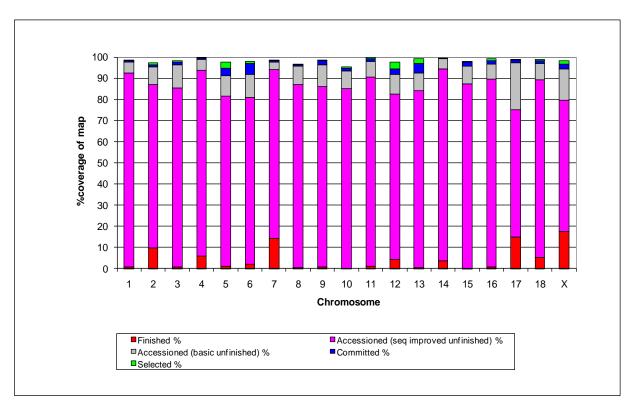


Pig Genome Update No. 99 November 1, 2009

Swine sequencing draft sequence about to be completed. The deadline has passed for new clones to enter the sequencing pipeline. However, some new clones are being identified as a possible resource for future sequence gap closure. These identified BACs currently stand at ~150 and have been identified using physical map and sequence information. All chromosomes are over 90% sequenced taking the genome to 95.58% from 16,664 sequenced clones. About 89% of the genome is at the "Improved" status (15286 clones). There is 114Mb of finished quality data within the 2.973Gb currently available (kindly provided by Richard Clark).



We owe a big thanks to all the many contributors, and all those within the field that have helped at Sanger and around the world to get us to that point. Many people raised money, contributed time and efforts and have helped over the years. The Pig Genome III meeting in the UK in November is in part a celebration of this activity and all are encouraged to attend if possible. The next issue will try to cover some of the accomplishments from the meeting.

Refunding of the NRSP8 requires some help from each of you. We are continually asked what the coordinators money does. Many of you have received reagents, arrays, SNP chip and some of this has been augmented by funds from coordinator activities. Please send by December 1, 2009 to mfrothsc@iastate.edu any grant titles and dollar amounts for the past 3 years for any project helped by reagents, tools and bioinformatics in part supplied by the Pig genome Coordination program.

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Recent Gene Nomenclature meeting provides some new direction. With the completion or soon to be completion of a number of genome sequencing projects, a number of challenges arise. Recently, representatives from the human, mouse, rat, cattle, chicken, swine, sheep, and aquaculture communities along with database and complex gene family representatives met in Cambridge, UK to discuss gene nomenclature issues. Previously, the livestock communities had agreed that the human gene nomenclature rules would be followed. This point was reaffirmed at the meeting. However, in cases where either clade-specific genes or even species-specific genes are to be named, a domesticated animal gene nomenclature committee (ie. cattle, dog, horse, sheep, and swine) needs to be formed to coordinate efforts. It is hoped that this topic is discussed with the respective species at the up-coming Plant and Animal Genome and International Society of Animal Genetics meetings (kindly provided by James Reecy).

VC Map recently released. As part of a collaborative project, between Jim Reecy and Zhiliang Hu at AnimalGenome.org and Mary Shimoyama and Anne Kwitek from the Rat Genome Database, version 1 of VCMap has been released. This visualization program has been developed to compare chromosome organization across species (currently cattle, chicken, human, mouse, rat and swine). The current release utilizes the swine USDA linkage map and chromosome 1, 4, 5, 7, 11, 13, and 14. The entire swine genome will be added shortly. Please take a look at VCMap (http://bioneos.com/VCMap/) and provide feedback (jreecy@iastate.edu or zhu@iastate.edu) on additional features that you would like to see added (kindly provided by James Reecy).

Dreaming of San Diego and PAG? Time is coming up to submit the abstracts and plan for next year. See <u>http://www.intl-pag.org/</u> for more information. Scheduled PAG XVIII plenary speakers include Eric Schadt, Peter Raven, Howard Jacob, Evan Eichler, Joanne Chory, Robb Fraley and Vicki Chandler. It promises to be a great meeting. Cathy Ernst (<u>ernstc@msu.edu</u>) is organizing the Swine workshop for January 9.

Pig Genome Update Newsletters are distributed electronically through AnGenMap, the Animal Genome Discussion Group (http://www.animalgenome.org/community/discuss.html). Previous newsletters are at http://www.animalgenome.org/pigs/newsletter/index.html. Coordinator updates can also be found http://www.animalgenome.org/pigs/community/NRSP8/. Please provide your input as the Swine Genome Coordinator is always glad to hear from NRSP-8 members and other readers about ways that we can improve the coordination effort or provide resources that are needed and with which we may be able to help. Also, let us know if you have items of general interest to include in this Newsletter.

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

Swine Genome Sequencing Consortium (SGSC) and Pig Genome III in Hinxton, UK November 2-4. Please see <u>http://www.pignet.eu/conferences/pig-genome-iii/</u> or contact either Larry Schook (<u>schook@illinois.edu</u>) or Martien Groenen (<u>Martien.Groenen@wur.nl</u>).

National Swine Improvement federation meeting December 2-4, Nashville TN. For details please email Glenn Conatser (<u>glennhelen@gmail.com</u>).

PRRS Friday Dec.4-Sat Dec.5. For details got to http://www.prrssymposium.org/ for all info.

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Plant & Animal Genome Conference, PAG XVIII, Jan. 9-13, 2010, Town & Country Hotel, San Diego, CA. Information available at <u>http://www.intl-pag.org/</u>.

Items for *Pig Genome Update 100* can be sent to me by no later than December 15 please.

Max F. Rothschild U.S. Pig Genome Coordinator 2255 Kildee Hall Department of Animal Science Iowa State University Ames, Iowa 50011 Phone: 515-294-6202 Fax: 515-294-2401 mfrothsc@iastate.edu

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