Insect Biotech Conference – 2006

Conference Schedule

Wednesday Evening – June 14

6:00 pm **Registration:** Outside Newman Room

7:00 pm **Plenary Talk:** Newman Room

Erwin Huebner, University of Manitoba

The Rhodnius prolixus Genome Project: Its inception and the opportunities

and challenges that stem from it.

7:45 - 10:00 pm **Reception**: Outside Newman Room

Thursday, June 15 Newman Room

8:50 am **Opening Remarks:** Ian Orchard

Session Chair: Ian Orchard

9:00 am <u>Donini, A., Gaidhu, M.P., Strasberg, D.R. and M.J. O'Donnell (McMaster</u>

University) Salinity changes and rapid regulation of ion transport by anal

papillae of mosquito larvae.

9:20 am Ruiz-Sanchez, E. and M.J. O'Donnell (McMaster University) Characterization of

salicylate uptake across the basolateral membrane of the malpighian tubules of

Drosophila melanogaster.

9:40 am Paluzzi, J.-P. and I. Orchard (University of Toronto at Mississauga) **Identification**

and characterization of CAP2b/(CAPA)-related peptides controlling anti-

diuresis in Rhodnius prolixus

10:00 am <u>Te Brugge, V.A.</u> and I. Orchard (University of Toronto at Mississauga) **The**

distribution and activity of DH₃₁-like peptides in two hemipterans, *Rhodnius*

prolixus and Oncopeltus fasciatus.

10:20 – 10:50 am Coffee Break: Outside Newman Room

Session Chair: Angela Lange

10:50 am <u>Donly, C.</u>, Verellen, L.A., Cladman, W. and S. Caveney

(Southern Crop Protection and Food Research Centre and University of Western

Ontario) Monoamine reuptake transporters in insects and beyond.

11:10 am <u>Clark, J., Milakovic, M and A.J. Mercier (Brock University)</u> **Postsynaptic**

mediation of DPKQDFMRFamide actions on larval Drosophila body wall

muscles.

11:30 am <u>Bendena, W.G.</u> (Queen's University) **Allatostatins: an invertebrate**

neuropeptide superfamily.

11:50 - 12:30 pm Short Exposures (5 minute talks)

<u>Clark, L.</u> and A.B. Lange (University of Toronto at Mississauga) **The distribution**

and physiological roles of allatostatin in the locust, Locusta migratoria.

Slater, S.J., Chin-sang, I., Tobe, S. and W. Bendena (Queen's University and

University of Toronto) Elucidating putative allatostatin function in the

nematode C. elegans.

<u>Lungchukiet, P.</u> (Queen's University) **Molecular cloning and characterization of allatostatin-like receptors (AlstR) from the cockroach Diploptera punctata.**

Gonzalez, R.G. and I. Orchard (University of Toronto at Mississauga)

Characterization of neuropeptide F-like material in the Hemipteran, Rhodnius

prolixus

<u>Burtenshaw, S.M.</u> (Queen's University) **Overexpression of farnesoic acid o**methyltransferase and juvenile hormone acid methyltransferase in *Drosophila*

melanogaster.

12:30 – 2:00 pm Lunch Break and Discussion: Outside Newman Room

Session Chair: Cam Donly

2:00 pm Yang, D.H., Barari, M., Arif, B. and P. Krell (University of Guelph and Great

Lakes Forestry Centre) **DNA microarray analysis of temporal regulation of 23** *Choristoneura fumiferana* nucleopolyhedrovirus (CfMNPV) genes and their

complements.

2:20 pm Carstens, E.B. and M.Yu (Queen's University) Analysis of AcMNPV lef-3 and

p143 Null Bacmids Following Transfection into Sf21 Cells.

2:40 pm Finnerty, C.M., Arif, B. and P. J. Krell (Queen's University and Natural Resources

Canada) Baculovirus fibroblast growth factors: analysis of structure-based

predictions.

3:00 – 3:30 pm **Coffee Break**

3:30 pm <u>de Jong, J., Theilmann, C.A., Arif, B.M. and P. J. Krell (University of Guelph,</u>

Agriculture and Agri-Food Canada, and Great Lakes Forestry Research Centre)

Analysis of the immediate early me53 gene from the baculovirus AcMNPV.

3:50 pm Hodgson, J., Krell, P. and B. Arif (University of Guelph and Great Lakes Forestry

Centre) Reprogramming the expression of Autographa californica

nucleopolyhedrovirus (AcMNPV) chitinase.

4:10 pm Whyard, S., Gibb, N., Court, L. and A. Singh (University of Manitoba and CSIRO

Division of Entomology) RNA Interference technologies in insects: Highthroughput gene validation studies and novel pest insect control applications.

4:30pm End of Session

6:00 pm Reception, Vineland Estates Winery

7:00 pm Conference Dinner, Vineland Estates Winery

Friday, June 16 Newman Room

Session Chair: Steve Whyard

9:00 am Merkx-Jacques, M., Despland, E. and J. C. Bede (McGill University and Concordia

University) Caterpillars do what I cannot: dietary self-selection in Spodoptera

exigua.

9:20 am D'Souza, O., Rheault, M., Caveney, S. and C. Donly (Southern Crop Protection

and Food Research Centre, University of Western Ontario, and McMaster University) **Diet-induced upregulation of multidrug resistance genes in the**

cabbage looper moth (Trichoplusia ni).

9:40 am Labbe, R.M., Donly, C. and S. Caveney (Southern Crop Protection and Food

Research Centre and University of Western Ontario) Cloning and functional characterization of multidrug resistance associated transporter proteins in the

cabbage looper moth.

10:00 am Stanisçuaski, F., Postal, M. and C.R. Carlini (Universidade Federal do Rio Grande

do Sul) Proteolysis of Canatoxin: Characterization of Callosobruchus

maculatus digestive enzymes involved in the process.

10:20 – 10:50 am Coffee Break: Outside Newman Room

Session Chair: Stephen Tobe

10:50 am Chiang R.G. and M.J. O'Donnell (Redeemer College and McMaster University)

Extracellularly recorded potentials associated with motor control of the bursa

in the blood-feeding insect, Rhodnius prolixus.

11:10 am	Morishita, R. and M. Grbic (University of Western Ontario) Characterization of genes involved in the polyembryonic development of <i>Copidosoma floridanum</i> (Ashmead)(Hymenoptera:Encyrtidae).
11:30 am	<u>Huebner, E.</u> (University of Manitoba) Origin, development and differentiation of germ cells in <i>Rhodnius prolixus</i> .
11:50 am	<u>Lenkic, L.</u> and S. S. Tobe (University of Toronto) Effects of the juvenile hormone (JH) analogue fenoxycarb on JH biosynthesis and the gonadotrophic cycle in the cockroach <i>Diploptera punctata</i> .
12:10 pm	da Silva, R. and A.B. Lange (University of Toronto at Mississauga) The association of neurochemicals with the spermatheca of <i>L. migratoria</i> .
12:30 – 1:30 pm	Lunch Break: Outside Newman Room
Session Chair:	Jacqueline Bede
1:30 pm	<u>Lagacé, D.</u> (University of Western Ontario) Ecophysiology of monarch butterfly spring migration.
1:50 pm	Anthonypillai, J. (University of Western Ontario) Accumulation and allocation of lipids in migrant and non-migrant adult females of the true armyworm, <i>Pseudaletia unipuncta</i> .
2:10 pm	<u>Lange, A.B.</u> and L. Clark (University of Toronto at Mississauga) Neuropeptides as releasing factors in the corpus cardiacum / corpus allatum of <i>Locusta</i>.
2:30 - 2:45 pm	Closing remarks
2:45 - 3:15pm	Coffee Break and Farewells: Outside Newman Room
3:15 pm	End of Conference