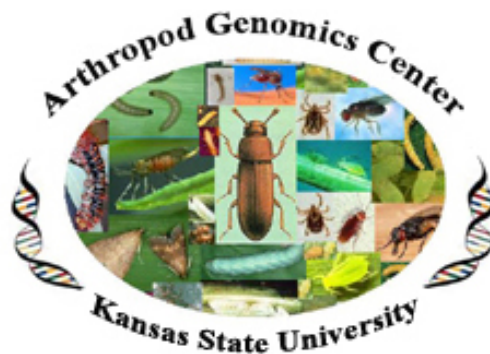
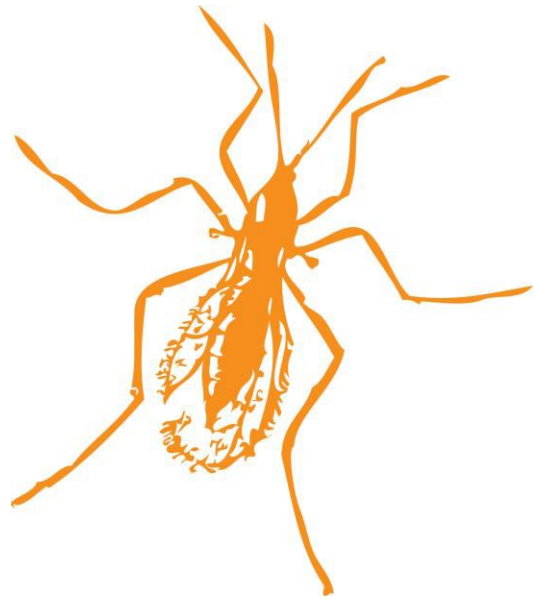




12TH ARTHROPOD GENOMICS SYMPOSIUM JUNE 12-14, 2019

**K-State Alumni Center
Kansas State University
100 Alumni Ctr
1720 Anderson Avenue
Manhattan, Kansas 66506**



I ILLINOIS



ECK INSTITUTE FOR
**GLOBAL
HEALTH**

AGENDA | WEDNESDAY, JUNE 12, 2019

PRE-SYMPOSIUM WORKSHOP
K-STATE ALUMNI CENTER
3rd Floor Purple Pride Conference Room

CURATION CLINIC: Gene Annotation with Apollo

04:00-06:00 PM **Monica Poelchau**, USDA-ARS, National Agricultural Library
Robert Waterhouse, University of Lausanne

12TH ARTHROPOD GENOMICS SYMPOSIUM
K-STATE ALUMNI CENTER
1st Floor

REGISTRATION – Foyer Outside Banquet Rooms

06:30-08:30 PM **Registration Check-In:** pickup name badge and symposium swag
Please note: Display of posters will begin at 7:15 a.m. on **Thursday morning**.

OPENING SESSION – Banquet Rooms B & C

Session Chair: *Sue Brown, Kansas State University*

WELCOME

07:30 PM **Sue Brown**, Director, Center for Genomic Studies on
Arthropods Affecting Human, Animal and Plant Health, Kansas State
University

KEYNOTE SPEAKER

07:35-08:30 PM **Denise Montell**, University of California, Santa Barbara
Adult Reproductive Diapause in *Drosophila* - Who Knew? And
other stories from the fly ovary

WELCOME RECEPTION

08:30-10:30 PM Enjoy hors d'oeuvres and beverages
[2 drink tickets provided per registered guest; cash bar available]





AGENDA | THURSDAY, JUNE 13, 2019

(*) indicates abstract presentation

BREAKFAST AND POSTER SET-UP– Foyer Outside Banquet Rooms

07:30-08:30 AM **Breakfast:** seating available in Barrett Wildcat Den, Johnson Terrace & Tointon Great Room

07:30-09:30 AM **Poster Session Set-Up:** Banquet Room A & D on flex screens
Registration Check-In: pickup name badge and symposium swag

i5K/COMPARATIVE GENOMICS SESSION – Banquet Rooms B & C

Session Co-Chairs: *Neal Dittmer, Kansas State University*
Maureen Gorman, Kansas State University

08:30-09:00 AM **Jamie Walters**, University of Kansas
Comparative proteomics and population genomics of dimorphic sperm in Lepidoptera

09:00-09:20 AM ***Kevin Sugier**, CEA-Genoscope
The role of the LNR domain-containing protein explosion in *Oithona nana* male differentiation (*Crustacea; Cyclopoida*)

09:20-09:40 AM ***Yiyuan Li**, University of Texas at Austin
Gene Family Evolution in the Pea Aphid Based on Chromosome-level Genome Assembly

09:40-10:00 AM ***Petr Nguyen**, University of South Bohemia
Sex chromosome evolution in spiders (*Araneae*)

10:00-10:20 AM ***Olena Maiakovska**, German Cancer Research Center (DKFZ)
The genome of the marbled crayfish and its origin

10:20-10:50 AM BREAK

10:50-11:10 AM ***Liuqi Gu**, University of Kansas
Both *Drosophila*- and mammalian-style dosage compensation on the neo Z chromosome in the monarch butterfly

11:10-11:30 AM ***Jing Zhang**, University of Texas Southwestern
Gypsy moth genome provides insights into flight capability and virus-host interactions

11:30-11:50 AM ***Nick Grishin**, University of Texas Southwestern
Phylogenomics of butterflies

11:50-12:10 PM ***Anna Childers**, USDA-ARS BARC
USDA-ARS's Ag100Pest Initiative Boosts the Earth BioGenome Project's Moonshot

Lunch and Afternoon Session Schedule on Next Page

AGENDA | THURSDAY, JUNE 13, 2019 CONT.

LUNCH

12:10-01:30 PM **Buffet Style Meal**; seating available in Barrett Wildcat Den, Johnson Terrace & Tointon Great Room

POSTER SESSION I – Banquet Rooms A & D

01:30-02:30 PM Poster session; odd numbered posters

STRESS RESPONSE SESSION – Banquet Rooms B & C

Session Co-Chairs: *Molly Duman Scheel, Eck Institute of Global Health*
Mike Kanost, Kansas State University

02:40-03:10 PM **Yehuda Ben-Shahar**, Washington University in St. Louis
Acute heat stress and the remarkable robustness of the insect nervous system

03:10-03:30 PM ***Zixiao Zhao**, University of Missouri
Alternative splicing in *Diabrotica virgifera virgifera* larval midgut in association with Bt resistance

03:30-03:50 PM ***Josh Benoit**, University of Cincinnati
Transcriptional shifts underlying *Drosophila-mite* interactions identifies mechanisms of resistance and trade-off during host-parasite dynamics

03:50-04:20 PM BREAK

04:20-04:50 PM **Luisa Orsini**, University of Birmingham
The role of genome structural variation on plastic and constitutive phenotypic divergence in multifarious environments

04:50-05:10 PM ***Amanda Stahlke**, University of Idaho
De Novo Genome Assembly and RADseq Advance Understanding of Hybridization and Range Expansion Dynamics in the Introduced Biocontrol Agent, the Tamarisk Leaf Beetle (*Diorhabda spp.*)

05:10-05:40 PM **Nick Teets**, University of Kentucky
Mechanisms of environmental stress tolerance in Antarctica's only endemic insect

Cash Bar available on-site starting 5:45 PM until 7:30 PM

DINNER

06:00-07:15 PM **Buffet Style Meal**; seating available in Barrett Wildcat Den, Johnson Terrace & Tointon Great Room

Evening Session Schedule on Next Page





AGENDA | THURSDAY, JUNE 13, 2019 CONT.

BIOINFORMATICS SESSION – Banquet Rooms B & C

Session Chair: *Robert Waterhouse, University of Lausanne*

- 07:15-07:45 PM **Stephen Richards**, University of California Davis
Can we get to telomere to telomere arthropod assemblies?
- 07:45-08:05 PM ***Sarah Kingan**, PacBio
Reference genome assemblies using long PacBio reads for non-inbred single insects
- 08:05-08:35 PM **Stephane Rombauts**, Ghent University
Sequencing mite genomes with long reads
- 08:35-08:55 PM BREAK
- 08:55-09:15 PM **Surya Saha**, Boyce Thompson Institute
Genome annotation and databases: value of a systems approach to building community resources
- 09:15-10:00 PM ***Livio Ruzzante**, University of Lausanne
Evolutionary-functional genomics for an enhanced resolution of arthropod gene function
- *Romain Feron**, University of Lausanne
Characterisation of evolutionary signatures using multispecies whole genome alignments
- *Robert Waterhouse**, University of Lausanne
Evolutionary features of disease-vector mosquito immunity
- 10:00-10:30 PM Discussion
-

AGENDA | FRIDAY, JUNE 14, 2019

BREAKFAST – Foyer Outside Banquet Rooms

07:30-08:30 AM **Breakfast:** seating available in Barrett Wildcat Den, Johnson Terrace & Tointon Great Room

MICROBIOME SESSION – Banquet Rooms B & C

Session Chair: *Berlin Londono, Kansas State University*

08:30-09:00 AM **Kerri Coon**, University of Wisconsin-Madison
Microbial regulation of molting in mosquitos

09:00-09:30 AM **Nsa Dada**, US Centers for Disease Control and Prevention
The mosquito microbiota and insecticide resistance

09:30-10:00 AM **Shahideh Nouri**, Kansas State University
The virome of the Asian citrus psyllid: from discovery to potential translational applications

10:00-10:30 AM BREAK

EVO/DEVO SESSION – Banquet Rooms B & C

Session Chair: *Jocelyn McDonald, Kansas State University*

10:30-11:00 AM **Mark Rebeiz**, University of Pittsburgh
From pattern to process in the study of morphological novelty

11:00-11:20 AM ***Richard Meisel**, University of Houston
Contrasting fast and slow rates of sex chromosome turnover across insects

11:20-11:50 AM **Yoshinori Tomoyasu**, Miami University
Enhancer identification and activity evaluation in the red flour beetle, *Tribolium castaneum*

11:50-12:10 PM ***Welcome Bender**, Harvard Medical School
G+C Oscillations in Genomic DNA

LUNCH & DISCUSSIONS

12:15-01:15 PM **Buffet Style Meal;** seating available in Johnson Terrace & Tointon Great Room

AgriVectors Lunch Discussion in Barrett Wildcat Den

AGS Organizing Committee Discussion in Purple Pride Conference Room, 3rd Floor

POSTER SESSION II – Banquet Rooms A & D

01:15-02:30 PM Poster session; even numbered posters

Afternoon Session Schedule on Next Page





AGENDA | FRIDAY, JUNE 14, 2019 CONT.

VECTOR BIOLOGY SESSION – Banquet Rooms B & C

Session Co-Chairs: *Cate Flanley, University of Notre Dame*
Kristin Michel, Kansas State University

- 02:40-03:10 PM **Conor McMeniman**, John Hopkins Bloomberg School of Public Health
Decoding Mosquito Chemosensory Biology using Genome Engineering
- 03:10-03:30 PM ***Maria Luisa Simoes**, John Hopkins Bloomberg School of Public Health
CRISPR/Cas9 gene editing to block malaria transmission
- 03:30-04:00 PM **Michelle Riehle**, Medical School of Wisconsin
Filtering non-coding DNA for function: The influence of genetic polymorphism on transcriptional enhancer activity in the malaria vector *Anopheles coluzzii*

CONCLUDING REMARKS – Banquet Rooms B & C

- 04:00 PM **Sue Brown**, Director, Center for Genomic Studies on
Arthropods Affecting Human, Animal and Plant Health, Kansas State University

REMOVE POSTERS – Banquet Rooms A & D

- 04:10-05:00 PM Remove posters from flex screens

A NIGHT ON THE PRAIRIE

Konza Prairie Biological Station

BUTTERFLY HILL HIKE

- 05:30 PM Meet outside the K-State Alumni Center to board transportation to
Konza Prairie for Butterfly Hill hike.
- 05:45 PM Transportation Departs Alumni Center
- 06:15 PM Butterfly Hill Hike at Konza Prairie

NON-HIKERS

- 06:30 PM Meet outside the K-State Alumni Center to board transportation to
Konza Prairie for evening activities.
- 06:45 PM Transportation Departs Alumni Center

EVENING SOCIAL

- 07:00PM Kaw Creek will provide entertainment for the evening.
- 07:30 PM Approximate time for dinner service to begin.
- 10:00 PM Board buses to return to K-State Alumni Center

MEETING CONCLUDES
