



# Bioinformatics/Database Update

## March, 2006

**Query the Bovine SNP Database.** A database is set up using most recent bovine SNP released by Baylor. This database contains 114,958 bovine SNPs derived from multi-breed genome sequence information comparisons. A web interface is set up for public users to blast against the SNP flanking sequences and query the database for SNP details if good hits are found. URL: [http://www.animalgenome.org/bioinfo/resources/util/q\\_bovsnp.html](http://www.animalgenome.org/bioinfo/resources/util/q_bovsnp.html)

**Bioinformatics utility tool box.** A bioinformatics utility tool box is set up at the NAGRP Bioinformatics site. Currently there are 6 utility tools in the "box": 1. Expeditor: Design primers gene structure and EST information from different species. 2. Prim2: Design primers on the consensus of 2 similar sequences. 3. A sequence alignment diagram drawing tool. 4. Gene ontology (GO) terms classifications counter. 5. DNA Sequence Reverse Complement Converter 6. Query the Bovine SNP Database by blast. URL: <http://www.animalgenome.org/bioinfo/resources/util/>

**Animal Genomics Software Archive.** We have set up an animal genomics software archive site for publicly shared software (<http://db.genome.iastate.edu/ftp/share/>). Those who wish to share their software with the community, please feel free to contact [bioinfo-team@animalgenome.org](mailto:bioinfo-team@animalgenome.org) for information on how to deposit your software to this archive.

**What is new with USDA grants in Washington, DC.** The new USDA-NRI request for applications is available. You can access it at [http://www.csrees.usda.gov/funding/rfas/nri\\_rfa.html](http://www.csrees.usda.gov/funding/rfas/nri_rfa.html). We want to remind everyone that this year there is a specific call for bioinformatics proposals.

The Bioinformatics program requests applications for the development of bioinformatic tools that will assist in functional genomics, annotation and comparative genomics of agriculturally important animals. These tools need to be designed to integrate with existing data/databases (not create new ones), serve as tools for genome analysis, provide for practical applications of genomic data and have a biological framework.

### FY 2006 Priorities for Research

- 1) Tools that integrate genome sequence, genome annotations and pedigree information with biological function and phenotypic information for a single species or across multiple species; and
- 2) Animal bioinformatics tools to efficiently and effectively handle and interpret the genomic/genetic data being generated to accelerate the knowledge discovery process. (Examples include technology platforms, computational resources and analytical tools for integrative and comparative research.)

**New projects:** As always if you have suggestions about what needs to be developed/improved or how we can help please do not hesitate to contact us. [Jreecy@iastate.edu](mailto:Jreecy@iastate.edu)

### UPCOMING BIOINFORMATICS MEETINGS

March 05 - March 10, 2006

Event: Biology: Integrating Biology, Technology, and Computation

Location: Taos, NM, USA

Web: <http://www.keystonesymposia.org/Meetings/ViewMeetings.cfm?MeetingID=789>

April 02 - April 05, 2006

Event: 10th Annual International Conference on Research in Computational Molecular Biology (RECOM)

Location: Venice, Italy

Web: <http://recomb06.dei.unipd.it/>

May 16 - May 19, 2006

Event: 2nd International Symposium on Animal Functional Genomics

Location: Henry Center, Michigan State University, East Lansing, MI

Web: <http://www.isafg.msu.edu/>

May 24 - May 28, 2006

Event: Genomes, Evolution, & Bioinformatics (GEB2006)

Location: Arizona State University, Tempe, Arizona

Web: <http://www.smbe.org/geb/>

June 15 - June 18, 2006

Event: 7th International Conference on Bioinformatics 2006 (BIOINFORMATICS 2006)

Location: Uhus, Denmark

Web: <http://www.birc.au.dk/bioinformatics2006/>

August 04 - August 05, 2006

Event: The 6th annual Bioinformatics Open Source Conference (BOSC 2005)

Location: Fortaleza, Brasil

Web: <http://www.open-bio.org/bosc2005/>

August 06 - August 10, 2006

Event: Intelligent Systems for Molecular Biology (ISMB)

Location: Fortaleza, Brazil

Web: <http://ismb2006.cbi.cnptia.embrapa.br/>

August 13 - August 18, 2006

Event: 8th World Congress on Genetics Applied to Livestock Production

Location: Belo Horizonte, MG, Brazil

Web: <http://www.wcgalp8.org.br/paginaInicial.do>

August 20 - August 25, 2006

Event: 30th International Conference on Animal Genetics (ISAG 2006)

Location: Porto Seguro, Bahia State, Brazil

Web: <http://www.cbra.org.br/eventos/XXXisag.do>

August 30 - September 03, 2006

Event: 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society

Location: Marriott Hotel at Times Square, New York, NY

Web: <http://embc2006.njit.edu>

September 04 - September 08, 2006

Event: 4th International Workshop on Biological Data Management - BIDM 06

Location: Krakow, Poland

Web: <http://embc2006.njit.edu/>

September 10 - October 13, 2006

Event: 4th European Conference on Computational Biology (ECCB/05)

Location: Eilat, Isreal

Web: <http://www.eccb06.org/>

September 13 - September 17, 2006

Event: Genome Informatics

Location: Hinxton, UK

Web: <http://meetings.cshl.edu/meetings/infouk06.shtml>

September 28 - September 29, 2006

Event: Computational Intelligence in Bioinformatics and Computational Biology

Location: San Diego, California

Web: <http://eldar.mathstat.uoguelph.ca/dashlock/CIBCB2006/>

October 16 - October 18, 2006

Event: IEEE Symposium on Bioinformatics and Bioengineering (BIBE)

Location: Washington D.C

Web: <http://birg.cs.wright.edu/bibe06/>

November 08 - November 14, 2006

Event: COMPUTATIONAL & COMPARATIVE GENOMICS

Location: Cold Spring Harbor Laboratory, NY

Web: <http://meetings.cshl.edu/courses/c-ecg06.shtml>

November 11 - November 15, 2006

Event: Biomedical and Health Informatics

Location: Hilton Wahington & Towers, Wahington, DC

Web: <http://embc2006.njit.edu/>

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