Pig Genome Update
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PAGXIII another success in sunny San Diego. Great weather and over 2,000 attendees had excellent meetings again this year. Plenary speakers including one Nobel laureate presented talks on a variety of subjects including dog genomics and comparison of microarrays platforms. Over 800 posters and some fun evening meetings made for an excellent conference. Suggestions for next year should be sent to mfrothsc@iastate.edu.

The NSRP-8 Swine Sub-committee met at the PAG XIII meetings on January 15, 2005 at the Town and Country Hotel, San Diego, CA. Joan Lunney, NSRP-8 Swine committee chair, welcomed everyone and then presided over the session. The morning session included 4 invited speakers. Hirohide Uenishi (huenishi@affrc.go.jp) Animal Genome Research Program, Natl. Inst. Agrobiological Sciences, Tsukuba, Japan, spoke on "Swine Immunogenomics: Resource Of Genomic Data And Its Application To Immunological Research In Pigs." Randall S. Prather (PratherR@Missouri.Edu) University of Missouri-Columbia (MU), Columbia, MO USA spoke on "Gene Expression During Pig Embryogenesis as Determined by Using a Pig Reproductive Tissue-Specific Microarray." Lucina Galina (Lucina.Galina@PIC.com) from Sygen International, Franklin, KY USA spoke about "PathoCHIP - A genomics approach to understanding Haemophilus parasuis infection." Scott Fahrenkrug (fahre001@tc.umn.edu) from University of Minnesota, St. Paul MN USA spoke on "Microarray Profiling for Quality Control of Porcine Islet Isolation."

Dr. Fahrenkrug then led a discussion of plans of the joint NRSP8/NC1004 committee on future swine microarray options. A microarray sub-committee (Scott Fahrenkrug, Chair, Joan Lunney, CoChair, Chris Elsik, and Cathy Ernst; Jim Reecy, NRSP8 Bioinformatics Coordinator) was created. This committee is developing the next array and will be moving forward quickly. Larry Schook (schook@uiuc.edu) University of Illinois at Urbana-Champaign, Illinois, provided an update on the swine genome sequencing consortium's progress. Ronald D Green (rdg@ars.usda.gov), the USDA ARS, National Program Leader for Animal Production, Beltsville, MD USA spoke about the "USDA Animal Genomics Workshop." Margaret Dentine, NRSP8 Swine Technical Committee Advisor explained the new process for project reviews. NRSP8 received very favorable responses. Muquarrab Qureshi, USDA CSREES National Program Leader, discussed performance based budgeting. He mentioned program areas 303 and 304, discussed genome project updates and the NRI budget increase. Max Rothschild (mfrothsc@iastate.edu) Swine Genome Coordinator, and James Reecy, Bioinformatics Coordinator, gave updates. NRSP8 Station Reports were presented by Joe Cassady (North Carolina State University), Cathy Ernst (Michigan State University), Max Rothschild and Chris Tuggle (Iowa State University), Gary Rohrer (USDA ARS MARC), Joan Lunney (USDA ARS BARC), Zhihua Jiang (Washington State University) and Craig Beattie (University of Nevada). At the end there was a short NRSP8 swine business meeting. Zhihua Jiang was elected Swine NRSP8 secretary for the next year. A discussion of whether NC1006 and NRSP8 would hold a joint meeting in 2005/2006 was left for Dr. Cassady, 2005 Chair for both groups, to poll members for their preferences. (kindly provided in part by J. Lunney and J. Cassady)

USDA sets plans for request for proposals (RFP) for swine genome sequencing. At the Swine Genome Sequencing Consortium meeting at PAG, USDA Undersecretary Joseph Jen announced that the USDA will issue a RFP to sequence the swine genome and will provide at least $10 million from the USDA's competitive grants program. Dr. Anna Palmisano, CSREES, indicated that the RFP will be issued within the next few months. Dr. Ronnie Green, ARS, suggested that the ARS intended to provide at least an amount equivalent to the ARS contribution to bovine ($1 million) and to possibly provide as much as $2 million for the project. Sequencing could begin in the fall. This support and all the hard work to get to this point are appreciated.

A large crowd of over 130 people interested in pig models attended Swine in Biomedical Research Conference in Chicago on January 27-29. The conference was hosted by University of Illinois and chaired by Larry Schook. The outstanding presentations covered a historical perspective, genomics, transgenesis and cloning in the pig. Examples of biomedical models using the pig included: eye, obesity, cardiovascular, cancer, bioengineering, skin and other significant research examples. Reports form the meeting are expected out in the future and abstracts are available from www.swinegenomics.com.

The Interagency Working Group on Domestic Animal Genomics report is now available and can be obtained by clicking on "Coordination of Programs on Domestic Animal Genomics" to obtain the PDF at http://www.ostp.gov/nstc/html/recentnstcdocs.html (click on "Coordination of Programs on Domestic Animal Genomics" to obtain the PDF). If you may need a hard copy contact *Muquarrab A. Qureshi, CSREES* at mqureshi@csrees.usda.gov

A pig quantitative trait loci (QTL) database (PigQTLdb) has been created at the Iowa State University. The database and its peripheral tools were made to compare, confirm and locate on pig chromosomes the most feasible location for a candidate gene responsible for quantitative trait(s) important to pig production. To date, 791 QTLs from 73 publications have been curated into the database at http://www.animalgenome.org/QTLdb/ . The database content has also been submitted to the NCBI Gene and Map Viewer resources, where the information about markers are matched to marker records in NCBI's UniSTS database. Support from NAGRP and NCBI have made this possible.

The 2005 NRI competitive grants program has been announced (www.reeusda.gov/nri/). Deadline dates are now May 17, 2005, for Animal Growth and Nutrient Utilization; and June 15, 2005, for Animal Genomics, Animal Genome Reagent & Tool Development and Functional Genomics of Agriculturally Important Organisms. Total 2005 NRI funding remains was set at $181M.

A small number of pig oligo arrays still remain to be printed and released. . Some individuals have failed to request a shipping date and need to do so. Cost is $20/slide plus shipping. Slide orders will be on a first come first serve basis. **Please immediately contact Max Rothschild at mfrothsc@iastate.edu.**

The 3rd International Symposium on Genetics of Animal Health (formerly, Candidate Genes for Animal Health) will convene on July 13-15, 2005, in Ames, Iowa, USA. The meeting will feature several invited speakers, contributed presentations and poster sessions and should be an exciting continuation of past meetings. Please note the dates on your calendar, and bookmark the GAH2005 web home page: http://www.ans.iastate.edu/GAH2005.html. More information will be follow!

Upcoming meetings (see: http://www.genome.iastate.edu/community/meetings.html)

The Biology of Genomes, May 11-15, 2005, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY. See http://meetings.cshl.edu/meetings/genome05.shtml for more information.

3rd International Symposium on Genetics of Animal Health, July 13- 15, 2005, in Ames, Iowa, USA, Please see: http://www.ans.iastate.edu/GAH2005.html

Symposium on Integration of Structural and Functional Genomics (14th Annual Growth Factor and Signal Transduction Conference), September 22-25, 2005, Iowa State University, Ames, Iowa. See http://www.bb.iastate.edu/~gfst/homepg.html

Items for *Pig Genome Update 72* can be sent to me by no later than April 15 please.

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