

Frontiers in Arthropod Genomics

June 11 – 14, 2009
Kansas City

THIRD ANNUAL
Arthropod Genomics
SYMPOSIUM

Schedule

Thursday, June 11, 2009 PRE-SYMPOSIUM WORKSHOP

4:30-6:30 pm Chado databases and Integration with GMOD tools, **Scott Cain**, Ontario Institute for Cancer Research, Andy Kirk AB Room on 3rd Floor, Marriott Tower

Dinner on your own

6:30–8:30 pm **Registration**, Basie Ballroom Foyer

6:30-7:30 pm & 8:30-10:00 **Poster Set-up** in Basie Ballroom A1/B1. Posters may also be placed on display Friday morning.

GENERAL SESSION, Basie Ballroom A/B

Welcome

7:30 pm **Susan J. Brown**, Director, Arthropod Genomics Center, Kansas State University

Keynote Speaker

7:35-8:30 **William M. Gelbart**, Harvard University, *Opportunities and Challenges for Arthropod Genomics and Informatics in the NextGen World*

Welcome Reception

8:30-10:00 Enjoy hors d'oeuvres and beverages in the Basie Ballroom Foyer

Friday, June 12, 2009

GENERAL SESSION, Basie Ballroom, A/B

7:00-8:30 am **Registration and Poster Set-up**

7:00 am **Breakfast**, Basie Ballroom Foyer

Arthropods affecting animals and human health; Session Chair: **Neal Dittmer**, Biochemistry, K-State

8:00-8:40 **Marcelo Ramalho-Ortigao**, Kansas State University, *Sand fly functional genomics and beyond*

8:40-9:00 Oral presentation by selected poster author: **Catherine A. Hill**, Purdue University, *The tick genome landscape – Challenging terrain for the genome explorer*

9:00-9:20 Oral presentation by selected poster author: **W. Augustine Dunn**, University of California, Irvine, *Cis-Regulatory element (CRE) discovery in mosquitoes using comparative genomics*

9:20-10:00 **Kristin Michel**, Kansas State University, *Genome-wide transcriptional analysis of circulating hemocytes in Anopheles gambiae*

10:00-10:30 BREAK

Arthropods affecting plant health; Session Chair: **Anna Whitfield**, Plant Pathology, K-State University

10:30-11:10 **Jay D. Evans**, USDA-ARS Bee Research Lab, Beltsville, *Chasing your honey: Genomic studies of honey bees and their pathogens*

11:10-11:30 Oral presentation by selected poster author: **Owain R. Edwards**, CSIRO Entomology, Floreat, WA Australia, *Sequencing the genome of the cotton bollworm, Helicoverpa armigera: A model for the evolution of complex ecological traits*

11:30-12:10 **Denis Tagu**, INRA Rennes, France, *Using the pea aphid genome to study phenotypic plasticity*

LUNCH

12:10-1:30 Basie Foyer

Friday, June 12, 2009 (continued)

Comparative genomics/evolution; Session Chair: **Dorith Rotenberg**, Plant Pathology, K-State

- 1:30-2:10 **José Ribeiro**, NIH/NIAID, *An insight into the salivary potion of blood sucking Nematocera*
2:10-2:30 Oral presentation by selected poster author: **Jürgen Gadau**, Arizona State University, *The power of multiple genomes in Nasonia – Genes for species differences and speciation*
2:30-3:10 **Yoonseong Park**, Kansas State University, *Evolutionary processes of the partnership between neuropeptides and their receptors*
3:10-3:40 **Bruce Schatz**, University of Illinois, *Towards ArthropodSpace: Functional Analysis in the BeeSpace Environment*

POSTER SESSION AND RECEPTION, Basie Ballroom, A1/B1

- 3:45 – 6:00 Authors present **ODD NUMBERED** posters.
6:00 Explore Kansas City's new Power and Light District for dinner and return for the Seminar or open poster session.
6:00-11:00 Open Poster Session, Basie Ballroom, A1/B1

SEMINAR, Basie Ballroom, A/B

Sponsored by Roche NimbleGen

- 7:30-9:30 pm **Christina Middle**, Field Application Consultant for Roche NimbleGen, *Genomic sequence capture*
Timothy Harkins, Roche 454 U.S. Marketing Manager for Genome Sequencing, *Next-Gen sequencing*

Saturday, June 13, 2009

GENERAL SESSION, Basie Ballroom, A/B

- 7:00-8:00 am Breakfast, Basie Ballroom Foyer

Challenges in genome annotation/tools; Session Chair: **Hans Merzendorfer**, University of Osnabrück

- 8:00-8:40 **Susan J. Brown**, Kansas State University, *Profiling genome transcription during Tribolium development: From egg to eternity*
8:40-9:00 Oral presentation by selected poster author: **Michael Pfrender**, Utah State University, *Condition-dependent transcription and neofunctionalization: Insights from genome-wide expression profiling in Daphnia*
9:00-9:40 **Terence Murphy**, NCBI/NIH, *Arthropod genome support at NCBI and the challenges of annotating genomes in the 21st century*
9:40-10:00 Oral presentation by selected poster author: **Brad S. Coates**, USDA-ARS Corn Insects & Crop Genetics Research Unit, Ames, Iowa, *The association of mobile elements with microsatellites in the genomes of Lepidoptera*

POSTER SESSION and LUNCH, Basie Ballroom, A1/B1 and Basie Foyer

- 10:00- 12:45 Authors present **EVEN NUMBERED** posters
10:00 Break / Beverages served in Foyer.
11:30 Buffet Lunch served at 11:30 in Foyer, concurrent with Poster Session

GENERAL SESSION, Basie Ballroom, A/B

Emerging genomics; Session Chair: **Renata Bolognesi**, Biology, Kansas State University

- 1:00-1:40 **Marian R. Goldsmith**, University of Rhode Island, *The new silk road: From Bombyx to butterflies*
1:40-2:20 **David G. Heckel**, Max Planck Institute for Chemical Ecology, Germany, *Insect defenses in chemical co-evolution: Transcriptional and biochemical responses of the generalist herbivore Helicoverpa armigera to intra-plant signaling and induction of anti-herbivory pathways*
2:20-2:40 Break

Lessons from non-arthropod comparative genomics platforms; Session Chair: **Emily Ragan**, Biochemistry, Kansas State University

- 2:40–3:20 **Doreen Ware**, USDA-ARS, Cold Spring Harbor Laboratories, *Annotation and comparative analysis of plant genomes*
3:20-4:00 **Volker P. Brendel**, Iowa State University, *Opportunities and challenges for automated genome annotation and modeling in a time of unlimited access to sequence data*

CONCLUDING REMARKS

POSTER REMOVAL: Posters must be removed before 4:30 p.m.

ORGANISM MEETINGS, Basie Ballroom, A/B

- 4:15-5:30 The following organism groups will meet at various tables in the Ballroom following the Symposium presentations:
- Arthropod Vector and/or Anopheles Gambiae
 - Honey Bee
 - Lepidoptera
 - Manduca
 - Mosquitoes
 - Tenebrio molitor
 - Ticks
 - Other

SATURDAY NIGHT JAZZ AND KANSAS CITY BARBECUE (optional)

- 6:05-6:15 pm Assemble in lobby of hotel and board bus.
- 6:15 Coach departs from hotel with 1st group of 54 passengers.
- 6:30 First group arrives at Fiorella's Jack Stack Freight House restaurant.
- 6:45 Open bar with wine, domestic beers and microbrews until 8:45, then cash bar available.
- 6:45 Second group of passengers departs from hotel on Coach.
- 7:00 Second group arrives at Fiorella's.
- 7:00 The Kerry Strayer Jazz Band begins to play.
- 7:15 Buffet BBQ Dinner will be served.
- 9:30 Jazz Band concludes performance.

The shuttle schedule between the hotel and Fiorella's is as follows:

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|-------|--------------------------|------|-------------------------------|
| 7:15 | Coach departs from hotel | 7:30 | Coach departs from Fiorella's |
| 8:00 | Coach departs from hotel | 8:30 | Coach departs from Fiorella's |
| 9:00 | Coach departs from hotel | 9:35 | Coach departs from Fiorella's |
| 10:00 | Coach Service concludes. | | |

Sunday, June 14, 2009

ARTHROPOD GENOMICS ROUNDTABLE MEETING, Harvest Room

- 7:30 -8:30 am Consortium Meeting Breakfast Buffet served in Harvest Room, main level of the hotel
- 8:30 am All participants are invited to join in a roundtable discussion led by members of the Arthropod Base Consortium regarding the generation of integrated arthropod genome databases, tools for genome analysis, and community annotation.
- 10:30-11:00 Break - Please note that if you have not yet checked out or made prior arrangements for late checkout, you will need to use this time to check out. The locks on the hotel doors automatically re-set at Noon and you will not be able to get back into your room after 12:00 Noon.
- Noon Hotel Checkout time

**Please join us in thanking the following corporate sponsor
for supporting the 2009 Arthropod Genomics Symposium.**

