

IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS

J-BHI Special Issue on

“Informatics for personalized, precision and preventive Healthcare (3P Healthcare)”

Advancing health informatics is a grand challenge for engineering in the 21st century as identified by the National Academy of Engineering. Managing and improving human health and curing complex diseases will require novel and creative informatics methods and solutions to accelerate scientific discovery, translate discoveries into successful treatments, re-engineer care practices and infrastructure for personalized, precision and preventive medicine. The advent of omics and biomolecular technologies has improved our understanding of biological processes leading to solutions for personalized and precise medicine. Technological developments associated with the Internet of Things (IoT) provide capabilities in empowering people with their own health across the continuum of life. This fantastic technology progress is creating unprecedented amount of data. Innovation in health informatics is therefore critical to harvest this big data to improve care, save lives and lower costs. It is expected that publications in this special issue will describe novel informatics solutions in applications to improve human health, and will demonstrate how the deployment of bioinformatics, digital imaging, artificial intelligence, Internet of Things (IoT), m-Health, e-Health, and telemedicine can enable precision and preventive medicine in the era of digital health.

This special issue will focus on enabling technologies of computing, databases, devices, imaging, sensors, and systems that optimize the acquisition, transmission, processing, monitoring, storage, retrieval, modeling, simulation, analysis, visualization and interaction of vast volumes and different modalities of biomedical data and related social, behavior, environmental, and geographical information.

Topics for this special issue include, but are not limited to:

- (i) Bioinformatics
- (ii) Imaging Informatics
- (iii) Sensor Informatics
- (iv) Medical Informatics and Public Health Informatics.

Priority will be given to papers reporting original work supported by long-term analysis, carefully designed studies, large cohort validation, and supplemented by on-line data or resources that can be shared by the research community.

Only **invited manuscripts will be accepted** corresponding to the best papers of the International Conference on Biomedical and Health Informatics (IEEE BHI 2017). New submissions will need to be expanded from the conference proceedings to contain original material and will have to be **at least 70% different** from any other publications.

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Key Dates

Extended Deadline for Submission: **1st June, 2017**

First Reviews Due: 1st July, 2017

Revised Manuscript Due: 1st August, 2017

Final Decision: 10th September, 2017