



FORTH/ICE-HT

SEMINAR SEMINAR

SPEAKER: **Dr. George Potamias, Principal Researcher**
FORTH-ICS, Crete, Greece

HOST BY: **FORTH/ICE-HT**

THEME: **Biomedical informatics and Translational Biomedical Research: Challenges, Tasks, Technology and Tools**
Βιοϊατρική Πληροφορική και Βιοϊατρική Μεταφραστική Έρευνα: Προκλήσεις, Στόχοι, Τεχνολογία και Εργαλεία

PLACE: FORTH/ICE-HT Auditorium

DATE: **Wednesday, 10th of October 2007**

TIME: **12:00**

ABSTRACT:



The completion of the human genome sequence has evidenced the need for a strong collaborative effort between **Bioinformatics** and **Medical Informatics**. Up to now, these disciplines have followed separate evolution paths. However, if 'genomic/individualised-medicine' is to become a reality a new integrated approach is required. **Biomedical Informatics (BMI)** is the emerging discipline that aims to combine these fields and facilitate the discovery of novel prognostic, diagnostic and therapeutic methods. The emerging R&D agenda calls for a '**translational research**' ('bench-to-bedside') approach.

□ The first part of the talk will centred on heterogeneous information and data **integration** issues involved in **post-genomic clinical studies** accompanied with an outline of the engaged BMI-enabling technologies - relevant European and National projects are to be highlighted.

□ In the second part, the speaker's personal and recent R&D activities and achievements in the field will be outlined with special focus on relevant **knowledge-discovery** research issues and tools:

- Identification of 'molecular-signatures'/'gene-markers' from gene-expression data: the MineGene system;
- Construction of Evidential Gene-Gene/Disease Correlation Networks: A Biomedical Literature Mining Approach: the MineBioText system;
- An Integrated Clinico-Genomics Knowledge Discovery Scientific Workflow;
- An Integrated Clinico-Proteomics Laboratory Information Management System (the LOCCANDIA LIMS).

Dr. George Potamias earned his BSc and PhD degrees from the Dept. of Mathematics, Univ. of Patras, Greece. George holds a Principal Researcher position at FORTH-ICS*, and for a number of years he was adjunct professor at the Dept. of Computer Science, University of Crete, Greece. His special R&D interests focus on Artificial Intelligence, Machine Learning, Data-Mining and Biomedical Informatics, with over 70 publications in refereed journals and conference proceedings to his credit. George has participated in more than 20 competitive R&D projects, and currently he is actively involved in major European and National projects related to Biomedical Informatics and post-genomics research (Prognochip, ACGT, LOCCANDIA, GEN2PHEN). He is an affiliate member of IEEE.

* Currently, George is hosted by FORTH/ICE-HT, Patras (**Room:** G215); **Contact:** (+30) 2610 965226, Email: potamias@ics.forth.gr