

Automated Image Analysis Workshop

at the

10th European Congress on Telepathology and 4th International Congress on Virtual Microscopy

July 1-3, 2010, Vilnius (Lithuania)

<http://www.telepathology2010.com/home>

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Digitization of microscopy slides is becoming a routine in pathology. Along with numerous benefits for education, quality assurance, image sharing and consultation, it opens new and most exciting perspectives of automated image analysis for pathology diagnosis and research. Digital microscopy and image analysis technologies are evolving rapidly, and there is a need to keep pathologists aware of the latest developments.

The Workshop aims to provide an opportunity for the Congress participants to overview automated image analysis tools in terms of their robustness and workflow efficiency. Both companies and individuals are invited to present their applications relevant to pathology diagnosis and research. The Workshop is expected to provide fair and efficient process to present the tools in a structured and comparable fashion.

WORKSHOP DESIGN - BRIGHT FIELD

1. Two widely used IHC quantification algorithms - nuclear (Oestrogen Receptors) and membrane (Her-2) - each to be tested on the same set of slides of 10 breast cancer cases provided by the Spanish IHC Quality Program.
2. The slides will be available for scanning at
 - a. the 1st European Scanner Contest Berlin-Brandenburg, May 24–26, and 94th Annual Meeting of the German Society for Pathology at the 94th Annual Meeting of the German Society of Pathology, Berlin-Brandenburg, May 27–30, 2010.
3. Participants will be allowed to set up and test their analyses and prepare for the Workshop presentation during the period after scanning the slides.
4. Workshop presentation is planned during the Congress on July 3rd. The presentation will consist of:
 - a. automated image analysis of ER and Her2, including live presentation of the system. Both process (work-flow) and results (output) have to be presented;
 - b. highlights on exceptional features and benefits of the tool;
 - c. short questions and answers.

WORKSHOP DESIGN - DARK FIELD

Fluorescent labeling methods become more and more important for dedicated applications. Thus, there is an increasing demand for digitization of fluorescently labeled samples at the same, if not better, quality like digitization of IHC stained specimen.

1. Her2 FISH quantification algorithm to be tested on any set of Her2 FISH slides of 5 breast cancer cases
2. The slides will be available for scanning at
 - a. the 1st European Scanner Contest Berlin-Brandenburg, May 24–26, and 94th Annual Meeting of the German Society for Pathology at the 94th Annual Meeting of the German Society of Pathology, Berlin-Brandenburg, May 27–30, 2010;
 - b. Alternatively, participants can use a set of any 5 HER2 FISH slides for the presentation.
3. Participants will be allowed to set up and test their analyses and prepare for the Workshop presentation during the period after scanning the slides.
4. Workshop presentation is planned during the Congress on July 3rd. The presentation will consist of:
 - a. automated image analysis of Her2 FISH, including live presentation of the system (the presenter's approach to digitize a fluorescently labeled sample slide at high resolution should be shown). Both process (work-flow) and results (output) have to be presented;
 - b. highlights on exceptional features and benefits of the tool;
 - c. short questions and answers.

Duration of the presentations has been adjusted to the number of registered participants. The presentations on the BF and DF analyses will be merged by the speakers.

Company	Duration	Speaker	BF	DF
Aperio	12	Kate Lillard	12	0
Menarini	20	Alessandro Foggi	12	8
Leica/SlidePath	12	Sean Costello	12	0
Biolmagene	20	Vikram Mohan	12	8
MetaSystems	10	Christian Schunck	0	10
3DHistech	20	Csaba Hankó	12	8
	94		60	34
