

Avian Genetics and Genomics

Organised by a standing committee **yes**

Date and meeting time:
July 25, 2016 from 8:30 till 12.15

Chair, name and contact email:
Richard Crooijmans,
richard.crooijmans@wur.nl

Agenda / programme attached **yes**

Number of participants at meeting: 55

Summary of the meeting including votes, decisions taken and plans for future conferences

In total 12 abstracts have been selected for an oral presentation and no invited speaker was invited for this workshop. The program was based on the following topics:

1. Phenotype - genotype studies (QTL, GWAS, WGS)
2. Functional annotation of the chicken genome
3. Evolution, domestication and selection

Three of the speakers were not able to participate the conference due to visa problems without notification to the chair although one presentation was performed by the supervisor of the PhD student. Additional time from the two presentations was spend to discuss the other presentations. Mostly young researchers were invited to present their work as part of their thesis. The quality of the presentations was good and there was enough time for questions.

The standing committee Avian genetics and Genomics for the next meeting was shortly discussed as well as candidates for a new chair. As agreed in 2014 the present committee will be the same including the chair at the ISAG meeting 2017 in Dublin, Ireland. Potential new members for the avian genetics and genomics standing committee need to be identified for the next meeting by the present committee members.

Committee members (the new committee)

Chair Richard Crooijmans	term of service ISAG 2014-2017	E mail address: richard.crooijmans@wur.nl
Other members Alain Vignal Martien Groenen Susan Lamont Xiaoxiang Hu	term of service ISAG2014-2017 ISAG2014-2017 ISAG2014-2017 ISAG2014-2017	E mail address: alain.vignal@toulouse.inra.fr martien.groenen@wur.nl sjlamont@iastate.edu huxx@cau.edu.cn

ORAL SESSIONS & WORKSHOPS – Monday, July 25

Workshop: Avian Genetics & Genomics 8:30 - 12:00

Chair: Richard Crooijmans, Wageningen University

Sponsor: Cobb-Vantress
Canyon B

- 8:30 P1003 **miRNAs expression profiling of Myostatin transgenic and wild type littermate mice by Solexa deep sequencing.**
R. Javed¹, Huazhong Agricultural University, Wuhan, China
- 8:45 P5011 **Fine mapping the QTL for growth traits in outbred chicken advanced intercross lines by improved ddGBS.**
Y. Wang¹, X. Cao¹, X. Gu¹, and X. Hu¹, China Agricultural University, Beijing, China
- 9:00 P3005 **Genome-wide transcriptomic analysis of liver in sex-linked Dwarf and wild type chickens.**
T. Zerjal¹, G. Monneret^{1,2}, M. Moroldo³, J. L. Coville⁴, M. Tixier-Boichard⁵, A. Rau¹, G. Nuel¹, and F. Jaffrezic¹, INRA, AgroParisTech, Université Paris-Saclay, GABI, 78350 Jouy en Josas, France, ¹UPMC, LPMA, Paris, France, ²INRA, AgroParisTech, Université Paris-Saclay, GABI, 78350 Jouy en Josas, France, ³GABI, INRA, AgroParisTech, Université Paris-Saclay, 78350 Jouy en Josas, France
- 9:15 P3020 **The potential relationship between comb color and egg production revealed by GWAS in Blue-shelled chicken.**
X. Dong¹, J. Li¹, Y. Zhang¹, X. Deng¹, and C. Wu¹, Key Laboratory of Animal Genetic Improvement, Beijing & Animal Genetic Resources and Molecular Breeding Laboratory, China Agricultural University, Beijing
- 9:30 P1019 **Genetic introgression through selection in domestic chickens: Insight from whole genome sequence analysis.**
R. A. Lawal¹, D. Wragg², P. Silva³, K. Vanmechelen⁴, A. Vereijken⁵, D. D. Wu⁶, R. M. Al-Atiyah⁷, and O. Hanotte⁸, School of Life Sciences, University of Nottingham, University Park, Nottingham, United Kingdom, ¹Institut National de la Recherche Agronomique (INRA), UMR 1338 GenPhySE, 31326, Castanet Tolosan, France, ²Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka, ³Open University of Diversity, Hasselt, Belgium, ⁴Henárix Genetics, Boxtmeer, Netherlands, ⁵State Key Laboratory of Genetic Resources and Evolution, Yunnan Laboratory of Molecular Biology of Domestic Animals, Kunming Institute of Zoology, Chinese Academy of Science, Kunming, China, ⁶King Saud University, Riyadh, Saudi Arabia, ⁷School of Life Sciences, University of Nottingham, United Kingdom

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ORAL SESSIONS & WORKSHOPS – Monday, July 25, 2016

- 9:45 P5035 **Fine mapping of a distal chromosome 4 QTL affecting growth and muscle mass in a chicken advanced intercross line.**
S. Iyu¹, D. Arends¹, M. K. Nasser^{1,2}, and G. A. Brockmann¹, Albrecht Daniel Thaer-Institut für Agrarische und Hortikulturelle Wissenschaften, Faculty of Life Sciences, Humboldt-Universität zu Berlin, Germany, ¹Department of Animal Production, Faculty of Agriculture, Cairo University, Giza, Egypt
- 10:00 **Break.**
- 10:30 P1033 **Relaxation of purifying selection is prevalent among domesticated animals.**
J. Chen¹, X. Du¹, C. Zhang¹, and S. Zhao¹, Huazhong Agricultural University, Wuhan, China, ¹Kib, Kunming, China
- 10:45 P5047 **Wide genome involvement in response to long-term selection for antibody response in an experimental population of White Leghorn chickens.**
M. Lillie¹, Swedish University of Agricultural Sciences, Uppsala, Sweden
- 11:00 P2025 **Identification of tissue-specific promoters in chickens.**
C. Kern¹, P. Saelao¹, Y. Wang¹, M. Halstead¹, J. Chitwood¹, T. Kim¹, P. J. Ross¹, I. Korff¹, M. E. Delany¹, H. Cheng¹, and H. Zhou¹, University of California-Davis, ¹USDA-ARS Avian Disease and Oncology Laboratory, East Lansing, MI
- 11:15 P2024 **Profiling of open chromatin in chicken tissues using ATAC-seq.**
M. Halstead¹, C. Kern¹, P. Saelao¹, Y. Wang¹, H. Zhou¹, and P. J. Ross¹, University of California-Davis
- 11:30 P3052 **Characterization of circular RNAs in relation to embryonic muscle development in chicken.**
H. Ouyang¹, Q. Nie¹, and X. Zhang¹, College of Animal Science, South China Agricultural University, Guangzhou, China, ¹South China Agricultural University, Guangzhou, China
- 11:45 P1046 **Deciphering chicken fatness trait with integrative genetics and genomics approaches.**
C. K. Khoo^{1,2}, A. Ghayas¹, R. Kuo¹, L. Eory¹, P. M. Hocking¹, and D. Burr¹, The Roslin Institute, Royal (Dick) School of Veterinary Studies, University of Edinburgh, United Kingdom, ¹Department of Veterinary Services, Ministry of Agriculture & Agro-Based Industry Malaysia, Putrajaya