



## Report to EFMI Council

For the period July 2003 to September 2004

To be presented at 51<sup>st</sup> EFMI Council Meeting, Munich, 12 June 2004

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### Current objectives

- ❑ **A. RID-MIP** – to establish a reference image database for medical image processing R&D groups (RID-MIP) within the EFMI member countries.
- ❑ **B. EIPG-IS** – to establish a Web-based Information System (IS) about European Image Processing Groups (EIPG) and their current activities.
- ❑ **C. Website** – to create and maintain a Working Group Website providing public information and (in a protected sub-area) WG-internal documents and work plans.
- ❑ **D. Workshops** – to organize workshops dedicated to the WG topics at the MIE conferences and other events.
- ❑ **E. Cooperation** – to build and maintain close relationship with persons, groups, organisations and standardisation bodies working on the MIP field and medical domains involved.

### Recent activities

- ❑ **Ad A:** The *Reference Image Database Work Prototype RID-WP 1.0* (implemented during the last report period) has been discussed within the working group. Suggestions for improvement have been collected. Promotion of the initiative has been done on various occasions, such as the *German Workshop for Medical Image Processing* in March 2003 in Berlin, and a conceptual publication in a special Issue of the *Methods of Information in Medicine* journal. Close contacts to initiatives in the USA have been established: with the *Cancer Imaging Program* ([www3.cancer.gov/bip/steercom.htm](http://www3.cancer.gov/bip/steercom.htm)) of the *National Cancer Institute* ([cancer.gov](http://cancer.gov)); with the *Insight Software Consortium* ([www.itk.org](http://www.itk.org)) and *Kitware Inc.* ([www.kitware.com/](http://www.kitware.com/)).
- ❑ **Ad B:** It has recently been decided in a WG chair meeting in Munich not to postpone this item any more until funding is available. Instead, a first EIPG-IS version shall be implemented with students at Kaunas University, Lithuania.
- ❑ **Ad C:** Through the [www.efmi-wg-mip.net](http://www.efmi-wg-mip.net) internal area the RID-WP is accessible for all working group members. Basic information about the working group (mission, members, etc) has been entered on the new EFMI website [www.efmi.org](http://www.efmi.org).
- ❑ **Ad D:** The 2<sup>nd</sup> *WG workshop* with seven presentations has successfully been held at MIE 2003 in Saint Malo on Monday 5 May 2003 on the topic *Integration of Medical Image Processing into Clinical Workflow and the Electronic Patient Record*.
- ❑ **Ad E:** The cooperation with CARS (Computer Assisted Radiology and Surgery) has been continued, the contacts to the organizers have been intensified. Cooperation has successfully been started with initiatives in the USA (see A). This axis shall help in the efforts to get funding for the RID-MIP initiative of the working group.



## Working Group on Medical Image Processing

- ❑ **Ad WG business:** Via electronic communication, two co-chairs have been elected for the working group: Thomas Wittenberg, Fraunhofer Institute for Integrated Circuits, Erlangen, Germany, and Vytenis Punys, Kaunas University of Technology, Kaunas, Lithuania.

### Future activities

- ❑ **WG meetings.** It is planned to have a WG meeting at MIE2004 Special Topic Conference in Munich on 16 June 2004. Also in the upcoming report period, there will take place dedicated small meetings of WG members tackling specific problems of the RID-MIP objective.
- ❑ **Scientific Programs.** For CARS2005 conference in Berlin again a scientific subprogram on *Image Processing and Display* shall be organized co-operatively by CARS and EFMI.
- ❑ **Workshops.** The 3<sup>rd</sup> *WG workshop* will be held at MIE2004 Special Topic Conference in Munich on Wednesday, 16 June 2004 on *Medical Image Processing for Health – State of the Art, Challenges and Obstacles*. The plan to have a workshop at either Medinfo 2004 or CARS 2004 has been skipped in favour of concrete preparatory work for the RID prototype and email-based collaboration. The working group will participate in the National Institutes of Health (NIH) symposium on *Biomedical Informatics for Clinical Decision Support: A Vision for the 21st Century* coordinated by the Bioengineering Consortium (BECON) and Technology Initiative (BISTI) consortium, June 21-22, 2004 on the NIH main campus in Bethesda, Maryland. Next WG workshops are planned at CARS2005 and/or MIE2005.
- ❑ **RID-MIP.** With the *Cancer Imaging Program* of the *National Cancer Institute* the working group will harmonize the efforts and try to strengthen the position for another application for funding by the European Commission. Human networking will be intensified for this purpose, taking the preparatory work, done for a Network of Excellence (NoE) application to the EC last year, as a starting point. With the *Insight Software Consortium* and *Kitware Inc.* an improved version of the RID-WP will be used for hosting of the image datasets of a new medical image processing online journal. Contributors to this journal will have to deliver their image datasets, algorithms and parameters they have used to create the results to be published, and the image datasets shall be stored in the RID-MIP.

### Conclusion

During this third year the activities of the working group gained increasing interest, especially from initiatives in the USA. The idea of reference image databases and their great value for quality assurance and improvement in research and development within the medical image processing domain has further been promoted. The fruitful cooperation with CARS has been consolidated and has a long-term perspective. This is important in order to strengthen the link between EFMI and the highly engineering-dependent medical domains based on medical imaging. The EFMI as an organization has been promoted within the scientific communities of these domains.

### Chairperson:

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