



BioMed Research International

Special Issue on

**Intelligent Informatics in Translational Medicine**

# CALL FOR PAPERS

Advances in information technologies are facilitating and accelerating research on molecular biology and medicine. But the increasing complexity and volume of biological data mean that more sophisticated computational techniques are still needed. Such methods must also be able to support new sensing techniques that are being developed to improve the quality of healthcare and medicine. The use of artificial intelligence, machine learning, and data mining can potentially play a significant role in addressing these important challenges. In 2013, we have published the first IIB special issue with high-quality original research articles. In order to continue this fruitful discussion, we would like to organize this special issue again for discovering more biological insights from genomics data. This special issue will focus on the challenges and solutions for information processes with an emphasis on forthcoming high throughput technology and systems biomedicine. The annual IIBM workshop (<https://sites.google.com/site/iibm2014/>) brings together computer scientists, computational biologists, statisticians, and medical practitioners in order to present and discuss current topics on intelligent informatics in biology and medicine.

The special issue will provide an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of biomedicine. The special issue will publish high-quality papers which are closely related to the various theories and practical applications in bioinformatics. In addition, we expect that the special issue will be a trigger for further related research and technology improvements in this important subject.

The special issue of this year aims to combine intelligent informatics and bioinformatics on diseases and translation medicine.

Potential topics include, but are not limited to:

- ▶ Translational bioinformatics
- ▶ Cancer genomics and epigenomics
- ▶ PheWAS and GWAS for diseases
- ▶ Medical signal/image processing
- ▶ Computer-assisted surgery
- ▶ Medical/healthcare informatics
- ▶ Big data analysis on medicine

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#### **Manuscript Due**

Friday, 8 August 2014

#### **First Round of Reviews**

Friday, 31 October 2014

#### **Publication Date**

Friday, 26 December 2014