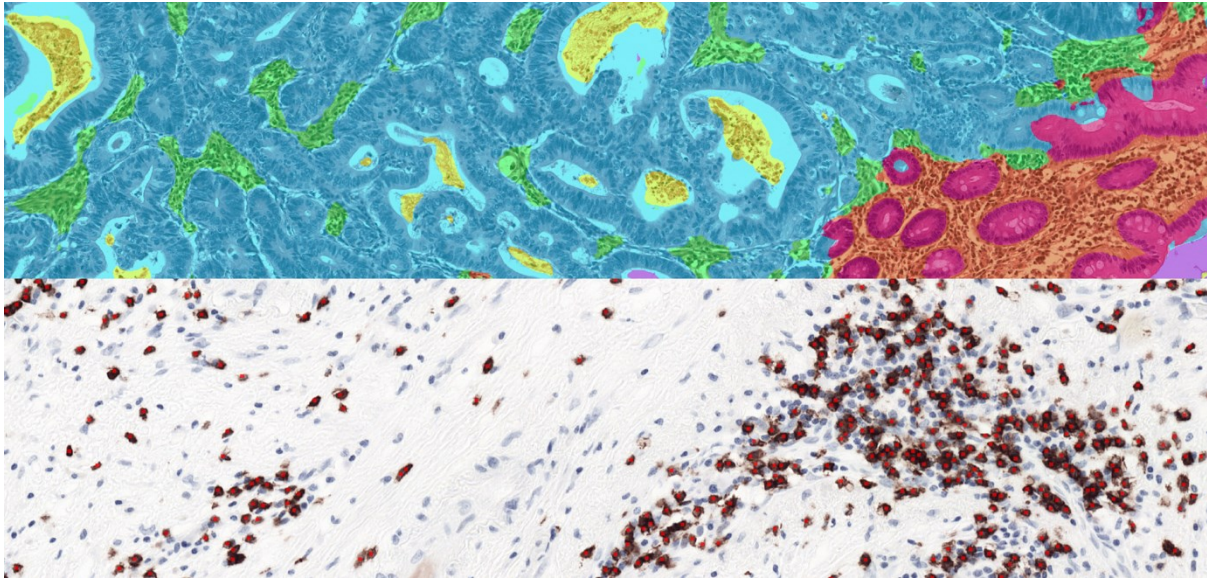


IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS



J-BHI Special Issue on “Computational Pathology”

Computational Pathology embodies the synergy of Digital Pathology, Medical Image Analysis, Computer Vision, and Machine Learning. The huge amount of information and data available in multi-gigapixel histopathology images makes digital pathology the perfect use case for advanced image analysis techniques. For this reason, deep learning and artificial intelligence have successfully powered computational pathology research in recent years. Recent scientific events on computational pathology, such as the MICCAI 2018 workshop on Computational Pathology (COMPAY), the European Conference on Digital Pathology (ECDP), the Computational Pathology Symposium at the European Conference of Pathology (ECP), among others, have generated a substantial pool of original research work in this discipline.

The goal of this special issue is to attract and highlight the latest developments in computational pathology, and feature papers proposing state-of-the-art solutions in the field of digital pathology using advanced image analysis and artificial intelligence.

Topics of interest include, but are not limited to:

- Artificial intelligence and Deep Learning for Computational Pathology
- Stain normalization/standardization
- Detection, classification and segmentation of tissue structures (cells, glands etc.)
- Detection and discovery of predictive and prognostic tissue biomarkers
- Whole-slide image analysis
- Registration of whole-slide images
- Immunohistochemistry scoring
- Multiplexed staining
- Unlabeled multiplexing

- Crowdsourcing for ground truth collection and machine learning applications
- Applications of computational pathology in the clinic

Guest Editors

Dr. Francesco Ciompi (francesco.ciompi@radboudumc.nl)
Diagnostic Image Analysis Group, Dept. of Pathology, Radboud University Medical Center,
Nijmegen, The Netherlands

Dr. Mitko Veta (m.veta@tue.nl)
Eindhoven University of Technology, Eindhoven, The Netherlands

Prof. Jeroen van der Laak (jeroen.vanderlaak@radboudumc.nl)
Diagnostic Image Analysis Group, Dept. of Pathology, Radboud University Medical Center,
Nijmegen, The Netherlands

Prof. Nasir Rajpoot (n.m.rajpoot@warwick.ac.uk)
University of Warwick, Coventry, UK

Key Dates

Deadline for submission EXTENDED: November 30, 2019

First reviews: January 15, 2020

Revised Manuscript due: April 15, 2020

Final decision: June, 2020

The aforementioned keydates follow the Greenwich Mean Time.