

Working Groups

ESC Working Group 15 " Computers in Cardiology "

1999/2000 Annual Report

Over the past year, the following activities have taken place under the auspices or organization of Working Group 15:

DICOM activities

Two members of our WG, Dr. R Brennecke and the chairman, continue to be active as members of the Committee on Digital Imaging of the ESC and of the Working Group 1 of the DICOM Standards Committee. This has resulted, among other things, in the following:

- All three phases of the International Compression Study (ICS) have been published simultaneously as three separate papers in the April 2000 issues of both the Journal of the American College of Cardiology and the European Heart Journal. The European contributions concerned Phase II (Effect of QCA) and Phase III (Image quality differences). The three papers were preceded by an Introductory Paper written by the project leaders of the ICS. The final conclusion of this ICS was that JPEG compression levels of 4 and 6 are acceptable for normal diagnostic purposes, but that levels 10 and 16 give unacceptable errors;
- Support in the organization of the DICOM booth and associated activities at the annual meetings of the ESC;
- Work on proposals to study the effects of JPEG image compression on high resolution X-ray images (1024² matrices).

Symposia in Amsterdam

For the ESC Meeting in Amsterdam, one symposium organized solely by our WG was accepted, namely:

Using the Internet in clinical practice and trials ,

while a second Meeting entitled:

The Electronic Patient Record in clinical practice - from OR to the outpatient clinic -

has been organized together with the WG on Cardiovascular Nursing,

New members

Fortunately, we receive regular requests from scientists to become a member of our WG. In other words, our WG is growing, which is a very positive sign! After the candidate has submitted his/her CV, it is decided whether to accept the request or not. So far, none has been rejected. This procedure is carried out in close collaboration with the ESC offices in Nice. The official number of members as of July 2000 is now 154. Of course, additional new members are very welcome and anyone interested in joining should contact the chairman.

Board and Nucleus of our WG

During the past year, we have worked on completing the nucleus of our WG, taking into account that younger people should be offered a chance to join and also that women should be represented. In addition, we have set up a proposal to fill in all the Board and Nucleus positions for the coming five years for reasons of continuity and stability. These proposals will be voted upon at the Nucleus and Member meetings at the ESC in Amsterdam.

ESC in Amsterdam.

Computers in Cardiology Annual Meeting

From September 26-29, 1999, a very successful Computers in Cardiology Meeting was held in Hannover, Germany. The meeting was ably organized by Dr Christoph Zywietz, from the Department of Biosignal Processing, and Dr Juergen Tebbenjohanns, from the Department of Cardiology, both from the Medical School in Hannover.

The meeting started with an opening symposium, which focused on the topic of "Molecular Genetic Research and Diagnosis in Therapy of Cardiac Diseases" and ended with an interesting historical resume of advances in cardiology, by Professor Peter Macfarlane from Glasgow.

The main Computers in Cardiology Symposium opened on the second day with presentations for the Rosanna Dagani Young Investigator Award. These were followed by 23 sessions over the 2½ day period, including imaging, with separate sections on DICOM, left ventricular morphology, ultrasound techniques, and coronary artery measurement. This year, there was an increase in presentations associated with Internet and Intranet applications, and more generally in telemedicine. As usual, there was much on electrocardiography, and all of it practical.

The Proceedings were published in December 1999, two months after the meeting, and contain 180 manuscripts in 756 pages. The book is published by IEEE (Computers in Cardiology, 1999, Vol 26, Catalogue No. 99CH37004, ISBN 0-7803-5614-4), and costs about \$75.

In the meantime, the Program for the year 2000 Meeting in Boston (September 24 – 27) has been finalized. This again promises to be an excellent meeting in an exciting location.

Internet activities

Since the beginning of this year, the WG has been officially represented in the ESC Internet Committee by Willem Dassen. Apart from maintaining and extending the official web site, the Internet Committee is currently developing a global strategy through investigating how all new developments in Information and Communications Technology can be used to make the web the mode of communication within the ESC.

Computer demos at the ESC in Amsterdam

This year, the WG is reviving an old tradition. For the first time in several years, it is providing computer demos on exciting new developments in our field. In Amsterdam, there will be a total of 12 computer demos spread out over the meeting period. We do hope that this will be a success, so that it will be repeated in the following years and will become an integral activity of our WG at the annual ESC meeting.

Activities in 2000/2001

For the new year 2000/2001, we envisage the following activities:

- Further active participation in the DICOM developments;
- Preparations for a DICOM demonstration at the 2001 ESC Meeting in Stockholm, in association with Working Group 1 of the DICOM Standards Committee.
- Participation in the Annual Computers in Cardiology Meeting.

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