

CURRICULUM VITAE
Tanya Pankiw

EDUCATION

Post-Doctoral Research	Department of Entomology	University of California, Davis, California, USA
Doctor of Philosophy	Biology	Simon Fraser University, Burnaby, BC, Canada
Master of Science	Entomology	University of Manitoba, Winnipeg, MB, Canada
Bachelor of Science	Plant Science	University of Manitoba, Winnipeg, MB, Canada

EMPLOYMENT

2001 to present	Assistant Professor, Department of Entomology, Texas A&M University
2001 to present	Faculty of Neuroscience, Texas A&M University
2001 to present	Graduate Faculty, Texas A&M University
1997-2001	Post-doctoral Research Associate, University of California, Davis, CA.
1990-1996	Research Assistant, Simon Fraser University, Burnaby, B.C.

SCHOLARSHIPS & AWARDS

[2006 National Research Initiative Discovery Award](#)

2006-2007 Teaching Excellence Award from [The Montague Center for Teaching Excellence Scholar's Program](#)

National Science & Engineering Research Council Postdoctoral Fellowship (declined)

British Columbia Science Council, Postdoctoral Fellowship (declined)

Simon Fraser University President's Research Stipend

Eastern Apiculture Society Student Award

Simon Fraser University Graduate Fellowship

Boone, Hodgson, Wilkinson Trust Fund Student Award

PEER REVIEWED PUBLICATIONS

Pankiw T (2007) Brood pheromone modulation of pollen forager turnaround time in the honey bee (*Apis mellifera* L.). *Journal of Insect behavior* (*in press*).

Pankiw T, Garza C. (2007) Africanized and European honey bee worker ovarian follicle development response to racial brood pheromone extracts. *Apidologie* (*in press*)

Aronstein K, **Pankiw T**, Saldivar E. (2006) SID-1 is implicated in systemic gene silencing in the honey bee, *Apis mellifera*. *Journal of Apicultural Research*. 45(1): 20-24

Pankiw T (2006) Non-toxic fire ant barriers protecting honey bee colonies. *Southwestern Entomologist* 31(1): 19-23

Pankiw T (2005) The honey bee foraging behavior syndrome: Quantifying the response threshold model of division of labor. In: Arabshahi P, Martinoli A (eds) *Proceedings of the 2005 IEEE Swarm Intelligence Symposium.*, vol SIS-05: 1-6

Rueppell O, Chandra S, **Pankiw T**, Fondrk MK, Beye M, Hunt G, Page RE (2005) The genetic architecture of sucrose responsiveness in the honey bee (*Apis mellifera* L.). *Genetics* 172: 243-251

Sagili, RR, **Pankiw T**, Zhu-Salzman K (2005) Effects of soybean trypsin inhibitor on hypopharyngeal gland protein content, total midgut protease activity and survival of the honey bee (*Apis mellifera* L.). *Journal of Insect Physiology* 51(9): 953-957

Pankiw T, Roman R, Sagili RR, Zhu-Salzman K (2004) Pheromone modulated behavioral suites influence colony growth in the honey bee (*Apis mellifera* L.). *Naturwissenschaften* 91: 575-578

- Pankiw T** (2004) Worker honey bee pheromone regulation of foraging ontogeny. *Naturwissenschaften* 91:178-181
- Pankiw T** (2004) Cued in: honey bee pheromones as information flow and colony decision-making. *Apidologie* 35: 217-226
- Pankiw T** (2004) Brood pheromone regulates foraging activity of honey bees. *Journal of Economic Entomology* 97(3): 748-751
- Ruepell O, **Pankiw T**, Nielson D, Fondrk KM, Beye M, Page RE (2004) The genetic architecture of the behavioral ontogeny of honey bee workers. *Genetics* 167: 1767-1779
- Ruepell O, **Pankiw T**, Page RE (2004) Pleiotropy, epistasis and new QTL: The genetic architecture of honey bee foraging behavior. *Journal of Heredity* 95(6): 481-491
- Liu Y, Salzman, RA, **Pankiw T**, Zhu-Salzman K (2004) Transcriptional regulation in Southern corn Rootworm larvae challenged by soyacystatin N. *Insect Biochemistry and Molecular Biology* 34: 1069-1077
- Schulz DJ, **Pankiw T**, Fondrk MK, Robinson GE, Page RE (2004) Comparisons of juvenile hormone hemolymph and octopamine brain titers in honey bees (*Apis mellifera*) selected for high and low pollen hoarding. *Annals of the Entomological Society of America* 97: 1313-1319
- Pankiw T** (2003) Directional change in a suite of foraging behaviors in tropical and temperate evolved honey bees. *Behavioral Ecology and Sociobiology* 119: 458-464.
- Pankiw T**, Nelson M, Page RE, and Fondrk MK (2003) The communal crop: Modulation of sucrose response thresholds of pre-foraging honey bees with incoming nectar quality. *Behavioral Ecology and Sociobiology* 55: 286-292
- Pankiw T** and Page RE (2003) Effect of pheromones, hormones, and handling on sucrose response thresholds of honey bees (*Apis mellifera* L.). *Journal of Comparative Physiology A* 189: 675-684.
- Pankiw T** and Rubink WL (2002) Foraging response to brood pheromone by Africanized and European honey bees (*Apis mellifera* L.). *Annals of the Entomological Society of America*. 95:761-767
- Pankiw T**, Tarpy DR, Page RE (2002) Genotype and rearing environment affect honeybee perception and foraging behaviour. *Animal Behaviour* 64:663-672
- Pankiw T**, Page RE (2001) Brood pheromone modulates sucrose response thresholds in honey bees (*Apis mellifera* L.). *Behavioral Ecology and Sociobiology* 49:206-213
- Pankiw T**, Page RE (2001) Genotype and colony environment affect honey bee (*Apis mellifera* L.) development and foraging behavior. *Behavioral Ecology and Sociobiology* 51:87-94
- Pankiw T**, Waddington KD, Page RE (2001) Modulation of sucrose response thresholds in honey bees (*Apis mellifera*): influence of genotype, feeding and foraging experience. *Journal of Comparative Physiology A* 187:293-301
- Pankiw T**, Page RE (2000) Response thresholds to sucrose predicts foraging division of labor in honey bees. *Behavioral Ecology and Sociobiology* 47:265-267
- Pankiw T**, Winston ML, Fondrk MK, Slessor KN (2000) Selection on worker honey bee responses to queen pheromone (*Apis mellifera* L.). *Naturwissenschaften* 87:487-490
- Pankiw T**, Page RE (1999) The effects of genotype, age, and caste on response thresholds to sucrose and foraging behavior of honey bees. *Journal of Comparative Physiology A* 185:207-213
- Pettis, J.S, T. **Pankiw**, E. Plettner. 1999. Pheromone biology of the bees. In *Pheromones of Non-Lepidopteran Insects Associated with Agricultural Plants*. Editors: J. Hardie & A.K. Minks. Center for Agriculture and Biosciences International Publishing. Oxon, UK. pp. 429-450. ISBN 0 85199 3451.
- Pankiw T**, Page RE, Fondrk MK (1998) Brood pheromone stimulates pollen foraging in honey bees (*Apis mellifera*). *Behavioral Ecology and Sociobiology* 44:193-198
- Pankiw T**, Huang Z-Y, Winston ML, Robinson GE (1998) Queen mandibular gland pheromone influences worker honey bee (*Apis mellifera* L.) juvenile hormone titres and foraging ontogeny. *Journal of Insect Physiology* 44:685-692

- Pankiw T** (1997) Queen rearing by high and low queen mandibular pheromone responding workers. The Canadian Entomologist 129:679-690
- Plettner E, Ottis GW, Wimalarntne PDC, Winston ML, Slessor KN, **Pankiw T**, PUNCHIHEWA PWK (1997) Species- and caste-determined mandibular gland signals in honeybees (*Apis mellifera*). Journal of Chemical Ecology 23:363-377
- Melathopoulos AP, Winston ML, Pettis JS, **Pankiw T** (1996) The effect of queen mandibular pheromone on the initiation and maintenance of developing queen cells in the honey bee (*Apis mellifera* L.). The Canadian Entomologist 128:263-272
- Pankiw T**, Winston ML, Plettner E, Slessor KN (1996) Mandibular gland pheromone components of European and Africanized honey bee queens (*Apis mellifera* L.). Journal of Chemical Ecology 22:605-615
- Pankiw T**, Winston ML, Slessor KN (1995) Queen attendance behavior of worker honey bees (*Apis mellifera* L.) that are high and low responders to queen mandibular pheromone. Insectes Sociaux 42:371-378
- Pankiw T**, Winston ML, Slessor KN (1994) Variation in worker responses to honey bee (*Apis mellifera* L.) queen mandibular pheromone. Journal of Insect Behavior 1:1-15
- Pettis JS, **Pankiw T** (1994) Grooming behavior by the honey bee and tracheal mite dispersal. American Bee Journal 134: 834-835
- Pankiw T**, Jay SC (1992) Aerially applied ultra-low volume malathion effects on caged honey bees (Hymenoptera: Apidae), caged mosquitoes (Diptera: Culicidae), and malathion residues. Journal of Economic Entomology 85:687-691
- Pankiw T**, Jay SC (1992) Aerially applied ultra-low volume malathion effects on colonies of honey bees (Hymenoptera: Apidae). Journal of Economic Entomology 85:692-699
- Pankiw T** (1991) Design for a dead honey bee (*Apis mellifera* L.) trap using standard hive equipment. Bee Science 1(4): 196-198.
- Winston ML, Higo HA, Colley SJ, **Pankiw T** (1991) The role of queen mandibular pheromone and colony congestion in honey bee (*Apis mellifera* L.) reproductive swarming. Journal of Insect Behavior 4:649-660

INVITED REVIEW

- Pankiw T** (2006) Review of "Asian Honey Bees: Biology, Conservation, and Human Interactions. The Quarterly Review of Biology 81: 408

PATENTS

- US 6,595,828 B2 (July 22, 2003) "Synthetic bee pollen foraging pheromone and uses thereof".
- Pankiw T**, Avelino N, and Lafontaine JP (7 September 2006) "Stabilized brood pheromone for manipulating honey bee behavior." *US Patent file number 11/470,762. & Patent Cooperation Treaty* (in prep).

EDITORIAL POSITION HELD IN PROFESSIONAL/SCIENTIFIC SOCIETIES

- 08/30/04 – present. Member of the International Scientific Board for the journal *Apidologie*.

MEMBERSHIP IN PROFESSIONAL/SCIENTIFIC SOCIETIES

American Association of Professional Apiculturists (AAPA)
Entomological Society of Canada (ESC)
Entomological Society of [North] America (ESA)
International Bee Research Association (IBRA)
International Society of Chemical Ecology
International Union for the Study of Social Insects (IUSI)

ELECTED POSITIONS HELD IN PROFESSIONAL/SCIENTIFIC SOCIETIES

2004 Chair, Apiculture and Social Insects SubSection Cb of the Entomological Society of America
2003 Vice-President, Apiculture and Social Insects SubSection Cb of the Entomological Society of America
2002 Secretary, Apiculture and Social Insects SubSection Cb of the Entomological Society of America
2001 Member-at-Large, International Union for the Study of Social Insects, North American Section.