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# Medical Content-Based Retrieval for Clinical Decision Support

Third MICCAI International Workshop, MCBR-CDS 2012  
Nice, France, October 1, 2012  
Revised Selected Papers



Springer

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# Preface

This document contains articles from the Third Workshop on Medical Content-Based Retrieval for Clinical Decision Support (MCBR-CDS) that took place at the MICCAI (Medical Image Computing for Computer Assisted Intervention) 2012 conference in Nice, France, on October 1, 2012. The first workshop on this topic took place at MICCAI 2009 in London, UK. The second one was held in Toronto, Canada, in 2011. An earlier workshop on medical image retrieval was conducted at MICCAI 2007, in Brisbane, Australia.

The workshop obtained 15 high-quality submissions of which 10 were selected for presentation. Three external reviewers and one workshop organizer reviewed each of the papers. The review process was double blind.

In addition to the oral presentations, two invited presentations were given. Gwenole Quéléec, the first invited speaker, presented a talk on heterogeneous information retrieval from medical databases. His talk developed several ideas about medical image and video retrieval applications from a theoretical and an application perspective. Georg Langs presented his invited presentation on the VISCERAL project that aims at creating a benchmark for medical imaging on extremely large data sets using a cloud-based infrastructure that is shared by the participants. A panel at the end discussed the role of content-based image retrieval in clinical decision support. In general, the workshop resulted in many lively discussions and showed well the current trends and tendencies in content-based medical retrieval and how this can support decisions in clinical work.

These proceedings contain the ten accepted papers of the workshop as well as the two invited presentations. An overview of the workshop initiates the proceedings, summarizing the papers and the discussions that took place at the workshop itself.

We would like to thank all the reviewers that helped make a selection of high-quality papers for the workshop. We hope to have a similar workshop at next year's MICCAI conference.

December 2012

Hayit Greenspan  
Henning Müller  
Tanveer Syeda-Mahmood

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