

**Establishing an international reference image database for research
and development in medical image processing**

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INTRODUCTION: The lack of comparability of evaluation results is one of the major obstacles of research and development in Medical Image Processing (MIP). The main reason for that is the usage of different image datasets with different quality, size and Gold standard. **OBJECTIVES:** Therefore, one of the goals of the Working Group on Medical Image Processing of the European Federation for Medical Informatics (EFMI WG MIP) is to develop first parts of a Reference Image Database. **METHODS:** Kernel of the concept is to identify highly relevant medical problems with significant potential for improvement by MIP, and then to provide respective reference datasets. The EFMI WG MIP has primarily the role of a specifying group and an information broker, while the provider user relationships are defined by bilateral co-operation or license agreements. **RESULTS:** An explorative database prototype has been implemented using the MySQL database software on the Web. Templates for provider user agreements have been worked out and already applied for own 'pre-RID-MIP' co-operations of the authors. **DISCUSSION AND CONCLUSION:** First steps towards a comprehensive reference image database have been done. Issues like funding, motivation, management, provision of Gold standards and evaluation guidelines are to be solved. Due to the interest from research groups and industry the efforts will be continued.

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