



Pig Genome Update Special

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Great news! The NRSP Review Committee has recommended for approval without any revisions the new NRSP8 project proposal and budget. The Experiment Station Directors who meet in September will have to approve it but this means we are likely to be approved for another 5 years. However, a **new Swine Genome Coordinator is needed starting October 1**. Max Rothschild has announced he plans to step down on September 30, 2013 after serving as the Swine Genome Coordinator for 20 years if a suitable person can be found. If you have interest and questions about the position please contact him.

MGI is pleased to announce a new implementation of comparative genome data. Previously MGI used a one-to-one orthology relationship between a mouse gene and that of another mammalian species. MGI now uses homology class data from HomoloGene and supports a "many-to-many" relationship between mouse genes and their vertebrate homologs. Chicken, zebrafish and rhesus macaque homologs are now included in this release as well as human, chimpanzee, dog, cattle and rat. Vertebrate Homology Class pages include: Gene symbols, Genetic locations, Links to EntrezGene & OMIM, Associated human diseases, Comparative GO Graphs, Sequences and HomoloGene multiple sequence alignments. For an example, see this complement component Vertebrate Homology Class page: <http://www.informatics.jax.org/homology/36030>. The mouse gene symbols link to gene detail pages which link to gene ontology, gene expression and allele details. For examples see <http://www.informatics.jax.org/marker/MGI:95691> for the myostatin gene and <http://www.informatics.jax.org/allele/allgenoviews/MGI:2148177> for a phenotype detail. Please send questions and comments to MGI User Support, mgi-help@jax.org.

On a sad note, Dr. Jan Rapacz, Professor Emeritus of Genetics at the University of Wisconsin, passed away May 5th, 2013 in Krakow, Poland at the age of 84. He received the B.S. degree in Animal Sciences (1953) and the M.S. degree in Animal Physiology (1955) from the Faculty of Animal Sciences, University of Jagiellonica, Krakow, Poland. He received the Ph.D. in Immunogenetics in 1959 joint from the University of Jagiellonica, Krakow and the Medical School, Zabrze-Rokitnica, Poland. His paper on the Heredity of Rabbit Gamma Globulin iso-antigens (Acta Genetica et Statistica, Basel 1962) set the stage for his research on genetic variations of antigens in blood groups and other protein systems. Jan had many positions until he finally went back to the University of Wisconsin at Madison in 1970 as an Associate Professor of Genetics, joint between the Department of Genetics and Department of Meat & Animal Sciences, University of Wisconsin-Madison. He was promoted to full Professor in 1978, and headed the Immunogenetics Program until his retirement in 1998. His early research involved establishing blood groups in rhesus monkey, fish, mink, cattle, horse, sheep, donkey, and pigs. One of his greatest scientific achievements is the development of a world-unique swine model with familial hypercholesterolemia (FH) to facilitate experimental research on atherosclerosis and coronary heart disease. This animal model has evolved over 20 years by breeding efforts that involved unique genotypes and phenotypes derived from 37 breeds and/or groups of pigs. The FH swine show very close resemblance to human advanced coronary heart disease regarding composition, vascular location and progression to clinical events, including heart attack and sudden death. The model is still used today by cardiologists and investigators to study coronary events, testing of new drugs and stents for angioplasty. He was a pioneer in a field that has rapidly evolved from blood groups to markers to genomes and Jan made quite an impression on everyone he met and worked with and so it was with me in 1974 when I began my graduate career. Zhiliang Hu was his PhD student and he recalled his "unbeatable passion and critical thinking, tireless reasoning on genetic problems that were so enlightening on how to do science."

The swine genome coordinator is always glad to hear from NRSP-8 members and other readers about ways that the coordination effort can be improved or provide resources that are needed. If you have items of general interest to the swine genetics and genomics communities that can be included in this newsletter please share.

World Pork Expo was in early June and brought thousands of people to Des Moines. The WPE is usually considered a trade show but with all the genetics companies it represents an opportunity to meet the end users of much of the research we do. If you missed this event consider spending a summer day going to a state fair or other “pig show” to remind yourself about other aspects of the industry our research contributes to and enjoy some good pork barbecue!

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

American Society of Animal Science (ASAS), Dairy Science (ADSA), and Canadian Society of Animal Sci. (CSA) Joint Annual Meeting will be in Indianapolis, IN from July 8 – 12, 2013. For details see <http://www.jtmtg.org/2013/>

64th Annual Meeting of the European Federation of Animal Science will be held August 26 – 30, 2013 in Nantes, France. For details see <http://www.eaap2013.org/>

Plant & Animal Genome Conference, PAG XXII, Jan. 11-15, 2014, Town & Country Resort & Convention Center, San Diego, CA. Information is available at <http://www.intl-pag.org/>.

PAG ASIA, May 19-21, 2014, Grand Copthorne Waterfront Hotel, Singapore. Details at www.intlpagasia.org

International Society for Animal Genetics, July 27 – Aug. 1, 2014, Xi’an, China. See <http://isag2014.com> for more information.

10th World Congress on Genetics Applied to Livestock Production, August 17-22, 2014, Vancouver, British Columbia, Canada. See <http://wcgalp.com/>

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