

ISAG Conference 2006, Porto Seguro, Brazil

Comparative Genomics Standing Committee Workshop

A workshop organized by the ISAG Comparative Genomics Standing Committee was held on August 23, 2006 during the 30th International Conference on Animal Genetics in Porto Seguro, Brazil. Approximately 148 persons attended the Workshop, which featured several new research directions in comparative genomics. The Standing Committee (Chris Tuggle, Chair; Andre Eggen, Sue Galloway, Craig Beattie, Abel Ponce de Leon, and Martine Yerle) agreed prior to the meeting that the format of the Workshop would be presentations by speakers selected from interesting abstracts, as well as a section for scientists to announce new collaborations and discussions on development of groups with a common research interest. These abstracts were selected by discussion amongst the committee, led by the Chair and the members, and included speakers from five countries and work on many species.

M. Ron discussed using comparative functional genomics data across species. In mice to understand QTLs for bovine milk production, while C. Tuggle described the use of Affymetrix expression profiling and comparative gene annotation to understand uterine differences between Meishan and Yorkshire pig breeds (Zhao et al.). M. Schneider presented the use of Serial Analysis of Gene Expression data in skeletal muscle to compare *Bos taurus* and *B. bubalis* (water buffalo) (Schneider et al.). As well, novel methods using multi-strain mouse genome sequence data to finemap QTLs was presented by G. Brockmann. After the break, G. Lu presented a bioinformatic analysis of the bovine genome, to systematically identify functional regulatory elements near bovine promoters through finding sequences conserved in multiple species. M. Longeri presented a phylogenetic analysis of region-specific Italian wild boar populations using SNPs within mitochondrial DNA sequence that indicated hybridization across domestic and wild species occurs in many different populations. K. Sanders completed the major presentations by describing FUGATO, a significant new multi-lab collaborative group in Germany focusing on genetic diseases in pigs, host-pathogen interactions in cattle, pigs and chickens, and reproductive biology in cattle.

Discussion in the open time was started by J. Reecy, who presented his project on trait ontology database development as part of his role as USDA Lead Coordinator for Bioinformatics. Jim indicated that he was organizing a trait ontology meeting to be held at the Plant and Animal Genome meetings in January 2007, San Diego. He indicated the meeting agenda would include a discussion of the trait ontology and QTL databases for each species research community, and encouraged people to attend and provide input on their needs for these two projects.

After this, the floor was open for discussion on the Workshop format and other business. One request from the audience was to encourage a speaker to be recruited for the 2008 Workshop who would provide a review of comparative research since the 2006 meeting. The Standing Committee would be happy to consider nominations for this speaker, and the Chair indicated he would help search for such a speaker. At the discussion on nominations for membership in the Standing Committee, it was requested that current members be re-nominated, which was accepted by acclamation. The Chair indicated he would request confirmation of willingness to serve again from the committee members who were not in attendance at the Workshop, (Beattie, Galloway, Ponce de Leon, and Yerle). The Chair requested that any other interested people contact him after the meeting.

George Liu, USAD Beltsville, did so and he was added to the current Standing Committee.

The following shows the Program as it was held

Start at 16:15 hours Announcements

16:15-16:45 Abstract #317 Ron et al. Mi. Ron presenting

16:45-17:00 Abstract #402 Schmitt et al. G.A. Brockmann presenting

17:00- 17:15 Abstract #263 Zhao et al. C. Tuggle presenting

17:15- 17:30 Abstract #548 Schneider et al. P. Schneider, presenting

17:30-17:45 break

17:45-18:00 Abstract #448 Liu et al. George Liu presenting

18:00- 18:15 Abstract #308 Lattuda et al. M. Longeri presenting

18:15- 18:45 Abstract #328 Sanders and Ostermann, K. Sanders presenting

18:45- ~19:15 Open discussion

- ontology/bioinformatics meeting planned- discussion leader Jim Reecy
- 2008 Workshop format discussion
- New election of Committee members

The Workshop on Comparative Genomics was adjourned at 19:15 hours, with the Chair requesting that everyone attend the Workshop in Amsterdam in 2008!