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KEY DATES

DEADLINE FOR SUBMISSION:
31st March, 2016

FIRST REVIEWS DUE:
2nd May, 2016

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J-BHI Special Issue on “Nutrition Informatics: from Food Monitoring to Dietary Management”

The prevention of the onset and progression of diet-related acute and chronic diseases (e.g. diabetes, obesity, cardiovascular diseases and cancer) requires reliable and intuitive dietary management. The need for accurate, automatic, real-time and personalized dietary advice has been supported by recent advances in computer vision, sensors and smartphone technologies, permitting the development of portable systems for dietary monitoring and management. The proposed solutions rely on the analysis of data captured by wearable sensors, smartphone cameras, barcode scanners, RFID readers and IR sensors, along with already established nutritional databases and often require some user input. Significant progress has already been made in this new field that bridges information and communication technologies with medicine, nutrition and dietetics; however there are still many challenges that need to be addressed.

This special issue aims to bring together contributions from researchers and practitioners in the area of ICT assisted dietary monitoring and management systems. We invite authors to submit their original research articles in nutrition informatics, with technical approaches covering from food monitoring to dietary management. In addition to the latest results and findings in the field, it is expected that this special issue will propose new ideas and identify emerging directions for future studies.

The topics of the special issue include, but are not limited to:

- Ubiquitous and mobile computing for dietary assessment
- Computer vision for food detection, segmentation and recognition
- 3D reconstruction for food portion estimation
- Augmented reality for food monitoring
- Wearable sensors for food intake detection
- Computerized food composition (nutrients, allergens) analysis
- Smartphone technologies for dietary behavioural patterns
- Food multimedia databases
- Evaluation protocols of dietary monitoring/management systems
- Multimedia assisted self-management of health and disease
- Engineering approaches to dietary behavioural pattern modelling using sensors and/or smartphones

Priorities will be given to papers reporting original work supported by carefully designed studies, robust statistical analysis and supplemented by on-line data or resources that can be shared by the research community.

Extended versions of selected papers presented during MADiMa2015 (<http://madima.org>) will be considered too. The extended version must contain at least 60% new content compared to the workshop version.

Submission of manuscripts

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. As an author, you are responsible for understanding and adhering to our submission guidelines (<http://jbhi.embs.org/for-authors/>). When submitting, **authors are requested to choose “Nutrition Informatics” in the manuscript type to indicate that the paper is intended for this special issue.** The managing editor for coordinating this special issue is **Dr Carmen Poon**.