



Pig Genome Update

No. 85 July 1, 2007

The Symposium on Epistasis: Predicting Phenotypes and Evolutionary Trajectories was held, May 31 to June 3, 2007, at Iowa State University, Ames, IA. The meeting was extremely interesting in that it brought together two groups, evolutionists, and plant and animal breeders to discuss epistasis. While no consensus was reached on the best way to estimate and use such effects the discussions were lively and useful.

The final meeting of the CSREES-USDA Multistate project NC-1004 on Genetic and Functional Genomic Approaches to Improve Production and Quality of Pork was held June 22 and 23 at North Carolina State University. Research stations in attendance presented results on ongoing research and discussed plans and opportunities to collaborate under the new 5-year Multistate project NC-1037, which was recently approved. The NC-1037 project carries the same title as NC-1004 and will have a substantial focus on genetic aspects of health. Details can be found at:

<http://nimss.umd.edu/homepages/home.cfm?trackID=8917> . The Multistate meeting was followed in the afternoon of June 23 by a symposium in honor of Dr. O.W. Robinson, with presentations by several of his former students. Dr. Robinson recently retired and has made many contributions to swine genetics during his career.

The Swine Genome Sequencing Workshop was recently held in St. Croix. The meeting was well attended and included specific issues of the sequencing project, identifying approaches to ensure broad and rapid utilization of the sequence information, developing educational programs, and examining ways to find additional financial support. A full report of the recent meeting will be posted soon at <http://www.piggenome.org/newsletter.php> .

SNP chip under discussion. One of the issues being discussed is the need for a SNP chip in pigs. There has been some development in this area and a “private” chip of about 7.5K SNPs is under manufacture by Illumina for a group of European scientists. Gary Rohrer has agreed to head a committee of interested researchers to work on developing a 10K chip and a group of scientists led by the University of Illinois put in a proposal for a 50K chip to be funded in part by USDA. Look for developments to be reported in the future.

The new pig oligo arrays are here and can be ordered. The Swine Protein-Annotated Oligonucleotide Microarray has been developed as an OPEN SOURCE collaboration between investigators and institutions with an interest in pig physiology. The sequences of the oligonucleotides, the consensus sequences they represent, and the annotation of the consensus sequences are provided at no cost to the entire research community. New swine oligo arrays ordering can now be ordered (<http://www.pigoligoarray.org/>). Please note ordering depends on the source of your funding. Labs associated with agriculture (at US Colleges or Universities, US government laboratories, or foreign Universities or governments) please order using the "Arrays for USDA NAGRP-8 supported activities" button. Validation of arrays is taking place. Thanks to efforts of a number of the swine genome community a validation experiment, funded in part by the participants and the USDA Pig Genome Coordinator will take place over the next few months. The plan is to report the information to the community at the earliest possible date.

Improvements to the Animal QTLdb have recently been made by the Bioinformatics Coordinator and his team. New data including mapping of Affy array elements to QTL maps for pigs and cattle and SNPs stored in Genbank to the respective chicken, pigs and cattle QTL maps have been added to the QTLdb (<http://www.animalgenome.org/QTLdb>). If they are is any additional information that you would like added, please contact James Reecy at jreecy@iastate.edu.

PAG-XVI will be held January 12-16, 2008 at the usual spot, the Town and Country Hotel, San Diego, CA. The NC-1008 Multistate Research project committee and the Swine Subcommittee of the National Animal Genome Research Program, NRSP-8, will meet concurrently. The NRSP-8 project needs to submit a renewal application this year. The NRSP-8 writing team will be coordinated by Mary Delany and include existing coordinators or their representatives.

Upcoming meetings (see: <http://www.animalgenome.org/pigs/community/meetings.html>)

American Society of Animal Science annual meetings in San Antonio, TX on July 8-12. For details please see <http://adsa.psa.ampa.asas.org/meetings/2007/>

3rd International Conference on Quantitative Genetics, August 18-24, 2007, Zhejiang University, Hangzhou, China. Conference Organizers: Jun Zhu (jzhu@zju.edu.cn) and Zhao-Bang Zeng (zeng@stat.ncsu.edu)

Convergence of Genomics and the Land Grant Mission: Emerging Trends in the Application of Genomics in Agricultural Research, September 10-12, 2007, Purdue U., West Lafayette, Indiana. Please see <http://www.entm.purdue.edu/conference/>

International Symposium on Animal Genomics for Animal Health, October 23-25, 2007, OIE Headquarters, World Organization for Animal Health, Paris, France. For information contact Cyril Gay, cyril.gay@ars.usda.gov, or Marie-Hélène Pinard (pinard@dga2.jouy.inra.fr).

2nd GSA Model Organisms & Human Biology Meeting, Jan. 5-9, 2008, Town & Country Convention Center, San Diego, CA. Please see <http://www.gsamodelorganisms.org>.

Plant and Animal Genome XVI, joint with NC-1008 and NAGRP annual meetings, Jan. 12-16, 2008, Town & Country Convention Center, San Diego, CA. See <http://www.intl-pag.org>

Items for *Pig Genome Update 86* can be sent to me by no later than August 15 please.

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