INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:
Computer-aided image analyis in Ophthalmology

Name, Title and Affiliation of Chair:
Manuel F. González Penedo, Associate Professor, University of A Coruña (Spain)

Details of Session (including aim and scope):

New, cheaper and more precise data acquisition devices create new ways to the use of computer-aided image analysis in ophthalmology allowing the automatic exploitation of novel modalities and new sources of information. These modalities open new challenges in the computerized medical analysis field easing the clinical practitioners' daily task with more objective and reproducible methods for the early diagnosis of a number of pathologies such as diabetic retinopathy, hypertension, glaucoma, dry eye, aged related macular degeneration to name a few. The main focus of this special issue is the description of novel automatic or semiautomatic computational methods applied to the analysis of images from internal or external eye structures. Studies on new imaging modalities and its possibilities are also welcome. Potential topics include, but are not limited to:

- 2D and 3D reconstruction
- Retinal vascular segmentation and/or measurement
- Automatic or semi-automatic segmentation of relevant structures
- Optical Coherence Tomography (OCT) analysis
- Multimodality fusion imaging
- Computer programs and methodologies for aid in medical diagnosis
- Soft-computing in ophthalmology image analysis
- Algorithms, methods and applications in Optics and Optometry

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Department of Ophthalmology and Visual Sciences, University of Iowa (USA)
Singapore Eye Research Institute, Singapore
Centre for Eye Research Australia, University of Melbourne, Melbourne, Victoria, Australia
Laboratory of Biomedical Imaging, University of Padova (Italy)

Website URL of Call for Papers (if any):

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