



# Pig Genome Update

## No. 89 March 1, 2008

### **PAG-XVI and the swine genome meetings were held in sunny San Diego January 12-16, 2008.**

A large crowd of over 2,200 people attended the recent PAG meetings and the many animal workshops. The swine workshop was well organized by Gary Rohrer and Melissa Ashwell. It included talks dealing with evaluation of the new arrays, confirmation of a QTL/candidate gene for meat tenderness on chromosome 2, evaluation of LD in different populations, updates on sequencing and SNP discovery. The sequencing workshop also addressed some of these issues and considerable discussion was directed towards development of a 60K SNP chip. Plenary talks included some provocative comments on the role of genomics in society, developments in small RNA and proteomic research, ontologies for biologists, energy genomics, epigenomics and systems approaches to understanding complex diseases. Poster viewing was much improved in the new conference area and workshops also had a number of updated and useful new techniques and equipment to describe.

**Planning for PAG XVII, January 10-15, 2009, is already underway.** The new chairs of the swine genome section are Melissa Ashwell and Cathy Ernst. Ideas for speakers are gladly being taken by Max Rothschild or Hans Cheng for plenary talks. Some reorganization of the species workshops on Saturday and Sunday is likely to take place to avoid overlap and increase attendance to the NRSP8 meetings. Stay tuned for developments.

**Dense SNP chip development continues.** Considerable discussion took place at PAG involving development of a dense SNP chip for pigs. Based on reports presented by a number of parties it appears possible to develop a 60K SNP chip this year. Members of the consortium from the USDA (ARS, CSREES), University of Illinois, Iowa State University and the National Pork Board met with two technology providers and discussed the technologies and the possible costs to produce chips. In addition, a number of people and research labs continue to deposit SNPs into the database and sequencing is producing a large number of additional SNPs. Details for purchase of chips have yet to be determined though price is likely to be less than \$150 but more than \$100 per chip. Details on minimum orders and other issues are yet to be determined. Please write to either Mohammad Koohmaraie ([Mohammad.Koohmaraie@ARS.USDA.GOV](mailto:Mohammad.Koohmaraie@ARS.USDA.GOV)), Larry Schook ([schook@uiuc.edu](mailto:schook@uiuc.edu)) or Max Rothschild ([mfrothsc@iastate.edu](mailto:mfrothsc@iastate.edu)) if you consider your research program / institution would consider purchasing and using the 60K pig SNP chip, along with likely numbers required initially and per year so that we can include you in the mailing list concerning chip creation and supply. Our aim is to achieve the maximum economy of scale across the pig genomic community and in turn the lowest unit cost per chip. Please don't hesitate to write for additional information.

**The NRSP-8 renewal application is now completed.** The NRSP-8 writing team, coordinated by Mary Delany finished recently. She and her team are to be congratulated for their hard work. Be sure to fill out your appendix E to state your participation and please get your director's support for this very important project.

**USDA-NRI Grant RFA for FY 2008 is now available** at <http://www.csrees.usda.gov/> or <http://www.greents.gov>. Program 43.0, Animal Genome, contains Translational Animal Genomics, Tools and Resources, Bioinformatics, and Functional Genomics. The deadline for these is June 5, 2008. However, integrated proposals only for Translational Animal Genomics and all proposals for Functional Genomics require submission of a letter of intent by March 14, 2008. Please see the RFA for deadlines for other animal-related programs. Letters of intent are required for some programs/elements to insure that proposal aims meet the goals of the program and to minimize wasted effort in the application process.

**The pig oligo arrays can be ordered.** Swine oligo arrays can now be ordered at (<http://www.pigoligoarray.org/>). A validation experiment, funded in part by the participants and the USDA Pig Genome Coordinator, was reported on at PAG 2008.

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

Midwestern Section, American Dairy Science Association, American Society of Animal Science, Annual Meeting, Des Moines, Iowa, March 17-19, 2008. Please see <http://adsa.asas.org/midwest/2008/>

Swine in Biomedical Research Conference, April 2-3, San Diego, California. For information and registration please see <http://www.nsrcc.missouri.edu/MeetingApril2008reg.aspx>.

ARK-Genomics conference 2008: 3rd International Symposium on Animal Functional Genomics (ISAFG), April 7th - 9th, 2008. Please see <http://ebrc-launch.org/ISAFG/index.html>

Swine Breeders Roundtable, UK. April 21-24. For details contact Chris Haley at [chris.haley@roslin.ed.ac.uk](mailto:chris.haley@roslin.ed.ac.uk)

ASAS 2008 Centennial meeting, July 7-11, 2008, Indianapolis, Indiana, USA. See <http://www.asas.org/100years/>

XXXI conference of the International Society of Animal Genetics (ISAG) July 20-24, 2008 Amsterdam, The Netherlands. See <http://www.isag2008.nl>

Kennedy Conference on Quantitative genetics and Animal Breeding, August 11-12, 2008 Guelph, Ontario Canada. For details please contact Larry Schaeffer at [Irs@uoguelph.ca](mailto:Irs@uoguelph.ca).

**Items for *Pig Genome Update 89*** can be sent to me by no later than April 15 please.

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