



# Pig Genome Update

## No. 52 January 1, 2002

*Happy Holidays to you, your families and colleagues*

**The 26th annual conference of the National Swine Improvement Federation was held December 6 and 7** in St. Louis. The conference was attended by swine breeders, producers, scientists and company personnel and featured an excellent line-up of speakers. The program started with two talks on gene discovery, genomic tools, and their use in selection programs, by Chris Tuggle (Iowa State University) and Archie Clutter (Monsanto/DeKalb Choice Genetics). This was followed by a presentation by Rodney Goodwin (National Pork Board) on genetic parameters of pork quality traits. The day ended with a presentation by Jan Merks (Institute for Pig Genetics, the Netherlands) on the impact of recent disease outbreaks on swine breeding programs in the Netherlands. The second day featured talks by Sam Buttram (Monsanto/DeKalb Choice Genetics) on strategies to ensure high quality phenotypic data for selection programs, by Jan Merks on transfer of genetic improvement from the nucleus to the commercial level, and by Bill Muir (Purdue University) on the impact of competition between group-housed animals on selection response and selection strategies. Finally, Charles Farber (Michigan State University), who was the winner of the 2001 NSIF Graduate Student Award, presented a paper on representational difference analysis to identify markers for candidate genes in the pig. The NSIF Distinguished Service Award went to Dr. Maynard Hogberg (Michigan State University). Congratulations to both these individuals. The conference was complemented by a pre-conference tour of Monsanto, a poster session, and a dinner at the President's Riverboat and Casino, where some of the conference participants tried their luck at alternative financial ventures. Congratulations to the organizers for another excellent NSIF conference. Proceedings will be available shortly at the NSIF site: <http://mark.asci.ncsu.edu/NSIF/>. Next year the meeting will be back in Nashville (kindly provided by Jack Dekkers).

**It is not too late to attend the swine workshop and PAGX in sunny San Diego.**

Please see [www.intl-pag.org/pag](http://www.intl-pag.org/pag) for more information. As is the usual case, the swine workshop will be meeting during Sunday, January 13. Jon Beaver, chair, has planned interesting swine sessions. The program will begin with station reports. The featured speakers will be Denis Milan, INRA will present "*Integration of Genetic and RH Porcine Maps with Carthagene*", Craig Beattie, University of Nevada-Reno will present "*Progress Towards a Comprehensive Map for the Porcine Genome*" Daniel Ciobanu, Iowa State University will present "*Discovery of New Genetic Markers Affecting Meat Quality in Pigs*" and Jack Dekkers, Iowa State University will present "*Mapping and Use of QTL for Marker-Assisted Improvement of Meat Quality in Pigs*". Your attendance is encouraged.

PAGX itself will have some excellent speakers and sessions. Dr. Francis Collins, "Czar" of the Human Genome Program at NIH, has agreed to give one of the plenary talks. Other speakers include Ralph Greenspan on behavioral genetics, Tom Blumdell on structure and function of the proteome, Steve Brown on ENU mutagenesis in mice and Eric Green on comparative genome sequencing. Several changes are on tap for next year. PAG-X will again be at the Town & Country Convention Center in San Diego, CA, next year running from Sat., Jan. 12, through Wed., Jan. 16. The PAG-X meeting will include plant, animal and agricultural microbe genomics all in one meeting. Also, it is planned that a weekend-only registration rate (\$175) is available in addition to the usual student (\$225), non-profit (\$425 early/\$525), and industry (\$550 early/\$650) for full week registrations. Registration badges will be required to participate in any workshop.

**New pig microsatellite diversity primers are available.** This set XI of primers was made in response to

requests and suggestions concerning pig diversity research and selected from markers across all 19 pig chromosomes. More information on all sets of primers can be found at the web site: <http://www.genome.iastate.edu/resources/fprimerintr.html>. In addition, there are a limited number of bags of the previous set X of primers still available. For further questions please contact me ([mfrothsc@iastate.edu](mailto:mfrothsc@iastate.edu)) or Dr. Yuandan Zhang ([ydzhang@iastate.edu](mailto:ydzhang@iastate.edu)).

**A new public porcine expressed sequence tagged (EST) database**, a set of tools for EST analysis and a web query tool for public access to this database has been developed. This database is comprised of a number of tables covering the EST profile, alignment similarity (between pig ESTs and human UniGene and between pig ESTs and pig genes/loci sequences), human ortholog information on cytogenetic, linkage, and RH locations. Interactive web query interfaces are developed for public access to the EST database (<http://pigest.genome.iastate.edu>). Based on the current work, public EST data is being analyzed and will be added to generate a more diverse pig EST database. Good progress has been made on the development of visualized web tools for in-silico mapping of porcine ESTs on human chromosomes and for predicating pig maps of the ESTs.

**Upcoming meetings (for more details see: <http://www.genome.iastate.edu/community/meetings.html>)**

Plant and Animal Genome X January 12-16, 2002 at the Town and Country Convention Center, San Diego, CA. For information please contact D. Sherago, Sherago International at [darrins@scherago.com](mailto:darrins@scherago.com).

Genomics and Structural Biology for Medicine, February 2-6, 2002, Miami Beach, FL. See [www.med.miami.edu/mnbws](http://www.med.miami.edu/mnbws) for more information.

International Society of Animal Genetics, Göttingen, Germany, August 11-15, 2002. See <http://www.gwdg.de/~bbrenig/ISAG2002.html> for further information.

7th World Congress of Genetics Applied to Livestock Production, August 19-23, 2002, Montpellier, France. See <http://www.wcgalp.org> for more information.

Additional items can be found at: <http://www.agbiotechnet.com/calendar/index.asp>.

**Items for *Pig Genome Update 53*** can be sent to me by no later than February 10 please.

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