



Annual Report 2004

Highlights of the Year

- 8th IFCC General Conference, Sousse, Tunisia
- 10th Arabic Congress of Clinical Biology, Monastir, Tunisia
- 10th Asian Pacific Congress of Clinical Biochemistry, Perth, Australia
- The IFCC/Abbott Award for Significant Contributions to Molecular Diagnostics was bestowed during the 10th Arabic Congress
- 2nd Clinical Molecular Biology Course, Milano, Italy
- Continuation of the Master Course in Clinical Laboratory Sciences, University of La Plata, Argentina
- Evidence Based Laboratory Medicine (Lectures, web-site database)
- Global Campaign on Diabetes Mellitus
- JCTLM Workshop on Traceability, Paris, France
- New Layout of the IFCC Web site

- Global Questionnaire on Membership, National Societies and Scope of Clinical Chemistry and Laboratory Medicine

President's Message

As the tragedy of the Tsunami spread death across Asia, the entire world watched the disaster on television and the internet. With the number of tourists in Thailand, Sri Lanka, India and the Maldives, the incomprehensible national tragedies developed into an international one. The entire world was moved by the South Asia disaster, and governments and private charities started immediately to organize relief efforts. The massive relief efforts focused first on food, clean water and medical supplies to prevent life-threatening diseases. According to WHO, up to 5 million victims in Asia and Africa lacked the basic necessities. Multi-country charity organizations are now establishing relief sites and starting projects for rebuilding the infrastructure in the affected countries. Experience from past natural calamities demonstrate that it will be critical not only to do something now but the process of saving lives and rebuilding countries will need long term commitment and will take years. Now, 3 months after the Tsunami disaster, one has the impression that the world community has learned this lesson and despite ethnic and religious differences is facing common humanity. Hopefully, this will last and facilitate mutual understanding and collaboration.

With this tragedy in mind, we are now realizing the limitations and boundaries of scientific and technological progress. We are aware that nature and the environment are complex and totally independent of the progress of knowledge in any discipline. Nevertheless we have to further develop Clinical Chemistry and Laboratory Medicine from a professional "measurement" discipline towards patient care by providing

sound reports with interpretation of more and more complex information on health, disease and risks for the individual. New technologies such as mass spectrometry, flow cytometry and PCR will support this development. Chip-information on cellular functions will be directly communicated to the Clinical Chemist who will integrate these results into an overall report. With these future aspects in mind, the professional skills of laboratory staff will be challenged towards cellular, genomic, proteomic and metabolic based laboratory medicine.

The expectations of our clinical colleagues in Laboratory Medicine demand changes in the IFCC to develop into a more multidisciplinary federation building on its historic strength. The IFCC has to be considered as the international forum of diagnostic laboratory professionals. The Federation and its membership are facing new challenges and will be necessary expand our expertise in order to retain supremacy in scientific projects and programmes for continuous education and training. In order to implement some of the new areas mentioned above, integration of experts from areas beyond the traditional concepts of Clinical Chemistry is needed. This IFCC evolutionary process has been successful so far by collaborating with other international organisations. However in the future, we need to think about broadening the horizon of the IFCC national societies and their federations. It was with these ideas in mind that a discussion on the future of IFCC membership was started at the General Conference in Sousse and followed-up by Members of the Executive Board collecting detailed information on the present status and the future perspectives of the membership. The information collected has been very useful and it is apparent this discussion will be continued over the next few years.

The mission of the Scientific Division (Chair: Jean-Claude FOREST) is to advance the science of clinical chemistry and

laboratory medicine by facilitating its application in clinical practice. The main goals of this Division are analytical standardisation, establishing reference systems (reference methods, reference materials, reference intervals, reference laboratories) and the definition of diagnostic strategies. Several of these activities are conducted in close collaboration with partner organisations such as the BIPM, IRMM, NCCLS, NIST and WHO. The activities of the Joint Committee of Traceability in Laboratory Medicine (JCTLM) (Chair: Jos THIJSSSEN) succeeded in the publication of reference measurement procedures of highest order and reference materials on the BIPM and IFCC web sites. This information provided for the in vitro diagnostic industry and the profession will certainly, over time, enhance harmonisation of laboratory test results globally. In collaboration with IRMM and WHO, new reference materials have been released. As a result of the partnership with NCCLS, new guidelines on thyroid free hormones, bone markers, cellular immune function tests, and determination of limits of detection were published. As a new major target for the Division, the establishment of reference ranges and clinical decision criteria using routine measurement procedures have been identified.

The Education and Management Division (Chair: Gerard SANDERS) provides IFCC members and the health care community with education, and educational recommendations, concerning scientific, technical, clinical and management issues relevant to clinical laboratory sciences. Global concerns regarding the cost of healthcare make it particularly important that the IFCC helps laboratory professionals to make correct choices and allocate resources in an evidence-based manner. The IFCC aims to achieve this through IFCC initiatives and collaboration with other groups in the fields of healthcare planning and delivery. The Division succeeded in the organisation of courses in Molecular Biology Techniques, in Quality Assurance,

and the Master Course at the University of La Plata. The Visiting Lecture Programme continues to be supported by IFCC member societies and this year provided speakers for the Arabic, Latin American and Asian Pacific Region.

The Global campaign for Diabetes Mellitus (Chair: S. SANDBERG) has integrated the relevant working parties within various Divisions to focus on strategies for the diagnosis and monitoring of Diabetes Mellitus. Together with the WG-HbA1c, special emphasis was taken to introduce the use of the new IFCC Reference System for HbA1c into the clinical arena.

The Communication and Publications Division (Chair: Andrew WOOTTON) provides world-wide dissemination on the work of the IFCC to clinical laboratory scientists, physicians and health policy-makers. The division has redesigned the IFCC website (www.ifcc.org) which has been developed as a portal for resources on laboratory medicine. In place are links to IFCC member societies, to Corporate Members, to partner organisations, and to the National Library of Medicine thus providing entrance to the scientific literature. Searchable data bases of IFCC publications, meetings and the bookstore allows individuals to participate in IFCC activities. The Division publishes the *eJournal* of the Federation (*eJIFCC*), and an IFCC newsletter on the web. IFCC scientific documents are also published in formal collaborations with Clinical Chemistry and Laboratory Medicine (CCLM) and other publishers, as are educational tools including scientific monographs.

The Congress and Conferences Division (Chair: L. VIINIKKA) carries out the IFCC's policy to promote and sponsor regular international and regional congresses, exhibitions, and specialist conferences in clinical chemistry and laboratory medicine. The CCD works with meeting organisers to share experiences, collaborates with industry, and provides

resources that allows young clinical chemists, and those from emerging countries to participate in regional and international meetings. A major event during this year was the General Conference in Sousse, Tunisia, a forum of discussion between the national and corporate representatives and IFCC officers.

The interested reader of this annual report will find much more information below in the various chapters provided by the secretary and the dedicated chairs of the divisions. This is also an opportunity for me to thank all those numerous colleagues for contributing to the success and progress of the Federation and to the Member Societies and Corporate Members for financial support. The symbiosis of professionals, industry and partner organizations driven by respect for each other are basis for an expanding IFCC.

Mathias M. Müller
President

Executive Board (EB)

General Conference

IFCC General Conference differs from all the other congresses: it is not a scientific meeting and it is organised by IFCC itself. The purpose of the General Conference is to bring together members of the EB, Divisions and Committees and some of the working groups. The General Conference was held in Sousse, Tunisia, 14-17 May 2004, as a satellite to the 10th Arab Congress of Clinical Biology.

The first EB meeting for 2004 was in Sousse held during the 8th IFCC General Conference. At this meeting, the EB had the opportunity to meet with many of the functional groups working within the IFCC as well as National Representatives and some Corporate Members. This meeting was extremely successful as it enabled the EB to gather a perspective on where the members

felt the IFCC should be concentrating its resources.

One of the issues that was raised in these discussions was that in some countries there are difficulties with the relationship between medical and non-medical laboratory staff. The EB suggested one way to take this forward is to ensure authorities are aware of the joint document signed by the IFCC and WASPALM on the role of scientists and pathologists as directors of laboratories (<http://www.ifcc.org/documents/Accreditation.pdf>). The IFCC would be willing to write an official letter indicating its position but cannot negotiate in individual countries.

Three IFCC Past-Presidents, Donald Young, Rene Dybkaer, and Gerard Siest were invited to participate in the General Conference and to assess the current status and direction of the Federation. The Past-Presidents gave their personal views and presented the following observations for consideration by the EB:

- 1) The Federation has grown significantly and that through the interaction with other organizations, the IFCC is taking a world-wide leadership role in Laboratory Medicine.
- 2) The interaction with JCTLM is of primary importance. In this context the uncertainty concept as described in GUM should be more explored further by IFCC.
- 3) Interaction and collaboration with the CCQUM-WG on Bioanalysis should be investigated.
- 4) C-NPU databases need to be kept updated which will require resources. The IFCC web site as a permanent domicile for this database was envisaged.
- 5) Regarding individuals appointed to any committee, there needs to be an expectation of performance which should be regularly reviewed. People not performing should be encouraged to step down and if this is

unsuccessful, then they should be asked to resign. In principle the IFCC working parties should be open to all individuals working in the field of laboratory medicine.

- 6) Communication needs to be an absolute priority. Ways to further reach the members needs to be explored. It is recognized that there can be blocks within individual countries.
- 7) Document translations should be a priority and may be the responsibility of the regional organizations. The suggested Web Editorial Board could be the key organization.
- 8) Lectures, VLP, courses should be recorded and made available to all members through the IFCC Web. There may be a requirement for translation.
- 9) National Societies should provide more information for IFCC which would enhance both organizations, e.g. by advertising on the IFCC Web.
- 10) On-line educational material, participation in the AACC "Lab-Test-online" and an on-line text-book were mentioned as possible options for assisting our members.
- 11) The website will be the primary recognition point but needs to be simplified and more closely monitored so that it is kept up to date.
- 12) As part of the strategic plan, all IFCC documents should be reviewed on a timeframe determined by the authors.
- 13) IFCC needs to make more close contact with physicians' organisations worldwide.
- 14) Interaction with WHO should be continued to be pursued as this is still the key health organisation world-wide.
- 15) Quality of performance in various countries is incredibly varied.

16) SD should be involved with some projects which are at the very fore-front of our profession. As an example proteomics was mentioned. Linking standardization issues to outcome studies was considered important.

17) E-mailing of documents, minutes, the eJIFCC and the Newsletter were considered important links to IFCC members.

The Global Campaign on Diabetes is an important initiative of the IFCC and the Chair of the TF, Sverre Sandberg presented to the EB, the current activities of the campaign, terms of reference and International Cooperation. There was also an open session during the General Conference on the activities of the Global Campaign. One of the goals of the campaign is to further link with World and regional Diabetes Association and to patients' Associations. The IFCC is seeking the cooperation of EDMA and Corporate Members for this.

The other IFCC TF is on Ethics. The Chair, Leslie Burnett summarised current progress. A generic framework which can be used as the basis for evaluating various specific future proposals in laboratory medicine has been prepared. This has been distributed to members for comments.

In an endeavour to increase membership input into the IFCC, the EB members have been asked to prepare a yearly questionnaire. The main task for 2004 was to contact NS to respond to a questionnaire on the Global Campaign. The results were summarized in an issue of the eJIFCC. The members also prepared a short document on the importance of the current discussions on membership change. A second document prepared from the discussions at the General Conference on the Change in Membership and the scope of the discipline within individual countries is currently being undertaken.

The second EB meeting was in Perth

immediately prior to the 10th Asian Pacific Congress of Clinical Biochemistry. The main business of the meeting was to review the activities of the various IFCC functional groups. The IFCC Strategic Plan was also reviewed. One important item discussed was the recommendation of the Financial Advisory Committee that IFCC finances be handled through a three-fold strategy, Credit Suisse for income, Banca Intesa for the working account and an Investment Bank for investments. This was further investigated and the strategy agreed to at the EB meeting in Milan.

The final EB meeting for 2004 was held in the IFCC Office in Milan. The final meeting of the year is a review and budget-planning meeting at which, the EB was joined by the Chairs of Divisions who reviewed the previous year's activities and presented their draft budgets. The details can be seen in the Divisional reports below. A new undertaking prior to this meeting was a request sent to all IFCC NS for information on their activities during 2004. These were discussed and are presented in this Annual Report. The EB hopes this will continue and encourage further exchanges between its members.

A letter of appreciation has been received from the AACC for the CHF 10,000 donated for the IFCC/AACC bursary program for people to attend the ICCO in Orlando.

A continuing issue for the IFCC is how to archive the historic material that has been accumulated by the IFCC and is now stored near the IFCC Office. The EB decided this is valuable material that should not be discarded until there has been the opportunity to categorise and evaluate it. At the very least EB minutes, Division minutes, agreements, contracts, publications and Congress-Conference Programmes need to be permanently archived.

The IFCC now has a number of commercial agreements with International Organisations. This has made clarifying and updating the legal status and domicile of the IFCC an

important priority. Despite strenuous efforts, the original documentation could not be found in the Archives. Due mainly to the efforts of the President, the status has now been finalised and tax free status granted to the IFCC. The domicile will need to be changed from Lausanne to Pfaeffikon (Canton Schwyz). This decision to move the legal domicile from Lausanne to Pfaeffikon requires a change in the Statutes which will be put to the next Council meeting in Orlando.

Just prior to the EB meeting in Milan, Ms Raffaella Infanti one of the IFCC Office staff announced she was resigning to take up another position. The members of the EB appreciated her service and regretted her decision. This gave the EB the opportunity to further review the activities of the Office and the staff requirements. It was concluded that the Office requires between two and half to three members to function efficiently and fulfill its tasks in a timely manner. Thus the President and Secretary developed new job descriptions and task assignments taking cost-effectiveness into consideration. It is anticipated this structure will be finalized in 2005. The IFCC Office has become the hub for communication within the Federation and thus it is essential that it is structured appropriately to allow it to carry out its important tasks.

Finally, the EB reviewed the relationship with Emmezeta Congressi with which it shares space and resources in Milan. This relationship has proved extremely beneficial to the IFCC and Emmezeta Congressi were asked to prepare a new agreement to be considered in 2005 when the current one concludes.

Professional Scientific Exchange Program

In 1998, this scholarship program for young colleagues to visit a laboratory abroad was founded and has been well accepted by the membership. Due to the geopolitical situation only 3 scholarships were granted in 2003. The recipients came from Costa Rica

and Spain and received training in the USA. The training provided was for bacteriology, techniques for detection of pharmacogenetic conditions. The EB considers this program important for our young scientists and their future in the profession. It is hoped that the National Societies will promote and encourage their young colleagues to use the opportunities of this programme and to submit applications.

Treasurer's Report

The year 2004 was not such a successful year financially for IFCC. This was largely due to the fact that there was no income from Congresses. Despite this, there was some very good news; we budgeted a loss of CHF 328.175 but we only realized a loss of approximately CHF 245.501. Also both Full Member dues and Corporate Member dues were the best ever, with very few non-payments.

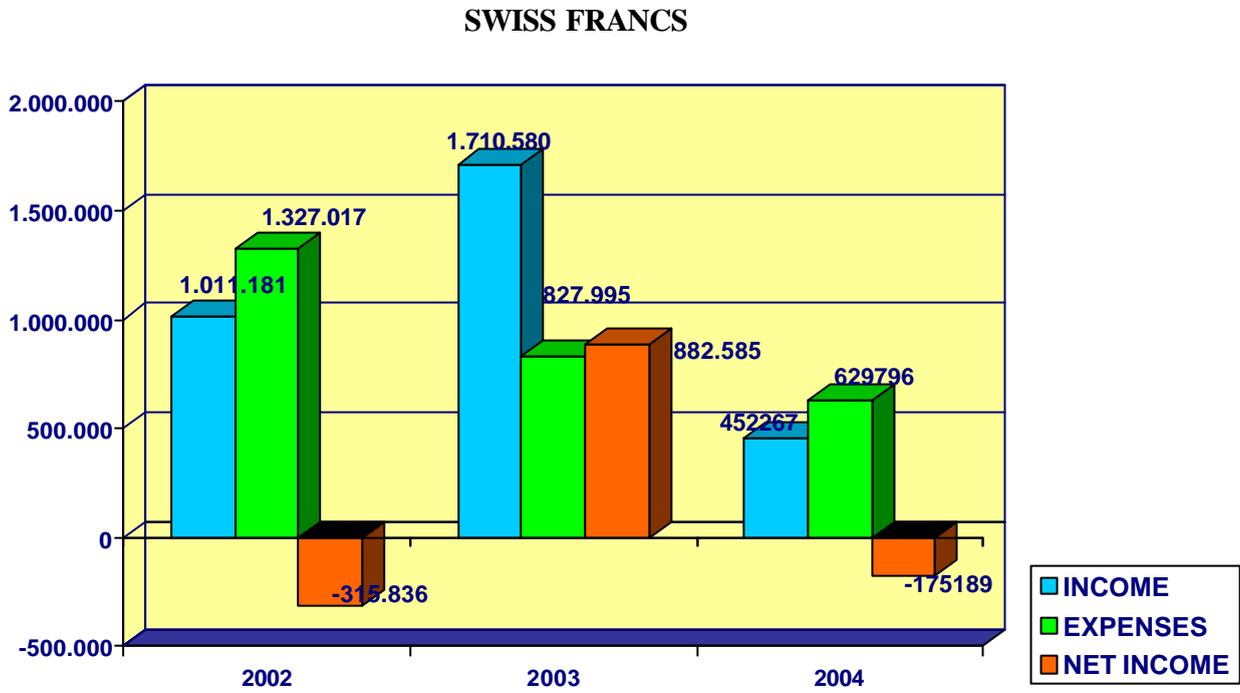
Our major expenses for 2004, as in all years, have been in supporting our major Divisions: Communications and Publications Division, Conference & Congress Division, Education and Management Division and the Scientific Division. Other expenses include the support of Special Projects, the IFCC Office in Milan and the Executive Board.

We continued to fine tune our financial accounting for IFCC. Our audit for 2004 was performed by a new company, Humphreys & Gates Chartered Accountants and went very well. With the help of the Financial Advisory Committee we are continuing to seek ways to improve the income for IFCC, and have developed a financial plan to assist in this effort.

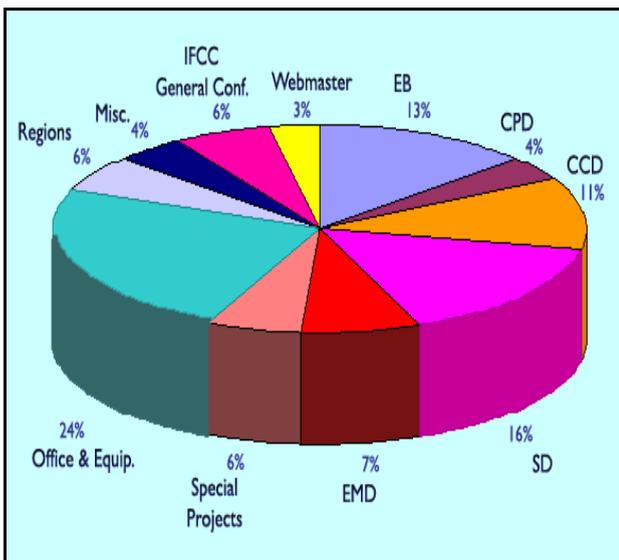
The relationship with Banca Intesa has greatly helped our processing of claim forms. Using the IFCC Office for bookkeeping has been a very positive experience. I appreciate very much the assistance of Lisa Ionescu. The year 2005

IFCC Finances

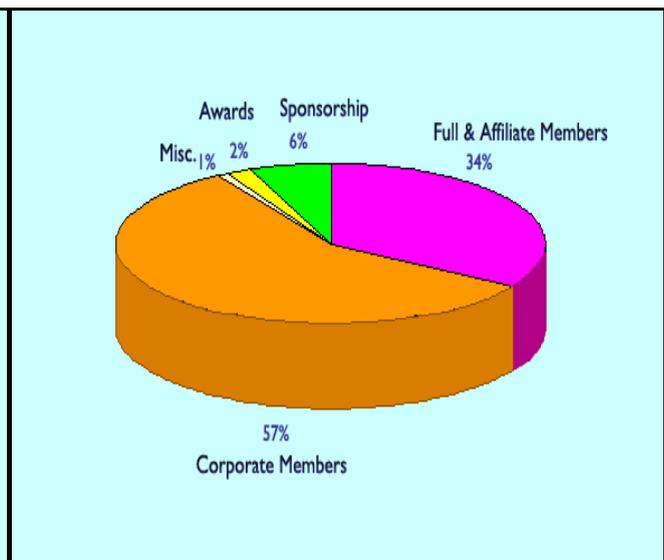
A quick view of IFCC finances for 2002-2004



Major Expenses



Major Income



will be successful financially with income realized from the EuroMedlab Congress in Glasgow and the ICC / AACC Congress.

Awards Committee

The recipient of the 2004 IFCC/Abbott Molecular Diagnostics Award for Significant Contributions to Molecular Diagnostics was Professor Maurizio Ferrari M.D. from the Department of Laboratory Medicine, Ospedale San Raffaele, Milano, Italy. The award was presented to Professor Ferrari on May 17, 2004 at the opening ceremonies of the 10th Arab Congress on Clinical Biochemistry that was held in Monastir, Tunisia.

This award honours an individual or individuals who have made unique contributions to the promotion and understanding of Molecular Biology and its application in Clinical Chemistry and Laboratory Medicine throughout the world. Professor Ferrari has pioneered the development of techniques for the analysis of genes and their use in the study of the molecular basis for diseases such as β -thalassemia, haemophilia-A, Duchene muscular dystrophy, cystic fibrosis, schizophrenia, and type-2 diabetes.

In addition, calls for nominations were globally distributed for the following awards that will be presented in 2005:

1. IFCC/Bayer Award for Outstanding Contributions in Clinical Chemistry and Laboratory Medicine
2. IFCC/Bayer Wishinsky Award for Distinguished International Service
3. IFCC/Beckman Coulter Award for Distinguished Contributions in Education
4. IFCC/Abbott Molecular Diagnostics Award for Significant Contributions to Molecular Diagnostics

5. IFCC/Roche Award for Significant Advances in Critical Care Testing.
6. IFCC/EDMA Award for Evidence of Effectiveness of Laboratory Tests.

Communication and Publications Division (CPD)

Most noteworthy of last year's activities were the launch of the re-designed website with its improved navigability and the introduction of multimedia slide-audio presentations on both the website and CD. The CPD continues to fulfill its mission through the efforts of its hard-working and dedicated team and maintains its leadership in exploring and delivering innovative uses of communications technology.

10.1 Activities and Reports

In addition to holding 2 face-to-face meetings at Sousse and Perth, 2 telephone-conferencing committee meetings were held. These proved extremely successful, allowing rapid review and approval of the web design and offering considerable cost savings compared to conventional meetings. We intend to continue with a mix of both telephone and conventional meetings.

10.3.1 Working Group – eJIFCC

The publication schedule was adhered to, with the September issue being a bumper publication of the proceedings of the Third FESCC Continuous Postgraduate Course in Clinical Chemistry: New Trends in Classification, Monitoring and Management of Neurological Disease.

The website now has an archive of the complete set of issues since the change to the electronic version.

10.3.2 Working Group – IFCC News

The change to a publication schedule of 6 issues per year has been a success. Archives of newsletters back to 2001 are now available on the website.

The use of editorial articles from each of the various divisions and IFCC officers has been valuable in publicizing the activities of the IFCC.

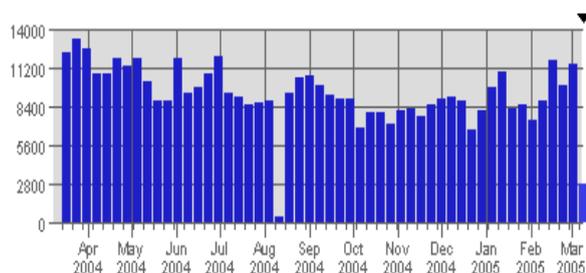
10.3.3 Working Group – Web-Site

The new site design was launched in Perth and has been well received with positive feedback. There is ongoing work to improve the search facilities and to enhance navigation. Page accesses continue at a healthy 8000 plus per week.

A separate directory for the C-EBLM has been established to provide a web-space for this activity. Included is a database of systematic reviews and meta-analysis in laboratory medicine. The searchable database access provided is a marked improvement, creating an important resource.

A pilot program is being established to explore the provision of web pages to National Societies or other Working Groups.

Website Hits



10.3.4 Working Group - Spanish (Ibero-american) Nomenclature and Translations

Responsibility for editing the Rincon IberoAmericano web pages has been centralized in the IFCC office. This part of the web site continues its strong success thanks to the vigorous efforts of its editorial team.

10.4.1 Documents from Committees & Working Groups - Report of the Editor of Documents

The database continues to be updated as publications are forthcoming. See appendix for a 2004 content list.

10.4.2 Monographs

The monograph by J. Wilkinson “Managing Change in the Clinical Laboratory” has now been printed and distributed.

10.9 Corporate Member Activities

A new corporate member Werner Poppe has been appointed and attended the meeting in Perth. His contribution in improving communication and participation with the corporate members has already been appreciable. As a result of the resignation of Raffaella Infanti, the term of office of the web coordinator, Craig Webster’s term was extended to ensure continuity of familiarity and expertise with the website.

10.20 Membership

Current membership of the CPD is:

- Andrew Wootton (Chair)
- Peter Lehmann (Secretary/Editor Documents)
- Ellis Jacobs (Editor IFCC News)
- Craig Webster (Web Coordinator)
- David Williams (Editor eJIFCC)
- Werner Poppe (Corporate Representative)

10.30 Budget

Considerable efforts have been made to reduce expenditure. These have successfully reduced costs without compromising the activities of the Division.

10.40 Multimedia

The IFCC symposium held in Perth reporting on the global campaign on diabetes was recorded and a set of slide-audio presentations has been added to the website for access by streaming. A CD has also been produced for distribution and is available for review. The use of both methods of distribution will allow evaluation of these to determine future strategy; we believe through the use of these

techniques we can extend participation into IFCC meetings to a substantial proportion of the membership, without requiring their physical presence in every case.

Congress and Conference Division (CCD)

International Congresses of Clinical Chemistry and Laboratory Medicine

The next International Congress of Clinical Chemistry and Laboratory Medicine (ICCCLM) will be held in Orlando, Florida, U.S.A. from 24-28 July 2005. It is the joint meeting of the 19th ICCCLM and 2005 Annual Meeting of the American Association for Clinical Chemistry. There will be seven IFCC sessions during the congress.

The 20th ICCCLM is being planned for Fortaleza, Brazil from 06-10 October 2008. The main working bodies of the congress have been established. Emmezeta Congressi has been appointed the PCO being responsible for organisational, administrative and exhibition issues.

The bids to host the 21st ICCCLM were obtained by the end of October 2004 and evaluated by CCD in November 2004. CCD rated the applicants and recommendations were submitted to EB. The decision of EB on the host for the 21st ICCCLM (2011) will be announced during the 19th ICCCLM Council meeting in Orlando.

Regional Congresses

In 2004 two Regional Congresses were successfully organised:

The 10th Arab Congress of Clinical Biology was organised by Tunisian Society of Clinical Biology and held on Monastir, Tunisia from 17-21 May 2004. There were 1,090 participants attending the congress mainly from the Mediterranean Region, but altogether 45 countries were represented.

The skeleton of the scientific program consisted of six plenary lectures and 14 symposia. The 11th Arab Congress of Clinical Biology will be held in Damascus, Syria, in 2006.

The 10th Asian Pacific Congress of Clinical Biochemistry was organised by the Australasian Association of Clinical Biochemists in Perth, Western Australia from 18-23 September 2004. Over 900 participants from ~80 countries participated in the congress with five plenary lectures and nineteen symposia. The 11th congress of this series is scheduled in Beijing, China, in 2007.

The Association of Clinical Biochemists (UK) will host the 16th IFCC-FESCC European Congress of Clinical Chemistry and Laboratory Medicine (EuroMedLab) in Glasgow, Scotland, from 08-12 May 2005. The Congress theme is "Focus on the Patient".

IFCC Specialist Congresses

IFCC organizes Master Conferences on specific topics. The Bergmeyer Conference, sponsored by Roche, is dedicated to Prof. Hans-Ulrich Bergmeyer, a pioneer in the field of clinical chemistry. The topic of the 10th Bergmeyer Conference in Garmisch-Partenkirchen (DE) in March 2005 will be diabetes mellitus and cardiovascular disease.

IFCC Auspices

IFCC contributes to the excellence of congresses and conferences by granting auspices to events arranged by congress organisers outside IFCC. Granting of auspices does not imply any financial agreement between the organisers of the event and IFCC, but does offer large publicity to the meeting through IFCC channels and - if needed - support in many practical aspects. A one-page application form for IFCC auspices is available on the IFCC web site. Completed forms should be submitted to the CCD chair. This possibility

might not be optimally exploited nowadays since IFCC auspices were only awarded to eight conferences in 2004.

Meetings and Membership

CCD had two meetings in 2004. The first meeting was held during the General Conference in Sousse, Tunisia and the second meeting held in November 2004 in Milan, Italy at the IFCC office. Electronic communication was used throughout the year.

Great changes in CCD membership took place at the end of 2004. Josefina Mora (SP) and Joseph S. Lee (Hong Kong) completed their second terms of office as elected members. Tomris Özben (TK) and Nobuyuki Amino (JA) were welcomed as new members. Lasse Viinikka, Chair of CCD retired from the division on 31 December 2004 and Albert Fraser was appointed as the next Chair. On behalf of EB, Vladimir Palicka presented an IFCC plaque to Josefina Mora, Joseph Lee and Lasse Viinikka in recognition of their significant contributions to activities of IFCC CCD.

Education and Management Division (EMD)

General remarks

In the year 2004, most of the Committees and Working Groups of the Education and Management Division (EMD) performed a lot of activities, especially in the areas of Molecular Biology and Evidence Based Laboratory Medicine. The Visiting Lecturer Program has also continued to be of significant value for IFCC and its members. For the next year it is expected that the Division will continue its efforts. These will be based on the needs of the membership of IFCC. Answers obtained from a questionnaire form the basis for this strategy. The focus will be more on developing countries, especially concerning

education, quality assurance and management.

The Division had its main meetings of the year 2004 during the General Conference in Sousse in Tunisia. The Division met there as a whole, and the different groups met separately.

As usual, for every group within EMD, the following items were dealt with:

- Give an overview of her/his activities in the last year
- Bring forward future plans, activities and meetings
- Indicate where co-operation with other groups within the Division is relevant
- Go over Membership, if necessary
- Indicate what budget is necessary for the activities (also 2004)
- Mention all other relevant issues.

Executive Committee (EC)

The Executive Committee (EC) now exists of Mary Burritt, Leo Vankrieken, Gerard Sanders (Chair) and Leslie Lai, who was appointed as the fourth member. Next year Janet Smith (UK) will be the fifth member,

EMD-EC met in Sousse and had a short meeting during the AACC Annual meeting in Los Angeles. Frequent contacts were arranged by mail.

In 2004, the EMD-EC, next to its regular tasks, has been active to define and monitor future strategies for the Division.

The main goals are:

- Bring clinical chemistry education to the basis where direct contacts with patients are
- Focus on developing countries
- Attention to Asian Pacific Region
- Presence at Regional and International Congresses
- Follow the needs of the IFCC Membership
- Lessons from a Questionnaire on Education

In the past few years the EC has tried to focus more on the clinical side of the profession, the use of modern media, courses on new technologies, teaching clinical chemistry in developing countries (e.g. by increasing the activities of the Visiting Lecturer Program). Relevant issues in this respect are:

- Clinical use of tests
- Indication for & interpretation of tests
- Expand relationships with clinicians & patients
- Modern media
- Distance education
- "Technical" courses
- Visiting Lecturer Program
- Role of Corporate Members
- Quality of education

It is the intention of the executive Committee of the EMD to continue this strategy in the years to come.

Committee on Clinical Molecular Biology Curriculum (C-CMBC)

The Chair, Maurizio Ferrari (IT), participated to the Xth Arab Conference of Clinical Biology, Monastir, 5/2004 and presented a lecture on "Laboratory medicine diagnostics by microarray technology"; moreover he received the ABBOTT-IFCC award. In the same time a meeting of C-CMBC was held.

The 2nd IFCC Clinical Molecular Biology Course, took place in Milan, 6-10 July 2004 (5 days course with the practical part).

Some of the members and associate members were invited to 4th FESCC Post-graduate Course, Dubrovnik, HR, 10/2004, P Carrera "Towards automation for Molecular Diagnosis of Cancer", M.Neumaier "Colon Cancer" and "Ethics and quality Assessment in Genetic testing", E.Topic "Pharmacogenetic and tumor drugs" The Chair met with members of the Mol Path Div of AACC and the AMP to plan further collaboration. He was in Beijing the last October for a nanotech meeting and at

the same time he met the President of the next Asian Pacific congress in Beijing 2007 (Dr Yang) at National Centre for Clinical Laboratory. A collaboration with China was started and Dr Yang recently visited the lab of Dr Ferrari.

Many more activities have been planned for the coming years.

Committee on Analytical Quality (C-AQ)

Under the new Chair Ken Sikaris (AU) this Committee has turned its focus on Education in relation to Analytical Quality. The following activities have taken place:

- Education Courses EQA / IQC in Perth at the APCCB 2004.
- Cooperation with other IFCC committees: Committee on Education and Curriculum Development, and the Committee on Clinical Molecular Biology Curriculum.
- Management in relation to analytical quality
- Establishment of EQA: Serum Donation Project requests (SERO)
- Regional Promotion of EQA: Perth APCCB Seminar EQA in Asia/Pacific Region
- Standards: IFCC review of ILAC G13 standard for External Proficiency Testing.

Committee on Evidence Based Laboratory Medicine (C-EBLM)

This Committee under the guidance of Rita Horvath (HU), has been very active. This reflects the need felt within clinical chemistry and laboratory medicine for a better understanding and use of laboratory diagnostics. The large technical possibilities may lead to a wealth of tests and it is due to the activities of this Committee as well that professionals seek to find the most relevant and useful ones.

Therefore, it is the wish to spread the knowledge acquired as much as possible. The Committee hopes to have corresponding

members in all member societies of IFCC; even Corporate Members have also expressed their interest in the activities.

Activities and plans in 2004 were:

- Evidence Based Guideline Development
- Assessment of Quality of Evidence Based Guidelines
- Co-operation with the Cochrane Collaboration; the Committee had a meeting adjacent to the 12th Cochrane Colloquium, October 2-6 in Ottawa, Canada
- External Quality Assurance of Test Interpretation
- IFCC VLP in Israel: 27-28 January 2004, Tel Aviv, Israel –AR Horvath: two lectures in Tel Aviv, one EBLM workshop in Haifa
- Health Technology Assessment International (HTAi): Pre-congress workshop on EB diagnosis, Krakow, Poland – Coordinator AR Horvath
- EBLM session in Padova, Italy – Italian Society of Clinical Biochemistry and Clinical Molecular Biology, Invited lecture by P Jorgensen
- AACC EBLM Edutrak: Los Angeles, USA – Coordinator R Christenson
- AACB EBLM Meeting: September, Perth, Australia – Coordinators J Whitfield, A St. John
- EBLM Session in Cuba: September, Havana, Cuba – How do we make clinical guidelines? Who evaluates them and how? Cuban Society of Clinical Pathologists. Invited lecture by PS Bunting
- EBLM session in Canada: October, Toronto, Canada. Evidence based Laboratory Medicine –examples from international and local research. Invited lecture by PS Bunting.

A survey about EBLM among the membership of IFCC was held in 2004. With the results, the Committee hopes to further improve its usefulness for the IFCC Membership.

The Committee has put a lot of effort into a searchable Database on Systematic Reviews. Most of this work has been done by Joseph Watine; at the IFCC Office Raffaella Infanti has taken care of its publication on the Web. The last update is October 2004, 435 reviews are available. The database can be retrieved from the IFCC Web-site: <http://www.ifcc.org/divisions/EMD/c-eblm/database.asp>

Committee on Education and Curriculum Development (C-ECD)

This Committee chaired by Lynn Allen (CA), has continued its activities on development of curricula, but its main action has been sending a questionnaire on educational needs to all IFCC member societies. The response was good and from it, the way forward for not only this Committee, but for the Division as a whole could be deduced. This will lead to a clear strategy to be implemented in 2005. This also will be the basis for a closer co-operation between Committees within EMD, being one of the main goals of the EMD Executive Committee.

For the Committee and the Division the following main topics were brought forward:

- Case-based learning tools
- Evidence-based laboratory medicine
- Quality control and quality assurance
- Test interpretation
- Laboratory management/ financial management
- Pre-analytical effects on test results.

Committee on Clinical Laboratory Management (C-CLM)

EMD-EC believes that it is essential that EMD should provide clinical laboratory management expertise and resources to the IFCC membership. The need for basic financial and managerial skills has been repeatedly stated during numerous meetings and visits to various member countries. In 2004 this Committee has been seeking for

new membership and it is expected that in 2005 a new start will be made.

The primary focus of the committee will be to provide basic management skills to the widest possible audience most in need of these resources, i.e., the developing/emerging member nations.

The committee will focus on the production of accessible, practical and adaptable basic management tools. For example: basic financial concepts; basic budgeting; essential economics; cost vs price calculations; personnel management; effective use of computerised tools, including the internet for basic management functions.

The committee should work closely and in full cooperation with the Committees on Education and Curriculum Development and Quality Assurance. The outcomes of the C-ECD questionnaire will be important in this respect.

In the meantime the Committee has produced in 2004 a Monograph on "Managing Change in the Clinical Laboratory", edited by Ian Wilkinson.

Working Group – Master in Clinical Laboratory Sciences (WG-MLS)

This course has finished its second cycle under the leadership of Nilda Fink (AR). The experience gained from this type of education has been published and may now be used as a blueprint to start courses like these in other regions. On one hand there seems to be a need for master courses in clinical chemistry and laboratory medicine, but at the same time it will be difficult to implement them. The students attending such a course need to have a job as well to finance their living. Also, IFCC needs devoted teachers for the program, as was the case in La Plata.

Still, we are seeking for opportunities for new locations.

Working Group on Epo (WG-EPO)

This working Group is in the final stage of publishing a document.

Working Group on Reviewing of Educational Materials (WG-REM)

The WG-REM has been created to be able to review the educational materials for potential distribution and/of publication by IFCC.

The initial tasks of the WG would include: a review of educational materials already submitted to IFCC for consideration; contact with manufacturers actively involved in education to determine interest in distribution of materials through the IFCC; contact in member societies known to be active in developing educational materials; develop a review format and schedule for evaluation of educational programs.

This WG has not been active since no material was offered to review.

Working Group on Distance Learning (WG-DE)

This WG is part of C-ECD and is seeking the best opportunities for distance learning.

They will periodically evaluate websites with educational information as part of distance learning; categorize web-based teaching materials: instructive clinical cases, atlases, and e-mail learning programs; identify lectures/educational materials on particular diseases including diagnosis, monitoring, therapy and clinical utility of new tests as part of continuing education programs; identify lectures/educational materials or programs on particular diseases including diagnosis, monitoring, therapy and clinical utility of new tests (multidisciplinary approach) for students in biomedicine (medicine, clinical biochemistry, dentistry, pharmacy).

Visiting Lecturers Program (VLP)

This program is sponsored by the corporate members DPC and Dade-Behring. From the

EMD-EC Mary Burritt (US) is responsible for this program.

It is becoming more and more important for IFCC to reach its goals in spreading the knowledge on different aspects of clinical chemistry. EMD appreciates very much the input of the lecturers devoting their time to this program.

- Dr. Jean Claude Forest (Canada) to give lectures in Jakarta, Singapore and Bangkok from 8-12 January. Subjects: biochemistry of menopause and traceability in laboratory medicine
- Dr. Rita Horvath (Hungary) to give lectures in Jerusalem, Tel Aviv and Haifa from 25-20 January. Subject: evidence-based laboratory medicine
- Dr. Camilo Fernandez (Spain) to give lectures at the 3rd Paraguayan Congress of Clinical Biochemistry from 10-12 June. Subjects: Quality Manual/Quality System and clinical utility of laboratory data
- Dr. Jean-Claude Libeer (Belgium)--EQAS International Meeting on "Laboratory Accreditation: Focus 2004 in conjunction with the Confederacion Unificada Bioquimica de la Republica Argentina from 22-26 June. Subjects: ISO 15189 accreditation, checklists for accreditation, experience of EQAS, and contributing to reduce medical errors
- Dr. Renze Bais (Australia)--Syrian Clinical Laboratory Association Symposium on Trends in Laboratory Practice from 27-30 Sept in Damascus and Homs. Subjects: practical approaches to QC/QA (a capability based approach), New Instrumentation and POCT and the impact on the lab. 2nd Congress of Clinical Laboratory in Beirut, Lebanon from 30 Sept – 2nd Oct. Subject: Capability in QA/QC.

Next to this, advice has been given to different societies wishing to invite a foreign speaker.

Course on Flow Cytometry

This course forms part of the EMD strategy to offer courses in modern technologies relevant for the membership of IFCC. Due to unforeseen circumstances the course for this year had to be postponed. A new course, organized by Gregor Rothe (DE) with the support of Beckman Coulter, is planned for September 2005 in Bremen, Germany.

Final Remarks

EMD wishes to thank everyone who participated in its activities. We hope that we may continue to profit from their input, ideas and support in the years to come.

Scientific Division (SD)

During 2004, the following members served on the SD Executive Committee: Jean-Claude Forest (Canada) (Chair), Mauro Panteghini (Italy) (Vice-Chair), Howard Morris (Australia) (Secretary), Ian Young (UK), Nader Rifai (USA), Ulf-Hakan Stenman (Finland), Rolf Hinzmann (Germany) (corporate representative), and Mathias Mueller (AT) (EB-Liaison). Four representatives of International Organizations are invited to attend the Scientific Division meeting as consultants: Jos HH Thijssen (JCTLM), Heinz Schimmel (IRMM), William Koch (NIST, March 2003), Michael Welch (NIST, October 2003). Two meetings were held during the year 2004 May 14-15 (Sousse, Tunisia in conjunction with the IFCC general Congress) and September 18-19 (Perth, Australia in conjunction with Asia Pacific Congress of Clinical Biochemistry).

Relationship with International Organizations

The Scientific Division has pursued the expansion of its activities to partner with international organizations to promote the implementation of the concept of traceability in laboratory medicine and the

implementation of reference measurement systems.

- **Joint Committee on Traceability in Laboratory Medicine (JCTLM)**

The Joint Committee on Traceability in Laboratory Medicine (JCTLM) including its two working groups have continued to develop its program with significant advances. The first Working Group on Reference Measurement Procedures (RMPs) and Reference Materials (RMs) has commenced its program of identifying and reviewing against agreed upon criteria (ISO standards 15193 and 15194), and publishing list(s) of higher order certified RMs and RMPs required for industry to comply with the EC directive regarding *in vitro* diagnostic medical devices. The first lists were presented to a meeting of the JCTLM Executive Board in March 2004 and updated during a general meeting in December 2004. These lists are now available on the IFCC website (JCTLM; data base: laboratory medicine and *in vitro* diagnostics). The composition of the lists of Reference Materials and Reference Methods are under continuous discussion with relevant international bodies. A series of documents are being prepared by WG1 describing the process for review and approval of nominated certified Reference Materials and Reference Measurement Methods, for requesting and accepting nominations for Certified Reference Materials and Reference Methods, Procedures, for evaluating Certified Reference Materials and Reference measurements procedures to be listed as being of higher methodological order, process for the demonstration of the comparability of certified values of the same measurement in multiple materials having the same nominal matrix, etc. The second Working Group on Reference Laboratories is working on a document to define a process for review of reference measurements services from laboratories that are signatories to CIPM MRA or accredited as calibration laboratories (ISO-17025/15195). The purpose of this endeavor

is to describe the processes to be followed by review teams for reviewing nominations of Reference Measurements Services provided by Reference Laboratories. WG2 has commenced collecting information on existing and candidate Reference Laboratories, to establish means of assessing performance in the future.

- **Institute for Reference Material and Measurement (IRMM)**

Close collaboration with IRMM continues with practical joint ventures such as with preparation of Certified Reference Materials for the following analytes: AST, ALP, Myoglobin, a new preparation of CRM470, progesterone, T3 & T4, Prothrombin factor II wild type and Factor II mutant as genetic reference materials. IRMM has achieved ISO17025 accreditation.

- **National Committee for Clinical Laboratory Standards (NCCLS)**

The good working relationship between NCCLS and IFCC continues. The NCCLS has adopted the name Clinical Laboratory Standards Institute (CLSI) to come into effect from January 2005. Joint projects with NCCLS are reviewed on a regular basis. The documents on Free Thyroid Hormone Measurements (C-45), Performance of Cellular Immune Function Assays (I/LA 26) and Protocols for Determination of Limits of Detection and Quantification (EP17) have been completed.

Current ongoing joint CLSI/IFCC projects include: Analysis of Body Fluids; Molecular Methods for Microarrays; Sample Collection and Handling for Molecular Test Methods; Quality Assessment Programs for Molecular Methods; Determining Clinical Utility of Genetic Tests; Body Fluid Analysis for Cellular Composition; Metrological Traceability and its Implementation; Mass spectrometry in the Clinical Laboratory: A Guideline to Implementation, Operation and Quality Assurance; IFCC project proposal

on Total Plasma Homocysteine; IFCC project proposal on Immunosuppressive Drug Monitoring; Use of External RNA Controls for the Quality of Gene Expression Measurements with Microarrays and by Real-Time PCR (RT-PCR); Expression of Uncertainty of Measurement in Clinical Laboratory Medicine.

- **National Institute of Standards and Technology (NIST)**

A large number of projects are underway at NIST and some are of considerable interest to IFCC. These include: preparation of primary reference material for cardiac troponin I (cTnI), serum reference materials (SRM) for electrolytes, glucose, lipids, creatinine, homocysteine and folate. Each SRM preparation will consist of analytes at 3 levels in serum.

- **Regional and other congresses**

The Scientific Division participated in the 10th Asian Pacific Congress of Clinical Chemistry held 20-25 September 2004 on an official basis contributing to the following two symposia: “Therapeutic Drug Monitoring” and “Assay Standardisation: Benefits for the Patient”.

Activities of Committees and Working Groups

Most of the scientific and professional activities of the Scientific Division are carried out by the Committees (Cs) which are theme-oriented. Their work is often in close collaboration with other international organizations. For more specific tasks, the activities are normally accomplished through Working Groups (WGs). During the IFCC General Congress (Sousse, Tunisia May 2004) the SD Executive Committee had the opportunity to meet with the G-NPU, C-MBT, C-PP, C-SMCD, C-SCT, C-RSE, C-POCT.

Committees

- ***C-Nomenclature, Properties and Units (C-NPU)***

This IFCC/IUPAC Committee is responsible for the maintenance of the generic database, which is now available through the IFCC website under the URL: <http://dior.imt.liu.se/cnpu/>. C-NPU is currently investigating long term maintenance of the database and wider utilization at the international level. A draft revision of the new edition of the VIM (Sub-Committee on Vocabulary in Metrology) is now available. A member of the committee is representing IFCC at the Sub-Committee on Vocabulary in Metrology and Guides to Expression of Uncertainty of Measurement in Metrology (GUMM) of the Joint Committee on Guidelines and Metrology (JCGM) of the International Organization for Standardization (ISO). Six projects are currently ongoing including Properties and Units for Transfusion Medicine and Immunohematology, Medical Molecular Biology, Urinary Calculi, Concept and Structure for request in Clinical Laboratories, Global use of the C-NPU concept system for properties in toxicology.

- ***C-Molecular Diagnostics (C-MD) (formerly the C-Molecular Biology Techniques in Clinical Chemistry (C-MBT))***

The activities of the C-MD have been thoroughly reviewed with the appointment of new membership. Specific projects include:

- 1) Production of well defined but “low level” reference materials capable of being used as positive and negative controls in clinical testing, which is to be discussed with IRMM.
- 2) Establish an International Network of IFCC Reference Centres in Molecular Diagnostics, each with a focus on a particular area of clinical interest in this field. The first three areas would focus on haemochromatosis, factor V Leiden

and apolipoprotein E. The purpose of these centres is to enhance technology transfer of clinical testing expertise to laboratories that provide clinical services in these areas.

- 3) Develop a checklist for technology transfer from development to clinical laboratory testing.
- 4) Establish links and collaboration with like-minded organisations to avoid duplication of projects.
- 5) Standardise formats for reporting of molecular diagnostic results. The C is currently establishing the priorities for these projects.

A manuscript titled "Certified Reference Materials (CRMs) for the analysis of the human factor II (prothrombin) gene G20210A mutation" from the C was published.

- ***C-Plasma Proteins (C-PP)***

The committee found that an international quality control study to assess the effect of the introduction of the CRM470 Plasma Protein RM on the performance of their analyses in over 3000 laboratories across the world indicated that the analytical performance of 11 of the 15 serum proteins contained within the preparation had improved. The full reports of these studies have been published along with the reference interval studies looking at multiple racial and ethnic groups around the world in a special issue of CCLM during 2004. The committee is presently involved in the following projects:

- 1) collaboration with IRMM for the development and certification of a new lot of CRM470, to be called CRM470-R;
- 2) evaluation of the impact of new technologies for the study of human plasma proteome on laboratory medicine (in connection with HUPO) and protein microarrays;
- 3) elaboration of position papers on the methods used in the investigation of protein M(?) components (such as capillary electrophoresis,

massspectrometry and the quantification of serum immunoglobulin free light chains)

- 4) on the optimal use of protein markers in clinical practice.

Two WGs to undertake the standardisation of carbohydrate-deficient transferrin and of cystatin C have recently been established and are working closely with the C.

- ***C-Standardization of Markers of Cardiac Damage (C-SMCD)***

The C-SMCD has continued its work on standardization of various cardiac markers. Secondary RM has been selected for myoglobin in close collaboration with IRMM. IRMM is working on the reference method for the certification of the selected material (IRMM/IFCC 458) as well as its further characterization. In collaboration with the AACC Subcommittee for Cardiac Troponin standardization and NIST, a candidate primary reference material for cTnI (human CIT tertiary complex NIST SRM 2921) was selected to be used for cTnI assay standardization. Further to the preparation of this primary reference material, discussions are underway for the preparation of a secondary matrix reference material for cTnI for which the values can be assigned by an immunoassay method, which demonstrates equimolarity and is calibrated using the primary material. A study on the imprecision of cardiac troponin assays at low range concentrations has been completed and published in Clinical Chemistry. A document titled "Quality specifications of BNP assays" will be published in the March issue of Clinical Chemistry. Companies marketing BNP and pro-BNP assays have supplied information describing the traceability of their assays. The C has decided that the preparation of reference material for BNP (preparation of a recombinant BNP material) is a useful starting point.

A manuscript titled "Future Biomarkers for Detection of Ischemia and Risk Stratification in Acute Coronary Syndrome"

has been accepted for publication in Clinical Chemistry. A top priority of the committee during the next 12 months will be to establish a web link through the IFCC website that will track the current and past analytical and clinical characteristics of cardiac troponin and natriuretic peptide assays.

- ***C-Standardization of Coagulation Tests (C-SCT)***

This joint committee with the International Society of Thrombosis and Haemostasis (ISTH) with new membership continues to develop new orientations. The main projects are: development of a reference method for antithrombin; development of recommendations on pre-analytical factors affecting coagulation testing; development of recommendations for the standardization of the prothrombin time test (in collaboration with ISTH).

- ***C-Reference Systems for Enzymes (C-RSE)***

The achievements of this C have necessitated a revision of the Terms of Reference. A meeting with Corporate members was held in July 2004 to discuss proposed projects. A draft manuscript on standardisation of the Amylase assay has been completed. Additional experimentation for the ALP assay was completed during 2004 and the documentation will be completed by June 2005.

The C will proceed with the project to standardise the Lipase assay method noting that significant technical issues need to be resolved. The C will not proceed with a project to standardise serum cholinesterase. As well the C is continuing to monitor the performance of the laboratories in the Network. Recognising the requirement for support of such laboratories the IFCC is considering the development of a business plan to include the possibility of these laboratories being able to offer services to the IVD industry.

- ***C-Point of Care Testing (C-POCT)***

The C has been established and held their first meeting. A document describing recommendations for the measurement of ionised Mg by selective electrodes titled « “Guidelines for Sampling, Measuring and Reporting Ionized Magnesium in undiluted serum, plasma or blood” » has been accepted by the IFCC. Another document accepted by the IFCC is titled “Recommendation on reporting results for blood glucose”. Both documents were accepted after voting as official IFCC recommendations.

Projects suggested on POCT include the preparation of QC guidelines for the use of glucose meters in the General Practice and /or Clinical setting. It is proposed that a draft of the document will be presented to the next meeting.

A second initiative proposed in collaboration with the IFCC EMD is the preparation of guidelines for education and training for operating POCT devices. The project would include defining the required knowledge base and skills as well as a curriculum. The issue of annual accreditation of staff using POCT will be considered. It was noted that industry was well represented on the C and these activities will involve collaboration with industry.

- ***C-Traceability in Laboratory Medicine (C-TLM)***

This newly formed committee will have as its main function the preparation of state of the art statements regarding traceability in Laboratory Medicine, permitting IFCC to play its international role in this area in providing and operating links between the Scientific Division and the Working Groups of the Joint Committee on Traceability in Laboratory Medicine. It will also monitor the implementation of new international directives and standards such as the European IVD directive 98/79, and relevant ISO standards; it may also contribute to the development of guidelines for the recognition of reference

laboratories and the establishment of external quality assessment schemes for reference laboratories for monitoring competence by participating in comparative measurement campaigns (ring trials). The members of the C have been appointed and their first meeting was held in July 2004 (Los Angeles). Their first task is to develop quality guidelines to manage performance of laboratories for participating in ring trials for the IFCC.

- ***C-Reference Intervals and Decision Limits (C-RIDL)***

At its last meeting of 2004 the Executive Board of the IFCC has approved the establishment of a Committee on reference intervals and decision limits and the call for nominations has been sent to National Representatives and Corporate Members. The main terms of reference of this Committee are: to review current concepts of establishing Reference Intervals and decision levels; to determine priority list of measurands (analytes) for which reference intervals and decision limits have to be studied; to establish transferability protocols of Reference Intervals and decision limits; to monitor and evaluate currently proposed reference intervals for selected measurands.

- **Working Groups**

During the General Conference in Sousse, the SD EC met with the following Working Groups: WG-SHCG, WG-HbA1c, WG-HbA2, WG-STFT.

- ***WG-Reference Methods for Apolipoproteins (WG-MA)***

CDC serves as repository for the WHO-IFCC First International Reference Reagents for Apolipoproteins A-1 and B. There are approximately 2,000 stored vials of Apo A-1 (SP 1-01) and 77 vials of Apo B (SP 3-07). SP 3-07 is currently being replaced by preparation SP 3-08, a serum pool prepared according to NCCLS 37-A Guidelines. Technical issues with regard to the production and characterisation of SP3-08 particularly with

reference to ISO guide 15194 are being resolved. After completion of the studies, the material will be submitted through IFCC to WHO for recognition.

- ***WG-Human Chorionic Gonadotrophin (WG-SHCG)***

A manuscript entitled "Establishment, value assignment and characterization of new WHO Reference Reagents for six molecular forms of human chorionic gonadotropin (hCG)" by Bristow A et al has been published by Clinical Chemistry. A package has been sent to kit manufacturers including the manuscript, a questionnaire and the results of the EQA survey. The WG is preparing a short manuscript summarising the new nomenclature of the hCG isoforms. The future plans of the WG and the WG membership are under review. It is noted that the development of reference methods remains outstanding.

The IFCC has agreed that 150 mg of reference material be retained for the preparation of a second batch and that the remainder be forwarded to IRMM to be prepared for retail sale.

- ***WG-Standardization of Lp(a) (WG-LP(a))***

This working group has completed its work, having succeeded in developing an international standard intended for the transfer of a Lp(a) concentration to manufacturers' master calibrators. Indeed, IFCC SRM 2B has recently been accepted by WHO as the first WHO International Reference Reagent for Lp(a) for immunoassays. The assigned unitage is 0,1071 nanomole of Lp(a) per vial and is traceable to the consensus reference procedure for Lp(a). The acceptance of a manuscript on this work brings the WG to a close.

- ***WG-Glycohemoglobin (HbA1c) (WG-HbA1c)***

The Clinical Implementation Group with representation of the International Diabetes Federation, American Diabetes Association, European association of Diabetes Societies, the Japanese Diabetes Society and the IFCC have held a number of meetings through 2004. The major issue to decide how the IFCC Reference Method, which has lower reference intervals than those obtained with previously published methods, will be adopted globally. These issues include the name of the analyte and its units. The C NPU has contributed to the debate.

- ***WG-Nanotechnology (WG-NT)***

This rapidly evolving field of laboratory medicine is monitored through a comprehensive review of the world literature that has been made available as a database on the World wide web. Updates are planned to cover the topics protein and DNA microarrays, nanotechnology and microchips.

- ***WG-Monitoring Immunosuppressive Drugs (WG-MID)***

During 2004, this WG has mainly concentrated its efforts in organizing or participating in symposia and/or workshops at the AACC meeting and the 10th APCCB. Presentations were given by the members of this WG on monitoring immunosuppressive drugs with reference to practice guidelines or methods.

- ***WG-Standardization of Hemoglobin A₂ (WG-HbA₂)***

The WG has defined the analyte HbA₂ and is developing protocols for the preparation of pure HbA₀ and pure HbA₂ materials followed by assessment of purity, preparation of primary RMs, development of a reference procedure for HbA₂ and finally

preparation of secondary reference materials.

- **Project Proposals**

Six project proposals have been received and dealt with during this year. Four new Working Groups have been accepted: Standardization of Cystatin C, Standardization of Carbohydrate-Deficient Transferrin, Standardization of Microalbumin, Standardization of Glomerular Filtration Rate Assessment.

- **Bergmeyer Conference**

The program of the 10th Conference has been prepared during the year and the theme chosen is “Diabetes Mellitus and Cardiovascular Risk”. The Conference, sponsored by Roche Diagnostics, was held over three days, March 14-16 2005. The main topics discussed were: Genetics and Epidemiology of DM, including risk stratification of patients, established and new markers; Diagnosis of DM, Monitoring of patients (guidelines based on evidence); Standardization Issues.

Reports from Regional Organisations

Arab Federation of Clinical Biochemistry (AFCB)

There was a meeting with the Executive of the AFCB during the IFCC General Conference. The main support requested was technical help with the introduction of new equipment and, educational such as VLP and workshops. Financial support to attend workshops, e.g. molecular biology workshops is a major problem for members within AFCB. It was pointed out that Bursary programs often have restrictions such as age which prevent senior members attending important and relevant Conferences. It was announced that the 11th Arabic Congress of Clinical Biology has

been scheduled for April 2006 in Damascus, Syria.

Asian Pacific Federation of Clinical Biochemistry (APFCB)

During the EB meeting in Sousse, the APFCB Secretary, Joseph Lopez gave a presentation on the Federation activities. It is comprised of 12 full members and 9 corporate members. It has a 5-member Executive Committee which works closely with the Chairmen of the APFCB's 3 working committees for Education, Laboratory Management and Scientific activities

The APFCB has undertaken several educational programmes in recent years. Foremost of these is the APFCB Travelling Lectureship, which was initiated in 1999. Thus far the programme has had 4 lecturers who have visited every member area/country of the APFCB at least once. The IFCC Visiting Lecturer Professor Jean-Claude Forest toured the region twice, to Hong Kong and India in 2003 and to Indonesia, Singapore, Malaysia and Thailand in January 2004. The tour was arranged by the APFCB and was in partial fulfillment of the APFCB-IFCC agreement. The APFCB-Beckman Coulter Educational Symposium lecture tour was initiated in October 2003 when Dr Denise Geiger of the USA visited Taiwan, Hong Kong and Singapore, co-hosted in each location with the local APFCB member. Besides organising lecturers, the APFCB Education Committee also organises symposia at regional meetings: this was done for the congresses in New Delhi and Kyoto in 2002.

A two-day Quality Congress for participants from the APFCB region was jointly organised by the Singapore ACB and Bio-Rad in conjunction with APFCB's Laboratory Management Committee and the Singapore Accreditation Council in February this year. A cholesterol standardisation programme was undertaken

earlier for laboratories within the APFCB region with financial sponsorship from Roche.

The Federation's newsletter is the *APFCB News* which is published annually. Circulation is about 4200 copies, within about 20 countries. The APFCB web-site (www.apfcb.org) uses the server memory leased by the AACB that is surplus to its needs. Besides providing information on the APFCB's activities, the site serves as an on-line archive for its documents.

The Distinguished Service Award was instituted to honour individuals from the region who have made outstanding contributions to the APFCB. The inaugural award winner was conferred on Dr Tan It Koon at the 10th APCCB, Perth, Australia.

Latin-American Confederation of Clinical Biochemistry (COLABIOCLI)

The EB also received a report on the activities of COLABIOCLI. The new Board of COLABIOCLI is working on a Strategic Plan with the Pan American Health Organisation (PAHO) at three levels

- Working with countries that require licensing
- Working with countries that have licensing and require EQA schemes
- Working with countries that have licensing and EQA schemes but require accreditation

The COLABIOCLI Board has been discussing these initiatives with FESCC in an attempt to get input from some of the European experts in these areas.

Reports from National Societies (NS)

The following NS have provided reports on their activities for 2004.

Argentina

The 3rd Argentine Congress of Quality in Clinical Laboratories and the 1st Latin-American Meeting of Quality in Clinical Laboratory was held in 2004 with 750 participants of which 150 were from 15 Latin-American countries. The program offered the presence of Prof. Dr. Lothar Siekmann (Bonn), Dr. Willie May (NIST), Dr. Ulf Örnemark (Sweden), Dr. Louis Kirchof (USA) and Dr. Elkim Sinsom (USA), in addition to local and regional lecturers. The presence of LS and WM gave participants the opportunity to be updated on JCTLM activities.

The meeting received 71 abstracts for posters covering quality matters in different fields of Clinical Laboratory. The industry exhibition was very successful and was organized by Estate Providers Organization that includes almost all manufactures and representatives of the international diagnostic companies.

The 5th Course on Organization and Management of External Quality Schemes was held as a Pre-congress course. This three day course had 35 participants from 15 NS of COLABIOCLI.

COLABIOCLI covers the travel and hotel expenses of one delegate from the following countries: Bolivia, Ecuador, Panamá, Nicaragua, Dominican Republic and Venezuela. For the rest of delegates, hotel expenses were covered. One symposium was included for NS to present their actions and achievements in the field of Quality. Paraguay, Uruguay, Guatemala and Ecuador gave presentations.

The Reference Laboratory of the Argentine Biochemical Foundation was presented as a candidate RL for Cholesterol at the WG2 of JTCLM. It will be presented as a RL for enzymes in the near future.

Austria

The biannual congress on Laboratory

Diagnostics and Molecular Medicine in collaboration with the Austrian Society of Laboratory Medicine was held in Salzburg, September 29 – October 2, 2004. Approximately 350 participants from Austria, Germany, Croatia and Switzerland participated. Special symposia on Cardiac Markers, Mass Spectrometry, Coagulation, Hematology were organized. In addition to this major scientific and educational event, the 8 area-sections organized educational symposia and training courses.

Based on membership requests, the board of the Austrian Society of Clinical Chemistry (IFCC member) and the Austrian Society of Laboratory Medicine have started the discussions on combining the 2 societies. For this purpose the statutes and rules for a new joint Austrian Society of Laboratory Medicine and Clinical Chemistry have been written, edited and circulated to the members. The membership of the 2 societies accepted the new statutes and agreed that the new joint Austrian Society of Laboratory Medicine and Clinical Chemistry will commence in 2005.

Brazil

The National Congress of the SBAC was held in Bahia del Salvador, Brazil. A meeting was held between IFCC EB member Daniel Mazziotta with the Dr. Willy Jung (president of SBAC) and Dr. Ulisses Tuma (Vice President) regarding the organization of the Fortaleza Congress. DM mentioned that more frequent communication and updates are needed about this Congress.

Canada

1. The Canadian Society continues to provide active support of the Cuban Society (SCPC).
 - A. This fall the CSCC supported the first joint symposium from Sept 29 to Oct 1 2004 at the National Hotel, Havana

City, Cuba and sent three CSCC members to this meeting. The objective was to enhance co-operation between the two societies and to educate the Cuban attendees about issues of laboratory medicine.

- B. Dr. Victor Turkington, on behalf of the CSCC, arranged to send surplus clinical chemistry equipment to Cuba.
2. The CSCC Travelling Lecturer for 2004 was Dr. Jacob Cannick. This involved a series of cross Canada lectures organized by the Travelling Lectureship Committee, chaired by Dr. Cynthia Ballon.
 3. The Professional Affairs Committee, chaired by Dr. Peter Bunting, is developing a new clinical chemist job description.
 4. Our 48th annual conference was held in London, Ontario in June 5 - 10.

Chile

Chile had their National Congress in October and the President of COLABIOCLI participated as a lecturer. The NS of Chile is preparing a request for the Visiting Lecture Program.

Colombia

DM participated in the National Congress of Clinical Bacteriologists held in Bogotá. He gave a Workshop on Biological Variation and Quality requirements, a plenary lecture on Traceability in Clinical Laboratory and a presentation on Instrumental Control. The Congress had an outstanding number of registered participants (2400 excluding exhibition registration).

The NS has become a powerful institution. They were able to legally change the requirement for a Pathologist to be the director to run a laboratory. This Society

does not belong to COLABIOCLI but rejoining is under discussion.

Cuba

The most important activity held during the year was the 5th National Congress of Clinical Pathology CONAPAC '2004, which took place at Hotel Nacional, in Havana City, Cuba, from September 29th to October 1st, 2004.

The 2nd International Symposium on "Selected Topics in Laboratory Medicine", dedicated to the Canadian Society of Clinical Chemists (CSCC) was also held in the Congress with the participation of three of its members. In this Symposium the SCPC honoured its association with CSCC by presenting a plaque. This acknowledged the continuous support of the CSCC to the development of Clinical Laboratory Speciality in Cuba through the 10-year-old twinning agreement between both national societies. This relationship was promoted by IFCC through Profs. G.Siest and M.McQueen.

IFCC was represented in the Congress by Dr. Daniel Mazziotta, member of the IFCC EB, while the COLABIOCLI was represented by its current President, Dr. Norberto Cabutti. Both were appointed Honorary Members of the SCPC.

The SCPC EB held official meetings with CSCC, IFCC and COLABIOCLI representatives from which important agreements were achieved.

Ecuador

DM visited Quito and Riobamba in June 2004 for meetings with the President of the NS (SEBIOCLI), Dr. Consuelo Valencia. After a period where the NS was divided, there is now an unified NS. They are working hard with COLABIOCLI, PAHO and local authorities of Health to obtain Licensing of Laboratories.

The NS is also working in the area of External Quality Assessment. In order to prime the system, Argentina (Argentine Biochemical Foundation) donates control materials for Clinical Chemistry and registration free of charge to 100 participants. There were two distributions (August and October) and currently a report is being prepared in Argentina to be discussed with SEBIOCLI authorities. It is anticipated the NS will take over the task and establish a stand alone EQAS.

Recently (November 19-20), DM visit and Dr. Norberto Cabutti, president of COLABIOCLI, visited Guayaquil to give lectures at an International Meeting organized by the Guayaquil District of SEBIOCLI. At this occasion, there was also a meeting with representatives of PAHO and the Ministry of Health of Ecuador.

Hong Kong

In 2004, the Hong Kong society celebrated its 20th Anniversary. Our founding president, Dr. Hsiang-Ju Lin and other past presidents, including Prof. Ramasamyiyer Swaminathan, Dr. Michael Chan, Prof. Christopher Lam, Dr. Joseph Lee, Prof. John Masarei, Dr. Anthony Shek and Dr. Chung-Shun Ho, were invited to join the annual general meeting and a Chinese banquet that followed. As part of the celebration, a scientific meeting titled, "Present reflection of the past presidents" was held, during which Dr. Lin, Prof. Swaminathan, Dr. Michael Chan, and Prof. Masarei not only introduced their recent research findings but also reviewed the history and development of the Society.

Concerted efforts were made by the Society with other academic and professional bodies in organising various educational activities in clinical and laboratory medicine. The workshops, lectures and seminars organised during last year included:

- "The 2nd Chinese Congress of Clinical Chemistry and Laboratory Medicine" in Nanjing jointly organised with the Chinese Society of Laboratory Medicine
- "3rd Macau symposium on Laboratory Medicine" jointly organised with Serviço de Patologia Clínica do Centro Hospitalar Conde de S. Januário of Macau
- dinner lecture on "Methods for assessing insulin sensitivity and insulin resistance in humans" jointly organised with HK Society of Endocrinology
- -education symposium "Immunodiagnosics- past, present and future. Thirty years of innovation" jointly organised with Beckman Coulter
- education symposium titled "TSH and TPO- Antibody Testing During Pregnancy – Recent Research and Clinical Applications" jointly organised with Abbott Laboratories Ltd
- dinner lecture titled "Clinical Proteomics: Tomorrow's Test for Clinical Chemistry" jointly with Hong Kong Society of Mass Spectrometry
- dinner lecture titled "Elimination of False-Positive Protein Identifications in Proteomics Research by Combined Use of Electron Capture Dissociation and Collision-Induced Fragmentation in Fourier Transform Mass Spectrometry" jointly organised with Hong Kong Society of Mass Spectrometry

Newsletter

"HKSCC Communications", the news and scientific bulletin of our society, is published in an electronic format to inform members of recent activities, announcement of forthcoming meetings and recent developments in clinical chemistry. Full contents can be accessed via HKSCC homepage at <http://www.medicine.org.hk/hksc>. Browsing of our Society's information from other Member Associations is most welcomed.

Italy

The main task of SIBioC in 2004 was to provide its members with opportunities for improvement of their scientific culture, being an active provider in the Italian Continuous Medical Education system.

SIBioC organized 52 scientific events:

- the National Congress that was held in Padova (8 – 11 June), it had 1362 attendees and presented:
 - 3 plenary lectures, 8 scientific sessions, 13 industry sponsored workshops and the exhibition of 293 posters.
- 2 Regional meetings
- 49 Courses

An agreement with Walter de Gruyter was reached and the journal Clinical Chemistry and Laboratory Medicine is now freely available on line for the SIBioC members from the SIBioC web site.

SIBioC by-laws were thoroughly revisited and some relevant modifications introduced: the President will be in charge for two years (instead of one), the process of nomination of the candidates was changed and the rules for the election in the Board were modified.

Mexico

The AMBC EB endorsed the following scientific and academic activities during 2003-2004:

1. XXVII and XXVIII National's congresses in clinical chemistry (Morelia Mich IFCC News May / June - 2003 and Tuxtla Gtz Chiapas LabMedInt en espanol May/June 2004) with the auspices of IFCC and COLABIOCLI.
2. XL Anniversary (2003)
3. XVI and XVII EQAS annual meetings (500 laboratories)

4. Courses (Diplomats) on Clinical microbiology, Cytology, Clinical immunology, ISO 9001/2000 document interpretation and development, and in Diagnostic bacteriology and anti-micro bacterial susceptibility.

5. Courses (20 hours credit) on QA manual, phlebotomy, parasites detection, fluids, antibacterial sensitivity, urinalysis, six sigma, internal audits, 7 tools in AQ, advance parasitology, metrology and trueness, hematology laboratory EQAS application, basic molecular biology techniques and clinical application.

6. Web page upgraded:
www.ambcmexico.org.mx

7. IFCC Publications: EQAS News December 2003; LMI en espanol (www.medines.com) & eIFCC News www.ifcc.org/eJNews

8. National Publication: BIOQUIMIA Journal, 1500 issues distributed 4 times per year.

9. Attendance at the ISO TC 212/15189 NCCLS meeting (Atlanta GA US and Utrecht, The Netherlands).

10 Member of C47 ISO 15189 of the Mexican Institute of Standards and Certification (IMNC)

11. IFCC VLP lecturers to Honduras and to Ecuador.

12. International participation as speakers and delegates at:
V International Course in Laboratory Management and EQAS, and XXII Congress of the Spanish Society of Clinical Chemistry and Molecular Biology, Spain, 2004.
AACC Annual meeting & Clinical Lab Expo, USA (2003 – 2004).

XXXVII National Congress of
Pharmaceutical Sciences (2004)
Mexico

14. Attendance and participation at different national forums and meetings of affiliated societies and chemistry colleges in Mexico.
15. Research Projects on EQAS and Oxidative stress sponsored by CONACYT Mexico.
16. Agreement with the National University of Mexico (Zaragoza campus) for courses and academic projects sponsorship and scientific recognition nationwide.

Serbia and Montenegro

The 14th Congress of Medical Biochemistry and Laboratory Medicine was held in Sokobanja, Serbia and Montenegro, June 7-12, 2004 under of auspices of IFCC and FESCC. The organizers of the congress was the Society of Medical Biochemists of Serbia and Montenegro, and The Institute of Medical Biochemistry, Clinical Centre of Serbia. The 21st Biochemical Days and the 7th Meeting of Biochemists of Serbia were held as satellite meetings. The Congress consisted of six plenary and nine poster sessions with 130 presentations and participation of more than 400 scientists and laboratory professionals. The plenary sessions of the Congress presented the latest information on cardiac markers, paediatric clinical chemistry, endocrinology, and hemostasis. This Congress once again provided the opportunity for participants to exchange ideas and experience in dealing with problems faced in daily laboratory practice.

In connection to the exhibition of medical equipment «Medipharm 2004» held on 23rd September, the Society organised a mini Symposium on New Technologies in Laboratory Medicine, and on 21st December

2004 organized the Seventh Annual Ivan Berkeš Conferences dedicated to life and work of Professor Ivan Berkeš, the founder of clinical chemistry in Yugoslavia.

Also, during the 2004 the Society conducted two quality control scheme – YUNEQAS in medical biochemistry in all laboratories in Serbia and Montenegro.

Spain

The 2004 SEQC annual meeting was held in Cadiz, 20-22 October, with 900 attendants and a 1000 m² exhibitor area.

The Scientific Committee of the SEQC has organized round tables with 5 different topics in Segovia, May 5-7. The topics were proposed by the Commissions of the Scientific Committee.

A new working group was created this year to work on Point- of -Care testing.

A new tumor marker Committee was created this year.

A Strategic Plan of the SEQC was approved. A document about the duties of the Scientific Committee on the organization of the scientific programme for the national meetings was developed and approved.

United Kingdom

The Association of Clinical Biochemists held its annual conference (Focus 2004 : A Meeting of Minds), in Birmingham in May 2004. An excellent scientific programme and exhibition was enjoyed by delegates from the UK and other countries and the 4 day meeting was enhanced by the excellent conference facilities and fine spring weather. The preparations for Euromedlab 2005, which the UK is hosting in Glasgow, are well underway and a steady stream of registrations is being received. We are looking forward to welcoming colleagues from Europe and beyond to Scotland next May.

The Association continues to be active in the publications field with its journal, the *Annals of Clinical Biochemistry* having a new editor, Julian Barth and is indebted to Stephen Halloran for his enormous contribution to the success of *Annals*, as the retiring editor, over many years. The most recent book in the Venture Publications series, 'Diabetes and Laboratory Medicine' was launched at the Focus meeting and this was followed in June by the launch of Lab tests On Line UK, a version of the original US website, which has been adapted for the UK, supported by the Healthcare Foundation. It was reported that a license fee of 8.000 \$ / year was agreed upon between the Association and the AACC.

The Association has launched initiatives to promote awareness of Laboratory Medicine to Parliament and society in general and to specifically address the professional needs of medically qualified clinical biochemists.

United States

2004 marked the 50th anniversary of *Clinical Chemistry* with a special golden cover and recognition activities at AACC's Annual Meeting. *Clinical Chemistry's* impact factor exceeded 5.5, making it the most cited journal in the field of laboratory science.

AACC's 2004 Annual Meeting and Clinical Exposition in Los Angeles broke all previous records with a sold-out exhibit hall and a total attendance of over 19,000. Lab Tests Online (LTO) topped 350,000 visitors per month and a UK version of LTO was launched this spring.

The Netherlands Lab Automation meeting was a great success with over 250 paid attendees and the Oak Ridge and Beckman meetings also had strong registrations. The Beckman meeting involved over 20 collaborating organizations.

AACC launched a new streamlined interface for Effects Online in spring of 2004. This new system provides online access to thousands of interferences and other effects. Based on the highly regarded Effects Series, edited by Donald Young, PhD, this system was well received at AACC's Annual Meeting. Effects Online provides users with the ability to explore virtually all known effects of disease, drugs, herbal supplements, and pre-analytic issues on chemistry results.

After extensive discussions, an agreement between AACC and IFCC had been reached how IFCC authors will be acknowledged in the NACB guideline on ACS.

Paraguay

At the National Congress of the Association of Biochemist of Paraguay, there was a meeting with the COLABIOCLI EB and the organizers of the Latin-American congress to be held in Asunción in 2006.

Romania

The 12th meeting of the Balkan Clinical Laboratory Federation was organized in Neptun, Romania between September 15-18, 2004 by the Romanian Society of Laboratory Medicine (RSLM). More than 300 laboratory medicine workers from Balkan countries participated. The meeting was organized under the auspices of IFCC and FESCC.

A rich scientific program comprising 24 main topics included plenary lectures, symposia, poster sessions arranged in Europe Hall of the International Congress Center. This Meeting is the second to take place in Romania. After the opening ceremony, Prof. H. Reinauer (Germany) presented an excellent plenary lecture on "Laboratory diagnosis and monitoring of diabetes mellitus" The research studies presented at the meeting contributed to the

advancement of numerous new and interesting observations, studies, and discoveries in all branches of laboratory medicine. For example, the discovery of the first water channel protein (later called aquaporin I) in Cluj-Napoca in 1985 led to the 2003 Nobel Prize in Chemistry and there was a lecture on the medical implications of aquaporins” (Gh. Benga, Romania). Other presentations included “External quality assurance and the detection of autoantibodies” (M. Bluthner, Germany); “Infection surveillance and control programmes in preventing nosocomial infections in French hospitals: national programme 2004-2007” (B. Gouget, France); “Transforming growth factor beta system in kidney diseases” (T. Gruev, Macedonia); “Quality control of genome detection in virus diagnostics” (H. P. Grunert, Germany); “Molecular investigations of the hereditary cancers” (Ch. Kalogera, Greece); “Traditional and novel biochemical markers of cardiovascular disease risk prevention” (E. Bairaktari, Greece); “From analytical to clinical quality in laboratory medicine” (S. Ignjatovic, Serbia and Montenegro); “Metabolic syndrome and risk of CVD” (A. Tzontcheva, Bulgaria); “Oxidative stress and antioxidative defence in type 2 diabetic patients with cardiovascular complications” (E. Colak, Serbia and Montenegro); “Clinical relevance of antikeratin antibodies in rheumatoid arthritis and symmetric polyarthritis associated with hepatitis C infection” (M. Cojocaru, Romania); “New IgE myeloma case report” (Z. Mijushkovich, Serbia and Montenegro); “Etiologic agents of urinary tract infections and their susceptibility to antibiotics” (S. Berbecar, Romania); “Quality control in the clinical microbiology laboratory” (R. Papagheorghe, Romania).

The active participation of professionals and societies of the Balkan countries continues to improve the quality of the profession in the region. We particularly value the links with IFCC and FESCC and the recognition of Clinical Chemistry as a full speciality in

Europe as being the key to attract more members and enlarge our field. Member societies of the BCLF and of the EB of the Federation are from Albania, Bulgaria, Greece, Macedonia, Romania, Serbia and Montenegro, and Turkey.

I am pleased inform you that the Association of Medical Biochemist of Bosnia and Hercegovina has become full member of the BCLF from 2004. The Association of Medical Biochemist of Bosnia and Hercegovina was established in 2003 and has around 50 members. The head office is in Sarajevo. We have to think about the future, and to participate in the future work of the Federation. We have to be pragmatic.

The 13th BCLF Meeting will be held in Tirana, Albania in September 2005.

Uruguay

There is continuous co-operation between the External Quality Assessment Scheme of Uruguay (ABU) and the program in Argentina. Reference Values assignation for instrument control materials prepared by ABU was established in the Reference Laboratory of the Argentine Biochemical Foundation. Uruguayan laboratories will be included in a distribution of HbA1c in March 2005.

IFCC Publications, 2003

The following publications appeared in 2004 as a result of IFCC projects. A number of other papers are in progress and are available through the IFCC Web Site.

Special IFCC publication

The 2002 IFCC-Roche Diagnostics Award. Advances in Critical Care Testing. Burtis CA, Muller MM (eds.). Springer-Verlag, Berlin, Heidelberg 2004.

D 9.1 Education and Management Division

Managing Change in the Clinical Laboratory. Wilkinson I (ed.). IFCC, Milan, 2004

C 8.2.13 Plasma Proteins

Johnson MA, Hytloft Petersen P, Whicher JT, Carlstrom A, MacLennan S. Reference intervals for plasma proteins: similarities and differences between adult Caucasian and Asian Indian males in Yorkshire, UK. Clin Chem Lab Med 2004; 42:792-799.

Ichihara K, Itoh Y, Min WK, Yap SF, Lam CW, Kong XT, Chou CT, Nakamura H. Diagnostic and epidemiological implications of regional differences in serum concentrations of proteins in six Asian cities. Clin Chem Lab Med 2004; 42: 800-809

C 8.2.19 Standardisation of Markers of Cardiac Damage

Panteghini M, Pagani F, Yeo K-TJ, Apple FS, Christenson RH, Dati F, Mair J, Ravkilde J, Wu AHB. Evaluation of imprecision for cardiac troponin assays at low-range concentrations. Clin Chem 2004; 50:327-332.

Panteghini M, Linsinger T, Wu AHB, Dati F, Apple FS, Christenson RH, Mair J, Schimmel H. Standardization of immunoassays for measurement of myoglobin in serum. Phase I: Evaluation of candidate secondary reference materials. Clin Chim Acta 2004; 341:65-72.

WG 8.3.16: Standardization of Lp(a).

Dati F, Tate JR, Marcovina SM, Steinmetz A. First WHO/IFCC Reference Reagent for Lipoprotein(a) for Immunoassay. IFCC Code Lp(a) SRM 2B. Clin Chem Lab Med. 2004; 42:670-676.

WG 8.3.19: Standardization of HbA1c.

Hoelzel W, Weykamp C, Jeppsson JO, Miedema K, Barr JR, Goodall I, John WG,

Kobald U, Little R, Mosca A, Mauri P, Paroni R, Susanto F, Takei I, Thienpont L, Umemoto M, Wiedemeyer HM. IFCC reference system for measurement of hemoglobin A1c in human blood and the national standardization schemes in the United States, Japan, and Sweden: a method comparison study. Clin Chem 2004; 50(1):166-174.

Miedema K. Towards worldwide standardisation of HbA1c determination. Diabetologia. 2004; 47:1143-1148.

WG 8.3.29 (Joint IFCC-IATDMCT Working Group): Laboratory Practice Guidelines for Monitoring Immunosuppressive Drugs.

Morris RG, Holt DW, Armstrong VW, Griesmacher A, Napoli KL, Shaw LM. Analytical Aspects of cyclosporine monitoring (on behalf of the IFCC/IATDMCT Joint Working Group). Ther Drug Monit. 2004; 26:227-230.

C 9.2.7 Evidence Based Laboratory Medicine

Horvath AR, Pewsner D. Systematic reviews in laboratory medicine: principles, processes and practical considerations. Clin Chim Acta 2004; 342:23-39.

Oosterhuis W, Bruns DE, Watine J, Sandberg S, Horvath AR. Evidence-based guidelines in laboratory medicine: principles and methods. Clin Chem 2004;50:806-818.

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