# Clinical Biochemistry News



**ACBI** 



September 2011

**ACB** 

Newsletter of the Association of Clinical Biochemists in Ireland and the Association of Clinical Biochemists (Republic of Ireland Region)



### INTERNATIONAL YEAR OF CHEMISTRY

This is the International year of Chemistry, an initiative of IUPAC (the International Union of Pure and Applied Chemistry) and of UNESCO (the United Nations Educational, Scientific, and Cultural Organization). The journal *Clinical Chemistry* has published several articles throughout the year celebrating the history of our profession, biographies of scientists who made significant contributions to the development of clinical biochemistry, and the interplay between art and chemistry.

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### From the President

### **Orla Maguire**

2011 has seen a number of significant changes occurring in hospital laboratory departments nationally. The primary impetus for the introduction of the changes is the perilous state of the national finances. Pathology laboratories were given special prominence in the Croke Park agreement (2010) by virtue of the fact that discussions were taking place at the time about the future delivery of Pathology services in Ireland. Revised work practices including an extended working day and a revised payment system for the provision of out of hours services have been introduced. These changes are envisaged to save six to seven million euro annually. In addition, the moratorium on staff recruitment in the public sector has presented huge challenges in our ability to provide the same level of service to our users as previously was in place.

In relation to the development of cold laboratory services, both an outline business case and cost benefit analysis have been carried out by the HSE. The models of delivery of a national service considered were on the basis of an eight, six, three or two sites either delivered within the public sector or by outsourcing to the private sector. This included a pre competitive dialogue process with both public sector and private sector providers. The key conclusion has been that further consolidation of cold laboratory activity will lead to cost savings being realized in the overall national Pathology budget. Pathology laboratory professionals have come together to formulate an alternative framework for laboratory modernization in Ireland (National Pathology Network) which has been tabled as part of these considerations. The National Pathology Network provides for the rationalization of services based on regional networks comprising of large core laboratories ('hubs') supporting smaller hospital laboratories ('spokes') in the same region. Discussions are ongoing between the HSE and laboratory professionals and will inform the next steps in the process of determining the optimal service delivery model for cold laboratory services.

On 31<sup>st</sup> May, the Health and Social Care Professionals Council (Coru) announced the

opening of a register for Social Workers. Social Workers are the first of twelve professions (which includes Clinical Biochemists) to be registered under The Health and Social Care **Professions** Act (2005). The individual professional bodies representing Health and Care Professions (H&SCP) extremely supportive of statutory registration as a means of ensuring the protection of the public by promoting high standards of professional competence among registrants. However, some concerns have arisen about the registration process to date including transparency around criteria for selection of future appointments to registration boards, meaningful consultation and CPD. It is planned to make representation, on behalf of the various H&SCP professional bodies, to the Minister of Health to discuss these areas of concern. Up to date information on the registration of H&SCP can be found on the Coru website (www.coru.ie).

Continuing Professional Development (CPD) is an integral part of ensuring professionals remain up to date in their knowledge and therefore provide an evidence based optimal service to patients. The HSE is supporting professions within the health service to ensure that appropriate CPD is delivered to all of its employees. Currently, the ACBI is formulating a CPD scheme to assist its members in maintaining professional development. It is planned that members will be able to record their individual CPD activities on the ACBI website.

Pathology has led the way with regard to implementation of changes in the delivery of patient services in the Health Sector envisaged in the Croke Park agreement. There is a need for more of the health service to adopt an extended working day so that the full impact of the changes can be realised. The years ahead will certainly see the delivery of laboratory services in Ireland different from that of today but it is important that we play our part in ensuring that any reform results in the most efficient, effective and patient-centred service being put in place.

## IFCC Call to Participate

The IFCC has established a Working Group (WG) on Laboratory errors and patient safety' under the chairmanship of Prof. Mario Plebani of Italy. The WG mission is to stimulate studies on the topic of errors in laboratory medicine, to collect available data on this topic and to recommend strategies and procedures to improve patient safety. Prof. Plebani and his team are now working on a project to set a model of quality indicators (MQI) in order to decrease the error rates in laboratory testing. To achieve this, they have developed a specifically-designed website <a href="http://www2.csinet.it/mqiweb/">http://www2.csinet.it/mqiweb/</a> where participating laboratories can enter data for each indicator. To set desirable quality specifications (SQI) for each indicator, the WG needs data

and to obtain this, they need more laboratories to on to participate in The WG warmly invite clinical laboratories to join them and to take part in this worthwhile project by logging on to the website outlined above. The collaboration of as many laboratories as possible will ensure they reach the goal of decreasing the error rates in laboratory testing. Further details can be obtained from Prof Plebani (email:mario.plebani@unipd.it). Of interest, Prof Plebani will be speaking on this subject at ACBI 2011 this October; all the more reason for laboratories in Ireland to participate actively in this extremely important project!



## In the news

Recently, the International Agency for Research on Cancer, whose parent body is the World Health Organisation (WHO), classified mobile phone radiation as "possibly carcinogenic". This is the third highest category behind "probably carcinogenic" and "carcinogenic". Those that use their phones for more than 30 minutes a day over a 10 year period are at particular risk for a type of brain cancer known as glioma, WHO claim. Wireless lobby groups have criticised the findings saying that no new research was performed to back up the claims and that mobile phones are no more dangerous than pickled vegetables, coffee and talcum powder, also included in the "possible carcinogen" list. Currently published findings are not conclusive and a considerably longer period of observation will be required to clarify the real risk. The 12th edition of the Report on Carcinogens (a list of substances classified according to risk) published by the US Department of Health and Human Services can be found here (a large file so may take some time to download).

Considering the recent controversy surrounding second-hand cigarette smoke in cars and its effects on children (see <a href="here">here</a> and its recent <a href="here">publication</a> makes interesting reading. Although it does not mention cars it does deal with passive smoking in another enclosed space, the home. The study was a collaborative work between the Tobacco Free Research Institute in Dublin and the Harvard School of Public Health's Center for Global Tobacco Control in Boston using data collected from the National Survey of Children's Health in the US. They found that children exposed to second-hand smoke had a 50% increased risk of developing multiple neurobehavioural disorders in addition to other conditions such as respiratory problems.



## Useful Web Sites



If you are looking for information about an enzyme you will find it <u>here</u>. Over 5,000 enzymes can be searched under numerous headings.

If you have ever typed a search term into PubMed and got thousands of returns it can be frustrating to find exactly what you want then. This paper might help you. It reviews 28 different search engines which claim to help you get more specific answers to your queries. Several of these sites work with PubMed to improve your search.

The <u>Omnivore</u> page of the Bookforum website provides hundreds of articles from a host of top publications grouped under broad headings. Articles include essays, book extracts, book reviews and interviews on a wide range of topics.



Vitamin D depletion: of clinical significance in advanced cancer? Stone CA, Kenny RA, **Healy M**, Walsh JB, Lawlor PG. Support Care Cancer. 2011 Jul;19(7):865-7. Epub 2011 Feb 18.

Seasonal variation of serum vitamin D and the effect of vitamin D supplementation in Irish community-dwelling older people. Romero-Ortuno R, Cogan L, Browne J, **Healy M**, Casey MC, Cunningham C, Walsh JB, Kenny RA. Age Ageing. 2011 Mar;40(2):168-74. Epub 2010 Nov 3.

The National Institute for Health and Clinical Excellence (NICE) guidelines for early detection of ovarian cancer: the pivotal role of the clinical laboratory. Sturgeon CM, **Duffy MJ**, Walker G. Ann Clin Biochem. 2011 Jul;48(Pt 4):295-9.

The incidence and clinical correlates of lithium toxicity: a retrospective review. Dennison U, Clarkson M, **O'Mullane J**, Cassidy EM. Ir J Med Sci. 2011 Sep;180(3):661-5. Epub 2011 Apr 23.

Hypovitaminosis D in a healthy female population, aged from 40 to 85 years, in the west of Ireland. Lardner E, **Fitzgibbon M**, Wilson S, Griffin D, Mulkerrin E. Ir J Med Sci. 2011 Mar;180(1):115-9.

A survey of point of care testing in Irish hospitals: room for improvement. **O'Kelly RA**, **Brady JJ**, Byrne E, Hooley K, Mulligan C, Mulready K, O'Gorman P, **O'Shea P**, Boran G. Ir J Med Sci. 2011 Mar;180 (1):237-40.

The role of S100 genes in breast cancer progression. McKiernan E, McDermott EW, Evoy D, Crown J, **Duffy MJ**.Tumour Biol. 2011 Jun;32(3):441-50. Epub 2010 Dec 14.

Prostate-specific antigen: does the current evidence support its use in prostate cancer screening? **MJ Duffy**. Ann Clin Biochem 2011;48:310-316.

## Journal



## Watch

Article: Sacks DB et al. Guidelines and Recommendations for Laboratory Analysis in the Diagnosis and Management of Diabetes Mellitus. Diabetes Care 34:e61–e99, 2011. Recommendations from an expert group on appropriate laboratory testing for the diagnosis and treatment of diabetes. Relative strengths of different analytes are examined from a pre-analytical, analytical and interpretation point of view. Other issues such as turn around time and frequency of measurement are addressed. A very detailed and up to date review. Follow this <a href="link">link</a> to the paper.

**Article:** Florkowski CM, Chew-Harris JSC. Mini-Review: Methods of Estimating GFR – Different Equations Including CKD-EPI. Clin Biochem Rev. 32(2): 75–79, 2011.

**Article:** Al-Khalla H et al. The Highest Ever Reported Level of Carbohydrate Antigen 19-9: A Case Report. J Med Cases. 2(2):71-75, 2011.

A <u>case report</u> and discussion of a patient with a CA-19.9 of 19,516,020 U/ml.

## **Upcoming meetings**

### BMJ Masterclasses

Training day under the auspices of BMJ Learning. Diabetes and Endocrinology. London, 10th October, 2011. Full details can be found here.



EuroPRevent 2012 3rd-5th May, Dublin. International Congress on Preventive Cardiology. Full details here.



Takes place in Manchester 1st-4th July 2012. Click for information.



19th European Congress on Obesity. 9th-12th May, 2012. Lyon, France. <u>Details</u>.

## 34<sup>th</sup> ACBI Annual Conference Friday 14th and Saturday 15th October 2011

### ACBI - Annual Conference 2011 Hilton Hotel, Charlemont Place, Dublin 2

### Friday 14 October 2011

8.45am: Tea and coffee

9.15am: Opening Comments: Orla Maguire, President of the ACBI

9.30am: Official Opening Address: James Reilly, Minister for Health and Children

**Session 1:** Laboratory Medicine – the wider context Sponsored by Biomnis

9.50am-10.30am: Role of the Quality Control Directorate

Dr. Barry White, National Director for Clinical Strategy and Programmes, Dr.

Steevens' Hospital, Dublin

10.30am-11.00am: Tea and coffee Sponsored by Aalto Bio Reagents

Poster presentation viewing

11.00am-11.40am: Errors in Laboratory Medicine and Patient Safety

Dr. Mario Plebani, University Hospital of Padova, Italy

11.40am-12.20pm: Standardisation of LIS connectivity- National Laboratory Medicine Catalogue

Dr. Gifford Batstone, Clinical Lead for Pathology, DH Informatics Directorate, NHS

12.20pm-12.30pm: TBA 12.30pm-2.00pm: *Lunch* 

Poster presentation viewing

Session 2: Cardiology and Biochemical Markers of Heart Disease

Sponsored by Sarstedt Ireland

2.00pm-2.40pm: High Sensitivity Troponin and the pain to come

Dr. Paul Collinson, St. George's Hospital, London

2.40pm-3.20pm: Heart Failure – Diagnosis and Management

Prof. Ken McDonald, Heart Failure Unit, St. Vincent's Healthcare Group

3.20pm-3.50pm: Tea and coffee

3.50pm-4.30pm: Novel biomarkers – fact or fantasy

Dr. Paul Collinson, St. George's Hospital, London

4:30pm: *Close of session* 

4.30pm-5.30pm: ACBI Annual General Meeting

7.00 pm: Sparkling Reception Sponsored by Abbott Diagnostics

Conference Dinner Sponsored by Roche Diagnostics

#### **ACBI Annual Conference programme continued**

#### Saturday 15 October 2011

9.30am: *Tea and coffee* 

**Session 3:** Cystic Fibrosis

10.00am-10.40 am: Cystic Fibrosis, Evolution to a Geriatric Disease

Prof. Charles Gallagher, St. Vincent's University Hospital, Dublin

10.40am-11.10am: Tea and coffee

Poster presentation viewing

11.10am-11.50am: Screening For and Diagnosis of Cystic Fibrosis

Prof. Philip Mayne, Children's University Hospital, Temple Street, Dublin

11.50am-12.30pm: The Genetics of Cystic Fibrosis

Dr. Ed McKone, St. Vincent's University Hospital, Dublin

12.30pm-12.40pm: Analysis in Action (formerly known as Labs are Vital)

12.40pm-2.00pm: Lunch

**Session 4:** Liver Disease Sponsored by BD Diagnostics - Preanalytical Systems

2.00pm-2.40pm: Aspects of Liver Disease: Fatty Liver and Liver Fibrosis

Dr J Plevris, Royal Infirmary of Edinburgh.

2.40pm-3.20pm: **Drug Induced Liver Injury** 

Prof. M. Pirmohamad, University of Liverpool

3.20pm-3.30pm: Presentation of Geraldine Roberts Medal

3.30pm-4.10pm: Liver Transplantation

Prof. Aidan McCormick, St Vincent's University Hospital, Dublin

4.10pm: *Close of conference* 



The Geraldine Roberts medal for the best poster at ACBI 2011 will be presented again this year. The award will be based solely on the poster and no oral presentation will be required. Abstracts for consideration should be submitted by Friday 16th September 2011.



#### Labs Are Vital

### Award for Excellence in Outcomes Research in Laboratory Medicine Presented at International Federation for Clinical Chemistry Congress

On May 16<sup>th</sup> in Berlin the European Federation of Clinical Chemistry and Laboratory Medicine (EFCC) and Abbott's LABS ARE VITAL<sup>TM</sup> presented its Award for Excellence in Outcomes Research in Laboratory Medicine to researchers from the University of Sheffield School of Health Related Research in the United Kingdom. The team, led by Steve W. Goodacre, Ph.D., was recognised for its scientific article published in *Heart* titled "The Randomized Assessment of Treatment Using Panel Assay of Cardiac Markers" that showed the use of point of care (POC) cardiac biomarkers resulted in shorter hospital stays and increased the number of patients successfully discharged after emergency department assessments.

Dr. Goodacre and his co-authors – Mike Bradburn, Elizabeth Cross, Paul Collinson, Alasdair Gray and Alistair Hall – investigated whether testing with POC cardiac biomarkers would increase the rate of successful patient discharges following emergency department exams of individuals presenting with chest pains. More than 2,200 suspected myocardial infarction patients in the U.K. were studied.

In the article, the authors noted the rise of hospital admissions has been described by the National Health Service as a problem that could bankrupt the U.K. health care system. The study explored the potential benefit of using POC biomarkers to lower the admission rate of chest pain patients, who account for about 25 percent of patients admitted from the emergency department. POC testing for cardiac biomarkers can substantially reduce turnaround time and transmit results rapidly to attending emergency department staff.

The study concluded that POC cardiac assessments resulted in a greater proportion of patients being successfully discharged after emergency department assessments and also reduced the median length of initial hospital stays.

The research team received an award and a €15,000 honorarium.

"Dr. Goodacre and his team have highlighted the vital role laboratory scientists play every day in diagnosing and preventing disease and in applying advanced diagnostic technologies to help assure favourable outcomes for patients", said Kathy Turner, divisional vice president, Abbott Diagnostics.

"The partnership between medical laboratory professionals and physicians is critical for improving patient care" said Andrea Rita Horvath, Ph.D., president of IFCC. "This award showcases this important relationship because it recognises the significant role that laboratory science can have on improving medical and economic health system outcomes, resulting in better patient care".

#### **About Labs Are Vital**

Sponsored by Abbott Diagnostics, Labs Are Vital is a multi-year, multi-faceted education and awareness programme. It is designed to elevate the status of lab professionals within the health care community and the general public, address the issues that face the profession today, and serve as a community for professionals to exchange ideas and get new information. The programme has a variety of Webbased resources for laboratory professionals, which focus attention on the life-saving work medical laboratory scientists provide in diagnosing disease and improving health outcomes.

Labs Are Vital is a cooperative venture created and sponsored by Abbott in partnership with the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) and supported by several national and international organisations representing laboratory professionals, such as the College of American Pathologists, American Society for Clinical Laboratory Science (ASCLS), American Association for Clinical Chemistry (AACC) and ASCP.

The ACBI representatives on the Irish committee of Labs Are Vital are Dr. Alan Balfe and Mr. Paddy Quigley.

www.labsarevital.com