



MEDICAL INFORMATICS NEWSLETTER

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(International Medical Informatics Association)



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6TH MEDINFO WILL BE HELD IN BEIJING IN 1989

"

At the Annual General Meeting held in Lisbon on October 22, 1985, the site of MEDINFO 89 was one of the important subjects discussed. Prof. Ouyang Zhineng, China representative to IMIA, presented the formal proposal of CMIA (China Medical Informatics Association) to host the congress in Beijing, and the members unanimously accepted the CMIA proposal. Further discussions were to be made at the board held in Beijing in 1986.

At the CMIA annual general meeting held on December 28 and 29 1985 in Beijing, the members discussed the plan, organization and arrangement of MEDINFO 89. The organizing committee was formed under the chairmanship of Dr. Deng Guojun, head of the international liaison, Chinese Institute of Electronics. China Council for MEDINFO 89 was also established under the presidency of Prof. Sun Junren, president of Chinese Institute of Electronics, to coordinate various organizations involved with the congress, namely China Association of Science and Technology, China Medical Informatics Association, China Institute of Electronics, Chinese Medical Association, China Association of Artificial Intelligence.

The MEDINFO 89 will be co-sponsored by: All China Association of Traditional Chinese Medicine, Chinese Nursing Association, Chinese Computer Federation, Chinese Information Processing Society, China Computer User's Associ-

ation, Computer Application and Engineering Society and Chinese Society of Biomedical Engineering. It is expected to have more than 1600 delegates.

The essence of the plan is as follows; Place: Congress Center of CAST and Beijing exhibition center Time: October 16-20, 1989

The IMIA Board members visited Beijing April 15-16, 1986 and were introduced by the members of the organizing committee. After they investigated the possible congress site and hotels in Beijing, they were impressed by the many new buildings with splendid facilities and were confident that the MEDINFO 89 would be a great success.



Prof. Zhou Peiyitan (Center), Chairman of the CAST, meets IMIA board members at the banquet in People's Great Hall.

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**ANNUAL GENERAL MEETING 1985
HELD IN LISBON**

The 1985 annual General Meeting was held October 21-25 in Lisbon, Portugal, and hosted by Prof. M. J. Barbosa, Universidade de Coimbra, the representative from Portugal. The IMIA Board meeting was also held prior to the Annual General Meeting.

Other than selection of the MEDINFO 89 site (*See page J*), General Assembly made the following important decisions. —The following IMIA officers were elected. The new

members are shown in *italic*.

President	H. Peterson (Sweden)
President-elect	S. Kaihara (Japan)
Vice-president	B. Berber (EFMI) <i>E. Molina</i> (IMIA-LAC) <i>R. Salamon</i> (France) <i>J. Flint</i> (Canada) <i>A. Gose</i> (U.S.A.)
Secretary	<i>Z. Ouyang</i> (P.R. China) / <i>Michel</i> (G.D.R.)
Treasurer	<i>Abbott</i> (U.K.)
Trustee	

—Prof. Kaihara from Japan was elected as president elect. He will start his office after next annual general meeting in Washington, D.C.

—Romania applied for corresponding membership and this application was unanimously approved. Prof. Mihalas will serve as the member, whose address can be found in the list of members.

CHINA HOSTED 1986 SPRING BOARD MEETING

The IMIA Board met on April 15 and 16, 1986 at Friendship Hotel in Beijing, Peoples Republic of China, at the invitation of China Medical Informatics Association. The board meeting was very successful with the warm hospitality of Prof. Guo, president of CMIA, Dr. Ouyang, vice-president and other members of the organizing committee of MEDINFO 89. They were also received by Prof. Zhou Peiyuan, chairman of the China Association for Science and Technology, at the banquet held in The Peoples Great Hall.

Mr. K. Ando, president of IFIP also attended the board meeting as a guest.

After concluding all administrative business, Dr. Peterson, Dr. Kaihara, Dr. Barber, Dr. Abbott and Dr. Flint attended a seminar at the Beijing Tumor Hospital organized by the CMIA, at which they exchanged with other seminar participants their knowledge and experiences in the use of information technology in the field of health.

PROFILE OF NEW TRUSTEES

Dr. J. Michel



Dr. Michel is a physiologist and medical informatician and has the degree of Dr. of Medical Science. His present affiliation is Division of Medicine (Charite) of Humboldt University. He is interested in integrated use of different methods of information processing for function analysis of human organs. He is the chairman of

section of automated information processing of the Society of Bio-medical Engineering and Information Processing of GDR.

Dr. Anne S. Gose



Dr. Anne S. Gose

Dr. Gose is a physician surgeon and has PhD degree in medical anthropology. She is presently president of a health care maintenance organization and consultant to the American government on health matters. She has two children. Her husband is Professor of Bioengineering at the University of Illinois at Chicago.

Prof. Ouyang Zhineng



Prof.

Ouyang Zhineng

of Chinese Society of Artificial Intelligence.

Prof. Ouyang was born in Sichuan Province, China on January 15, 1929. He graduated from Nan Kai University in 1951. He was the vice president and concurrently chief engineer of Electronic Technology Corporation. Then he was the president of China Computer Technical Service Corporation (CCTS). Now he is the executive vice president of CMIA, Director of China Institute of Electronics and Director



The Fifth World Congress on Medical Informatics (MEDINFO 86) will be held in Washington, D. C., U.S.A. from October 26 to 30, 1986. It will be organized under the auspices of IMIA by the U.S. Council for MEDINFO 86, a non-profit corporation sponsored by 12 leading medical and engineering societies in the United States.

The final program Committee was held in May 1986 and the papers to be presented were selected. The subject areas are;

- Hospital departments
- Primary/Ambulatory care
- Medical Records Management
- Decision support
- Images, signals, and pattern recognition
- Health information/Epidemiology
- Education and training
- New technology
- Laboratory applications
- Occupational health
- Database management systems

- Therapeutic support
- Picture archiving systems
- Social/Ethical considerations
- Self care
- New software
- Nursing and other occupational applications
- Bioengineering applications
- Health services research
- Dental applications
- Health care administration
- Medical research
- Evaluation
- Library applications

Over its five day duration, MEDINFO 86 will present the most extensive review assembled anywhere to date of state-of-the-art techniques and new developments in the computer/health care field.

For further information and registration please contact:
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FUTURE EVENTS OF IMIA

Date	Code	Place	Title etc.
1986			
October	WC	Habana (CUBA)	Health informatics for development (WG-9)
10/23	BM	Bethesda (USA)	Board meeting
10/24	AGM	Bethesda (USA)	Annual General Meeting
10/26-31	MED	Washington D.C. (USA)	MEDINFO 86
1987			
4/1-6	WC	Amsterdam (NL)	Fourth generation programming systems in the medical and public health field (J. van Bommel)
5/19-23	WC	Berlin (GDR)	Progress in biological function analysis by computer technologies (J. Michel J. Willems)
5/24-25	BM	Berlin (GDR)	Board meeting
9/21-25	EFMI	Rome (ITALY)	EFMI General Congress
Autumn	AGM	?	Annual General Meeting
1988			
Spring	BM	?	Board meeting
6/22-27	WC	Dublin (IRE)	Computer in Nursing (WG-8)
9/?	EFMI	Oslo (NOR)	EFMI General Congress
9/7	WC	Oxford (UK)	Medical informatics in primary care G. Clayton (W. Abbott)
Autumn	AGM	?	Annual General Meeting

WORKING CONFERENCES SUMMARY

IMIA held few working conferences in 1985 and 1986. In principle, a working conference is a closed meeting of experts who meet to discuss a specific subject in medical informatics. The proceedings are published shortly after the conference. Below are reports on these conferences.

Nursing Use of Computers and Information Science May 1-3, 1985, Calgary, Canada

This meeting was called as *symposium* and was an open conference for any person interested in this subject. In fact, 500 delegates attended the symposium. The symposium was organized by the Faculty of Nursing, University of Calgary, under the auspices of IMIA.

The symposium started with the paper by Dr. Scholes (U.K.) entitled *The computer—A gauntlet for change in nursing*. The titles of the sessions following the plenary session were Practice, Education, Research, Administration, Security confidentiality, Practice relationships, Organizational changes and Ergonomics.

The symposium was followed by a 4 day workshop and approximately 60 speakers met at this workshop to develop the discussions held at the symposium.



Discussion at nursing conference

Computer EGG Analysis: Towards Standardization June 2-5, 1985, Leuven, Belgium

This conference was the 4th conference in the IMIA series on computer ECG processing. The previous conferences were held in Hannover in 1971, in Amsterdam in 1976 and in Halifax in 1979.

The objectives of the conference were to provide the state of the art on computer applications in electrocardiography, to review developments which have occurred since the last meeting in Halifax and to look at the future. As indicated by the subtitle of the conference, a special emphasis was placed on standardization efforts and ECG program evaluation. The conference was initiated through the concerted action project "Common Standards for Quantitative Electrocardiography" (CSE),

sponsored by the commission of the European Communities. This international project, involving the co-operation of 27 institutes from Western Europe, North America and Japan, aims at the establishment of standards for ECG measurements programmes and at the evaluation and exchange of quantitative, diagnostic ECG criteria.

The present conference was focused on the resting electrocardiogram. Review papers were given on computerized processing of exercise ECGs, body surface mapping, signal averaging and ambulatory ECG monitoring. The conference was attended by 70 experts in the field coming from 13 different countries. A total of 47 papers were presented, which reflect the current state of various systems (session 1), signal acquisition and measurement programs (session 2), diagnostic ECG classification (session 3), various application areas (session 4) and serial ECG analysis (session 5). Main results of work carried out in the CSE project over the past 6 years have been presented at the conference.

(Jos L. Willems, J. H. van Bommel, Ch. Zywiets)

Man Machine Communication in Health Care June 10-14, 1985, Stockholm, Sweden

This conference was the follow-up of the conference entitled *Communication network in health care* held in Stockholm in 1982. This time man-machine communication was the main subject of the conference.

Linguistics to store and retrieve medical information was discussed among approximately 80 scientists attended from all over the world. Proceedings is also available from the North Holland Publishing Co.

Pattern recognition in practice II . June 19-21, 1985, Amsterdam, Netherlands

This conference was organized by WG 7 of IMIA. The first conference took place in June 1980 and this was the second conference of this series. There were about 80 participants from all over the world.

It was the outcome of the conference, that pattern recognition and artificial intelligence are coming closer together. There will be another proposal in due time for another working conference, when this relationship becomes more apparent.

The proceedings is now available (See IMIA publications) and the followings are the titles of the sessions.

Image processing, Knowledge based systems, Pattern recognition and artificial intelligence, Statistical pattern recognition, Models, Miscellaneous applications, Reconstruction, Non-linear filtering, Bio-medical applications, Precision measurements.

Computer-aided Medical Decision Making September 30-October 4, 1985, Prague, Czechoslovakia

This conference was the second one of this type under the sponsorship of the IMIA, the first one was held in

Dijon in 1976. The conference was held in a large congress centre, the Palace of Culture in Prague. The conference was organized by the Czechoslovak Society for Biomedical Engineering, Czechoslovak Medical Society J.E. Purkyně in cooperation with the Czechoslovak Scientific and Technical Society. The conference attracted about 220 persons from 18 countries. During the opening ceremony the conference was addressed by Dr. J. Zvarova, president of the conference, the vice-president of IMIA Prof. S. Kaihara and by Dr. Z. Stuchly, representative of the Czechoslovak Ministry of Health. Prof. Kaihara welcomed the conference participants on behalf of IMIA and brought the attention of the audience to the IMIA activities in the field of medical informatics, especially to the forthcoming event MEDINFO 86.

Two introductory lectures were presented;

"Formalization of medical knowledge, the basis for diagnostic strategies and expert systems by Prof. Jan van Bommel, (Netherlands), Chairman of the Program Committee, and "Ethics of the person and of the community in medical decision making" by Prof. Gremy (France), former president of IMIA.

About 80 scientific papers and 70 posters were presented at the conference in five main sessions intending to offer a representative survey over the entire field. The oral presentations were included in the conference proceeding. (See IMIA publications) The scientific programme of the fifth day of the conference was devoted to the seminar on "Medical informatics—achievements, perspectives, teaching." The seminar attracted very many people and more than 70 Czechoslovak clinicians and other medical personnel enlarged the number of conference participants for this one day.

Thanks to the great effort of the members of the Program and Organizing Committee, the conference was a great success. The lectures and discussions of the conference appeared to have been at a very high scien-

tific level and were the good summary of the state of art both in Western and East European countries.

Systems in Primary Care

December 2-6, 1985, Munich, F. R.

G.

This conference was organized by IMIA's Working Group 5 and held on the site of the 'Gesellschaft fuer Strahlen- und Umweltforschung' (GSF), one of the German Research Centers.

The Program committee was chaired by Prof. Reichertz/Hannover, the chairman of the working group and the organization committee was headed by Dr. Engelbrecht, GSF/Munich.

The conference was sponsored by the World Health Organization, the GSF, the Medical School Hannover and the German research and exchange funds DFG, DAAD besides Federal and Bavarian ministries.

More than 80 experts from 19 countries from all over the world participated to discuss important aspects of information systems in ambulatory care.

The conference addressed three topics: —system analysis and presentation of health care systems — achievements and developments of computer support, expert systems and —longterm summary documentation

Workshops were dedicated to new technologies, expert systems and standards for primary care support.

The first part resulted in a structured written system analysis and short presentation of the specialities of each participating country. The resulting volume is presently being published separately in the Springer Series: 'Lecture Notes in Medical Informatics' under the title: 'Primary Care and System Support. An Analysis in Selected Countries.' This publication is intended as a basis for further discussions and conferences of this working group, but also as reference for any comparison of health care delivery systems.

In the second part implemented systems, requirements and overviews of applications in the doctor's office were presented and widely discussed. Special regard was given to the aspects of quality of care and integration into the doctor's workload.

The dissemination of doctor's office computers shows a varying degree in the different countries, but an overall positive trend can be observed. Counteracting seems to be an increase of physicians in many, especially European countries, with a resulting narrowing of the respective economic basis.

In most cases the administrative components are fully developed while application areas like documentation and decision support in diagnosis and therapy are a broad field of prototypes and research approaches.

Some systems were actually demonstrated.

These contributions were used as a basis for the workshops which led to lively discussion, especially in the area of expert systems in primary care.



Dr. Zvarova (right) and Dr. Stuchly, Ministry of Health (left) at the opening ceremony.

REPORT FROM EFMI

The Sixth European Federation for Medical Informatics Congress, (MIE-85J, was held at the Finlandia Hall in Helsinki, Finland, August 25-29, 1985. Over 650 participants were registered, making it the largest European Congress after the Berlin meeting in 1979. Over 160 papers were presented during the four days of congress.

These papers clearly showed a developing interest in medical decision making and expert systems, as well as a resurgence of interest in clinical data bases and medical coding.

There will be no EFMI congress in 1986 due to the Medinfo congress in the USA. MIE-87 will take place in Rome Italy, September 21-25. In 1988, MIE-88 will be held in Oslo in August and it will be followed by a special topic EFMI conference on *Expert systems and decision support in medical informatics* held in association with the German National Medical Informatics Society.

It is hoped that the next EFMI congress will take place in Glasgow.

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IMIA PUBLICATIONS OF MEDICAL INFORMATICS AVAILABLE FROM NORTH HOLLAND PUBLISHING CO.

Title	Editor	Year	Price
Pattern Recognition in Practice II	E. S. Geselma L.N. Kanal	1985	US\$ 79.25
Medical Decision Making: Diagnostic Strategies and Expert Systems	J. H. van Bommel F. Gremy J. Zvarova	1985	US\$ 62.25
Nursing Use of Computers and Information Science	K. J. Hannah E. J. Guillemin D. N. Conklin	1985	US\$ 53.57
Human Computer Communications in Health Care	H. Peterson W. Schneider	1985	US\$ 43.00
Computer ECG Analysis : Towards Standardization	J. L. Willems J. van Bommel Ch. Zyvietz	1985	US\$ 57.00
Role of Informatics in Health Data Coding and Classification Systems	R. A. Cote D. J. Protti J. R. Scherrer	1985	Dfl. 160.00
Data Protection in Health Information Systems	G. Griesser	1982	US\$ 42.50
Meeting the Challenge Informatics and Medical Education	J. Page A. H. Levy F. Gremy	1983	US\$ 51.00
The applications of Computers in Cardiology	G. M. Quetglas P. W. Macfarlane A. Fez Peres Detalens	1983	US\$ 68.00
Medinfo 83	J. H. van Bommel M. J. Ball O. Wiegerz	1983	US\$ 180.75
Medinfo 83 Seminars	O. Fokkens et al	1983	US\$ 57.50
The Impact of Computers on Nursing An International Review	M. Scholes Y. Bryant B. Barber	1982	US\$ 60.00

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