



Pig Genome Update

No. 110 January 1, 2012

Happy Holidays and New Year to you, your families and colleagues!!

PAG XX will again to be in sunny San Diego January on January 14, 2012. PAGXX promises to be exciting with over 2,500 participants in plant and animal research, and over than 120 exhibits, 120 workshops, 900 posters and 1500 abstracts. This year the plenary talks include Lee Hood (Institute for Systems Biology), Rob Williams (Un of Tennessee), Carlos Bustamante (Stanford), Stephen Quake (Stanford), Loren Riesenber (Un of British Columbia), Susan McCouch (Cornell) and Geoff Fincher (Un of Adelaide). Many exciting workshops, animal, plant and industry are also planned. In addition the NRSP8 workshop Sunday afternoon will feature Guojie Zhang (BGI), William Davidson (Simon Fraser Un), Mark Morrison (CSIRO) and former Cattle genome coordinator James Womack (Texas A&M). Need some help organizing the week of activities? Go to the PAG XX home page <http://www.intlpag.org/web/> and see information on the new mobile web app.

PAG 2012 Swine Workshop and other swine presentations. The joint swine/cattle/sheep (morning) and swine workshop (afternoon) will be held Saturday, January 14, 2012. In the joint meeting Jack Dekkers will present his most recent efforts to identify QTL associated with PRRS susceptibility. The swine workshop will also include reports from academic, governmental and commercial laboratories from three different continents covering swine genome-resequencing efforts to explore domestication and biogeography aspects of wild and domestic pigs (Hendrik-Jan Megens), genome-wide associations for stress susceptibility (Dan Nonneman) and immune response (Shu-Hong Zhao), a profile of the “world” of non-coding RNA in the reproductive tissues (Jason Ross) and commercial applications of genomics in swine breeding. These talks will be followed by updates of swine genome sequencing (Larry Schook), and a longer meeting on progress of the PRRSV host genetics consortium (see below). A special swine sequencing working group discussion will take place in the Towne room on Sunday night at 7pm. In the Animal Epigenetics workshop (Tuesday, January 17, 2012) Ole Madsen will provide updates of his most recent work of the porcine imprintome. (kindly provided by Daniel Ciobanu)

Progress and plans for the PRRS Host Genetics Consortium (PHGC) will be presented several times at the PAG XX, on Saturday, January 14, 2012. In the Cattle/Sheep/Swine workshop in the San Diego room at 8:45 AM Jack Dekkers, Iowa State University, will talk on “Genome-wide Association Study of Host Response to Experimental Infection with the PRRS Virus in Pigs.” That afternoon the Swine workshop in the Royal Palm Salon will continue at 5PM with a review of current progress and plans for the PRRS Host Genetics Consortium (PHGC). Short talks will provide updates on the consortium’s progress and a discussion of PHGC plans. That session is expected to be finished by 7PM and participants plan go to dinner in downtown San Diego after the session (kindly provided by Joan Lunney).

Swine genome resources are now available thanks to activities of many people. There are two preliminary annotation resources for the swine genome. The first is work conducted by Henrik Hornshøj Jensen. This annotation can be obtained at the following site http://gbi.agrsci.dk/pig/sscrofa10_2_annotation/ . The second, is work developed by the Ensembl team and is http://pre.ensembl.org/Sus_scrofa/Info/Index . Please keep in mind that these efforts are part of the Swine Genome Sequencing Project and all rules and rights of community sequencing projects apply. In addition, this annotation can be visualized in Gbrowse against version 10.2 of the swine genome at <http://www.animalgenome.org/cgi-bin/gbrowse/pig10>. Special thanks got to Henrik Hornshøj Jensen, Zhiliang Hu and Jim Reecy.

The 2011 International PRRS Symposium was held in Chicago, IL, on Friday, December 2, 2011 and Saturday, December 3, 2011. This meeting brought together an international group of 248 attendees from 25 countries involved in all aspects of PRRS research. Participants included researchers, students, swine health specialists, and pork producers interested in PRRS virus research were all invited to attend. A broad range of topics from field studies to highly technical investigations - were discussed in 19 talks and 78 posters. Proceeding and posters will be posted at www.prrssymposium.org .

National Swine Improvement Federation honored Rodger Johnson. The 2011 NSIF conference and annual meeting was held December 1-2 in Lincoln, NE and honored Rodger Johnson who retired last July after a successful career at the University of Nebraska. Rodger had a significant impact on swine breeding and genetics not only by his outstanding pioneering research, but also through many of his former students who serve in leading positions in swine breeding organizations and academic research. The meeting included presentations from former students (Eldon Wilson, Bill Lamberson, Justin Holl, David Casey, Joe Cassidy, Tom Rathje, Tom Long and Benny Mote), fellow staff member (Merlyn Nielsen), and collaborators (Jean-Pierre Bidanel, Gary Rohrer and Graham Plastow). Proceeding will be posted on line in the coming months (kindly provided by Daniel Ciobanu).

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

Plant & Animal Genome Conference, PAG XX, Jan. 14-18, 2012, Town & Country Hotel, San Diego, CA. Information available at <http://www.intl-pag.org/> .

Human Genome Meeting (HGM2012), March 11-14, 2012, Sydney, Australia. See <http://www.hgm2012.org>

ASAS and ADSA Midwest Meetings in Des Moines, Iowa on March 19-21, 2012. For details see: <http://adsa.asas.org/midwest/2012.asp>

33rd International Society for Animal Genetics Conference in Cairns, Australia on July.15-20, 2012. For details see <http://www.isag.us/2012/>

American Society of Animal Science (ASAS), Dairy Science (ADSA), and Canadian Society of Animal Science (CSA) Joint Annual Meeting in Phoenix, AZ on July 15 – 19, 2012. For details see <http://www.jtmtg.org/2012/>

Upcoming meetings continued

International Conference of Quantitative Genetics in Edinburgh, Scotland on July 17-22, 2012. For details please see <http://www.icqg2012.org.uk/>

A special thanks to friends and colleagues for your help and support. Please take some time off to enjoy the holidays!!

Items for *Pig Genome Update 111* can be sent to me by no later than March 15 please.

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Supported by Multi-State Research Funds to the National Research Service Program: NRSP-8. National Animal Genome Research Program, Muquarrab Qureshi, NAGRP Director, NIFA