## 12<sup>th</sup> International Conference on Intelligent Systems for Molecular Biology (ISMB 2004) 3<sup>rd</sup> European Conference on Computational Biology (ECCB 2004)

JULY 31 - AUGUST 4, 2004 # SCOTTISH EXHIBITION & CONFERENCE CENTRE, GLASGOW, SCOTLAND, UK

## **One Day SIGs**

Thursday, 29 July 09:00 - 17:00 Moat House Castle II & III

#### **BioLink**

The BioLINK text mining SIG focuses on providing improved access to the biological literature and tools to help database curators with the maintenance of current and consistent biological databases. The 2004 SIG will focus on recent advances in this area and will include a report of the results from Critical Assessment of Information Extraction: BioCreAtIvE 2003. As in the past, the SIG will include a mix of invited and contributed papers and reports from related SIGs (BioOntologies, BioPathways) and relevant projects (e.g., BioMINT).

Friday, 30 July 08:00 - 19:00 Moat House Island Suite

#### **Bioinformatics and Disease**

Bioinformatics has become a fundamental tool for understanding the molecular basis of disease. It is now commonplace for candidate drug targets to be both suggested and validated through genomic research. Expression profiles derived through microarray analysis routinely give insight into disease aetiology. The study of polymorphisms provides information on the basis of inherited disease and susceptibility to common disease. These are but a few examples.

The CCP11 SIG on Bioinformatics and Disease will present keynote lectures from protagonists in the field. Primarily, however, it is an opportunity for young-blood scientists to present 20 minute talks on their bioinformatic success stories in this area. Abstracts of proposed talks should be submitted to the Programme Committee (see http://www.bioinformatics.ac.uk for details) who will then invite successful researchers to speak at the event.

Friday, 30 July 09:00 - 19:00 Moat House Castle II & III

### **Bio-ontologies**

The Annual Bio-Ontologies meeting has now been running for six consecutive years, as a SIG at ISMB. It covers all aspects of the use of ontologies to biological problems, including new applications of ontologies, and updates on previously published work.

The meeting consists of a series of talks, with no formal peer review, or publication. The meeting is generally attended by around 100 delegates, and

tends to be lively. As such its a good opportunity to gain early feedback on new work.

The meeting is loosely themed; this years theme is "Ontologies and Images". We are now well used to annotating gene products and we've seen ontologies used in text analysis, but images are pervasive in bioinformatics - how do we use ontologies to help us manage bio-images? Talks on this topic are especially encouraged, although not limited to this topic.

The conference organisers are Robert Stevens, and Phillip Lord, from the University of Manchester, and Robin MacEntire and Jim Butler from GSK.

Friday, 30 July 08:30 - 17:00 SECC - Carron Room 2

#### **Genome Annotation**

The one-day meeting will review the main activities in genome annotation, definition of biological function, use of database annotations, and genome annotation based genomic/proteomic information. Key scientists will present their views on the needs and possibilities in each one of these areas. The goal of the workshop is to create an open forum for the discussion of the current problems, to foster the analysis of key scientific issues, and to promote the collaboration among scientist interested in this key area of Molecular Biology. The EC funded BioSapiens network dedicated to the development of integrated strategies for the annotation of genomes will coordinate this first activity.

Friday, 30 July 08:30 - 17:00 SECC - Carron Room 1

#### WEB04

"Bioinformaticians are hard to find" is a complaint that is often uttered. We, the organizers of WEB '04, firmly believe that bioinformaticians are not born but made. Education and training in bioinformatics is crucial to the survival of this burgeoning field. WEB '04 focuses its attention on current issues facing bioinformatics education: curricula, course delivery: tools and infrastructure, training and pedagogy. Industry requirements are also essential to the development of successful educational programs. WEB '04 is the fourth meeting, following on from the successful WEB meetings held earlier at Copenhagen, Edmonton and Brisbane. If you are interested in bioinformatics education, WEB is the one-day SIG meeting for you. If you have something to say, we would love to hear from you. WEB '04 features an invited plenary speaker, short talks as well as posters. Oral and poster abstracts are due on April 16, 2004.

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## Two day SIGs

Thursday, 29 July - Friday, 30 July

09:00 - 18:00

SECC - Dochart Room

#### **Bioinformatics and Statistical Physics**

This SIG is a follow-up to the ECCB2002 satellite workshop with the same title, held in Saarbrücken (Germany, http://www.zbi.uni-saarland.de/ECCB2002/satellite/index.html). We invite contributions to bioinformatics from (statistical) physics-based methods. Topics include: DNA, RNA, gene prediction, microarrays, protein interactions, biological networks (metabolic, signal transduction, gene regulation), population dynamics, evolution. In particular, the 2004 edition has a special topical focus on the use of nanotechnology for the generation of novel data in bioinformatics. We thus especially encourage contributors to suggest corresponding topics of relevance for genomics, proteomics and cellomics.

Thursday, 29 July - Friday, 30 July

09:00 - 19:00

SECC - Boisdale Room

#### **BioPathways**

Bioinformatics Open Source Conference (BOSC) (2 days)

Thursday, 29 July - Friday, 30 July

09:00 - 19:00 SECC - Alsh Room

# Bioinformatics Open Source Conference (BOSC)

The 5th annual Bioinformatics Open Source Conference (BOSC'2004) is organized by the notfor-profit Open Bioinformatics Foundation (http://open-bio.org). The meeting will take place July 29-30, 2004 in Glasgow, Scotland and is one of several Special Interest Group (SIG) meetings occurring in conjunction with the 12th International Conference on Intelligent Systems for Molecular Biology. The focus of the meeting will be on current and emerging open source informatics tools and toolkits. BOSC provides a forum for developers, project groups, users and interested parties to meet personally, exchange ideas and collaborate together. Keynote speeches from well known Open Source Bioinformatics leaders are being planned.

SIGSIM (2 days) Thursday, 29 July - Friday, 30 July 09:00 - 19:00 Moat House Hotel Argyle Suite 1

#### **SIGSIM**

One of challenges in the modern biology is that a huge amount of biological data should be integrated and analyzed to plan new series of wetlab or clinical experiments. The range, quality, and level of biological complexity are very different and ambiguous. The new knowledge covers different biological entities and processes, from genes, molecular mechanisms of DNA repair transcription factors to toxicogenomics and personalized medicines. Ultimately, all information fluxes should be combined, and analyzed together to give a real understanding of biological process and to find the best therapeutical intervention. Pathways reconstruction and mathematical modeling of cellular processes is one of possible ways to tackle this complex problem.

## Two Day SIG with Dinner

Thursday, 29 July - Friday, 30 July 09:00 - 20:00 (perhaps as late as 22:00 on day one) SECC - Lomond Suite

#### 3Dsig: Structural Bioinformatics

Description: We are happy to announce the first 2day special interest group meeting on Structural Bioinformatics. Previous ISMB conferences have had many attendees interested in the field, but lacked a session devoted to it. The time is ripe to initiate a tradition of a focused meeting on aspects associated with 3D bioinformatics. These include topics such as: structural databases, structure representation, secondary structure and domain assignment, 3D data-mining, 3D programming modules, structure-based function prediction, membrane protein assembly, role of geometry and of energetics in protein structure and function, docking and protein-protein/ligand interaction prediction, structure prediction, structural genomics. A combination of plenary lectures, short presentations and structured panels/discussions should provide a good anchor for a program in which scientists in the field will be able to interact.

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The important work of the International Society for Computational Biology is accomplished primarily through the commitment of dedicated member volunteers serving on one or more committees of the Society. During the ISMB conference, each ISCB committee takes advantage of this annual opportunity to meet face to face. The committees review their previous year's accomplishments, set priorities for the coming year, and establish task groups to plan activities toward achieving the essential future works of the committees.

All ISCB member attendees of the conference are encouraged to participate in the committee meetings of greatest interest to them in order to lend their voice and/or volunteer their time. If you are attending the ISMB conference as a non-member of the Society, please accept this invitation to attend our committee meetings and consider joining a community of your peers through ISCB membership.

# **ISCB Committee Meetings Schedule**

Monday, August 2, 2004

#### 12:30 - 14:00 Publications Committee

The Publications Committee evaluates and recommends the Society's sponsorship and promotion of the Society's official journal and arranges for member discounts on other journals and publications.

#### 12:30 - 14:00 Education Committee

The Education Committee promotes worldwide education and training in computational biology as well as serving as a resource and advisor to institutions and industry interested in developing educational programs.

## 18:00 - 19:30 **Public Affairs & Policies Committee**

The Public Affairs & Policies Committee interacts with worldwide government agencies that fund bioinformatics research. The Committee, in partnership with other Societies where and when appropriate, provides guidance to the government on policies related to bioinformatics and genomics, and assists government agencies in defining bioinformatics funding programs. The Committee also alerts the ISCB Directorship and membership of government policy likely to impact our science, and responds appropriately to feedback given.

#### 18:00 - 19:00 Conferences Committee

The Conferences committee deals with all aspects of the relationship of ISCB to conferences and meetings, both internal and external.

#### Tuesday, August 3, 2004

#### 12:30 - 14:00 Affiliates & Special Interest Groups Committee

The Affiliates & SIGs Committee fosters interactions between the Society and its Affiliated Regional **Groups and Special Interest** Groups. The committee examines applications for new regional affiliates and SIGs and establishes the relative procedures. It also examines ways in which both partners (the Society and the groups) can mutually benefit from each other. It is the body to which members of the Affiliated Regional Groups and SIGs can bring particular concerns and make suggestions for new initiatives.

## 12:30 - 14:00 Finance & Business Development Committee

The Finance Committee oversees revenue generation and expenditures by developing projections, strategy, and setting guidelines. The Committee also writes grant proposals for Society projects and liaises with the Outreach Committee over financial outreach matters.

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# ISMB/ECCB

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