



Pig Genome Update

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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. In this regard there is concern that several million dollars still needs to be raised to meet the goals of a finished sequence. Funding sources include ARS which had previously contributed to the cattle genome project and a number of other sources from other countries. 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. Max Rothschild and Gary Rohrer and some of the European research group met with Illumina personnel. We discussed the possibility of using these SNPs and others to produce a 10K chip. Gary has agreed to head a committee to work on this and the committee includes several other swine researchers. Look for developments to be reported in the future.

The new pig oligo arrays are here and can be ordered. Thanks to efforts of a number of groups and individuals we have developed a novel 70-mer oligonucleotide microarray for profiling expression of the pig (*Sus scrofa*) genome. 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. If you are a PRRS researcher please order using the "Arrays for PRRS CAP supported activities" button. Commercial concerns (domestic or foreign) or any biomedical researchers (domestic or foreign) please order using the "Array for Biomedical and Commercial Applications" resource button. Validation of arrays will take 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.

The NC1004 rewrite was quite successful and the new project NC1037 - Genetic and Functional Genomic Approaches to Improve Production and Quality of Pork has been approved for five years. The new project rewrite was successful in large part due to the efforts of Chris Tuggle and his committee that did the rewrite. North Carolina State University will be hosting the last NC1004 annual meeting on Friday June 22nd on the NCSU campus. The next day there will be an event honoring the career of Dr. O.W. Robison. Details can be obtained by emailing Joe Cassidy at joe_cassady@ncsu.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.

The CSREES FY 2007 National Research Initiative (competitive grant program) request for proposals can be found at http://www.csrees.usda.gov/funding/rfas/nri_rfa.html. The FY 2007 budget was finally passed as a continuing resolution, allocating \$189 million to the NRI. FY 2007 NRI applications require electronic submission through <http://grants.gov/>. The deadline for both Animal Genome and Animal Growth & Nutrient Utilization programs is June 5, 2007. This year, the Animal Genome program will not offer Functional Genomics grants (but expects to resume these in FY 2008). Applied Animal Genomics, Tools & Resources and Bioinformatics grants will be awarded this year. The President's proposed 2008 budget allocates \$257M to the NRI, but the increase would come at the expense of deleting \$157M in earmarked projects and grants, and Congress can be expected to cut the NRI in order to save much of the earmarked funding (kindly provided by Jerry Dodgson).

CREATE-21 Draft Legislation. Create-21 is a proposal by the Nat'l Association of State Universities and Land Grant Colleges to increase USDA's organizational flexibility and budgetary efficiency through greater program integration, increased competitive grant funding and enhanced stakeholder involvement as part of the 2007 Farm Bill reauthorization. The CREATE-21 proposal has two "integral" elements: (1) creation of a new "National Institute" through the consolidation of agencies, programs, and activities currently within the USDA's Research, Education, and Economics Mission Area (REE) and U.S. Forest Service R&D; and (2) authorization of new funding to increase the intramural capabilities of the Institute and its land-grant and related university partners and to increase competitive research programs to address critical food, agriculture, and natural resource problems. Draft legislation has been proposed that encompasses all of the provisions recommended by CREATE-21 Executive Summary: www.create-21.org/documents/PDF/Print/A_Bold_Proposal.pdf (kindly provided by Jerry Dodgson and Jeff Armstrong).

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

Symposium on Epistasis: Predicting Phenotypes and Evolutionary Trajectories, May 31 to June 3, 2007, at Iowa State University, Ames, IA. For details please see <http://www.bb.iastate.edu/~gfst/PSIframeset.html>

NC1004 meeting and O.W. Robison meeting at North Carolina State University on June 22-23, 2007. For details please email Joe Cassidy at joe_cassady@ncsu.edu

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 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.gsa-modelorganisms.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 www.intl-pag.org/.

Items for *Pig Genome Update 85* can be sent to me by no later than June 15 please.

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