For MIE 2003, Saint Malo, May 4-7, 2003

Program of the Workshop 3
Monday 5 May 2003, 16.00-17:30, Room C

Integration of Medical Image Processing into Clinical Workflow and the Electronic Patient Record

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[10 minutes presentation + 5 minutes discussion]

16:00 Alexander Horsch
Technical University of Munich, Germany
Basic Considerations on Requirements for Integration of Computer Aided Diagnosis Applications in eHealth Environments

16:15 Vytenis Punys
Kaunas University of Technology, Lithuania
DICOM-based Approach for Clinical Integration and the Problem of the Great Variety of Image Acquisition Parameters

16:30 Henning Müller
University Hospitals of Geneva, Switzerland
Integrating Content-Based Image Retrieval into Clinical Practice

16:45 Michael Prinz
AKH Wien, Austria
Considerations on Integration of Medical Research Data and Patient Care Data from Distinct Sources

17:00 Christian Lovis
University Hospitals of Geneva, Switzerland
Images: Bridging the Gap between PACS and Clinicians

17:15 Karl-Hans Englmeier
GSF Neuherberg, Germany
Morpho-Functional Visualization of Image Information as Integration Tool of Medical Image Processing

17:30 Henning Müller
University Hospitals of Geneva, Switzerland
Evaluating Information Retrieval Systems – Parallels with Evaluating Image Processing Techniques in Medicine

[Hope we can stay 15 minutes longer in this room! If not, we will shorten each contribution a little.]

1 Topic summary

The field of Medical Image Processing (MIP) and the applications in Computer Assisted Diagnoses (CAD) and therapy (e.g. Computer Assisted Surgery – CAS) which strongly depend on MIP methods is of increasing importance in modern medicine. Due to its proximity to medical imaging devices, the field is widely considered as an engineering discipline rather than a core part of medical informatics. Integration of MIP applications therefore has mainly been carried out by vendors of medical imaging devices as an integration into their imaging a post-processing systems in the overall framework of RIS/PACS environments. On the other hand, the discussion about the Electronic Patient Record (EPR) as well as the basic need for integration of components in the healthcare systems have recently more and more addressed also the non-textual information like medical images, audio and video data. So far, there are no comprehensive models and solutions for a seamless and complete integration of such data in the daily clinical workflow. Therefore, the EFMI Working Group on Medical Image Processing (WG MIP) has chosen as one of its objectives to foster the discussion of how to integrate decision support by means of medical image processing into clinical practice, i.e. the clinical workflow and the EPR.

2 Goal of the workshop

During the workshop, invited speeches on the topic will be presented. The goal is to give an overview of the state of the art of the MIP field and its specialties, and to define the requirements that have to be met by MIP applications, the clinical workflows and the EPR, if an integration shall be successful. A discussion with the audience shall give the opportunity to gather ideas and to exchange experiences. The result will be documented and published on the WG Website. Last not least, interested colleagues can get into contact and also join the efforts of EFMI WG MIP.

3 Professional interests of the intended audience

The intended audience are colleagues working in the MIP field with an emphasis on clinical applications, as well as colleagues who are involved in the topics Clinical Workflow and/or EPR with interest in multimedia data integration and decision support. Possible motivations for to join the workshop can be:

- to get up-to-date information about the subject
- to participate in the discussion
- to identify possible own contributions to the work of EFMI WG MIP

4 Expected outcome

A documentation of the presentations and the discussion published on the WG Website. New contacts between the WG and colleagues interested in the WG work.