are invited for the post of Principal Biochemist in the department of Clinical Chemistry.

This is a revised job description for the post advertised in August and would now suit Members or Diplomates of the Royal College of Pathologists who desire a "fast track" route to a Consultant Biochemist post.

The successful candidate is likely to be able to demonstrate a solid track record as a Clinical Biochemist, would probably have some

experience of supervision of staff, be innovative and active in attending scientific meetings. In particular the candidate will appreciate the overall level of responsibility vested in the post whilst realising on occasions the importance of seeking advice.

The Trust Chief Executive has confirmed the "ring fencing" of the money required to regrade the post in the future, subject to external assessment.

Further details from Dr Dennis J Wright Tel: 0181 869 2121

For an application form and job description, please contact Human Resources Department, Northwick Park and St. Mark's NHS Trust, Watford Road, Harrow, Middlesex HA1 3UJ. Tel: 0181 869 2184 (24 hour answerphone), quoting ref: INV406P.

Closing date: 4th December 1998.



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Sheffield Children's Hospital, Western Bank, Sheffield S10 2TH
Tel: 0114-271-7267**

Deadline: 26th of the month prior to the month of publication

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