CAR '89—Computer-Assisted Radiology Third International Symposium and Exhibition

Berlin, June 25-28, 1989

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CAR '89 is a meeting on new methods in radiology and other medical disciplines in which digital medical imaging is an essential part of diagnosis and therapy planning. These medical activities are increasingly being affected by developments in computer and communication technology.

Many digital imaging or computer-assisted medical imaging modalities have been introduced successfully since the 1970s. They are continuing to gain acceptance in the medical community. Their impact is felt not only in diagnostic radiology but also in disciplines such as orthopedics, radiation oncology, cardiology, and surgery, where computer-assisted therapy planning is increasingly based on digital-imaging modalities.

When radiology takes advantage of the opportunities digital imaging, computer, and communication systems can offer, it will play a critical role in the medicine of the future. This already is taking place in an increasing number of hospitals in Europe, the United States, Canada, and Japan. However, there is still a long way to go before this becomes a universal means of providing health care services.

Step by step and in an evolutionary manner, the CAR symposia are organized to introduce to the medical community current achievements in computer-assisted methods for diagnosis and therapy planning. This is realized in coordination with many international medical and technical societies, as well as educational institutions and industries.

As a successor to the CAR '85 and CAR '87 symposia, CAR '89 is intended to serve as a forum for discussion between experts from the medical sciences (eg, radiology, radiotherapy, nuclear medicine, orthopedics, cardiology, neurology, and surgery) and professionals from the computer and physical sciences. The aim is to evaluate the state of the art (presented in tutori-

als) and to research results (session papers) in the area of computer-assisted radiology (CAR).

Tutorials are presented in a dialogue fashion between experts from the medical and computing fields. They should give medical personnel concerned with medical imaging an appreciation of the advantages and pitfalls of computer and communication technology. For the computer professional, in turn, they should provide a better understanding of clinical problems and goals related to medical imaging.

In the context of the CAR symposium, CAR is being discussed with respect to the following topics:

1. digital image generation (eg, CT, MRI, DSA, US, SPECT, PET, DR);
2. image management and communication (eg, picture archiving and communications systems [PACS], digital optical recording and communication, local and wide area networks, PACS/RIS/HIS interface, ISDN, distributed radiology and teleconferencing, standards, systems planning, and implementation);
3. medical work stations (eg, computer vision, computer graphics, modelling, human computer interaction; and
4. application systems for computer-assisted radiological diagnosis, computer-assisted orthopedics, computer-assisted radiation therapy, and computer-assisted surgical planning.

These four topics are the main tracks of the symposium, and each is concluded with an in-depth panel discussion.

A special workshop on social aspects of CAR has been prepared, dealing with topics such as (1) the effect of CAR on the patient, (2) the effect of CAR on the physician, (3) the impact of CAR on medical education, and (4) the impact of CAR on the health care system.

In total, approximately 250 papers have been submitted from 20 countries. Of these, more than 100 contributions have been selected for presen-

tation at the symposium and inclusion in the proceedings, some of which will also be published in the *Journal of Digital Imaging*. In addition, a number of invited papers will provide the

context in which research results are being presented.

In conjunction with the symposium, there will be an industrial and work-in-progress exhibition.

CAR '89: Important Dates at a Glance

Dates: June 25-28, 1989

Tutorials: June 25, 2 PM through June 26, 12 noon

Sessions: June 26, 2 PM through June 27, 6 PM

Workshops: June 28, 9 AM to 1 PM

Exhibition: June 25 through 27, 1989

Conference languages: Symposium: English, French, and German simultaneous translation will be provided for all papers.

Venue: International Congress Center, Berlin

Costs and Fees: Symposium: including tutorials, sessions, workshops, proceedings, exhibition

Registration before May 1, 1989: DM 580, including VAT

Registration after May 1, 1989: DM 680, including VAT

Speakers and special fees for (1) members of supporting organizations or (2) group registration of three or more participants from one university or hospital: DM 480, including VAT

Daily admission for the symposium: DM 340, including VAT

Organizer: Heinz U. Lemke

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