CURRICULUM VITAE (Abbreviated) – Jeremy D Allison

PROFESSIONAL BACKGROUND

Contact Information:
Natural Resources Canada, Canadian Forest Service
Great Lakes Forestry Centre
1219 Queen Street East
Sault Ste. Marie, ON 70803, Canada
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Degrees Received:

2006 **PhD.** Major: Entomology. (2001-2006). University of California, Riverside, CA (Supervisor RT Cardé).

2001 **Master of Pest Management (MPM).** (1998-2001). Simon Fraser University, Burnaby, BC, Canada (Supervisor JH Borden).

1998 **HBSc.** Major: Biological Sciences. University of Guelph, Guelph, Ontario, Canada.

Positions Held:

2013-	Adjunct assistant professor and associate member of the graduate faculty in the Faculty of Forestry, University of Toronto
2011-	Research scientist, Natural Resources Canada, Canadian Forest Service, Great Lakes Forestry Centre
2008-11	Assistant Professor, Department of Entomology, Louisiana State University Agricultural Center, Baton Rouge, Louisiana
2007-08	Postdoctoral researcher, Department of Entomology, University of Kentucky
2006-07	Postdoctoral researcher, Department of Entomology, UC-Riverside

PROFESSIONAL CONTRIBUTIONS

Editorial Positions:

- Subject Editor: Behavior, *Environmental Entomology*, 2011-

Executive Positions:

- Treasurer, International Society of Chemical Ecology, 2011-

Symposia and Workshops Organized:

- Co-organizer: Symposium "*Sirex noctilio*: A Global Forest Insect". International Congress of Entomology, 2016.
- Co-organizer: Symposium "*Concepts in Chemical Ecology*". International Society of Chemical Ecology, 2015 Annual Meeting. Stockholm, Sweden.
- Co-organizer: Symposium "*Evolutionary Ecology of Pheromone Communication in Moths*". International Society of Chemical Ecology, 2006 Annual Meeting. Barcelona, Spain.

Reviewed Grant Proposals for:

- National Sciences and Engineering Research Council of Canada (2010, 2012)
- National Science Foundation (2008, 2010)
- Binational Agricultural Research and Development Fund (2010)
- Canadian Food Inspection Agency (2014, 2015)

RESEARCH AND SCHOLARSHIP

Books

Allison, J.D. and Cardé R.T. (eds.) Pheromone Communication in Moths: Evolution, Behavior and Application. University of California Press, Berkeley. (*in press*) http://www.ucpress.edu/book.php?isbn=9780520278561

Book Chapters

Allison, J.D. and R.T. Cardé. Variation in Moth Pheromones: Causes and Consequences. In: Pheromone Communication in Moths: Evolution, Behavior and Application. J.D. Allison and R.T. Cardé (eds.). University of California Press, Berkeley. (*in press*).

Allison, J.D. and R.T. Cardé. Pheromones: Reproductive Isolation and Evolution in Moths. In: Pheromone Communication in Moths: Evolution, Behavior and Application. J.D. Allison and R.T. Cardé (eds.). University of California Press, Berkeley. (*in press*).

Journal Articles

Millar, J.G., Haynes, K.F., Dossey, A.T., McElfresh, J.S., & **Allison, J.D.** 2016. Sex attractant pheromone of the luna moth, *Actias luna* (Linnaeus). ***Journal of Chemical Ecology*** (*in press*).

Gaudon, J.M., Haavik, L.J., MacQuarrie, C.J.K., Smith, S.M., & **Allison, J.D.** 2016. Influence of nematode parasitism, body size, temperature, and diel period on the flight capacity of *Sirex noctilio* F. (Hymenoptera: Siricidae). ***Journal of Insect Behavior*** (*in press*).

Haavik, L.J., Dodds, K.J., Ryan, K., & **Allison, J.D.** 2016. Evidence that the availability of suitable pine limits non-native Sirex noctilio in Ontario. ***Agricultural and Forest Entomology*** (*in press*).

Allison, J.D., Graham, E.E., Poland, T.M., & Strom, B.L. 2016. Dilution of fluon before trap surface treatment has no effect on longhorned beetle (Coleoptera: Cerambycidae) captures. ***Journal of Economic Entomology*** (*in press*).

Miller, D.R., **Allison, J.D.**, Crowe, C.M., Dickinson, D.M., Eglitis, A., Hofstetter, R.W., Munson, A.S., Poland, T.M., Reid, L.S., Steed, B.E., & Sweeney, J.D. 2016. Pine sawyers (Coleoptera: Cerambycidae) attracted to α-pinene, monochamol and ipsenol in North America. ***Journal of Economic Entomology*** (*in press*).

Hartshorn, J.A., Haavik, L.J., **Allison, J.D.,** Meeker, J.R., Johnson, W., Galligan, L.D., Chase, K.D., Riggins, J.J., & Stephen, F.M. 2016. Emergence of adult female *Sirex nigricornis* F. and *S. noctilio* F. (Hymenoptera: Siricidae) coincides with a decrease in daily minimum and maximum temperatures. ***Agricultural and Forest Entomology*** (*in press*).

Haavik L.J., **Allison J.D.,** MacQuarrie C.J.K., Nott R.W., Ryan K., de Groot P., & Turgeon J. J. 2016. Non-lethal effects of nematode infection on *Sirex noctilio* and *S. nigricornis*. ***Environmental Entomology*** (*in press*).

Haavik, L.J., Yu, Q., Turgeon, J.J., and **Allison, J.D.** 2016. Horizontal transimission of a parasitic nematode from a non-native to a native woodwasp? ***Biological Invasions*** 18:355-358.

Johnson, C.W., MacRae, T.C., Brownie, C., Virgets, W., and **Allison, J.D.** Observations of *Cerceris fumipennis* (Hymenoptera: Crabronidae) phenology and variation in its buprestid prey in Louisiana, USA. ***Florida Entomologist*** 98:1106-1113.

Haavik, L.J., Dodds, K.J., and **Allison, J.D.** 2015. Do native insects and associated fungi limit non-native woodwasp, *Sirex noctilio*, survival in a newly invaded environment. **PLOS one** 10(10), e0138516.

Sullivan, B.T., **Allison, J.D**., Goyer, R.A., and Shepherd, W.P. 2015. Sex pheromone of the baldcypress leafroller, *Archips goyerana* Kruse (Lepidoptera: Tortricidae). ***Journal of Economic Entomology*** 108:166-173.

Dodds, K.J., **Allison, J.D**., Miller, D.R., Hanavan, R.P., and Sweeney, J. 2014. Considering species richness and rarity when selecting optimal survey traps: Comparisons of semiochemical baited flight intercept traps for Cerambycidae in Eastern North America. ***Agricultural and Forest Entomology*** 17:36-47.

Haavik, L.J., Batista, E., Dodds, K.J., Johnson, W., Meeker, J.R., Scarr, T.A., and **Allison, J.D.** 2014. Type of intercept trap not important for catching female *Sirex noctilio* and *S. nigricornis* (Hymenoptera: Siricidae) in North America. ***Journal of Economic Entomology*** 107:1295-1298.

Allison, J.D., Bhandari, B.D., McKenney, J.L., and Millar, J.G. 2014. Design factors that influence the performance of flight intercept traps for the capture of longhorned beetles (Coleoptera: Cerambycidae) from the subfamilies Lamiinae and Cerambycinae. ***PLOS ONE*** 9(3), e93203.

Olatinwo, R., **Allison, J.D.**, Meeker, J., Johnson, W., Streett, D., Aime, M.C., and Carlton, C. 2013. Detection and identification of *Amylostereum chailletii* and *A. areolatum* in the mycangia of the native woodwasp *Sirex nigricornis* in central Louisiana. ***Environmental Entomology*** 42:1246-1256.

Schoeller, E.N., and **Allison, J.D.** 2013. Flight phenologies of the southeastern *Ips* species (Coleoptera: Curculionidae: Scolytinae) and some associated Coleoptera in central and southern Louisiana. ***Environmental Entomology*** 42:1226-1239.

Haavik, L.J., Meeker, J.R., Johnson, W., Ryan, K., Turgeon, J.J., and **Allison, J.D.** 2013. Predicting *Sirex noctilio* F. and *S. nigricornis* F. (Hymenoptera: Siricidae) emergence using degree-days. ***Entomologia Experimentalis et Applicata*** 149:177-184.

Gago, R., **Allison, J.D.**, McElfresh, J.S., Haynes, K.F., McKenney, J., Guerrero, A., and Millar, J.G. 2013. A Tetraene Aldehyde as the Major Sex Pheromone Component of the Promethea Moth (*Callosamia promethea* (Drury)). ***Journal of Chemical Ecology*** 39:1263-1272.

Allison, J.D., McKenney, J.L., Miller, D.R. and Gimmel, M.L. 2013. Kairomonal responses of natural enemies and associates of the southern *Ips* (Coleoptera: Curculionidae: Scolytinae) to ipsdienol, ipsenol and *cis*-verbenol. ***Journal of Insect Behavior*** 26:321-335.

Schoeller, E.N., Husseneder, C., and **Allison, J.D.** 2012. Molecular evidence of facultative intraguild predation by *Monochamus titillator* larvae (Coleoptera: Cerambycidae) on members of the southern pine beetle guild. ***Naturwissenschaften*** 99:913-924.

Allison JD, McKenney JL, Miller DR, Gimmel ML. 2012. Role of ipsdienol, ipsenol and *cis*-verbenol in the chemical ecology of *Ips avulsus*, *Ips calligraphus* and *Ips grandicollis* (Coleoptera: Curculionidae: Scolytinae). ***Journal of Economic Entomology*** 105:923-929.

Allison JD, McKenney JL, Millar JG, McElfresh JS, Mitchell RF, Hanks LM. 2012. Response of the woodborers *Monochamus carolinensis* and *Monochamus titillator* (Coleoptera: Cerambycidae) to known cerambycid pheromones in the presence and absence of the host plant volatile α-pinene. ***Environmental Entomology*** 41:1587-1596.

Kruidhof, H.M., **Allison, J.D.**, and Hare, J.D. 2012. Abiotic induction affects the costs and benefits of inducible herbivore defenses in *Datura wrightii*. ***Journal of Chemical Ecology*** 38:1215-1224.

Miller, D.R., and **Allison, J.D.** 2011. Variation in enantiospecific attraction of *Ips avulsus* (Coleoptera: Curculionidae) to the pheromone ipsdienol in Georgia. ***Journal of Economic Entomology*** 104:895-900.

Allison, J.D., Johnson, C.W., Meeker, J.R., Strom, B.L., and Butler, S.M. 2011. Effect of aerosol surface lubricants on the abundance and richness of selected forest insects captured in multiple-funnel and panel traps. ***Journal of Economic Entomology*** 104:1258-1264.

Allison, J.D. and Hare, J.D. 2009. Learned and naïve natural enemy responses and the interpretation of volatile organic compounds as cues or signals. ***New Phytologist*** 184:768-782.

Hemmann, D.J., **Allison, J.D.** and Haynes, K.F. 2008. Trade-Off Between Sensitivity and Specificity in the Cabbage Looper Moth Responses to Sex Pheromone. ***Journal of Chemical Ecology*** 34: 1476-1486.

Allison, J.D., Roff, D.A. and Cardé, R.T. 2008. Genetic independence of female signal form and male receiver design in the almond moth, *Cadra cautella*. ***Journal of Evolutionary Biology*** 21:1666-1672.

Allison, J.D. and Cardé, R.T. 2008. Male pheromone blend preference function measured in choice and no-choice wind-tunnel trials with *Cadra cautella*. ***Animal Behaviour*** 75:259-266.

Allison, J.D. and Cardé, R.T. 2007. Bidirectional selection for novel pheromone blend ratios in the almond moth, *Cadra cautella*. ***Journal of Chemical Ecology*** 33:2293-2307.

Allison, J.D. and Cardé, R.T. 2006. Heritable variation in the sex pheromone of the almond moth, *Cadra cautella*. ***Journal of Chemical Ecology*** 32:621-641.

Allison, J.D. Borden, J.H. and Seybold, S.J. 2004. A review of the chemical ecology of the Cerambycidae (Coleoptera). ***Chemoecology*** 14:123-150.

Morewood, W.D., Simmonds, K.E., Gries, R., **Allison, J.D.** and Borden, J.H. 2003. Disruption by conophthorin of the kairomonal response of sawyer beetles to bark beetle pheromones. ***Journal of Chemical Ecology*** 29:2115-2129.

Allison, J.D., Morewood, W.D., Borden, J.H., Hein, K.E. and Wilson, I.M. 2002. Differential bio-activity of *Ips* and *Dendroctonus* pheromone components for *Monochamus clamator* and *M. scutellatus* (Coleoptera: Cerambycidae). ***Environmental Entomology*** 32:23-30.

Allison, J.D., Borden, J.H., McIntosh, R.L., de Groot, P. and Gries, R. 2001. Kairomonal responses by four *Monochamus* species (Coleoptera: Cerambycidae) to bark beetle pheromones. ***Journal of Chemical Ecology*** 27:633-646.

Allison, J.D. and Borden, J.H. 2001. Observations on the behavior of *Monochamus scutellatus* (Say) (Coleoptera: Cerambycidae) in Northern British Columbia. ***Journal of the Entomological Society of British Columbia*** 98:195-200.

McIntosh, R.L., Katinic, P.J., **Allison, J.D.**, Borden, J.H. and Downey, D.L. 2000. Comparative efficacy of five types of traps for trapping large woodborers in the Cerambycidae, Buprestidae and Siricidae. ***Agricultural and Forest Entomology*** 3:113-120.

Allison, J.D., McIntosh, R.L., Borden, J.H. and Humble, L.M. 2000. A new parasitoid (Diptera: Tachinidae) of cerambycid beetles in North America. ***Journal of the Entomological Society of British Columbia*** 97:3-5.

Grant Proposals Funded **[$1,374,522 CAD since 2012 ($1,813,303 Total)]:**

Doucet D and **Allison JD**. 2015. "Antenna-in-a-cell": a tool for forest insect pest research and management. OGI SPARK ($20,000)

Allison JD. 2015-2018. Development of metagenomics and bioinformatics tools to facilitate processing of insect trap captures. GRDI ($231,500)

Sweeney J, **Allison JD**, and Silk P. 2015-17. Improved tools and trapping methods for surveillance of exotic bark- and wood boring beetles. APHIS ($345,600)

Allison JD. 2015. Reproductive biology and survey and detection tools for *Sirex noctilio* ($68,000)

Allison JD. 2014. Survey and detection tools for *Sirex noctilio*. USDA-FS FHP ($77,500)

Allison JD, Haavik LJ. 2013. Developing a host attractant lure and determining the optimal trap for *Sirex* spp. in North America. USDA-FS FHP ($63,000)

Allison JD. 2013. Behavioral analyses instrumentation request. STAVE ($37,232)

Allison JD. 2012-2016. Chemical ecology of native and invasive forest insect pests. PROMIS ($326,000)

Allison JD, Scarr T, and Turgeon JJ. 2011. Effects of Intertrap Distance on Large Woodborer (Coleoptera: Cerambycidae) Trap Catches. Invasive Species Centre Partnership Fund 2011-2012 ($46,400)

Allison JD, Scarr T, Dodds K, and Turgeon JJ. 2011. Impact of competitors and natural enemies on the population dynamics of *Sirex noctilio* (Hymenoptera: Siricidae). Invasive Species Centre Partnership Fund 2011-2012 ($16,290)

Allison JD. 2012. Partial age-specific life table for *Sirex noctilio* in North America. USDA-FS FHP ($143,000)

Presentations (11 Oral and 11 Poster Presentations since 2012; information available on request)

TEACHING AND MENTORING ACTIVITIES

Courses Taught

Co-Instructed: *Forest Insects and Diseases* (LSU, Dept. of Entomology 4018). Fall 2008 – 2011 (upper division course taken by undergraduate and graduate students)

Forest Entomology: biology, ecology and pest management (FAPESP supported special topics course, Faculdade de Ciências Agrárias e Veterinárias (FCAV). Universidade Estadual Paulista (UNESP). Campus de Jaboticabal. Jaboticabal, SP, Brazil). Jan. 17-31, 2016; July 25-29, 2016 (http://www.bv.fapesp.br/en/auxilios/90181/dr-jeremy-allison-technical-visiting-for-discussing-and-contributing-in-a-research-project-and-par/)

Graduate and Postdoctoral Supervision

Postdoctoral fellows

Dr. Marc Bouwer (2016 -) (co-supervised with Dr. Bernard Slippers, University of Pretoria)
Dr. Elder Batista (2015 -) (co-supervised with Dr. Antonio Busoli, UNESP-Jaboticabal campus)
Dr. Laurel Haavik (2012-2014)
Dr. Rabiu Olatinwo (2011)

Graduate students

Josephine Queffelec, Ph.D. (2016 -) (co-supervised with Dr. Slippers, University of Pretoria)
Quentin Guignard, Ph.D. (2016 -) (co-supervised with Dr. Slippers, University of Pretoria)
Erich Schoeller, MSc. (2008-2011)
Basu Deb Bhandari, Ph.D. (2010-2011)