



9th Workshop of the International Aphid Genomics Consortium (IAGC)

Sunday 25th September 2016

Orlando, Florida, USA

One-day workshop

Program

Venue: Orange County Convention Center W224 E

Bold: invited speakers

Not bold: selected speakers

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8:15-9:00 **Registration and Introduction by IAGC**

9:00-10:50 **Session 1: In progress genome projects part 1**

9:00-9:20. *Aphis glycines* [Michel Andrew (Agricultural Research and Development Center, Ohio State University, Wooster, USA); Rosanna Giordano, (Univ Puerto Rico)]

9:20-9:40. *Diuraphis noxia* [Gary Puterka & Scott Nicholson (USDA, Stillwater, USA)]

9:40-10:00. *Cinara cedri* [Toni Gabaldon (CRG, Barcelona, Spain)]

10:00-10:20. *Daktulosphaira vitifoliae* (Phylloxera) [Denis Tagu & Fabrice Legeai (INRA, Rennes, France)]

10:20-11:20 Tea/coffee break and poster session

11:20-12:25 **Session 2: In progress genome projects part 2**

11:20-11:40. Aphid transcriptomics [Colin Favret (Univ Montreal, Canada), Kevin Johnson (Illinois Natural History Survey, Champaign, USA)]

11:40-11:55. Asian Citrus Psyllid [Judith Brown (Univ Arizona, USA)]

11:55-12:10. The genetic architecture of host-fidelity in the aphid parasitoid *Aphidius ervi* [Gabriel Ballesteros, Univ Talca, Chile)]

12:10-12:25. *Myzus cerasi* and *Rhopalosiphum padi* genome sequencing, transcriptomics and proteomics [Peter Thorpe (James Hutton Institute, UK)]

12:25-13:30 (quick) Lunch on our own

13:30-14:45 **Session 3: Bioinformatics**

13:30-13:50. AphidBase [Fabrice Legeai (INRA Rennes, France)]

13:50-14:10. PhylomeDB [Toni Gabaldon (CRG, Barcelona, Spain)]

14:10-14:30. i5k workspace@NAL [Monica Muñoz Torres (Univ California Berkley, USA) and Monica Poelchau (USDA NAL, Beltsville, USA)]

14:30-14:45. DNA based biodiversity in of Luteovirus borne aphid species [Muhammad Tayyib Naseem (National Institute for Biotechnology and Genetic Engineering, Faisalabad, Pakistan)]

14:45-16:30 **Session 4: Tools for post-genomics approaches**

Targetted and non-targeted mutagenesis

14:45-15:00. EMS and CRISPR mutagenesis in the pea aphid [Gaël Le Trionnaire (INRA, Rennes, France)]

RNAi

15:00-15:15. RNAi-mediated screening for novel pest control targets in *Acyrthosiphon pisum* [Andreas Vilcinskas (Univ Giessen, Germany)]

15:15-15:30. Aerosolized siRNAs and nanoparticles successfully knocks down gene expression of BCAT in the soybean aphid [Allison Hansen (University of Illinois, Urbana-Champaign, USA)]

15:30-15:45. RNAi strategies to silence genes in aphids [Véronique Brault (INRA, Colmar, France)]

Other topics

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15:45-16:00. The use of new genomic methodologies for real-time pest surveillance [Ramiro Morales-Hojas (Rothamsted Research, Harpenden, UK)]

16:00-16:15. Resequencing strategies to tackle population genomic issues in the pea aphid complex [Jean-Christophe Simon (INRA, Rennes, France)]

16:15-16:30. Genome-wide association study reveals genetic determinants of nutritional phenotypes in insect- bacterial symbiosis [Seung Ho Chung (Cornell Univ, USA)]

16:30-16:45. First proteomic approach of *Acyrthosiphon pisum* hemolymph [Jean-Luc Gatti (INRA, Sophia Antipolis, France)]

16:45-17:30 **Session 5: Prospective for IAGC**

17:30 **Concluding remarks and end of the workshop**

18:00: opening of ICE 2016