

Conference Agenda

Sunday May 18

Arrival, registration, casual dinner and drinks in Comfort Suites conference room from 7:00 to 10:00 pm.

Monday May 19

8:00 am Posters should be put up as early as possible for viewing, but the actual Poster Session will be held from 5:30 – 7:00. All student posters should be indicated with a red sticker (available at registration desk). Awards will be given for the best student posters. Student posters will be judged during the Poster Session and only posters staffed by the student authors during the poster session are eligible for an award.

8:00 – 8:40 Registration

8.40 am Meeting opening
Dr. Vance Watson
President of Mississippi State University

Agency/Industry Session

Chair **Dr. Michael Kidd,**
Head, Department of Poultry Science, Mississippi State University

9.00 am Plenary Speaker
Dr. Muquarrab Qureshi
Director, Animal Systems Section and National Program Leader -
Animal Genetics
USDA CSREES
*Blueprint for USDA Efforts in Agricultural Animal Genomics
2008 – 2017*

9:30 am Invited Speaker Industry
Dr. Janet Fulton
Leader, Molecular Genetics
Hy-Line International
*USDA Animal Genomics Program: The View from the Chicken
Coop*

- 10.00 am **Invited Speaker Industry**
Dr. Albert Paszek
Director of Biotechnology
Cobb-Vantress, Inc.
More or Less SNPs? For More or Less Value
- 10.30 am **Refreshment Break**
- Systems Biology Session**
Chair **Dr. Susan Lamont**
Department of Animal Science, Iowa State University
- 11.00 am **Jay Konieczka,**
Graduate Student, University of Arizona
Introducing the Chick Interactome
- 11:20 am **Aurelie Krol**
Graduate Student, Stowers Institute for Medical Research,
Kansas City, Missouri
Microarray Analysis of the Chick Segmentation Clock
- 11:40 am **Michael Hughes**
Graduate Student, University of Southern California
*Microarray Profile of Gene Expression in Skin Morphogenesis:
Feathers, Scales, Plasticity and Regional Specificity*
- Noon **W. Shane Sanders**
Graduate Student, Mississippi State University
Proteomics Based Structural Genome Annotation in Chicken
- 12:30 pm LUNCH (provided)
- 1:30 pm **Invited Speaker**
Dr. Susan Lamont
Charles F. Curtiss Distinguished Professor
Department of Animal Science, Iowa State University
SNP Markers for Production and Egg Quality QTLs in Layer Lines
- 2:00 pm **Invited Speaker**
Dr. Xiu-Feng (Henry) Wan
Miami University (now with CDC, Atlanta, GA)
H5N1 Highly Pathogenic Avian Influenza Virus: a Decade of Evolution towards a Pandemic Threat

- 2:30 pm **Invited Speaker**
Dr. Ed Perkins
Team Leader Environmental Genomics and Genetics Team
U. S. Army Corps of Engineers Engineer and Development Center
Avian Research at the Department of Defense
- 3:00 pm **Refreshment Break**
- 3:30 pm **Invited Speaker**
Dr. David Ray
Assistant Professor, Department of Biology, West Virginia
University
*Mobile Element Contributions to Non-Avian Archosaur
Genomes*
- 4:00 pm **Invited Speaker**
Dr. Michael Romanov
Scientist, Genetics Division, Conservation and Research for
Endangered Species, Zoological Society of San Diego
The Value of Avian Genomics to Wildlife and Conservation
- 4:30 pm **BREAK** Buses to hotels provided
- 6:00 pm **POSTERS** in the Ring of Honor upstairs in the Hunter Henry
Center
Cocktails and hors d'oeuvres
- 7:30 pm **CONFERENCE DINNER (Hunter Henry Center)**
- 8:30 pm **Introduction**
Dr. Jerry Gilbert,
Associate Provost, Mississippi State University
- Keynote Address**
Dr. Scott Edwards
Professor and Curator, Museum of Comparative Zoology Labs
Harvard University
Adventures in Archosaur Evolutionary Genomics

Tuesday May 20

8:45 am Opening remarks, Dr. Melissa Mixon, Interim Vice President of Agriculture, Forestry, and Veterinary Medicine

Species Genomics Session

Chair: Dr. Hans Cheng, USDA ARS Supervisory Research Geneticist, East Lansing, MI

9:00 am Invited Speaker
Dr. Jerry Dodgson
Professor of Microbiology and Molecular Genetics
Michigan State University
Chicken and Turkey Genome Updates

9:30 am Invited Speaker:
Dr. David Clayton
Professor, University of Illinois
Songbird Genome Update

10:00 am Refreshment Break

Genome Resources Session

Chair **Dr. Dave Burt**
The Roslin Institute, University of Edinburgh
Division of Genetics and Genomics

10:30 am **Dr. Janet Weber**
Reference Sequence Curator (Chicken Champion)
Staff Scientist, NIH/NLM/NCBI
NCBI Resources for Avian Genomes

11:00 am Invited Speaker
Dr. Carl Schmidt
Associate Professor, Department of Animal and Food Sciences
University of Delaware
Gallus Gbrowse: a Resource for Chicken Genomics

11:30 am Invited Speaker
Dr. Parker Antin
Professor, Department of Cell Biology and Anatomy
University of Arizona
Avian Genomics Resources

NOON LUNCH (Provided)

1:00 pm **Invited Speaker**
Dr. Chris Ashwell
Assistant Professor, Department of Poultry Science
Epigenetics: Climb on Board or Get Left Behind

Genome Annotation Session

Chair **Dr. Todd Pharr**
College of Veterinary Medicine, Mississippi State University

1:30 pm **Dr. Tamsyn Crowley**
Australian Animal Health Laboratory
CSIRO Livestock Industries
*Cross Avian Applications of Whole Genome Chicken
Microarrays*

1:50 pm **Dr. Robert Etches**
Origen Therapeutics
Annotating the Genome Using Transgenic Chickens

2:10 pm **Dr. Raphael Isokpehi**
Assistant Professor, Jackson State University
*Automatic Extraction of Influenza Virus Pathogenicity from
Biomedical Literature*

2:30 pm **Surya Saha**
Graduate Student, Mississippi State University
*Discovering Spatial Proximity Relationships among Dispersed
Repeats in the Chicken Genome*

3:00 pm **Refreshments**

3:30 pm **Plenary Speaker, Gene Ontology Annotation Workshop**
Dr. Judith Blake
Associate Professor, Jackson Laboratories, GO Consortium PI
Data to Knowledge: Bridging the Gap

4:00 pm **Invited Speaker**
Dr. Dave Burt
The Roslin Institute, University of Edinburgh
Division of Genetics and Genomics
Summary and Looking to the Future

Avian Gene Ontology Training Workshop

Wednesday May 21

9:00 pm *Introduction and aims of the workshop*

Dr. Shane Burgess

Director Life Science and Biotechnology Institute, Co-Director
Institute for Digital Biology
Mississippi State University

Part 1: A User's Guide to GO

9:15 am *Structural and functional annotation*

Dr. Fiona McCarthy

Assistant Professor and AgBase Curator
Mississippi State University

9:30 am *What you should know when you use the GO*

Dr. Harold Drabkin

MGI Biocurator
Jackson Laboratories

10:30 am Refreshment break

11:00 am *What you should know when you use the GO (cont'd)*

Dr. Harold Drabkin

Noon Lunch break (relocate to ELI/Giles Room)

Part 2: Tools for Getting and Using GO

1:00 pm Getting GO annotations for your dataset

Demonstration of online tools

Dr. Fiona McCarthy

1:30 pm AgBase tools demonstration

Demonstration of online tools

Dr. Fiona McCarthy

2:30 pm Refreshment break

3:00 pm Onto-Tool demonstration

Dr. Purvesh Khatri

Postdoctoral fellow & Onto-tools developer
Department of Computer Science, Wayne State University

Thursday, May 22

Part 3: Providing GO for Avian Gene Products

- 8:00 am** **Prioritization of avian GO annotation effort
Discussion
Fiona McCarthy and Carl Schmidt**
- 10:30 am** **Feedback forms and review**
- 11:00 am** **Catch flights leaving GTR Airport**