

IFCC NEWS, Mar-Apr 2005 issue By Ellis JACOBS, IFCC News Editor

EDITORIAL: MP3 EDUCATION?

Growth in iPod ownership has been explosive. One in 10 US adults (22 million) own one of these devices already. Either you or your teenage offspring probably have the headphones on now. Can we use portable audio to support learning in clinical biochemistry?

An interesting application of these devices is Podcasting. It creates what is best described as time-shifted radio. Podcasting uses your computer automatically to download audio to your iPod (or other player), ensuring the content is constantly updated. In this way it can provide an alternative to conventional radio, because the user chooses what shows to subscribe and listen to, and also when and where to listen to them. The technique involves the publisher creating audio content, and posting it to a web server, typically in MP3 format. An RSS (Really Simple Syndication) file is then published, that references the audio content. Each RSS item provides meta information about an audio file, such as the file's name and description, and contains an RSS enclosure with the URL of the audio file. End-users regularly check for new versions of the newsfeed, using an application like iPodder. When a new version is found, iPodder reads through it, identifies the audio file URL, downloads it and synchronises it to a media player. Users then listen to the "podcasted" audio file when it is convenient.

The common file format these portable audio devices use is MP3. This compression method delivers reasonable quality and small file sizes. Typical capacity is 4Mb and up, which can offer 80 or more hours of content at moderate bit rates, offering quite high fidelity. Many of these devices allow short range FM radio re-transmission, so that the content can be played through a radio.

In my own lectures to undergraduate students, there is often a row of portable tape recorders on the desks, identifying either the more serious students or perhaps the friends of the less studious who haven't made it to the lecture. For a start it seems reasonable to ensure that the quality of these recordings is high. So why not record all the lectures and let the students download them? It is easy to connect a recording device to a signal output from the auditorium sound system and capture the audio. I choose to ignore the mutterings of my colleagues who assure me that the students will cease to attend. If these developments mean that we have moved on from personal attendance, then so be it.

Creating MP3 files is simple. Some of the MP3 devices will record from a "line in" source, allowing one to make recordings directly. Typically the output from a CD player is line level to allow the "ripping" of your music collection. The "rack" of a lecture theatre audio system will almost certainly have a line-out source to record from. As an alternative to an MP3 recorder, you can use a minidisk recorder, converting to MP3 from the recorder's native file format or even use a laptop computer. Alternatively you can pre-record a lecture using your desktop computer. This requires either a computer

microphone input via the soundcard or preferably a professional quality microphone via a mixer through the line-in connection of the sound card. Free software such as Audacity will do the conversion to MP3.

Some but not all MP3 devices have "digital rights management", the enemy of music pirates but potentially a handicap to our own perfectly legal requirements for recording ourselves. So take care with selection of a suitable device.

These new technologies provide us with the facilities to create portable audio that is tailored to our own professional interests. We can develop Radio IFCC or Radio ClinChem. Our audience can listen while jogging or in the car during the daily commute. How shall we explore these possibilities and bring them to reality? The Communications and Publications Division is committed to developing new ways of making educational material available to IFCC members. We have been experimenting with uses of multimedia to deliver lectures. Recently a slide-audio series of lectures from the symposium on Diabetes was made available from the IFCC website (www.ifcc.org/multimedia.asp). We will be happy to work with interested colleagues to develop a regular series of podcasts. Perhaps we could record a Case of the Month? Please contact me (andrew.wootton@rmit.edu.au) if you would like to collaborate on this project.

Certainly we need more experience with how best to exploit these possibilities. It is clear that the conventional 40 minute lecture does not translate well to this multimedia format. We all know what a challenge to the attention span it can be to concentrate for this time, even in "live" mode. In the relative sensory deprivation of the multimedia environment this is too long. So we need to tailor our material to the medium. With the series of multimedia presentations developed by the Australasian Association of Clinical Biochemists, we have used a10-15 minute format that has been well received. Indeed, the time limitation seems to focus the presenters on their key points and often seems to improve their delivery.

Watch (or listen to) this space!

Virtually yours.

Dr. Andrew Wootton

Chair, IFCC Communication & Publications Division

MANAGEMENT: A NEW PARADIGM FOR CLINICAL LABORATORY SCIENTISTS

Bernard GOUGET SFBC-FESCC Advisory Board member

Clinical chemistry raises a strategic health issue. Clinical laboratory scientists must adapt to technological challenges by keeping pace with changing analytical methods, and to economic challenges through innovative management and networking, to be able to incorporate within their practice all the emerging disciplines of laboratory medicine whilst committing themselves to the priorities of quality and safety. The environment in which medicine laboratory is practiced has undergone a paradigm shift in the midst of the medical, legislative, regulatory, technological, sociological and economic upheavals that have forever changed the practice of medicine. In addition to clinical laboratory sciences, laboratory managers need to possess broad knowledge of clinical medicine, the science basics of medicine together with administrative knowledge and experience. Their managerial responsibilities involve the directing of quality testing for patient care with concomitant high levels of expertise in finance and personnel management meeting the increasing need for new qualifications. They must play a leadership role in enhancing the image and increasing the visibility of laboratory medicine.

Laboratory managers are therefore faced with new responsibilities. Leadership and managerial skills are essential, mainly due to the areas covered by the advance in biological and medical science: the variety and volume of testing, exponential growth of sophisticated tests, new instrumentation, automated data processing and information management systems. Economics and governments are accelerating these changes in a predatory environment. Competition, mechanisms for consolidation alliances between laboratories and service agreements have won new frontiers for laboratories. These mechanisms are often regarded as a threat, but as an opportunity by those who are willing to think creatively. At the same time, public expectations have never been higher and, paradoxically, funding has never been under such pressure. The task facing laboratory managers is therefore an extensive one encompassing technology, science, human resources and finance with the specificity that these include a patient care component.

This monograph aims at preparing the clinical laboratory scientist for the changes affecting laboratory management. It draws attention to the opportunities of new missions, new methods of practice, new professions, new coordinated structures and new responsibilities. We sincerely thanked the Education and Management Division for writing this monograph on "Managing changes in the clinical laboratory". It is a practical tool that makes an essential contribution towards the quality and future of laboratory medicine.

NEW C-EBLM WEBSITE

It is our pleasure to announce the launch of the new C-EBLM website, available at the following link: <u>http://www.ifcc.org/divisions/EMD/C-EBLM/ceblm.asp</u>

VISIT the C-EBLM's Database of Systematic Reviews and Meta-Analyses in Laboratory Medicine!

Systematic reviews and meta-analyses of diagnostic interventions are relatively scarce as compared to those of therapeutic interventions. There are only a few systematic review databases which deal with diagnostic reviews and, to our knowledge, there is no specific database which contains systematic reviews in the specialist field of laboratory medicine. Therefore, the Committee on Evidence-based Laboratory Medicine (C-EBLM) of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) has compiled this Database of Systematic Reviews and Meta-Analyses in Laboratory Medicine.

IFCC Office

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XIX International Congress of Clinical Chemistry IFCC/AACC 2005 Annual Meeting July 24-28, 2005 - Orlando, Florida



Registration Now Open Online

Sign up for the workshops and roundtable sessions today—the popular sessions sell out quickly. Register before April 15th and be entered in a drawing for discounts at restaurants and attractions in the Orlando area.

MEXICO CITY VENUE OF THE MEETING OF THE INTERNATIONAL ORGANIZATION STANDARDIZATION (ISO) TC 212/WG1 QUALITY OF COMPETENCE IN THE MEDICAL LABORATORY.

Contributed by Rosa I Sierra Amor, President AMBC (www.ambcmexico.org.mx)

Mexico City, Mexico, was the venue of the ISO TC 212/WG1 Quality of Competence in the Medical Laboratories that took place from January 25-26, 2005. The Mexican Association of Clinical Biochemistry (AMBC) hosted the meeting of the ISO TC 212/WG 1 held for the first time in Mexico. The AMBC also organized a Workshop on Accreditation where more than 50 laboratory professionals attended. On Tuesday January 25th, Rosa I Sierra-Amor, President AMBC together with Maria Antonieta Garza-Galindo, National Representative IFCC welcomed the Members of the WG1. The meeting took place at the Hamburg Conference Room of the Galleria Plaza Hotel in the cosmopolitan neighborhood called "Pink Zone" in Mexico City. The members of the WG1 who attended the meeting were Desmond Kenny (Chair) (IR), Geri Barnes (Secretary/CLSI) (US). Regina Robertson (AU), David Burnett (UK), Mario Peblani (IT), Elisabete Gomes (PO), Ellis Jacobs (US), Phil Barnes (NZ), Anne Cathr Bollerup (DK), Tadashi Kawai (JP), Tsutomu Aoyagi (JP), William Cooper (US), Lucia Berte (US), Klaus Stinshoff (SW), Harold Richardson (CA), Michel Noble (CA), and Rosa I Sierra-Amor (MX). Observers, members of the AMBC and WG 15189 of the Mexican Entity of Accreditation (www.ema.org.mx) also attended the meeting: Eva Rosas, Jenny Leon, Elizabeth Campos e Ignacio Reyes.

On Tuesday afternoon, and after the meeting was adjourned, Lic Carlos Berzunza Sanchez, Director of National Standardization at the DGN from the Secretary of Economy of the Federal Government in Mexico welcomed the audience. Immediately

after, Dr Rosa I Sierra-Amor introduced the speakers: professors Kenny, Burnett, Robertson, Barnes and Noble, who presented different topics and their experiences on accreditation in the implementation of ISO 15189 for the medical laboratories. Interestingly was to find out that from New Zealand to Mexico, or from United Kingdom to Australia or Canada, the laboratories were going through accreditation issues that were similar in content regardless of their level of development. In countries such like UK or New Zealand, the process is improving with the help of national organizations, but in other countries, the implementation of ISO 15189 is moving towards accreditation with rather more difficulties, therefore, the example and the expertise provided to the audience during the lectures given by the members of the ISO TC 212 / WG1 15189 were very motivated and encouraging. In Mexico, since recent years, we have the support of the Mexican Entity of Accreditation (www.ema.org) member of ILAC, where EMA's clinical laboratory WG 15189 together with the AMBC and other laboratory professionals are working together to achieving accreditation. Hopefully some day, all together medical laboratories will become self motivated to achieve accreditation worldwide.

The APFCB in 2002-2004: A Triennium of Achievements

Submitted by Joseph Lopez, APFCB Secretary, 2002-2004; President, elected October 2004

The period of just under three years from March 2002 to October 2004 began with the election of the 5-member Executive Committee under the President, Professor Chris Lam of Hong Kong at the Council Meeting in New Delhi. It ended with several important achievements, many of which were unprecedented for the Federation.

Education and Laboratory Management

Perhaps the APFCB's most significant achievement in recent years has been the provision of opportunities for continuing education. Foremost among the programmes we now have is the APFCB Travelling Lectureship that was initiated in 1999. The lectureship has gained increasing popularity and the 4 lecturers it has had thus far have visited almost every member area/country of the APFCB at least once. Professor Chris Lam has been appointed the next APFCB Travelling Lecturer for 2005-06.

In accordance with the IFCC-APFCB agreement (mentioned below), the IFCC appointed Professor Jean-Claude Forest of Canada as its Visiting Lecturer to the Asia-Pacific region. Professor Forest toured the region twice: Hong Kong and India in 2003; and Indonesia, Singapore, Malaysia and Thailand in January 2004. The tour arrangements were coordinated by the Dr Leslie Lai, Chairman of the APFCB Education Committee.



Professors Forest, Sethi and Chelain after the Symposium in Singapore

The APFCB-Beckman Coulter Educational Symposium lecture tours began in 2003 when Denise Geiger of the United States visited Taiwan, Hong Kong and Singapore in October. She spoke in conjunction with a local lecturer in each location at meetings that were co-hosted with the local APFCB member. The lecturer for the 2004 symposium was Dr Sue Evans, also of the USA, who visited Hong Kong, Singapore and Sydney in June. Dr Ken Sikaris of Australia has been appointed the lecturer for 2005 and he is expected to visit 4 locations within the region.



Sue Evans with Rossa Chiu (HKSCC President) in Hong Kong

It has become the practice of the APFCB to have a presence at regional meetings of laboratory medicine. During this period the Education Committee organised symposia at the 9th APCCB Delhi and the ICCC in Kyoto, in 2002 and held an educational workshop at the recently concluded 10th APCCB in Perth.

The two-day Quality Congress for participants from the APFCB region was organised in February 2004 jointly by the Singapore Association of Clinical Biochemists and Bio-Rad in conjunction with APFCB Laboratory Management Committee (under its Chairman A/Prof Sunil Sethi of Singapore) and the Singapore Accreditation Council. In addition, Dr Sethi delivered lectures on quality control in Vietnam under the auspices of the APFCB and Bio-Rad.

The APCCBs

The Asian-Pacific Congresses of Clinical Biochemistry (APCCBs) is the triennial scientific meeting of the APFCB. The destruction of the WTC in New York on 11th September 2001, created a very difficult international environment that forced the postponement of the 9th APCCB in New Delhi from November 2001 to 9-14 March 2002. Nevertheless, this congress was a success from scientific, organisational and financial aspects. The 10th APCCBs was held in Perth, Australia from 19-23 September 2004, while Beijing will host the 11th APCCB in October 2007. The 12th APCCB will be held in Korea in 2010.

Membership

It is the aim of the APFCB to include as members as many countries from the Asian-Pacific region as possible. We welcomed the newly formed Pakistan Society of Chemical Pathologists into the APFCB in August 2004, bringing the total number of voting members to 13. Following the decision in 2002 to admit corporate members, 13 companies have been admitted as corporate members. Most are multi-nationals operating in the region.

APFCB Publications

The *Clinical Biochemist Reviews* is a quarterly journal of reviews that is published by the Australasian Association of Clinical Biochemists in association with the APFCB. The CBR is distributed to AACB members as part of their subscription and bulk-distributed at very low cost to individual subscribers in the region through APFCB member associations. The CBR is expected to be indexed in PubMed in the near future.

The APFCB's newsletter is the *APFCB News*. Several key changes to make the News more attractive were introduced with the appointment of a new editor in 2002. The News is distributed without charge to APFCB members and others outside the region. Circulation is about 3500-4000 copies, within about 20 countries.

The APFCB Distinguished Service Award

Yet another unprecedented event was institution of the DSA in 2003 to honour individuals from the region who have made significant and outstanding contributions to the APFCB. The inaugural award, which was sponsored by BD Diagnostics, was conferred on Dr Tan It Koon of Singapore at the 10th APCCB, Perth.

The IFCC

The close ties between the IFCC and the APFCB were strengthened when the IFCC-APFCB agreement on the APCCBs was signed in February 2002. Following this and for the first time, a report of the APFCB's activities was presented to the IFCC's Executive Board at the General Meeting in Tunisia in May 2004.

While the past 3 years have been eventful, the newly elected office bearers intend to build upon this success for the next triennium through new and existing activities.

(Email contact of writer: <u>ibhlopez@tm.net.my</u>)

ANNOUNCING TWO FORTHCOMING IFCC COURSES

Course on Evidence-Based Laboratory Medicine

organised by the Committee on Evidence-Based Laboratory Medicine of IFCC September 21st-24th, 2005 Budapest, Hungary

For more information: Download the <u>Preliminary Programme</u> and the <u>Registration Form</u> or visit the <u>C-EBLM website</u>

IFCC/Beckman Coulter Flow Cytometry Course

Strategies for the diagnostic Monitoring of the specific Immune Response October 6th-9th, 2005 Bremen, Germany

For more information: Download the 1st Annoucement Or visit the EMD website

ANNOUNCING THE 2005 AACC AWARD WINNERS

The AACC is pleased to announce the winners of the following awards. Congratulations to all these outstanding scientists!

Harvey Alter, MD, MACP, National Institutes of Health *The AACC Lectureship Award* Sponsored by an educational grant from Bayer HealthCare Diagnostics Division

- Edward W. Bermes, Jr., PhD, FACB, Loyola University Medical Center *Outstanding Contributions to Clinical Chemistry* Sponsored by Bayer HealthCare Diagnostics Division
- Ulf-Håkan Evald Stenman, MD, Helsinki University Central Hospital The Morton K. Schwartz Award for Significant Contributions in Cancer Research Diagnostics Sponsored by Bayer HealthCare Diagnostics Division
- Roland Valdes, Jr., PhD, DABCC, FACB, University of Louisville Outstanding Contributions through Service to the Profession of Clinical Chemistry Sponsored by Beckman Coulter, Inc.
- Robert H. Christenson, PhD, DABCC, FACB, University of Maryland Medical Center *Outstanding Contributions in Education* Sponsored by Quest Diagnostics Nichols Institute
- David B. Sacks, MD, FACB, Brigham and Women's Hospital *Outstanding Contributions to Clinical Chemistry in a Selected Area of Research* Sponsored by Olympus America Inc., Diagnostic Systems Group

Liu-Ying Luo, MD, PhD, R & D Systems, Inc. *Outstanding Scientific Achievements by a Young Investigator* Sponsored by Roche Diagnostics

Kiang-Teck Jerry Yeo, PhD, DABCC, FACB, Dartmouth-Hitchcock Medical Center International Travel Fellowship Sponsored by BD Vacutainer Systems, Preanalytical Solutions of Becton

Sanford A. Asher, PhD, Chevron Science Center, University of Pittsburgh The Sigi Ziering Award for Outstanding Contribution for a Publication in the Journal Clinical Chemistry

Sponsored by Diagnostic Products Corporation (DPC)

Steve Fodor, PhD, Affymetrix *The Edwin F. Ullman Award* Sponsored by Dade Behring, Inc

Dickinson and Company

Thomas P. Moyer, PhD, DABCC, FACB, Mayo Clinic *Past President's Award* Sponsored by Cardinal Health, Scientific Products Distribution

IFCC DOCUMENTS RECENTLY PUBLISHED

The following documents have been published by IFCC Divisions /Committees /Working Groups:

Education and Management Division

Managing Change in the Clinical Laboratory. Editor I Wilkinson. IFCC Milan, 2004.

WG 8.3.16 Standardisation of human chorionic gonadotropin

Bristow A, Berger P, Bidart JM, Birken S, Norman R, Stenman UH, Sturgeon C. Establishment, value assignment, and characterization of new WHO reference reagent for six molecular forms of human chorionic gonadotropin. Clin Chem 2005; 51:177-182.

The following papers based on IFCC documents has been published recently:

- Li TC, Liu CS, Lin CC. The relationship of liver enzyme abnormalities and obesity in Aboriginal children in Taiwan. J Gastroenterol 2004; 39:1170-1174.
- Bakker AJ, Bakker A, Bierma –Ram A, Dijstra JT, Renting-Wiering H, Syperda H, Zijlstra A. Improved reliability of measurement of lactate dehydrogenase by IFCC method in plasma. Clin Chem 2005; 51:215-217.
- Dybkaer R. An ontology on property for physical, chemical, and biological systems. Acta Pathol Microbiol Immunol Scand 2004; 117:1-210.
- Dimeski G, Baldrick T, Flatman R, Ormiston B. Roche IFCC methods for lactate dehydrogenase tested for duplicate errors with Greiner and Becton-Dickinson lithium-heparin and Greiner serum samples. Clin Chem 2004; 50:2391-2392.

LIGHT-HEARTED CLINICAL CHEMISTRY

ORMM in the Seraj

Dropping in on overseas colleagues can sometimes result in a unique experience. In the early 1980s, David Bayse and Magnus Hjelm, office bearers of the Office for Reference Materials and Methods, went to Germany for a meeting. On route to the meeting on a Saturday afternoon we called our friend Detlef Laue, long-standing chairman of the Commission of Standardisation under the German Society of Clinical Chemistry, and asked if we could pay a visit at his home. The positive reply sounded polite but perhaps a bit restrained, which we put down to a bad telephone connection.

Visiting Detlef's home is already a unique experience. A stable is incorporated into the main body of the house with doors to the outside and also along a corridor leading from the entrance to the dining hall. When we arrived, the upper halves of the interior stable doors were open, horse heads sticking out to inspect the visitors. Waiters were busy laying last hands to dinner tables set for a substantial number of guests. Something was going on. It turned out that a unique event was about to take place. Detlef, in a typical gesture of generosity, had decided to invite several dozens of ladies for dinner that particular Saturday. They were widows of former colleagues and other ladies in need of gentlemanly appreciation to be provided by Detlef but not necessarily by other gentlemen. The ladies were soon to arrive. Detlef's voice *had* been restrained! We were unintentional "gate-crashers" in his Seraj!.

However, we were handsomely rewarded. We admired the vestigial ladies, in rustling silk and showing off their haute coiffures, slowly making their way to the candle lit, elegantly decorated dinning hall along the stable doors, befriending the horses with tender white-gloved touches. The horses were exited, their nostrils flaring from the rich fragrance in the air. We then enjoyed a dinner of highest gourmet standard and the climax of the evening in the form of renowned Berliner singers, performing in best "Marlene Dietrich" tradition.

We, the ORMM, were as close to experience the Seraj as we were ever going to get. A reference event, if any, to take note of. Detlef was also happy in the end, getting many affectionate "white-gloved touches" by the ladies at their departure. We were invited to come back!

Recollected by Magnus Hjelm

UPCOMING IFCC RELATED MEETINGS IN 2005/2006

28th Annual Mexican Clinical Chemistry Conference and Expo, Mexico, 5-9 March 2005, <u>http://www.ambcmexico.org.mx/expolab.html</u>

Laboratory Automation: Advanced Tools for Improving the Practice of Medicine, Amsterdam, The Netherlands, 9-10 March 2005, <u>http://www.aacc.org/meetings/labauto_amsterdam/</u>

10th Bergmeyer Conference: Diabetes Mellitus and Cardiovascular Disease, Eibsee Hotel, Grainau Garmisch-Partenkirchen, Germany, 14-16 March 2005, For Scientific Program, For registration form

37th Annual Oak Ridge Conference -Pushing the Technology Envelope II: An Exploration of the Future of Clinical Laboratory Testing, Baltimore, Maryland, USA, 14-16 April, 2005, www.aacc.org/meetings/oakridge/2005

3rd European Symposium on Clinical Laboratory and In Vitro Diagnostics Industry "Automation of the Pre-analytical Phase: Benefits in terms of Quality and Organisation", Barcelona, Spain, 21-22 April, 2005, <u>www.acclc.es</u>

9th International Congress of Therapeutic Drug Monitoring and Clinical Toxicology, Louisville, Kentucky, USA, 23-28 April, 2005, <u>www.iatdmct.org/congress</u>

IFCC/Beckman Coulter Conference Series: Protein Conference and Award, Glasgow, United Kingdom. 6-7 May, 2005, <u>www.beckmancoulter.com</u>

16th IFCC-FESCC European Congress of Clinical Chemistry and Laboratory Medicine, 'Focus 2005' National Meeting of the Association of Clinical Biochemists, Glasgow, Scotland, 8-12 May 2005, <u>www.glasgow2005.org</u>

Laboratory Automation Conference, Orchard Hotel, Singapore, 12-13 May, 2005, <u>www.aacc.org/meetings/singapore_labauto/</u>

XIX International Congress of Clinical Chemistry (ICCC) IFCC/AACC 2005 Annual Meeting, Orlando, Florida, USA, 24-28 Jul 2005, <u>www.aacc.org/2005AM/</u>

X International Congress of Pediatric Laboratory Medicine (ICPLM) East Meets West: Meeting the Challenges in Pediatric Diagnosis and Management, Raffles City Convention Center, Singapore, 3-6 Sep, 2005, <u>www.sacb.org.sg</u>

XVII Congreso Latinoamericano de Bioquímica Clínica, Hotel Yacht and Resort, Asunción, Paraguay, 4-7 April, 2006

http://www.ifcc.org/products/congresses/HotelYachtCasinoResorting.pdf