Annual Report 1999

Highlights of the Year

- Seventeenth International Congress of Clinical Chemistry, Florence
- Triennial Council meeting and election of Executive Board
- Presentation of Triennial Awards to Donald Moss, UK (Distinguished Clinical Chemist; Mohamed Shaarawy, Egypt (Henry Wishinsky Distinguished International Services Award; and Lothar Thomas, Germany (Distinguished Contributions to Education)
- IFCC-AVL Award for Significant Advances in Critical Care Testing won by A Morovat (UK) and colleagues
- IFCC-EDMA Award for Evidence of Effectiveness of Laboratory Tests won by A Perrier (Switzerland) and colleagues
- Consensus statement from meeting on Quality Specifications for Laboratory Medicine

President's Message

This Annual Report is the final one from the Executive Board which has served during 1997-1999 and it is a good opportunity to take a longer range look at what has been happening within the International Federation of Clinical Chemistry and Laboratory Medicine. The strategic plan provided vision and direction. The 1997-1999 Executive Board had the opportunity to interpret this and to work with all of the members of the Federation in translating it into actions. This has been challenging work but it has always been satisfying and enjoyable.

Clinical laboratory scientists and physicians have been facing unprecedented challenges, while at the same time the diagnostics industry has faced many organisational and financial changes. Nevertheless, the IFCC has grown to78 member countries and our corporate member base has become wider.

The scientific reputation of the Federation has grown, especially in the areas of standardisation and reference materials. We have improved scientific cooperation with other international laboratory professional organisations. The Education and Management Division has maintained its role in analytical quality and has expanded the IFCC role in the pre-analytical and post-analytical phases. The Communications and Publications Division has restructured itself to meet the challenges of electronic publication and is now ready to benefit from this. The creation of the Congress and Conference Division was a recognition of the importance of these activities to the IFCC and to national and corporate members.

Some of the other features of the past three years include the very important name change to the International Federation of Clinical Chemistry and Laboratory Medicine, highlighting the clinical relevance and importance of our profession. The Statutes of the Federation have been modified to limit the amount of time any one person can spend on the Executive Board. The voting procedures at the Triennial Council meeting have been made clearer and more practical, thus strengthening our democracy by avoiding confusion and misunderstanding. Representatives of the Corporate Members have been formally included in the structure of each of our Divisions. It has also been clearly demonstrated that the Triennial Congress will rotate to different parts of the world.

In all the discussions about the strategic plan the Executive Board has been very clear that putting it into action would involve greater expense. A decision was made, with your support, that increased activity would justify a budget deficit, particularly in the early stages of new activities. A commitment was made by the Board that the

deficit would be met from the reserves of the Federation, that it would not be allowed to continually increase, and that over a three year period there would be indications that it was beginning to decrease. In addition, this Board accepted the responsibility of presenting a financial plan that would move towards the end of budget deficits. All this has been put in place.

Towards the end of 1999 the Board successfully concluded discussions with the World Association of Societies of Pathology and Laboratory Medicine. The IFCC and WASP have issued a joint policy statement on "Principles of Clinical Laboratory Accreditation". Among many other points it clearly states that the laboratory can be directed by scientists or physicians, with the appropriate initial qualifications and specialised post-graduate professional education and training in clinical laboratory work. This is a vitally important statement for the members of our national societies.

None of this would have been possible without the professional and dedicated support of the IFCC Technical Secretariat. The complexity of the Federation has increased. The need to move to a larger and stronger Head Office structure has been accepted by the Board. To maintain operational efficiency and effectiveness, while at the same time being financially responsible, this major change will be phased in over a three to five year period.

Large organisations can appear very distant and unreal. One of my goals as President has been that this Board should be present to you as real people, not simply as names holding official positions. We have tried to visit as many countries as possible, to get to know many of you so that we can indeed refer to you as friends and colleagues. To a great extent we have succeeded. However, it is not possible to meet everyone and we hope that the next Board will be able to continue the process of making good contact with as many members as possible.

I would like to thank Gérard Siest, John Whitfield, Laszlo Muszbek, and Hartmut Wetzel, who are all leaving the Board after devoting much time and their considerable talents to the benefit of the IFCC. You have been well served by them and we all thank you for having given us the opportunity to both lead and serve.

There is so much professional, scientific and educational excitement and challenge to which we can all look forward. I have every confidence that under the leadership of Professor Mathias Müller, the next Executive Board will work hard to meet your needs and expectations and further expand the vision and role of the International Federation of Clinical Chemistry and Laboratory Medicine.

M J McQueen
President, 1997-99

1999 Triennial Council Meeting

At the Council meeting in Florence, representatives of fifty-one of the Members of IFCC gathered to hear reports of activities in 1997-99, to raise issues for EB consideration and action, and to elect the EB for the next three years.

The following were elected to serve on the IFCC EB from 2000 to 2002: Mathias Müller, President; Carl Burtis, Vice-President; Renze Bais, Secretary; Paolo Mocarelli, Treasurer; Wieland Hölzel, Corporate Representative; and Rosa Sierra Amor, Chris Lam, Gassan Shannon, Members. Matthew McQueen will continue on the EB as Past President.

Executive Board (EB)

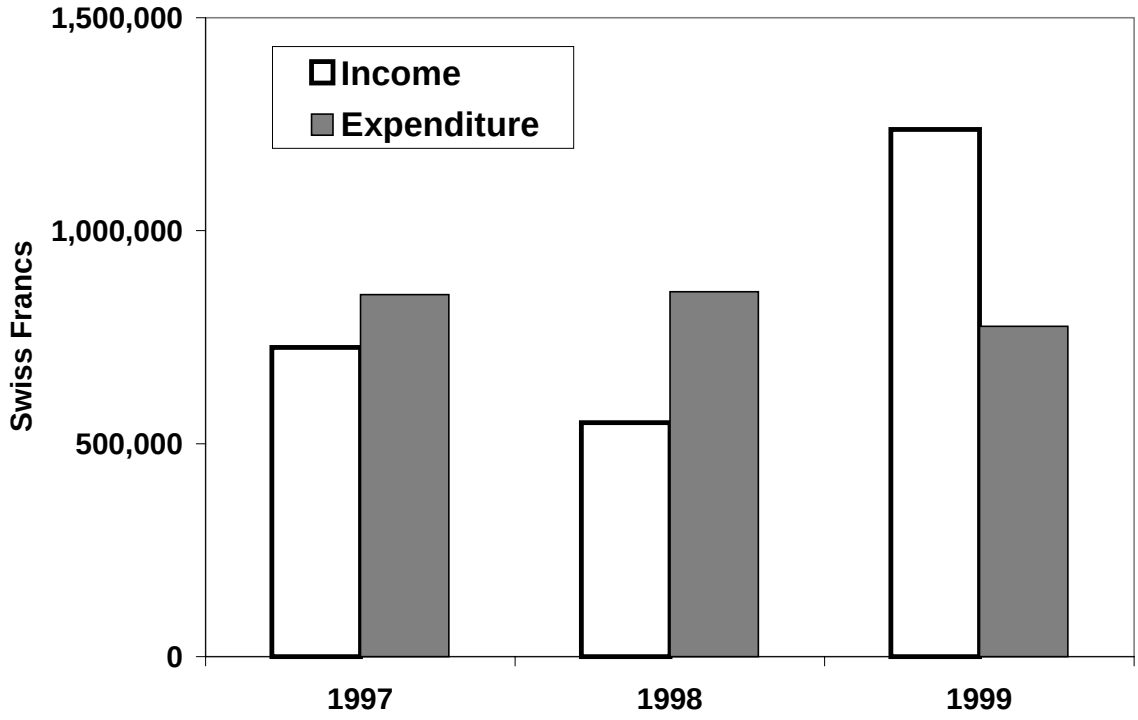
EB met three times in 1998, in Mexico City, Mexico; Florence, Italy; and Antalya, Turkey. The last meeting included the newly elected members of the EB for 2000-2002, to familiarise them with current issues and facilitate the transition. Each of the EB meetings took place at a national, regional or international conference to increase the contacts between EB members and clinical chemists from national societies.

At the meeting in Mexico City the EB reviewed the Actions arising from the Strategic Plan, in preparation for the Council meeting in Florence. EB was greatly assisted by the work of Jerry Galwas and Peter Lehman, who have been working throughout this and the previous EB's terms to help with the planning process.

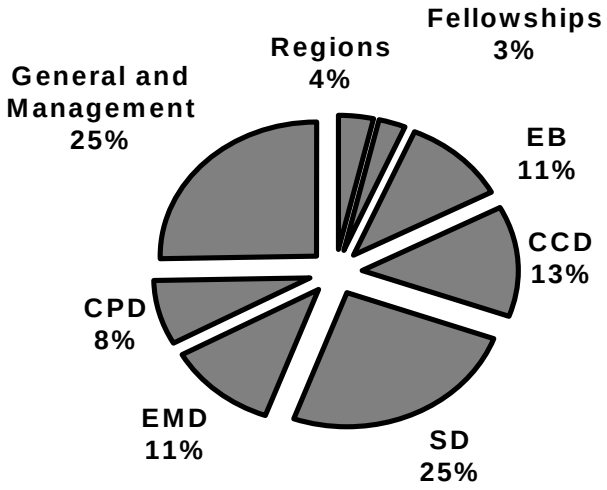
Also during 1999, IFCC co-sponsored an important meeting in Stockholm on Quality

A quick view of IFCC finances for 1997-1999

As shown in the first Figure below, income and expenditure were broadly in balance over the three years 1997-99. As usual, the third year which contained the International Congress of Clinical Chemistry showed a positive outcome whereas in 1997 and 1998, expenditure exceeded income. **The overall result across the 1997-99 triennium was a surplus of 31,000 Swiss Francs.**



The major sources of income are Members' and Corporate Members' subscriptions, ICCC profits, and contributions towards Scientific Division projects and specialised conferences. The pattern of IFCC expenditure, aggregated across the three years, is shown in the pie chart below. The major items of expenditure are within the Scientific Division (SD) and in maintaining the infrastructure of our organisation. The three other Divisions account for just over a third of the expenses.



Specifications for Laboratory Medicine. This meeting, initiated by IUPAC, attracted over 100 participants from 26 countries and produced a consensus statement setting out the ways in which analytical performance specifications should be derived. The proceedings of this conference have been published and the consensus statement has been widely circulated. This collaboration, based on professional experience and data, is increasingly important at a time when standards organisations are active in discussing quality standards, and it is essential that clinical chemists use all available routes to influence this process.

Awards

The IFCC Awards were increased by the addition of a new lifetime achievement award, for Distinguished Contributions to Education, and a new award for scientific work in the field of evaluation of usefulness of laboratory tests. The former award is sponsored by Beckman Coulter and the latter by the European Diagnostics Manufacturers Association. The IFCC is also grateful to Bayer for their continuing sponsorship of the Distinguished Clinical Chemist and the Henry Wishinsky Awards, and to AVL for sponsorship of the IFCC-AVL Award.

The Awards Committee for 1997-99 comprised Mathias Müller (Vice-President), David Bruns (USA), Oswald Müller-Plathe (Germany) and Kwang-Jen Hsaio (China - Taipei). They solicited and assessed the nominations from National Societies for the three major awards and participated in the judging of the IFCC-AVL and IFCC-EDMA prizes. The Awards Committee was assisted by Werner List (Austria) for the IFCC-AVL Award and by B van Weemen (Netherlands) and Wieland Hölzel (Germany) for the IFCC-EDMA Award. More than 150 manuscripts and publications were submitted and reviewed for the latter two awards. The proceedings of the IFCC-AVL Award have been published as Advances in Critical Care Testing, edited by W F List, M M Müller and A St John.

Professional Scientific Exchange Programme

In 1998 this programme for young colleagues (less than 40 years of age) in our discipline was founded and welcomed by the IFCC membership. The idea behind this programme was to encourage twinning between laboratories and to support training and scientific work on an individual basis. During 1999, 12 applications for this IFCC initiative were received and 7 scholarships (long-term visit: 1, short-term visits: 6) were granted. The young colleagues came from Croatia, Mexico, Romania, Turkey, and Vietnam. They were trained in laboratories in Austria, Hong Kong, Italy, Luxemburg, and Sweden. The topics and techniques dealt with during these visits were related to cellular surface markers, cytokines, oxygen radicals, diabetes mellitus, inborn errors of metabolism, flow-cytometry, immunoassays, and molecular biology techniques.

Two reports of training visits have been published in eJIFCC so far and others will follow soon. The following reports are available:

- Nguyen Thi Muoi (Vietnam): Personal Educational Programme in Sweden
- Elena Bochukova (Bulgaria): Characterisation of candidate gene for DYT3.

IFCC Office

The increasing activities of the IFCC, and the need to provide administrative support to IFCC volunteers, have led to an increase in the staff at the Technical Secretariat in Nancy. Technical aspects of the Web-based activities of IFCC have also been centralised and form an important part of the work. In recognition of these changes, the Technical Secretariat has been renamed as the IFCC Office, refurbishments are being undertaken, and extra staff are being recruited.

Communication and Publications Division (CPD)

The members of the Communication and Publications Division for 1999 were Bernard Gouget, (France) (Chair), Gordon Challand, (UK) (Secretary, Liaison CCLM), Andreas Rothstein, (Colombia) (News Editor), Johan Waldenstrom, (Sweden) (Chief Editor eJIFCC), Craig Webster, (UK) (Web Coordinator), Andrew Wootton, (Australia) (eJIFCC and Web Assistant), and Stephanie Wells, (Corporate Representative). Rosa Sierra-Amor acted as EB Liaison.

The CPD met as a whole group on two occasions. The first was in New York, to analyse the outcomes of its actions within the strategic plan, and to develop external communications. The second was in Florence at the ICCC, at which the CPD organised a 'cyberstand' which made it possible to promote the web-site, to provide

access to publications, and to better respond to the needs of the other Divisions and the IFCC membership.

The CPD reconfirmed and reinforced the use of electronic communication. The CPD has formalised e-mail for discussions, this now being the preferred means of communication between IFCC volunteers and many of the National Societies. It was agreed that setting up an email discussion forum had facilitated communication between CPD members and the other IFCC groups.

The major objective of the CPD is to communicate the work of the IFCC to clinical laboratory scientists, physicians and health policy makers worldwide, thereby providing continuing education in both printed and electronic forms, and at the same time promoting the image of the IFCC to its individual members, to industry and to the world at large. Public relations is also an important, implicit, role for the CPD. One of the priorities for the CPD in 1999 was to redefine its mission around the following objectives:

- define the types of communication and of multimedia training that might be proposed to IFCC members
- identify, evaluate, ensure continuous technical awareness, and act as a central point for access to existing 'products', notably those coming from Working Groups, National Societies and Corporate Members
- develop new products, such as the redesigned web-site
- make widely available new techniques for professional training, (such as self-training, and tutorials) together with the other Divisions
- prepare the most appropriate supporting techniques for widespread use of the new teaching techniques.

In pursuing these objectives, CPD undertook a range of new and continuing actions in 1999.

Activities at the XVIIth ICCC: Worldlab'99

In collaboration with the Technical Secretariat, the CPD organised the IFCC booth. Posters presented the Divisions and their activities, and there was distribution of reports from Working Groups, interactive forums with members, and promotion of future congresses. Posters listing members of Divisions were displayed on the booth. The IFCC publicity brochure was distributed on the booth and at the opening ceremony. The publicity brochure for the IFCC is also available as a download from the IFCC web site.

The IFCC stand at Worldlab'99 included a demonstration of the IFCC web site during the entire meeting. The demonstration was a big success, leading to a CPD decision to organise (with the support of the Corporate Members) a Cyber-stand or a Cyber-cafe during future official meetings of IFCC. The IFCC Cyber-stand has been present both at congresses organised under the auspices of IFCC (Florence, June 99) and also with help from IFCC Corporate Member Agilent Technologies at the AACC in New Orleans. The stand encourages familiarity with the use of personal computers and with searching for information on the World-wide web.

The ICCC was also used to organise an Editors' Breakfast for editors of the National Societies' journals. The purpose was to present the new rules for publishing scientific texts from IFCC and the collaborations with other journals.

IFCC Web Site

Craig Webster, as Web Coordinator, with the aid of the Web Coordinator assistant (Andrew Wootton) and the CPD have closely collaborated to define the content and design of the IFCC web site, the electronic publication eJIFCC and new documents, and to coordinate the Internet activities of the IFCC. The Web Coordinator works closely with the web specialist and the Technical Secretariat to ensure that the web site is well maintained and works correctly. The web coordinator is the chair of the WWW-WG whose role is to develop and enhance the IFCC web site.

The web site is now well established with an average 1500 visits per month. The aim of the web site is to promote the IFCC, disseminate IFCC documents, and provide access to the eJIFCC and other resources for people interested in clinical chemistry and laboratory medicine. After several modifications, a consistent look and feel to the site has been introduced using a new design intended to project a professional image of IFCC to the world. The web site is registered as www.ifcc.org and maintained in Nancy, France by the web specialist (Jean Marie Ziegler) who updates the site with information supplied by the

Technical Secretariat, after approval by the Web Coordinator.
The current site shows the organisational structure of the IFCC, with dedicated subdirectories for the EB and each of the divisions. (SD, EMD, CPD, CCD). The material presented is equivalent to the content of the IFCC Handbook, recent strategy papers and, for some Divisions, extra material which has been developed with specific Working Groups / Committees. In addition, the interactive functions include links to member societies and Corporate Members, to a database of IFCC and other biomedical meetings and conferences, and to a system of mailing lists.

The web site promotes a multidisciplinary approach to patient care by obtaining educational material, making it available on the web site and by providing links to other relevant resources. The web site will promote the patient-orientated approach by publishing pathophysiological articles in eJIFCC and by providing links to other relevant resources.

Publication of Recommendations and other IFCC documents
Following an agreement with IFCC, Walter de Gruyter and Co gives 100 pages per year in their journal *Clinical Chemistry and Laboratory Medicine* (CCLM) to IFCC to publish news, approved recommendations and other documents such as guidelines, position papers, reports, evaluations, etc. The copyright for these contributions is held by IFCC. In parallel with the paper version of CCLM, the IFCC web site has a link to the web site of CCLM which allows the IFCC documents to be consulted by all members at no cost.

Gordon Challand is responsible for editing IFCC recommendations and documents. He is also the contact person for other editors, who can publish IFCC scientific documents from CCLM, with permission from the CPD Chair and quoting the CCLM version as the source. Taking into account the agreement with Walter de Gruyter, the CPD has prepared a new version of the process for publishing IFCC recommendations.

Electronic Journal of the IFCC (eJIFCC)
The JIFCC-Editorial Working Group is a new Working Group to be established, including Johan Waldenstrom as Editor in Chief. The JIFCC has been converted to a wholly electronic publication, now called eJIFCC. This occupies a separate subdirectory of the main IFCC web site. A new layout has been designed. Development will continue to ensure that this publication continues to grow and attract attention.
Three issues of eJIFCC have been published. The content is oriented towards educational articles and updates. An email list has been created in order to better appreciate the use and impact of the journal. The instructions for authors have been re-written in order to more easily acquire the texts. The content and layout of the journal have been rewritten in order to facilitate the acquisition of text. Significant issues remain, relating to eJIFCC's niche and the target audience. It should not duplicate the role of other established journals, many of which have their own on-line version, and it must attract people to use the IFCC web-site.

IFCC News
Andreas Rothstein (News Editor) has created a News-WG in order to prepare eJIFCC news in a format that is easily understood and modeled along the lines of the newsletter. The news is published in CCLM (four issues in 1999) and in eJIFCC on the IFCC web site. The web site is used to help in the collection of news from members.

Future Goals
The experience in 1999 suggests that in the next year CPD should further reinforce the web site, and develop a plan for the professional external promotion of IFCC, together with the Corporate Member (Stephanie Wells).The challenges for the CPD in 2000 are to:

- Maintain the integrity and image of IFCC as a scientific organisation
- Enhance the key position of IFCC through provision of improved communications within Clinical Chemistry and Laboratory Medicine.
- Provide opportunities to increase revenues of IFCC.

The major opportunity for differentiation and growth appears to lie with the web site, as the primary means of both Communication and Publications.

Congress and Conference Division (CCD)

Membership of the Congress and Conference Division for 1999 comprised: Graham Beastall (UK) (Chair); Joseph Lee (Hong Kong); Josefina

Mora (Spain); Thomas Moyer (USA); Lasse Viinikka (Finland); Hermann Wisser (Germany); Paul Whitlock (Corporate). In addition Gerard Siest served as EB Liaison and Francesco Dati as Consultant.

Membership changed significantly during the year as the Division said thanks and farewell to Oren Zinder (Israel) (former Chair), Jerzy Naskalski (Poland) and Francesco Dati (Germany). CCD welcomed in their place three new faces to IFCC in Joseph Lee, Josefina Mora and Lasse Viinikka. They also managed to retain the invaluable services of Francesco Dati for his work in collating the rolling program of conferences and meetings. Six Associate Members from a wide geographical base were introduced to CCD to provide balance.

The Division met twice during 1999, in June in Florence in association with the ICCC and in November in Dusseldorf in association with MEDICA and MediLab.

The main work of CCD continues to be liaison with and support for the organising committees of International Congresses of Clinical Chemistry (ICCC) and Regional Congresses of Clinical Chemistry (RCCC). During the year communication took place with the organisers of the Florence, Kyoto and Orlando International Congresses, and with AFCB, APFCB, COLABIOCLI and FESCC over their forthcoming Regional Congresses.

The highlight of the year was the XVIIth International Congress of Clinical Chemistry (WorldLab 1999) in Florence - a magnificent Congress which was successful in every way and a triumph for the organising team. During 1999 CCD played a leading role in receiving and processing applications for the ICCC in 2005 - the eventual decision going in favour of Orlando in the USA.

CCD continues to provide information and advice, as required, for the program of specialist Master Conferences (Bergmeyer, Beckman, Roche) organised by the Scientific Division and the respective Steering Committees.

CCD has also developed a scheme to encourage other organisations to hold its meetings under the auspices of the IFCC. Through this scheme IFCC members get to learn about excellent scientific meetings and the organisers benefit from the status and publicity that IFCC support can provide. Ten meetings were accorded IFCC auspices during 1999.

CCD has made increasing use of the IFCC Website during the year. All CCD Guidelines are now available, as is the rolling program of conferences and meetings and the application form for obtaining IFCC auspices. In addition, Regional contacts for IFCC Corporate Members may now be located. It is planned to expand this service during the year with a full package of conference support being made available through this medium.

Finally, CCD is working closely with the Executive Board to define the contribution that scientific congresses, conferences and meetings should make to IFCC in the interests of both the organisation and its members.

Education and Management Division (EMD)

The EMD activities for 1999 were overseen by Peter Wilding (USA), Chair; Marek Dominiczak (UK), Michael Mayer (Israel), Risto Heikkinen (Finland), Daniel Mazziotta (Argentina) and Ian Wilkinson (Canada) as Members. They met in Florence, and again in London in November, to review and set directions for this Division.

Courses

A Master Course was held in Prato, Italy immediately prior to the ICCC, and a Workshop in Florence, Italy at the Congress itself. In addition, a project entitled Public Understanding of Science and Health (PUSH) was organised in collaboration with the EMD. This project operated in Italian schools and culminated with meetings held at the ICCC. In each case EMD members participated and collaborated with local organisers.

The EMD is in active contact with the organisers of the following and participation by the EMD is anticipated:

- IFCC/Roche Conference in Kyoto in 2000
- Chinese National Conference in Hong Kong in June 2000
- Ninth Asian Pacific Congress in New Delhi in 2001
- XVIIIth ICCC 2002 in Kyoto, Japan.

Committees and Working Groups

Analytical Quality
Projects in Latin America were continued in 1999 and proposals for similar activities in Bulgaria, India and Iran are under consideration. These projects consist of distribution of donated control sera and reports on test performance for participants. Information on outcomes was presented at the IFCC General Conference and at a number of meetings within Latin America. Follow-up and continuation of EQA activity in participating countries is important and may be helped through further serum donations or through local production.

Pilot studies between Germany and Argentina to create a network of Reference Laboratories for enzyme measurements were completed in 1999 and details were reported as a poster at the ICCC. Translations of the document "Fundamentals for EQA" are now available in nine languages and distribution has taken place.

Financial Laboratory Management
The C-FLM participated actively in the Master Course held in Prato. Closed and Open Meetings were held in Florence in June 1999. The report on the Field Study of Laboratory Organisation and Management Cases: Slovakia and Czech Republic, (Heikkinen et al) published in cooperation with Jan Balla and Gustav Kovacs, Slovakia 1999 has now been widely distributed.

Systematic Reviews In Laboratory Medicine
The C-SRLM participated actively in the Master Course held in Prato and held an open meeting in Florence. At the ICCC, the Chair of C-SRLM gave an overview lecture in a symposium on Evidence Based Medicine with about 500 attendees. Two posters were presented. The C-SRLM also participated in the Cochrane Congress in Rome in October, 1999 and it has been agreed that the committee will maintain a contact member for C-SRLM to the Cochrane Committee on Screening and Diagnostic Tests.

The C-SRLM is continuing to develop a data base and to monitor other activities and databases for systematic reviews.

Visiting Lecturer Program
The VLP provided lecturers in four countries in 1999 (Paraguay, Japan, China and Uruguay). Several requests for use of the VLP have been received for 2000/2001 including support for meetings in Mexico and Zimbabwe.

Curriculum Development
This committee was established in 1999 and the intention is to examine curricula for medical students and for Clinical Chemists. The Committee will have links with Working Groups for specific areas of the world. A combined meeting was held with a Working Group for a project in La Plata, Argentina which will be completed in 2000.

Molecular Biology Teaching
The committee organised a course in connection with the 1st International Congress of Clinical Molecular Biology in June 1999 in Florence, Italy. Also, this committee will operate a major Practical Training Course in Kyoto in 2000 and is exploring opportunities for providing help and advice in forthcoming meetings in Rabat, Morocco and Mexico.

Scientific Division (SD)

During 1999, the following members served on the SD Executive Committee: Carl A. Burtis (USA) (Chair); Jean Claude Forest (Canada) (Vice-Chair); Jos H H Thijssen (Netherlands) (Secretary); Yoshihisa Itoh (Japan); John G Ratcliffe (UK); Andrew St. John (Switzerland); Rudolph Tauber (Germany). Three meetings of the SD were held in 1999, in Schaffhausen, Switzerland; Florence, Italy; and Sao Paolo, Brazil.

International Organisations
SD maintains contact and collaborates with many international organisations interested in standardisation issues. These include:

Institute for Reference Material And Measurement (IRMM)
Projects on HbA1c, enzyme reference material, and cortisol matrix based reference material. are running in cooperation between IRMM and IFCC. The cortisol material is now available and the package insert that will be included has been reviewed and approved by the SD. Projects on HCG and myoglobin are under discussion. Because of the close relationship that is developing between the SD and the IRMM, a member of the IRMM will be asked to attend one of the SD annual meetings.

National Committee for Clinical Laboratory Science (NCCLS)
It has been agreed that there will be continued cooperation; the two organisations will exchange project proposals to prevent unnecessary duplication of efforts. In addition, the NCCLS will inform the IFCC of ongoing ISO/TC-212 activities

National Institute Of Biological Standards And Control (NIBSC)
NIBSC has evaluated the PSA preparations developed by Dr Thomas Stamey and the IFCC C-PSA and has recommended that WHO accept them as International Standards.

International Union Of Biochemistry And Molecular Biology (IUBMB)
A symposium on molecular biology was organised in Florence as a joint effort between the IFCC and IUBMB.

International Association for Therapeutic Drug Monitoring And Clinical Toxicology (IATDMCT)
The leadership of the IFCC and IATDMCT met at the ICCC in Florence and agreed to close their joint committee. In its place they agreed to start a series of working groups on items of specific interest to the two organisations. The first will be a WG on immunosuppressive drugs. The IFCC/SD organised a symposium at the International Congress of the IATDMCT in Cairns, Australia, Sept 13-17, 1999. During this Congress, it was agreed to organise a joint scientific session at the next IATDMCT Congress scheduled for Washington, D.C., USA in 2001.

International Society Of Thrombosis And Haemostasis (ISTH)
On behalf of the IFCC and the SD, Mathias Müller gave a presentation at the Scientific and Standardisation Committee (SSC) of the International Society on Thrombosis and Haemostasis (ISTH) during the Congress held in Washington, DC in August 1999.

International And Regional Congresses

During the XVII International Congress Of Clinical Chemistry, symposia were presented by SD Committees on Molecular Biology Techniques and Standardisation of Flow Cytometry. In addition, the Chairs of SD Committees and Working Groups presented 22 posters and organised 16 open and 6 working meetings.

The SD presented a Workshop entitled "Future trends in Laboratory Medicine" at the XX World Congress Of Pathology And Laboratory Medicine Sao Paulo, Brazil 1999

Two members of the SD have been invited to serve on the Organising Committee of the XVIII Congress in Kyoto, 2002, and contact has been made with organisers of regional meetings including the Arab Federation of Clinical Biology Congress in Rabat, Morocco, 2000, the 9th Asian-Pacific Congress of Clinical Chemistry, New Delhi, India 2001 and the 14th European Congress Of Clinical Chemistry and Laboratory Medicine, Prague 2001.

Committees

Advanced Technology (C-AT)
This Committee has been converted into a Working Group on Microtechnology with Larry Kricka as Chair.

Nomenclature, Properties And Units (C-NPU)
Three further C-NPU documents have been accepted as Technical Reports: these are on Properties and Units in Clinical Bacteriology, in Clinical Pharmacology and Toxicology, and in Clinical Allergology. Endorsement of these documents from other relevant international organisations has been requested; the American Academy of Asthma and Allergology has endorsed the third of these. Documents will be sent for publication on the IFCC-IUPAC Website (www.ifcc-iupac.suite.dk).

Xavier Fuentes-Arderiu has stepped down as Chair of the C-NPU and Urban Forsum will serve as the new Chair. Members of the C-NPU will continue to participate in the activities of the subcommittees of the Joint Committee on Guidelines in Metrology (JCGM) under the umbrella of the International Organisation for Standardisation (ISO).

Molecular Biology Techniques In Clinical Chemistry (C-MBT)
Christine Mannhalter is the new chair of the Committee and three new members have joined it. The national societies and Corporate Members have been contacted and asked to confirm or

nominate their Associate Members to this Committee. The following projects are either in progress or being considered:

- Data collection regarding the use of nucleic acid diagnostics in clinical chemical laboratories. A questionnaire has been prepared to assess the status of nucleic acid techniques in clinical laboratories. Using an earlier draft, a pilot study was conducted in Finland; the questionnaire has been modified and a worldwide survey is now being conducted.
- External Quality Control Programs.
- Reference material for nucleic acid diagnostics.
- Standardisation of pre-analytical procedures.
- Nomenclature.

The C-MBT organised and presented a symposium at the ICCC in Florence, Italy.

Plasma Proteins (C-PP)

The project on calibration of BCR CRM 470 for immunoglobulin IgG subclasses continues. In addition, the soluble transferrin receptor is being considered as a candidate for value assignment. IRMM and a number of Corporate Members have expressed interest in this project.

Work on reference intervals for serum proteins, based on values assigned to CRM 470, has been conducted in Sweden. The same protocol will be used to study ethnic differences in samples from UK, Italy, Hong Kong, Japan, Malaysia and Portugal.

Detailed EQA data have now been assembled from various National schemes and publications will be prepared on the introduction of CRM 470 and its impact.

Standardisation Of Clinical Flow-Cytometry (C-SCFC)

The Committee organised and presented a symposium at the ICCC in Florence. In addition they published a paper on flow cytometric investigation of haematological malignancy. This Committee has been closed, effective December 31, 1999, and replaced with a Working Group on Cell Markers. The name of the new WG is "Intracellular and Cell Surface Markers" (WG-ICSM).

Therapeutic Drug Monitoring (C-TDM)

As mentioned above, this Committee has been closed and replaced with a Working Group on immunosuppressive drugs.

Markers For Bone Turnover And Bone Disease (C-MBTBD)

The initial goal of the C-MBTBD is to begin efforts to standardise assays for one analyte from each assay family: matrix synthesis, matrix maturation and matrix mineralisation. Proposals have been prepared for the standardisation of bone ALP and osteocalcin and are currently under review.

Standardisation Of Markers Of Cardiac Damage (C-SMCD)

A highly successful Bergmeyer Conference on Cardiac Markers was organised by the C-SMCD in Tutzing, Germany in February, 1999. The proceedings are available as Supplement 230 (1999) of the Scand. J. Clin. Lab. Invest. "Markers of Cardiac Damage – Current Status and Future Trends".

After the conference the Committee met with representatives of various interested companies and the IRMM. All companies present indicated an interest in evaluating myoglobin reference material, several companies may be able to provide suitable reference materials, and IRMM is willing to act as the coordinating centre for the project. Progress has now been made on the participation of all major companies in the evaluation of myoglobin reference material. Several companies promised to provide suitable reference materials. The Committee has prepared a detailed protocol for the evaluation of these myoglobin candidate reference materials. A questionnaire on the use of cardiac markers has been distributed to all 4,300 participants of the ICCC in Florence. Because the response rate was rather low, national societies have been asked to stimulate reactions from their members.

The AACC is working on a project on Troponin I. Six candidate materials have been tested and characterised, they will be used for the next study, scheduled for late 1999.

Standardisation of Coagulation Tests (C-SCT)

This Committee was organised in 1998 and is a joint activity of the IFCC and the ISTH. The initial goal of the C-SCT is to bring together the

expertise of IFCC in Reference Method development for substances of "traditional" clinical chemistry and the expertise of the SSC of the ISTH in the development of Reference Preparations ("Standards") to work jointly in this standardisation effort.

At a meeting in Ljubljana in 1998, basic discussions were started by the Committee with the peer committee ISTH-SSC (Scientific Standardisation of Coagulation) on defining standards on a molar base of a defined molecule instead of using activity. A draft position paper entitled "Standardisation of coagulation tests" has been written and is under review. It includes the principles of the assays, performance goals, specificity, pre-analytical factors, instrumentation, reference range establishment by reference methods and implementation.

In the areas of interest (thrombophilia, cardiovascular risk factors and markers of fibrinolysis), the C-SCT has chosen protein-C, antithrombin and fibrinogen as the analytes on which to begin standardisation efforts. For each of these subjects, a small working group will be organised consisting of one member of the C-SCT plus one member of the ISTH-SSC.

Working Groups

Selective Electrodes (WG-SE)
Wolfgang Külpmann has taken over as Chair of this group. The WG has written two documents that are currently under review: on a reference method for ionised calcium, and on conventions for reporting sodium and potassium by ion-selective electrodes. These have been submitted to the SD for approval and publication

Standardisation Of Human Chorionic Gonadotropin (WG-SHCG)

The goal is to assist users and manufacturers in improving the clinical utility of hCG assays by:

- Encouraging adoption of unambiguous and improved nomenclature for hCG-related molecules.
- Organising production of reference preparations for six important molecular forms of hCG [hCG, nicked hCG (hCGn), α- and β-subunits of hCG (hCGα and hCGβ), nicked β-subunit (hCGβn), and β-core fragment (hCGβcf)].
- Working to improve the quality of control materials for internal and external quality assessment of hCG assays.

The WG has made significant progress in meeting these objectives. It is collaborating actively with NIBSC/WHO and several of the preparations probably will become WHO standards. Purification of the materials is complete; preliminary characterisation confirms that all preparations are of excellent quality. Further characterisation is in progress. Comparative and stability studies, coordinated by NIBSC, have begun and it is anticipated that the WHO Expert Committee for Biological Standards will consider the suitability of the preparations as international standards in autumn 2000.

Standardisation of LP (a) (WG-LP (a))
The IFCC lipoprotein(a) standardisation project aims to improve Lp(a) measurement in clinical laboratories by introducing a secondary Lp(a) reference material for use by manufacturers of diagnostic assays. In phase 2 of the project four proposed reference materials (PRMs) selected in phase 1 were compared for their analytical performance, commutability, and method harmonisation in 27 optimised Lp(a) test systems.

Results of precision and linearity testing were similar for all materials. However, among-assay harmonisation of Lp(a) values between systems varied from 11% to 22% CV. For one material, PRM 2B, 78% of systems were within ±10% of the consensus mean Lp(a) concentration, and among-assay CV was <8% for 18 immuno-nephelometric and immunoturbidimetric systems.

On the basis of these results and documented stability, PRM 2B will be used as the common calibrator in the final harmonisation study. It has been assigned an Lp(a) protein concentration in nmol/L using a reference Lp(a) measurement system in which a purified Lp(a) preparation of accurately defined composition was used to calibrate a standardised and validated Lp(a) assay. Provided results are satisfactory, the WG intends to put the material forward to WHO, in order to achieve the status of WHO reference reagent for Lp(a).

Standardisation of HbA1c/Glycohemoglobin (WG-HbA1c)
The IFCC established the WG-HbA_{1c} with the goal of developing a scientifically based reference system that will act as the basis for ultimate standardisation of all HbA_{1c} assays.

An international network of 11 reference laboratories participated in a preliminary method comparison. The results were discussed in Florence. The WG is convinced that all methods can be anchored to the IFCC-system. In order to define exact relationships between all methods, a new study has been designed and has been brought to the attention of all manufacturers of reagents for glycohemoglobin. This study will comprise 40 single blood samples and 6 pools of blood. This study was planned for November 1999.

PSA Standardisation (WG-PSA)
NIBSC has evaluated the Stamey/IFCC PSA preparations and found them suitable as a WHO standard. NIBSC has submitted a formal application to WHO to have the preparations considered as a WHO standard.

Calibrators in Clinical Enzymology (WG-CCE)
Considerable progress has been made in developing a set of Standard Operating Procedures for the IFCC enzyme methods (CK, LD, GGT, ALT, AST, and amylase) at a reaction temperature of 37^{o} C. In conjunction with IRMM, plans are being finalised to recertify BCR reference materials at this temperature.

AST and ALP preparations from recombinant technology are being evaluated for their commutability with patients' specimens. A multienzyme reference material containing ALP, amylase, ALT, AST, CK, LDH, GGT and lipase is being prepared using information from monoenzyme CRMS. This work is being done in collaboration with IRMM.

Effective January 1, 2000, this WG has been converted to the Committee on Calibrators In Clinical Enzymology (C-CCE)

Standardisation Of Cortisol Measurements (WG-SCM)
The IFCC Working Group for Standardisation of Cortisol Measurements has prepared and validated a panel of cortisol reference materials to be used to standardise cortisol test systems. This panel of samples consists of 35 sera obtained from 'single blood donations' whose cortisol contents have been established by an ID GC/MS method in two reference laboratories. The suite of 34 specimens have been analysed by 2 laboratories (Linda Thienpoint and Lothar Sieckmann). The results show excellent agreement between laboratories. The specimens have been transported to IRMM and they have recently been offered to companies. The price for IFCC Corporate Members is lower than for non-members. Together with IRMM the WG is preparing documents that need to be sent with the samples and the first draft of a certificate has been made. This is the first example of jointly produced IRMM/IFCC reference materials.

Patient Sample Identification (WG-PSI)
Sample misidentification can result in severe consequences for the patient. To explore this critical area of health care delivery with an integrated vision of the problem, the IFCC has organised a Working Group on Patient/Sample Identification (WG-PSI). Its first activity has been to develop a questionnaire to be used to collect information from a variety of hospitals about their system in use for sample/patient identification. Using this questionnaire, data has been collected from a variety of hospitals about their systems for patient/sample identification. Preliminary data was presented at the ICCC in Florence. This survey has been expanded internationally to determine the current status of sample identification schemes in use around the world.

Conferences
A successful Bergmeyer Conference on Cardiac Markers of Myocardial Damage was held February 1-3, 1999 in Tutzing, Germany. The next conference is scheduled in 2001 in Tutzing, on Autoimmune Diseases. The next Arnold O. Beckman European Conference is scheduled for October 12-14, 2000 in Paris. The title of the Conference is " Frontiers in Molecular Basis of Disease: Cell Biology of Neuronal Dysfunction.". The second IFCC/Roche conference has been organised for April 16-19, 2000 in Kyoto, Japan. Its topic will again be "Human Genomics: The Basis Of The Medicine Of Tomorrow."

Nominations Committee

The Nominations Committee for the 1999 EB elections was chaired by Mary Burritt, with José

Abol Corrêa, Peter Garcia-Webb, Gerard Siest and Yang Zhen-Hua as members. In consultation with the Executive Board, the Rule governing voting procedures at the Council meeting was revised to reduce the time taken in conducting the ballot. Nominations for EB officers and members were sought from Member societies and voted on at the June 1999 meeting of Council. The new procedures, which reduced the number of rounds of voting needed to reach a result, substantially improved the Council meeting by allowing more time for reports and discussion.

Enquiries about the IFCC may be sent to:

IFCC Office, 30 Rue Lionnois, F-54000 Nancy, France. Fax 33 3 83 32 13 22; Email thirion@ifccts.u-nancy.fr

Updated information is available at www.ifcc.org

IFCC Publications, 1999

The following publications appeared in 1999 as a result of IFCC projects. A number of other reports are in progress and may be available through the IFCC Web Site.

Apple FS. Biochemical markers of thrombolytic success. IFCC Committee on Standardization of Markers of Cardiac Damage. Scand J Clin Lab Invest 1999; Suppl 230:60-66.

Christenson RH, Duh SH. Evidence based approach to practice guides and decision thresholds for cardiac markers. Scand J Clin Lab Invest 1999; Suppl 230:90-102.

Dati F, Panteghini M, Apple FS, Christenson RH, Mair J, Wu AH. Proposals from the IFCC Committee on Standardisation of Markers of Cardiac Damage (C-SMCD): strategies and concepts on standardisation of cardiac marker assays. Scand J Clin Lab Invest; 1999;Suppl 230:113-123.

Heikkinen R, Mayer M, Orntoft T and Wilkinson I. Field Study of Laboratory Organisation and Management. Cases: Slovakia and Czech Republic. Published in cooperation with Jan Balla and Gustav Kovacs, Steering Committee for Rationalisation in Clinical Support Services in Slovakia. Slovakian Society for Clinical Biochemistry and IFCC, Slovakia 1999: 1-37.

Heikkinen R, Mayer M, Orntoft T and Wilkinson I. Aims, activities and action plans - The Committee on Financial Laboratory Management (C-FLM). Clin Chem Lab Med; 37: S 108. Poster abstract- IFCC-WorldLab '99, Florence, Italy 1999.

Johnson AM. Low levels of plasma proteins: malnutrition or inflammation? Clin Chem Lab Med 1999; 37:91-96.

Mair J, Friedl W, Thomas S, Puschendorf B. Natriuretic peptides in assessment of left-ventricular dysfunction. Scand J Clin Lab Invest 1999; Suppl 230:132-142.

Orfao A, Schmitz G, Brando B, Ruiz-Arguelles A, Basso G, Braylan R, Rothe G, Lacombe F, Lanza F, Papa S, Lucio P, San Miguel JF. Clinically useful information provided by the flow cytometric immunophenotyping of haemato-logical malignancies: current status and future directions. Clin Chem 1999:45:1708-1717.

Panteghini M, Apple FS, Christenson RH, Dati F, Mair J, Wu AH. IFCC SD Committee on Standardisation of markers of cardiac damage: Use of biochemical markers in acute coronary syndromes. Clin.Chem.Lab.Med. 1999;37:687-693. Periods removed

Panteghini M, Apple FS, Christenson RH, Dati F, Mair J, Wu AH. Proposals from IFCC Committee on Standardisation of Markers of Cardiac Damage (C-SMCD): recommendations on use of biochemical markers of cardiac damage in acute coronary syndromes. Scand J Clin Lab Invest 1999; Suppl 230:103-112.

Sturgeon C, Stenman U-H, Bidart J-M, Birken S, Berger P, Lequin RM, Norman RJ, Bristow A. IFCC working group on standardisation of human chorionic gonadotropin measurements: progress report. Proc. UK NEQAS Meeting 1998, 1999; 3:134-139. Periods removed

Tate JR, Berg K, Couderc R, Dati F, Kostner GM, Marcovina SM, Rifai N, Sakurabayashi I, Steinmetz A. International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) Standardisation Project for the Measurement of Lipoprotein(a). Phase 2: selection and properties of a proposed secondary reference material for lipoprotein(a). Clin Chem Lab Med 1999; 37:949-958.

Thienpont LM. Quality specifications for reference methods. Scand J Clin Lab Invest 1999; 59:535-538.

Wu AH. Biochemical markers of cardiac damage: from traditional enzymes to cardiac-specific proteins. IFCC Subcommittee on Standardisation of Cardiac Markers (S-SCM). Scand J Clin Lab Invest 1999; Suppl 230:74-82.

The papers on markers of cardiac disease appeared in a supplement containing papers from the Bergmeyer Conference: "Markers of cardiac damage - Current Status and future trends" Conference Proceeding of the 1999 Bergmeyer Conference. Scand J Clin Lab Invest 1999: Supplement 230.