

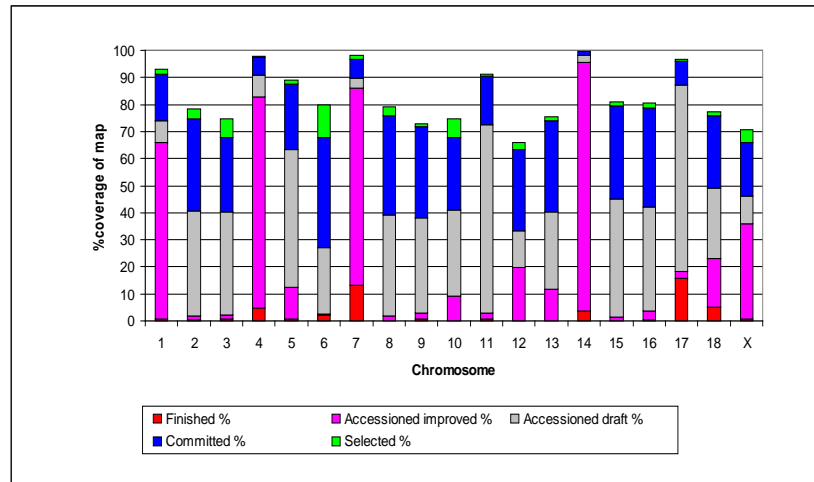


Pig Genome Update

No. 90 May 1, 2008

Pig genome sequencing progress continues to move along.

Recent progress is shown on the graph. A total of 13,296 clones have been selected and sent for sequencing. The coverage is now 82.5% of the map. The total sequence now equals 1421 Mb of which 60.1 Mb is finished quality from 8,999 sequenced clones with 4,741 clones at an improved status. Sequencing appears on schedule but it is clear more funding is desired.



Registration for the Pig Annotation Workshop July 16-18 at the Wellcome Trust Sanger Institute is needed. The Sanger institute is organizing an annotation workshop to bring together researchers from the pig genome community to participate in the manual annotation of the genome sequence. The event is sponsored by EADGENE and SABRE. The resulting annotation from the participants will be eventually displayed in the Ensemble browser. The aim of the three day workshop is to teach participants how to use annotation software so they can begin to annotate regions of interest to them. The organizers will provide support during and after the workshop to enable participants to work remotely to finish their annotation using the experience gained at the workshop. Registration is free and there are a number of grants available to pay for the cost of accommodations. Registration is limited to 40 participants and the last day of registration is May 31, 2008. For details see http://www.sanger.ac.uk/Projects/S_scrofa/workshop_Hinxton08/index.shtml

Dense SNP chip development continues. International efforts to develop the first large scale (50K) dense SNP chip continue. Several groups in Europe and the US have been busy making libraries and doing sequencing to produce SNPs. The overall plan is to attempt to get 30X coverage on about 10% of the genome and to produce about 1 Million SNPs. These will then be tested using bioinformatics and other tools to come up with a set that are wide spread across the genome and which work with the technology provider's platform. The plan also is to have those with validated SNPs to deposit them in dbSNP. The plan is for ALL SNPs to be deposited by June 1 to be considered. Members of the consortium from the USDA (ARS, CSREES), University of Illinois, Iowa State University and the National Pork Board have met with two technology providers and discussed the technologies and the possible costs to produce chips. It appears that Illumina will fit the needs of the community best. To work with them it will be necessary to have all the sequencing, validation, and bioinformatics completed by August 22. In addition, all contracts for initial purchase will need to be executed by August 22, 2008. All interested parties should prepare to consider how much funding they have available. Cost per chip will depend on numbers of chips contacted at the date the contract period ends. We suspect that value could be in the \$125 range if sufficient numbers are sold.

USDA-NRI Grant RFA for FY 2008 is now available at <http://www.csrees.usda.gov/> or www.grants.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.

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.

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>)

NC-1037 Genetic and functional genomic approaches to improve production and quality of pork May 14-15, USDA Beltsville, MD. For information please contact Joan Lunney at Joan.Lunney@ARS.USDA.GOV

Pig Genome II, The Second European Conference on Pig, June 4-5, 2008 in Ljubljana, Slovenia. For details see <http://www.piggenomeii.si/>

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 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 lrs@uoguelph.ca.

Items for *Pig Genome Update 91* can be sent to me by no later than June 15 please.

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