# **International Conference on**

# Information Technology in Bio- and Medical Informatics

# ITBAM'10

(Conference, Workshops, Poster Sessions)

in conjunction with the 21<sup>st</sup> DEXA – DEXA'10

August 30 - September 3, 2010 Bilbao, Spain

# **Scope of ITBAM Conference**

The area of Information Technology is very important for Bio- as well as Medical Informatics.

The DEXA conference is dedicated to providing an international forum for presenting applications in the area of database and expert systems, enabling the exchange of ideas and experiences defining requirements for future systems.

Referring to current applications, Bio- and Medical Information Technology are areas confronting us with new challenges.

Both areas are characterized by producing mass data and by using federated databases transparently integrating multiple autonomous database systems into a single federated database

Further both areas are characterized by using different techniques common in the area of information systems.

Generally speaking, for storing, manipulating and locating information for particular questions within Bio- and Medical Informatics research and application, many well known tools, methods and algorithms have to be adopted or totally re-organized (in the sense of a new development) for these very important scientific disciplines. All those modern technologies like micro-arrays, high throughput mass-spectrometry, high-resolution imaging, huge literature databases, complexity of biological and medical databases (e.g. the human genome project provide the sequence of the 3 billion DNA bases that constitute the human genome), a huge amount of information to study biological systems like cells, organs, or patients and many things more, are non trivial tasks representing new challenges to transform the vast amount of biomedical data into information supporting scientific progress and/or patient management.

Scientists working in this area originate from different departments and disciplines (informatics, mathematics, bioinformatics. biology, medicine, etc.). Therefore the area of Information Technology of Bio- and Medical Informatics is very heterogeneous. ITBAM should provide an opportunity for fruitful discussion between researchers and practitioners of different scientific disciplines for developing a common language for solving problems within information technology concerning bio and medical informatics together

### **Scope of ITBAM Poster Session**

ITBAM poster sessions should show first ideas of non ready publications and projects in progress within the area of information technology in bio- and medical-informatics. Poster sessions are mainly addressed to young researches like PhD students. All accepted posters will be shown during the whole DEXA / ITBAM event.

ITBAM invites researchers from universities and labs of companies to submit papers for the ITBAM conference, proposals for workshops and proposals for poster sessions on all topics related to

information technology in Bio- and Medical Informatics including, but not limited to those listed below:

**Topics:** 

- Administration of vast biological- and medical data
- Applications of Database-, Information-, Expert- and Decision-support systems
- Biological and medical image processing and –retrieval
- Biological and medical signal processing and interpretation
- Data and information modeling, integration, networks, privacy and security, quality, semantics and streams
- Data structure and data management
- Data and information systems architecture and performance
- Data mining, data warehousing
- Digital Libraries
- Distributed, parallel,P2P, and grid-based databases
- Electronic patient record
- Expert- and decision- support systems
- Information retrieval
- Internet computing and web applications
- Knowledge modeling and processing
- Knowledge and acquisition and management
- Metadata Management
- Mobile Data and information
- Multimedia databases
- Multi-databases and Database federation
- Query processing and optimisation
- Statistical and scientific databases
- User interfaces
- Workflow management and database

# **Important Dates:**

## **ITBAM conference papers:**

- Submission of full papers: March 7, 2010 == → extended to March 21, 2010
- Notification of acceptance: May 12, 2010
- Camera-ready copies due: June 10, 2010

# **ITBAM poster session:**

- Poster submission deadline: May 31, 2010
- Notification of acceptance: June 30, 2010

# PAPER SUBMISSION DETAILS:

Authors are invited to submit electronically original contributions or experience reports in English.

- The submitted manuscript should closely reflect the final paper as it will appear in the proceedings.
- Papers should not exceed 15 pages in LNCS format (http://www.springer.de/comp/lncs/authors.html).

• Any submission that exceeds length limits or deviates from formatting requirements may be rejected without review.

For paper registration and electronic submission see <u>http://confdriver.ifs.tuwien.ac.at/</u> starting January 2010.

Submitted papers will be carefully evaluated based on originality, significance, technical soundness, and clarity of exposition.

Duplicate submissions are not allowed. Authors are expected to agree to the following terms: "I understand that the paper being submitted must not overlap substantially with any other paper that I am a co-author of and that is currently submitted elsewhere. Furthermore, previously published papers with any overlap are cited prominently in this submission."

Duplicate submissions will be rejected. Questions about this policy or how it applies to your work should be directed to the PC-chairs.

# **ACCEPTED PAPERS:**

All accepted conference papers will be published in "Lecture Notes in Computer Science" (LNCS) by Springer Verlag. Accepted papers will be of two sizes: regular (15-page papers) and short (up to 8 pages). The former will tend to be descriptions of complete technical work, while the latter will tend to be descriptions of interesting, innovative ideas, which nevertheless require more work to mature. Authors of accepted papers must sign a Springer copyright release form.

For further inquiries, please contact the Conference Organisation Office (gabriela@dexa.org)

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