Curriculum Vitae



N. Kirk Hillier, Ph. D.

EXECUTIVE SUMMARY

I completed a Ph.D. in biology at Memorial University of Newfoundland, where I studied the use of semiochemicals for pest monitoring of the lingonberry fruitworm, *Grapholita libertina*. In 2002, I took a postdoctoral position in Neil Vickers lab at the University of Utah and examined the role of courtship odors and olfactory physiology in Heliothine moths. I was recruited as Assistant Professor by Acadia in 2007 and ultimately promoted to Full Professor in 2014. I have further been invited as an International Visiting Scientist at the Theodor Boveri Institut (Wurzburg, Germany), the Arizona Research Laboratories Division of Neurobiology, Tucson, AZ, and the Max Planck Institut für Chemische Ökologie (Jena, Germany) and the Centre for Human and Tropical Resources (CTAHR) at the University of Hawaii.

At Acadia, developed a research program based upon the comparative evolution of olfactory neurophysiology and behaviour within insects and other arthropods. My research program has expanded to include an examination of large scale host-acquisition strategies (field-based) and gene-expression, to include studies of the brain and behaviour from the molecular to ecosystem level. Ultimately this work is being integrated with industrial collaborations for development and commercialization of new pheromone-based control technologies. Furthermore, my research has expanded in to applied chemical ecology, examining the effects of chemicals on honey bee health, contaminants on aquatic insects, development of trapping systems for invasive species and pest of small fruit and vegetable crops, and conservation biology in the context of natural products chemistry.

My lab has garnered over \$24M in research support since 2007. I am presently Director of a \$5.7M collaborative project from the Atlantic Canada Opportunity Agency, my second consecutive major ACOA award for applied work to develop pheromones for use in insect pest management. Furthermore, I am director of the Chemical Analysis and Bioimaging Laboratory (CABL) and the AgriTech Laboratories at Acadia University, which together are amongst the most comprehensive laboratories in Canada for analysis of insect olfaction and neurobiology. I have authored or co-authored 82 peer-reviewed publications and supervised 200+ personnel at post-doctoral, graduate, honours undergraduate and technician levels. In 2011, I was honored with the C. Gordon Hewitt Medal from the Entomological Society of Canada – a peer nominated, National award for outstanding achievement in Canadian Entomology by a scientist under 40.

HIGHLIGHTS:

- <u>Over \$24M in research funding</u>, supporting 150 funded projects from international, federal, provincial, industrial and private organizations, between 2007-2023 (see CV for detailed list). At my institution, I am a faculty front-runner for research revenues to Acadia University during the past decade. The scope of my lab's work has extended from basic scientific research, to online learning technologies, community engagement, and considerable industrial technological development.
- <u>Extensive Federal Funding experience</u>. I have been a reviewer for multiple federal funding agencies, and perhaps most significantly, served as a panelist for a National Sciences and Engineering Research Council (NSERC) Evaluation group from 2012-2015, and 2022-2025, and on the NSERC Joint Prizes committee from 2020-2021. In 2024, I have been invited to co-chair the 1501 Genes, Cells and Molecules Evaluation group. This role provided intimate knowledge of the review and funding process as well as substantial knowledge of Tricouncil policies, procedures, and trends.
- <u>Federal Funding Success.</u> As a researcher, I have been continuously funded by NSERC since joining Acadia University, being awarded grants from NSERC Research Tools and Instrumentation (N=6); NSERC Industrial

Engage (N=5); NSERC Collaborative Research and Development (N=2); NSERC Alliance (N=1); NSERC Interaction (N=1); and NSERC Discovery (N=4). My most recent 2017 NSERC Discovery renewal, ranked as Outstanding for excellence of Researcher, Very Good for Merit of Proposal and Outstanding for training of personnel. Such rankings are rare and exceptional in the NSERC portfolio. Finally, in my 2017 renewal, I was also awarded a prestigious NSERC Discovery Accelerator Supplement (DAS; \$120000). The DAS Program provides "substantial and timely resources to researchers who have a superior research program that is highly rated in terms of originality and innovation, and who show strong potential to become international leaders within their field". To my knowledge, this is the only DAS ever awarded to an Acadia University faculty member.

- <u>Awarded two Atlantic Canada Opportunities Agency Atlantic Innovation Fund Grants</u>, (each worth **\$6.8M** and **\$5.7M**, representing some of the largest research projects in Acadia's history), investigating development and commercialization of reduced-risk insect management tools in forestry and agriculture. Through these multi-institution initiatives, I have been engaged in significant intellectual property (IP) development, patent protection and product commercialization. Furthermore, these projects have involved administration of over 20 scientists and administrators across 7 different government, academic and industry partners, and 100+ employees and students. As such I have considerable experience in managing a large team of disparate research groups, and in navigating such matters with student and collaborator IP ownership and rights.
- <u>Collaborative Research Networks.</u> My ability to fundraise and identify novel sources and solutions to funding challenges has be a hallmark of my career. Much of my success in 'landing' funding has been facilitated via an excellent working relationship with the present administration, and a strong network of academic and industrial partnerships (throughout the Atlantic region, nationally and internationally see *Collaborations* on final page of CV). I believe that lobbying partnerships with private and public clients (government, first nations, trusts, academic partners, and industry) will pivotal for building a positive and interactive academy in the future funding environment within Canada.
- <u>C. Gordon Hewitt Award.</u> In 2011, I was recognized by the Entomological Society of Canada with the C. Gordon Hewitt Award for Outstanding Achievement under the age of 40 (one of the highest National awards in my field). The success of my research program has been facilitated, in part, through a fantastic array of students under my supervision (+120 undergraduate and graduate students since 2007). My experience at Acadia University has emphasized the importance of <u>integrating research with student learning</u>.

<u>Knowledge Transfer</u>

- My publication record has been steadily accumulating to now feature 85 peer-reviewed articles, 2 book chapters, and 270+ presentations at scholarly conferences or as an invited speaker.
- In addition to my research program, I am an experienced and award-winning instructor of many courses in the biological sciences. One of the highlights of my pedagogical career has been the development of an online software suite entitled "Anatomy Interactive".
- Finally, in addition to direct technology transfer, I am a strong proponent of information transfer and communication for research findings. As academics, our obligation is not only teaching and learning, but also discovery and dissemination. More and more, the role and mission of research institutions and universities has become focused as venues to engage and integrate into communities. As such, I have consistently promoted research within my lab, and on my campus, through popular media (press interviews, television, radio; see *Public speaking and popular press* in CV).

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I. ACADEMIC QUALIFICATIONS

1. Education

2001-2007	Post-Doctoral Research Associate Dept. of Biology, University of Utah, Salt Lake City, UT. Research interests: Olfactory neurophysiology, behavior, learning and chemical ecology.
2002	Ph.D., Biology Dept. of Biology, Memorial University of Newfoundland, St. John's, NL, Canada Supervisors: Dr. David Larson and Dr. Peggy Dixon.
1998	B.Sc., with Honours in Biology Dept. of Biology, Memorial University of Newfoundland, St. John's, NL, Canada Entomology/Parasitology specialization, Minor in Psychology
1992	Whitbourne Central High School, Whitbourne, NL, Canada
2. Awards, Honors an	d Scholarships
2021	Nominee – Eco Canada Community Impact Award, Eco Canada, Calgary, AB, Canada
2019	Invited panelist – International Olfactomics Initiative: from mapping sensory responses to application – SLU, Alnarp, Sweden.
2018	Invited instructor – International Graduate Course in Insect Chemical Ecology (ICE 18) – SLU, Alnarp, Sweden.
2018	Invited participant – Canadian Institutes for Health Research Lyme Disease Research Network Strengthening Workshop, Ottawa, ON.
2016	Invited panelist – First Collaborations in Indian Chemical Ecology – National Centre for the Biological Sciences, Bangalore, India.
	Invited instructor – International Graduate Course in Insect Chemical Ecology (ICE 16) – Max Planck Institut für Chemische Ökologie, Jena, Germany.

CURRICULUM VITAE 2015	N. Kirk Hillier Invited participant - Deutscher Akademischer Austausch Dienst (German Academic Exchange) – Alumni Conference on Migration and Multiculturalism in Germany and Canada, Toronto, Canada.
2011	C. Gordon Hewitt Medal: Entomological Society of Canada - Peer nominated, National award for <u>outstanding achievement</u> in Canadian Entomology by a scientist under 40.
2011	Finalist in the BioInnovation Challenge – Bionova, Bioport Conference, Halifax, NS.
2011	Regional Finalist in the I3 Innovation Challenge, InnovaCorp, NS (Withdrew).
2009	Acadia Student Union Teaching Recognition Award.
2002	Fellow of the School of Graduate Studies, Memorial University of Newfoundland.
2000-2001	Special Scholarship to Pursue Natural Resource Development, Memorial University of Newfoundland.
2000	Biology Graduate Fellowship, Memorial University of Newfoundland.
1999	Acadian Entomological Society – Best presentation winner.
1992	Governor General of Canada Award - highest academic standing at institution.
3. Employment Histo	οrγ
Acadia University	
2018-Present	Appointed Director of the Acadia Agri-Tech laboratory.
2018-Present	Appointed Director of INSECTA (Insect NeuroScience and Ecology CenTre at Acadia) – a facility for study of insect pest management and evolution (Renewable every 5 years).
2014-Present	Full Professor of Biology, Department of Biology, Acadia University, Wolfville, NS.
2010-2014	Associate Professor of Biology, Department of Biology, Acadia University, Wolfville, NS.
2007-2010	Assistant Professor of Biology, Department of Biology, Acadia University, Wolfville, NS.
Other Appointments	
2013-Present	Adjunct Professor, Department of Biology, Memorial University of Newfoundland, St. John's, NL.
2011-Present	Adjunct Associate Professor, Faculty of Graduate Studies, Dalhousie University, Halifax, NS.

2012-Present	Adjunct Professor, Department of Environmental Sciences, Faculty of Agriculture, Dalhousie University, Truro, NS.
2014, 2016	Visiting Scientist, Department of Plant and Environmental Protection Sciences, College of Tropical Agriculture and Human Resources, University of Hawai'i Mānoa, Honolulu, HI, USA. Multiple projects on insect pheromone identification and evolution.
2012	Visiting Scientist, Max Planck Institut für Chemische Ökologie, Jena, Germany. Investigation of functional physiology of ionotrophic receptors in sensilla coeloconica in the moth, <i>Manduca sexta</i> .
2011-2012	Adjunct Professor, Department of Environmental Sciences, Nova Scotia Agricultural College, Truro, NS.
2007	Visiting Scientist, Max Planck Institut für Chemische Ökologie, Jena, Germany. Collaboration with Dr. Bill Hansson, Technology development for EU Grant on Biosynthetic Infochemical Communication (iCHEM).
2006	Visiting Scientist, Department of Physiology and Sociobiology, Theodor Boveri Institut, Universität Würzburg, Würzburg, Germany. Collaboration with Dr. Christoph Kleineidam, investigating moth antennal lobe physiology through calcium imaging techniques.
2006	Visiting Scientist, Arizona Research Laboratories Division of Neurobiology, Tucson, AZ. Advisor: Dr. Nicolas J. Strausfeld, Anatomical and histological studies of the moth brain.

* Full sabbatical in 2012 and half sabbatical in 2023.

II. PERFORMANCE AS A TEACHER

Acadia University is a small, primarily undergraduate university. Teaching loads are generally <u>four courses</u> with labs per year for science faculty.

1. Teaching Activity

(a) Course work

2023-2024:	Half Year Sabbatical (July – December 2023) + research teaching release
2022-2023:	BIOL 1113 – Introductory Biology BIOL 3193 - Entomology
2021-2022:	BIOL 1113 – Introductory Biology BIOL 3413 – Research Topics in Biology BIOL 3193 – Entomology

CURRICULUM VITAI	E BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	N. Kirk Hillier
2020-2021:	BIOL 1113 – Introductory Biology BIOL 3413 – Research Topics in Biology BIOL 3883 – Chemical Ecology BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	
2019-2020:	BIOL 1113 – Introductory Biology BIOL 3413 – Research Topics in Biology BIOL 3193 – Entomology BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	
2018-2019:	BIOL 3413 – Research Topics in Biology BIOL 3193 – Entomology BIOL 3883 – Chemical Ecology BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	
2017-2018:	BIOL 3413 – Research Topics in Biology BIOL 3193 – Entomology BIOL 3883 – Chemical Ecology BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	
2016-2017:	BIOL 3413 – Research Topics in Biology BIOL 4153 – Entomology BIOL 4443 – Comparative Animal Physiology BIOL 5533/5043 – Entomology – Directed Studies (Graduate courses)	
2015-2016:	BIOL 3833 – Chemical Ecology BIOL 4413 – Research Topics in Biology BIOL 4443 – Comparative Animal Physiology BIOL 5533/5043 – Entomology – Directed Studies (Graduate course)	
2014-2015:	BIOL 3833 – Chemical Ecology BIOL 4153 – Entomology BIOL 5533/5043 – Entomology – Directed Studies (Graduate course) BIOL 3013 – Terrestrial Field Course in Biology (2 day Entomology unit)	
2012-2014:	BIOL 4443 – Comparative Animal Physiology BIOL 3413 – Research Topics in Biology BIOL 4153 – Entomology BIOL 5533/5043 – Entomology – Directed Studies (Graduate course) BIOL 3013 – Terrestrial Field Course in Biology (2 day Entomology unit)	
2010-2012	Parental Leave (Nov. 2010-April 2011) and Sabbatical (July 2011-June 20	12)
2008-2010:	BIOL 2813 – Human Anatomy and Physiology I	

- BIOL 2823 Human Anatomy and Physiology II
 BIOL 4443 Comparative Animal Physiology
 BIOL 3413 Research Topics in Biology
 BIOL 4153 Entomology
 BIOL 5503 Tutorial in Entomology (Graduate course)
 ENVS 3523 Field School Instructor (1 day Entomology unit)
- 2007/2008: BIOL 2813 Human Anatomy and Physiology I BIOL 2823 – Human Anatomy and Physiology II BIOL 4443 – Comparative Animal Physiology BIOL 3413 – Research Topics in Biology

(b) Course development and design

- 2016-2017: Guest Lecturer in Microbiology (Microbial interactions in pest management). Guest Lecturer in Psychology of Relationships (Human Social Odors).
- 2014: Developed and introduced a new course in chemical ecology (BIOL 3883).
- 2008-2011: Human Anatomy and Physiology I/II– Continued development of online learning apps, funding for commercial development of product. Product Teaser: http://www.youtube.com/watch?v=HuwCPRTWiDM

Research Topics in Biology – Initiated department-wide 'research topics' poster symposium wherein students engaged in lab research present their findings to the department as part of their course curriculum (widely advertised to the campus and public).

2007/2008: Human Anatomy and Physiology I/II – Removal of laboratory sections. Development and implementation of specialized online learning modules during 2008 summer semester.

Research Topics in Biology – Proposed department-wide modifications, end of semester poster sessions, potential unified syllabus, volunteered to coordinate Research Topics in Biology.

2. Teaching Activity Assessment

Summary data sheets and student comments for all formal course evaluations for all years of teaching at Acadia University are available upon request. A summary of teaching accomplishments is listed within the enclosed Teaching Statement.

3. Previous Instructional Experience

2003-2005: Instructor - Human Physiology, Department of Biology, University of Utah, Salt Lake City, UT. Distance Education course. Author/Editor: *Biology 2320: Human Physiology Course Manual*.

CURRICULUM VITAE N. Kirk Hillier 2002, 2004: Instructor – Introductory Biology, Department of Biology, University of Utah, Salt Lake City, UT. Introductory Biology - Team Teaching, 150 students.

1997-2001: Teaching Assistant/Lab Demonstrator, Department of Biology, Memorial University of Newfoundland, St. John's, NL. Two courses per semester over five years, including: Introductory Biology, Invertebrate Zoology, Vertebrate Zoology, Ecology, Evolution, Insect Physiology, and Insect Ecology and Taxonomy.

2000: Graduate Teaching Programme, Memorial University of Newfoundland, St. John's, NL.

4. Student and Personnel Supervision

- (i) Direct Post-doctoral and Graduate Student Supervision Directly involved in portions of research and thesis supervision:
 - 2024: Cailyn McKay, PhD Candidate, Western University (visiting researcher during winter 2024 for a collaborative project with McNeil Lab at Western University). Thermal impacts on pheromone response in true armyworm, *Mythimna unipuncta*.

Luca Voscort, MSc Candidate (Parks Canada – cosupervised with Jon Sweeney, NRCan) - Non-target effects of insecticidal controls of Hemlock Wooley Adelgid in Western Nova Scotia on native pollinators. Current: Forest Entomology Technician, Natural Resources Canada-Canadian Forest Service, Fredericton, NB.

Cody Chapman, MSc Candidate (Parks Canada – cosupervised with Matt Smith, Parks Canada) – Non-target effects of insecticidal controls of Hemlock Wooley Adelgid in Western Nova Scotia on biodiversity. Current: Technician, Parks Canada, Kejimkujik National Park, NS.

2023: Taylor Swanburg, MSc Candidate (cosupervisor with Laura Ferguson, primary supervisor) – Vector potential of invasive mosquito populations in Nova Scotia. Current: Molecular Biology Technician, Natural Resources Canada-Canadian Forest Service, Fredericton, NB.

> Sarah MacKinnon, MSc Candidate (cosupervisor with Scott Landry, Dept. of Kinesiology) – Effects of clinical hip extension on running performance. Current: Instructor, Dept. of Kinesiology, Acadia University.

> Alicja Muir, MSc Candidate (Co-supervised with Dave Shutler) – Chemical disruption of *Varroa destructor* (withdrew from program). Current: Retail sales.

2022: Sarah Koerte, Post-Doctoral Researcher - Comparative Olfactory Physiology of Heliothinae moths, and Armyworm Olfaction. Current: Research Coordinator, Cancer Research Institute, Heidleberg, Germany.

Sandunika Mullegama, MSc Candidate – Mechanisms of reproductive isolation by hairpencil compounds in Heliothine moths. Current: Technician, Agriculture Canada and K.C. Irving Environmental Science Centre.

Kayla Gaudet, MSc Candidate (cosupervised by Nicoletta Faraone, Chemistry; Industry funded) - Development of botanical insecticides and repellents. Current: Technician, Perennia ATTTA (Honey bee specialist).

Takwa Wannassi, PhD candidate and visiting MITACs Globalink Intern – Chemical Ecology of the Apricot Wasp. Current: Researcher: High Agronomic Institute of Chott-Mariem, Tunisia.

Victoria Ivey, MSc Candidate – Plasticity in pheromone detection in heliothine moths. Current: PhD Candidate, Biotechnology program, University of Toronto.

Thanusha Suresh, MSc Candidate – Olfactory system of the Eastern spruce budworm. Current: Stay at home parent.

2021: Cate Little, PhD Candidate via Memorial University of Newfoundland (Primary thesis supervisor, cosupervised with Tom Chapman, MUN, NL) – Development of novel attractants for invasive Spotted Wing Drosophila. Current: Hospital administration.

Matt Peill, MSc Candidate [AAFC funded} (cosupervisor with Debra Moreau and Peggy Dixon, AAFC) – Aphid virus transmission in strawberries. Current: Researcher – Perennia Food and Agriculture, Wolfville, NS.

Sean McCann, Post-Doctoral Researcher – *Streptomyces* applications in Insect Pest Management. Current: Scientist, Agriculture and Agrifood Canada, St. John's, NL.

Serhan Mermer – Visiting Post-Doctorial Fellow – collaboration with Oregon State University, investigating pheromones and host detection of the Filbertworm. Current: Assistant Professor, Oregon State University.

- 2020: Catherine Scott, Post-Doctoral Researcher (Mitacs) Synthetic Essential Oils in Management of Arthropods. Current: Post Doctoral Researcher, McGill University.
- 2019: Kevin Cloonan, Post-Doctoral Researcher Comparative Olfactory Physiology of Heliothinae moths. Current: Research Scientist, United States Department of Agriculture, Miami, FL, USA.

Nicoletta Faraone, Post-Doctoral Researcher – Development of inert dusts and essential oil products for integrated pest management. Current: Associate Professor of Chemistry, Acadia University.

Joel Goodwin, MSc Candidate (cosupervisor with Dr. Jon Sweeney, NRC-CFS) – Optimization of Beech Leaf Mining Weevil trapping using multimodal stimuli. Current: PhD Student, University of Toronto and Canadian Forest Service.

Michael Light, MSc Candidate (cosupervisor with Dr. Dave Shutler (Acadia) and Dr. Chris Cutler (Dalhousie)) – Management of Varroa mites with attractant and repellent volatile compounds. Current: PhD Student, University of Toronto, and Canadian Forest Service.

2018:

Laura Ferguson, Post-Doctoral Researcher – Olfaction in Heliothinae. Current: Assistant Professor, Biology, Acadia University.

Jesse Saroli, MSc Candidate [Industry funded] (Primary thesis supervisor, cosupervised with Chris Cutler, NSAC, Truro) – Ecology and Management of the Blueberry Flea beetle (withdrew from program). Current: Director of Biology, ISCA Pheromone Technologies.

2017: Megan Stevenson, MSc Candidate (cosupervisor with Dr. Suzanne Blatt, AAFC) – Management of carrot pests with entomopathogenic nematodes (withdrew from program). Current: Technician, Gingko Sustainability, Toronto, ON

> Simon Pawlowski, MSc Candidate (Primary thesis supervisor, cosupervised with Jon Sweeney, CFS, Fredericton - Chemical Ecology of the Beech Leaf-Mining Weevil. Current: Killam Scholar, Communication Sciences and Disorders, Dalhousie University, Halifax, NS.

Heather Crozier, MSc Candidate – [Industry funded] (Primary thesis supervisor, cosupervised with Debra Moreau, AAFC, Kentville, NS). Host preference in Spotted Wing Drosophila (withdrew from program). Current: Conservation technician.

Rebecca Rizzato, MSc Industry-funded]– Comparative olfaction of Heliothine moths. Current: Research Technician, Agriculture Canada (AAFC), Kentville, NS.

Loay Jabre, MSc Candidate [Industry funded] (Primary thesis supervisor, cosupervised with Peggy Dixon, AAFC, St. John's, NL) - Development of lures and traps to monitor and control the cabbage maggot in Newfoundland and Labrador (withdrew from program – personal reasons). Current: Post-Doctoral Research, Woods Hole Oceanographic Institute, Woods Hole, Mass., USA.

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	2014:	Christopher Burgart, MSc [Industry funded] (Primary thesis supervisor, cosupervised with Suzie Blatt, AAFC, Kentville) – Neurophysiological correlates of apple cultivar preference by European Apple Sawfly (<i>Hoplocampa testudinea</i>) and Apple Maggot (<i>Rhagoletis pomonella</i>).
	2013:	Colin MacKay, MSc [NSERC] (Primary thesis supervisor, cosupervised with Jon Sweeney, CFS, Fredericton) – Physiology and ultrastructure of antennal sensilla of <i>Tetropium fuscum</i> . Project manager, IWK Hospital, Halifax, NS; PhD Candidate, Interdisciplinary Health Studies, Dalhousie University, Halifax, NS. Governor's Gold Medal recipient – Acadia University – highest ranked academic standing and thesis.
	2012:	Jillian Kelly, MSc [Industry funded] – MSc (Biology), Primary Thesis Supervisor; Pheromone identification of the Red-Striped Fireworm. Current: Researcher, Cardiac Health program at Halifax Capital Health.
		Lise Charbonneau, MSc [NSERC] – MSc (Biology) – Co-supervisor with Dave Shutler (Primary); Effects of <i>Nosema</i> infection on honeybee learning and memory.
	2010:	Elisabeth Frost, MSc [NSERC] – MSc (Biology) – Co-supervisor with Dave Shutler (Primary); Effects of Fluvalinate miticide on honeybee learning and memory. Current: Owner/Operator Frostbyte Interactive, Wolfville, NS.
(ii)	Graduate stud	dent committee representation:
	Ongoing:	Jared Verge – MSc (Biology), Supervisory committee member (Dalhousie); Whitefly management with nanoparticle encapsulated essential oil products.
	2023:	Aziz Ullah, PhD (Biology), Thesis External Examiner (University of Alberta, Edmonton, AB).
	2022:	Jenny Hogenbom, MSc Candidate - Chemistry (Supervisor: Nicoletta Faraone, Chemistry) – Testing and development of novel tick repellents (Withdrew from program).
	2021:	Jody-Ann Clarke – MSc (Biology), Supervisory committee member (Memorial University of Newfoundland, St. John's, NL).
	2019:	llich Figuerosa – PhD (Biology), Thesis External Examiner (SLU, Alnarp, Sweden)
		Joachim Palsson - PhD (Biology), Thesis Examination Committee Member (SLU, Alnarp, Sweden)

N. Kirk Hillier

Sawyer Olmstead – MSc (Biology), Supervisory Committee (Dalhousie); Pollinators and Pollination of Haskap (*Lonicera caeruleain*) in Southern Nova Scotia.

- 2016: Laurel Schut MSc (Biology), Dalhousie Environmental Studies, External Examiner, Thesis Defence
- 2014: Christine Lynn McLauchlan –MSc (Biology), Supervisory Committee; Spatiotemporal ecology of coastal wetlands near Aulac, NB: Macroinvertebrates and marsh birds.
- 2012: Amal DeSilva MSc (Biology), Supervisory Committee (Dalhousie); Pheromone identification of the Blueberry Spanworm. Current: Health and Safety Technician

Laura Ferguson – MSc (Biology) – Supervisory Committee; Influence of *Hepatozoon* species (Apicomplexa: Adeleina) on host-seeking and host-choice behaviour of *Culex territans* and *Culex pipiens* mosquitoes (Diptera: Culicidae).

Kevin Reeh – MSc (Biology), Supervisory Committee (NSAC); The use of pollinators to vector biocontrol agents for disease control. Current: Jr. Research Coordinator - COMPASS at Population Health Research Institute.

Louis Zsamboki – MSc (Geology), Chair of Examining Committee, Thesis Defence

- 2010: Sam Edmonds MSc (Earth & Environmental Science), Supervisory Committee; Mercury levels within aquatic insects and bio-amplification effects on the Rusty-Winged Blackbird.
- 2009: Crystal Bridson [Industry funded] MSc (Biology), Supervisory Committee
 (NSAC); Collaborator for research project investigating the chemical ecology of the blueberry spanworm (Withdrew from program personal reasons).

Naomi Stright – MSc (Psychology) – Chair of Examining Committee, Thesis Defence.

Sean LeMoine – MSc (Biology) – Internal Examiner, Thesis Defence

Aron Roxin – MSc (Chemistry), Chair of Examining Committee, Thesis Defence

Tyson Kerr – MSc (Biology), Acting Head of Department, Thesis Defence

- 2008: Gabe Nelson MSc (Earth & Environmental Science), Chair of Examining Committee, Thesis Defence
- 2007: Emily Turner-Brannen MSc (Biology), External Examiner, Thesis Defence

- (iii) Honours Students Supervised:
 - 2023-2024: Carys McMurray [NSERC] Thesis: Investigating cuticular hydrocarbon profiles of ticks. Cosupervised with Nicoletta Faraone (Chemistry, Acadia). Current: Technician Hillier lab.

Paige Grabka [Clean NS]– Thesis: Ant responses to bacterial volatiles. Current: MSc Candidate, Pureswaran Lab, Canadian Forest Service and University of New Brunswick

Holly Turner [NSERC] – Thesis: Mercury bioaccumulation in invertebrates. Cosupervised with Nelson O'Driscoll (Environmental Science, Acadia). Current: MSc Candidate, O'Driscoll lab).

Claire Hawboldt – Thesis: Tick repellent mode of action. Cosupervised with Nicoletta Faraone (Chemistry, Acadia).

2021-2022: Mia Doncaster – Thesis: Bioaccumulation of methylmercury in a wetland impacted by Herring gull guano and water table restoration on Brier Island, Nova Scotia. Cosupervised with Nelson O'Driscoll (Environmental Science). Current: MSc Candidate O'Driscoll lab).

> Andrew Lawrence [HSRA] – Thesis: Chemical Ecology of Diamondback moths. Cosupervised with Sarah Koerte. Current: Bartender, Vancouver, BC.

Tyler Peskett – Thesis: Examining plasticity in moth pheromone production based upon pre-exposure to conspecific odors. Current: Analyst, Biovectra Pharmaceuticals. Cosupervised with Sarah Koerte. Current: Process Development Technician, BIOVECTRA.

2020-2021: Grace Bowen-MacLean [Eco Canada] – Thesis: Chemical Ecology of spider mite community interactions. Cosupervised with Catherine Scott. Current: Estuary Project Coordinator, Clean Annapolis River Project, Annapolis Royal, NS.

Emma Rand [AAFC] – Thesis – Survey and impact of Grape Phylloxera in NS. Cosupervised with Deborah Moreau, AAFC. Current: Research Technician, Plant stress and Remote sensing lab, AAFC, Kentville, NS.

2019-2020: Varun Dhunna [NSERC] – Thesis: Olfaction in Spider mites. Current: Digital Associate, Roche Canada, Toronto, ON.

Kassandra Kelbratowski [Eco Canada] – Thesis: Plasticity in pheromone production in heliothine moths. Current: Environmental Law School, Dalhousie University.

Samantha Stegen – Thesis: Survey and incidence of Large Raspberry Aphid and associated viruses in Nova Scotia. Current: Research Technician, Bedford Institute of Oceanography.

2018-2019: Samantha MacPherson [NSERC] – Thesis: Olfactory basis of host choice in *Ixodes scapularis* ticks. Current: Cardiac Genome Clinic and Medical School, University of Toronto

Megan MacIsaac – Thesis: Repellent mode of action of granite dusts on lily leaf beetle. Current: Development Manager, Natural Forces, Halifax, NS.

Adam Discher [NSERC] – Thesis: Volatiles produced by *Streptomyces* bacteria as repellents for *Drosophila* species. Current: Divemaster in Australia.

2017-2018: Maggie MacDonald – Thesis: Management of Delia pest via host phenology shifts. Cosupervised with Suzanne Blatt, AAFC. Current: Post-Doctoral Researcher, University of Alberta, Edmonton, AB.

Rachel Clarke – Thesis: Evaluation of mercury concentrations from caddisfly and mayfly populations from Kejimikujik National Park. Cosupervised with Nelson O'Driscoll, Environmental Sciences. Current: Biologist, Department of Fisheries and Oceans, Dartmouth, NS.

2016-2017: Victoria Brown [Acadia Honours Student Research Award] – Thesis:
 "Reproductive biology of *Lysimachia*". Cosupervised with Rodger Evans, Acadia Biology. Current: MSc Candidiate, Psychiatry, Dalhousie University.

Emily Evans [NSERC] – Thesis: "Interactions of *Mompha capella* with endangered *Crocanthemum canadense*". Cosupervised with Rodger Evans, Acadia Biology. Current: Physician.

Erica Gillis – Thesis: "Genetic structure of *Crocanthemum canadense* populations in Nova Scotia. Cosupervised with Rodger Evans, Acadia Biology. Current: Research Intern, Churchill Northern Studies Centre, Churchill, MB.

Ersa Gjelaj [NSERC] – Thesis: "Role of female pheromone autodetection in *Helicoverpa zea* moths". Current: PhD Candidate, Crick Institute, Oxford University.

Allie Flinn – Thesis: "Alternative management of *Varroa destructor* mites using their odour responses. Cosupervised with Dave Shutler, Acadia Biology. Current: Tree Planter.

2015-2016: Nathalie Silver [AAFC] – Thesis: "Host preference in *Delia platura*". Cosupervised with Suzie Blatt, AAFC. Current: Medical Sales Representative.

Tyler Nelson [CFS] Thesis: "Effects of tree vigor on colonization of bark beetles". Cosupervised with Jon Sweeney, CFS, Fredericton. Current: Technician, AAFC Summerland, BC.

Shea Goreham [NSERC] – Thesis: "Chemical Ecology of Spotted Wing Drosophila". Current: Radiology Technician, Halifax, NS.

2014-2015: Melissa McGuire [NSERC] – Thesis: "Hairpencil compounds as a means of sexual selection in Heliothine moths." Current: Registered Nurse, Wolfville.

Rylee Oosterhuis [Acadia Honours Student Research Award] – Thesis: "Identification of volatiles for management of *Varroa* mites". Cosupervised with Dave Shutler, Acadia University. Current: Physician, Edomonton, AB.

Mark Hanes [Industry funded] – Thesis: "Deployment and application of attractants for *Varroa* mites". Cosupervised with Dave Shutler, Acadia University. Current: Lead Scientist Marshall and Giacomantonio Labs; PhD Candidate, Cancer and Immunotherapy, Dalhousie University.

2013-2014: Lara Thomas [NSERC] – Thesis: "Development of attractants for Spotted Wing Drosophila".

Current: Optometrist, Wolfville, NS.

Simon Pawlowski [NSERC] – Thesis: "Chemical Ecology of the Beech Leaf-Mining Weevil".

Anna Morean-Sperker [NSERC] – Thesis: "Effects of developmental temperature on subsequent adult olfactory sensitivity". Current: Nurse, Sydney, Australia.

2012-2013: Matthew Nunn [NSERC] – Thesis: "Pheromones of the Red-Striped Fireworm". Current: Chief Resident, Medical School, Dalhousie University

> Colleen O'Connor [NSERC] – Thesis: "Sound detection in *Ips* beetles." Current: Admin assistant, Centre for pediatric pain, IWK, Dalhousie University.

2010-2011: Stephanie Powell [NSERC] – Thesis: "Stressed out: the effects of epinastine and octopamine on learning, memory and heart rate in Heliothine moths" Current: Optometrist, Corner Brook, NL

> Amy Buckland-Nicks [NSERC] – Thesis: "Mercury bioaccumulation in dragonflies (Odonata: Anisoptera) from two lakes in Kejimkujik National Park, Nova Scotia" Current: Climate Change Projects Coordinator at Bluenose Coastal Action Foundation, Lunenberg, NS

		Amy Larkin [Ducks Unlimited, in part] – Thesis: "Damselflies in distress: effects of methylmercury-cysteine on foraging behavior and escape response; aquatic invertebrate predators (Order Odonata)" Current: Veterinarian and Lecturer Small Animal Sciences, University of Saskatchewan, SK.
		Adam Deveau [Acadia Honours Student Research Award] – Thesis: "Effects of pheromone blends on odour-mediated behavior and the neuroanatomy of the European Gypsy moth, <i>Lymantria dispar</i> " Current: Physician,
	2009-2010:	Kathleen Chiddenton [NSERC] – Thesis: "A moth's memory: the effects of octopamine on memory acquisition and retention in <i>Heliothis virescens</i> " Current: Speech Pathologist, Vanier Scholar, Island Health Authority, Victoria, BC
		Sarah Rose [NSERC] – Thesis: "The effects of male hairpencil odour on courtship behavior of females in <i>Helicoverpa zea</i> " Current: Instructor, Kinesiology, Acadia University
		Colin MacKay [CFS] (cosupervised with Jon Sweeney, CFS, Fredericton) – Thesis: "A survey of antennal sensilla of <i>Tetropium fuscum</i> " Current: Project manager, IWK Hospital, Halifax, NS; PhD Candidate, Interdisciplinary Health Studies, Dalhousie University, Halifax, NS.
		Laura Ferguson [NSERC] (cosupervised with Todd Smith) – Thesis: "Host-seeking behavior of <i>Culex territans</i> mosquitoes parasitized with <i>Hepatozoon clamatae</i> " Current: Assistant Professor, Acadia University.
		Emma McIntyre [NSERC] (cosupervised with Todd Smith) – Thesis: "An investigation of host preference and attraction cues in <i>Culex territans</i> and <i>Culex pipiens</i> "
		Current: Director of Engagement, Nature NB, Fredericton, NB
	2008/2009:	Rhys Kavanagh [HSRA] – Thesis: "Bugs and drugs: the effect of octopamine on the sensitivity of female olfactory receptor neurons to female conspecific sex pheromone in <i>Heliothis virescens</i> ." Acadia "Student of the Year" Award. Current: General and bariatric surgical champion, Bridgewater, NS.
		Kathryn (Landry) Allen [NSERC] – Thesis: "Blend Processing in the Tobacco Budworm, <i>Heliothis virescens"</i> Current: Pharmacist, Bioscript Solutions, Hammond's Plains, NS
(iii)	Technicians/F	Research Topics / Summer Students

2023:

Sophie Blanchard - Research topics student (cosupervised with Nicoletta Faraone) Kayla Gaudet – MITACs funded – F/T Research Technician Sarah Hobbs – F/T Research Technician Jacob Ouellette - (CAHRC) - Co-op Research Technician and P/T Technician (2021-) Wendy Hillier – Lab Manager (2019-) Angela Moore – Animal Care Technician (2018-)

2022:

Victoria Smith - Research topics student (cosupervised with Nicoletta Faraone) Cassidy Park – Canadian Agricultural Human Resource Council funded (CAHRC) Co-op Research Technician (2022) Carys McMurray – (CAHRC) - Co-op Research Technician (2022) Emilia Emily Izaguirre Gaetan - (CAHRC) - Co-op Research Technician (2022) Sarah Hobbs -[Eco Canada/CAHRC] Co-op Research Technician, P/T Technician (2020-) Chelsea Scothorn - Research topics student (cosupervised with Nicoletta Faraone)

2021:

Adrienna Marchand – Research topics student (cosupervised with Nicoletta Faraone) Khyla Power - Co-op Research Technician (2021)

Luca Voscort – [Agriculture Canada YESP Intern] F/T Research Technician (2020-2021) Taylor Swanburg – [Eco Canada] F/T Research Technician, (2019-2021)

Alysson Jones - [Eco Canada] (cosupervised with Nicoletta Faraone, Chemistry) F/T Research Technician (2020-2021). Current: Research Technician - National Research Council.

Tyler Peskett – P/T Technician (2020-2021); Research Topics (2021). Current: Analyst - Biovectra Pharmaceuticals

Andrew Lawrence - Research Topics (2021)

Georgia Condran – Research Topics (2021; cosupervised with Nicoletta Faraone, Chemistry)

Noah Johnson – Research Topics (2021; cosupervised with Nicoletta Faraone, Chemistry)

2020:

Laura Pickett – [Eco Canada] (cosupervised with Nicoletta Faraone, Chemistry), Summer Technician (2020)

Jenny Hogenbom (cosupervised with Nicoletta Faraone, Chemistry), Summer Technician (2020)

Tyler Peskett – [Eco Canada] Co-op Research Technician (2020)

Sarah Hobbs - [Eco Canada] Co-op Research Technician (2020)

Sophie Bekkers - [Eco Canada] Co-op Research Technician (2020)

Current: MSc Student, Acadia University

Abbie Martyn – Clean Leadership Intern (2019-2020)

Current: Technician, DFO, Moncton, NB

Lindsay Colyn – Clean Leadership Intern (2019-2020)

Current: Wildlife Technician, Environment and Climate Change Canada

Sarah Stewart – Clean Leadership Intern (2019-2020) Current: Technician, Hemmera Environmental, Halifax, NS Simon Pawlowski – Clean Leadership Intern (2019-2020) Grace Bowen-Maclean – Co-op Research Technician (2019), P/T Technician (2020)

2019:

	Wendy Hillier – P/T Technician (2018-2019)
	Yvonne Lunn – Co-op Research Technician (2019)
	Current: MSc Student, University of Ottawa, Ottawa, ON.
	Haozhe Wang – Co-op Research Technician (2019)
	Current: Research Technician, Chemistry, Acadia University.
	Zoe Brown – Summer Technician (2019)
	Current: Technician, Cape Eleuthera Institute, Bahamas.
	Madison Firth – Summer Technician (2019)
	Current: Ross University School of Veterinary Medicine, St. Kitts.
	Ellen Hatt – Summer Technician (2019)
	Current: Director of Event Services, S E A, Halifax
	Katrina Kratziek – Research Topics (2019)
	Current: New England College of Optometry, Boston, MS.
2018:	Emma Jensen – Summer Technican (2018)
	Current: Pharmacy, Dalhousie University, Halifax, NS.
	Jordan Mahaney – Co-op Research Technician (2018)
	Current: Realtor and Dance Instructor.
	Laura MacVicar – F/T Technician (2018-2019)
	Current: MSc Candidate Public Policy and Admin, Carleton University.
	Andrew Collins – Summer Technician (2018)
	Thomas David Moore – Summer Technician (2018)
	Lise Charbonneau – Lab Manager (2017-2019)
	Taylor Swanburg – F/T Technician (2018)
	Emma Rand – P/T Technician (2017-2018)
	Sydney Scholten – P/T Technician (2017-2018)
	Current: MSc studies, Centre for Regenerative Therapies, Dresden, Germany
	Megan MacIsaac – P/T Technician (2018)
2017:	Leah MacLean – F/T Techician (2017)
	Current: MSc Candidate, Dalhousie University, Halifax, NS.
	Megan MacIsaac – Co-op Research Technician (2017-2018)
	Andrew Collins – Summer Technician (2017)
	Adam Discher – Summer Technician (2017)
	Emily Evans – Summer Technician (2017)
	Ersa Gjelaj – Summer Technician (2017)

Rebecca Rizatto – F/T and P/T Technician (2015-2017)

Lise Charbonneau – P/T Technician (2014-2017)

- 2016: Jenna Collins F/T Technician (2016) Terron Spence – F/T Technician (2016) Dawn Veinot (Research Topics)
- 2015: Shea Goreham P/T Technician Taylor Luck - Co-op Research Technician Current: Regulatory Engagement Coordinator at Agrima Botanicals Roshni Kollipara - Co-op Research Technician Current: PhD Candidate, Medicine, Memorial University of Newfoundland, St. John's, NL.
- 2014: Cate Little F/T Technician (2012-2014)
 Lara Thomas Summer Technician
 Alyson Carter Summer Technician. Current: Assistant Partnership Coordinator, FOUND
 Nova Scotia.

Colin MacKay – F/T Field Supervisor (2013-2014) Stephanie Morris – Contract technician – Blueberry studies. Current: Senior naturalist tour operator, Tauck Tours.

- 2013: Emily Cruickshank Summer and P/T Technician Optometry, Waterloo University, London, ON. Current: Rob William – Summer Technician Lab Instructor, St. Mary's University, NS Current: Josiane Goguen – Summer Technician (New Brunswick site management) Development Officer, Dept. of Agriculture, Aquaculture and Current: Fisheries, Government of New Brunswick, NB Ryan Oram – Summer Technician (Newfoundland site management) MSc Student, Royal Saskatchewan Museum Current: 2012: Logan Gray – Technician Current: PhD Candidate, St. Mary's University Kerstin Surgeoner (Research Topics) Current: Pharmacist Jenna Reid (Research Topics) Current: Quality Control Manager at Spa Springs Mineral Water Company Ltd Emma Delory – Co-Op Research Technician Current: Executive Director, Halifax Rugby Football 2011: Nathalie Leblanc - Co-op Research Technician Current: PhD Candidate (Biology), Univ. New Brunswick
 - Robyn Pierce (Research Topics)

Current: Physician, Barrington Passage, NS

Ryosuke Ishigami (Research Topics & F/T Technician)

Current: Customer Success Lead, Japan, Scientist.com

2010: Amy Larkin (Research Topics)

Gillian MacMullin (Research Topics)

Current: MD, Obstetrics and Gynecology Resident, Dalhousie University Ryosuke Ishigami – Co-op Research Technician – 2 semesters Jose Lefebvre Research Technician - NSERC Engage grant to examine Grape IPM.

Anatomy Interactive Software Development Team:

Scott Schaffner – Programmer and Team Lead

Current: Application Developer Senior Consultant at NTT Data, Halifax, NS Curtis Hughes – Editor

Current: Account Manager (Upstream Chemicals) at Baker Hughes, Calgary, AB

Andrew (Nan) King – Programmer

Current: Senior Software Engineer, Ping Identity, Halifax, NS

Cassandra Fraser – Editor

Current: Veterinarian, New Brunswick

Sam Coleman-Aulenbach – Media Developer

Current: Video Production Associate at SimplyCast

 2009: Scott Schaffner – Human Physiology Electronic Learning Module Development Curtis Hughes – Human Physiology Electronic Learning Module Development Aaron Lee – Human Physiology Electronic Learning Module Development Current: Dentist, Canadian Armed Forces, Gander, NL
 Samantha Sanford– Human Physiology Electronic Learning Module Development Current: Veterinarian, Bridgewater, NS

Rhys Kavanagh – Summer Technician, continuing Honours research project

 2008: Rhys Kavanagh (Special Topics) Jacob Lingley (Special Topics). Current: Middle school math teacher. Chris Ogbuah (Special Topics) Current: Anesthesiologist at University at Buffalo
 Aaron Lee (2 Semesters – Special Topics, Human Physiology Electronic Learning Module Development)
 Scott Schaffner - Human Physiology Electronic Learning Module Development Kathleen Chiddenton (Special Topics)

- (iv) Honours Thesis Committees (in addition to supervised honours students)
 - 2017: John Tweedie Andree Albert
 - 2015: Marie-Catherine French
 - 2012: Amy Powell Laura Logan-Chesney Ben Callaghan

- 2011: Tom Labenski Jamie Whitcomb
- 2009: Zoe Migicovsky Samantha Sanford
- 2008: Andrea Fritz Gerrit Murray Kathryn Cleveland Katherine Dugas Luke Richardson

III. SCHOLARLY ACTIVITY

1. Theses

Hillier, N.K. 2002. Thesis: Quantitative Chemical Ecology of the Lingonberry Fruitworm Moth, *Grapholita libertina* (Ph.D., Memorial University of Newfoundland).

Hillier, N.K. 1997. Attractant trapping of the Lingonberry fruitworm, *Grapholita libertina* (B.Sc. Hons, Memorial University of Newfoundland).

2. Publications (Students/HQP underlined)

- Weeraddana, C.D.S., Wijesundara, R., Hillier, W., Swanburg, T., Hillier, N.K., Faraone, N., Wolfe, S., McCartney, C., Wist, T., and Costamagna, A.C. Volatile organic compounds (VOCs) mediated host selection of wheat midge, *Sitodiplosis mosellana* (Géhin) (Diptera: Cecidomyiidae) among preanthesis and postanthesis stages of susceptible wheat. *In press, Journal of Chemical Ecology.*
- 2. <u>Anholeto, L.A</u>.*, Blanchard, S., Wang, H.V., Chagas, A.C., Hillier, N.K., and Faraone, N. 2024. *In vitro* acaricidal activity of essential oils and their binary mixtures against the blacklegged ticks *lxodes scapularis* (Acari: lxodidae). *In press, Tick and Tick-Borne Diseases*.
- 3. Hillier, N.K., <u>Voscort, L., Zamlynny, L</u>., Hillier, W., and Faraone, N. 2023. Granite dust application to hemp examining effects on growth, cannabinoid production, and resistance to two-spotted spider mite (*Tetranychus urticae* Koch). *Scientific Reports, 13, 22254.* 10.1038/s41598-023-49529-9
- 4. <u>Mullegama, S</u>. and Hillier, N.K. 2023. Identification of compounds produced by male hairpencil glands of Corn Earworm, *Helicoverpa zea*, and their role in male autodetection and female mate acceptance. *Open Early Access, Insect Physiology* <u>https://doi.org/10.1111/phen.12424</u>.
- <u>Suresh, T</u>., Roscoe, L., and Hillier, N.K. 2023. Pheromone and host plant odor detection in eastern spruce budworm, *Choristoneura fumiferana* Clemens (Lepidoptera: Tortricidae). *INSECTS*, 14(7), 653; <u>https://doi.org/10.3390/insects14070653</u>

- 6. <u>Light, M</u>., Shutler, D., Cutler, C, and Hillier, N.K. 2023. Arrestment of *Varroa destructor* (Acari: Varroidae) exposed to selected honey bee (*Apis mellifera*) semiochemicals. *Journal of Pest Science*; <u>https://doi.org/10.1007/s10340-023-01668-8</u>
- <u>Gaudet, K.</u>, Faraone, N., and Hillier, N.K. 2023. Assessing effects of a plant-derived pesticide on Tetranychus urticae, Botrytis cinerea, Cladosporium herbarum and Bombus impatiens. Phytoprotection, 103: 42-51. <u>https://doi.org/10.7202/1105561ar</u>
- 8. <u>Ivey, V.</u>, and Hillier, N.K. 2023. Impacts of species hybridization on pheromone communication in heliothine moths. *Frontiers in Chemical Ecology*, *11-2023. doi.org/10.3389/fevo.2023.1208079*
- 9. <u>Gaudet, K.</u>, Faraone, N., and Hillier, N.K. 2023. Investigating chemoreception and behavioral responses of *Tetranychus urticae* Koch to organic acids, aldehydes and essential oil components. *Frontiers in Agronomy*, 5-2023. doi: 10.3389/fagro.2023.1212705.
- 10. Hussain, A., Hladun, S., Vincent, M., Wist, T.J., Hillier, N.K., and Mori, B.A. 2022. Development of a pheromone monitoring system for the goosefoot groundling moth, *Scrobipalpa atriplicella* (von Röslerstamm) in quinoa, *Chenopodium quinoa* (Willdenow). *Crop Protection*, *165*: 106166.
- 11. <u>Liu, J., Clarke, J.A., McCann, S.</u>, Hillier N.K., and Tahlan, K. 2022. Analysis of *Streptomyces* volatilomes using global molecular networking reveals the presence of many plant-associated metabolites. *Microbiology Spectrum* 10(4):e0055222. doi: 10.1128/spectrum.00552-22.
- 12. Webster, R.P., Sweeney, J.D., Lewis, J.H., , Klymko, J., Carpenter, G., Giasson, M., <u>Voscort, L., Chapman,</u> <u>C</u>., Hillier, N.K., and Smith, M. 2022. Additions to the Coleoptera Fauna of New Brunswick and Nova Scotia. *Journal of the Acadian Entomological Society, 18: 1-13.*
- 13. <u>Bowen-MacLean, G., Scott, C.M.</u>, Hillier, N.K. 2021. Two-spotted spider mites respond to chemical cues associated with conspecifics' silk when choosing a microhabitat. *Journal of Insect Behavior*, *1-9*.
- 14. <u>Clarke, R</u>., Klapstein, S., Hillier, N.K., and O'Driscoll, N.J. 2021. Methylmercury bioaccumulation in caddisflies and mayflies: Influences of water and sediment chemistry. *Chemosphere*, *131785*.
- 15. <u>Little, C</u>., Dixon, P.L., Moreau, D.L., Chapman, T.W., and Hillier, N. K. 2021. Assessment of attractant baits, adjuvants, and monitoring traps for *Drosophila suzukii* using electrophysiology, laboratory choice assays, and field trials. *Journal of Economic Entomology*, *114: 652-675*.
- 16. Faraone, N., Hillier, N.K. 2020. Preliminary field evaluation of a rock dust product for pest herbivore management. *INSECTS*, *11*: 877.
- 17. Faraone, N., Hillier, N.K., and McSweeney, M.B. 2020. A preliminary investigation into participants' reactions to a sensory trial investigating a cannabis edible. *Journal of Sensory Studies*, <u>https://onlinelibrary.wiley.com/share/author/ST6MKZHEID7BA7AIAB46?target=10.1111/joss.12624</u>.
- 18. <u>Zhang, C.</u>, <u>McCann, S.</u>, Faraone, N., <u>Clarke, J.</u>, <u>Cloonan, K.</u>, <u>Martyn, A.</u>, Hillier, N.K., and Tahlan, K. 2020. Volatile organic compound profiles of industry related *Streptomyces*. *Microorganisms*, 8: 1767.

- 19. <u>Cloonan, K., Rizzato, R., Ferguson, L</u>., Hillier, N.K. 2020. *Helicoverpa punctigera* olfactory receptor neuron responses to heliothine sex pheromone components and their antennal lobe projection destinations. *Journal of Comparative Physiology A*, 206(6), 939-950.
- Faraone, N., <u>Light, M., Scott, C.</u>, <u>MacPherson, S.</u>, and Hillier, N.K. 2020. Chemosensory and behavioral responses of *Ixodes scapularis* to natural products: role of chemosensory organs in volatile detection., INSECTS, 11: 502.
- Light, M., Faraone, N., Shutler, D., Cutler, C., Hillier, N.K. 2020. Varroa destructor repellency and electrophysiological activity towards Yarrow (Achillea millefolium L.) essential oil and its components. The Canadian Entomologist, 153(2), 211-221. doi:10.4039/tce.2020.65
- <u>Faraone N</u>., Evans, R., <u>LeBlanc, J.</u>, Hillier N.K. 2020. Soil and foliar application of rock dust as a biocontrol agent: management of two-spotted spider mites on tomato plants. *Scientific Reports*, 10: 12108.
- 23. <u>Pawlowski, S.</u>, Sweeney, J.D., Hillier, N.K. 2020. Electrophysiological responses of the beech leaf mining weevil to seasonally-variant volatile organic compounds emitted by the American Beech, *Fagus grandifolia*. *Journal of Chemical Ecology*. 46: 935-946.
- 24. <u>Light, M</u>., Shutler, D., Cutler, C, and Hillier, N.K. 2020. *Varroa destructor* mite responses to honey bee (Apis mellifera) colony volatiles. *Experimental and Applied Acarology*. 81: 495–514 <u>https://doi.org/10.1007/s10493-020-00519-w</u>
- 25. <u>Little, C.M.</u>, Dixon, P.L., Chapman, T.W., and Hillier, N.K. 2020. Role of fruit characters and color on host selection of boreal fruits and berries by *Drosophila suzukii*. *The Canadian Entomologist*. 152: 546-562.
- 26. <u>Isitt, R.L.</u>, Bleiker, K.P., Pureswaran, D.S., Hillier, N.K., Huber, D. P. W. 2020. Local, geographical and contextual variation in the aggregation pheromone blend of the spruce beetle, *Dendroctonus rufipennis* (Coleoptera: Curculionidae). *Journal of Chemical Ecology*. 46: 497–507
- Light, M., Shutler, D., Cutler, C, and Hillier, N.K. 2020. Electrotarsogram responses to odorants by Varroa destructor, a primary parasite of western honey bees (*Apis mellifera*). Experimental and Applied Acarology. 81: 515–530. <u>https://doi.org/10.1007/s10493-020-00525-y</u>
- 28. Sweeney, J.D., Hughes, C., Hongkao, Z., Hillier, N.K., Morrison, A., and Johns, R. 2020. Impact of the invasive beech leaf-mining weevil, *Orchestes fagi*, on American beech in Nova Scotia, Canada. *Frontiers in Forests and Global Change*, 3: <u>https://doi.org/10.3389/ffgc.2020.00046</u>
- 29. <u>Little, C.,</u> Chapman, T.C. and Hillier, N.K. 2020. Plasticity is key to success of *Drosophila suzukii* (Diptera: Drosophilidae) invasion. *Journal of Insect Science* 20(3): 5; 1–8.
- 30. <u>Little, C.M.</u>, <u>Rizatto, A.R</u>., Charbonneau, L., Chapman, T.W., and Hillier, N.K. 2019. Color sensitivity and preference of *Drosophila suzukii* (Diptera: Drosophilidae). Scientific Reports 9: 16051.

- 31. Pinnelli, G.R. Terrado, M., Hillier, N.K., Lance, D.L., and Plettner, E. 2019. Synthesis of isotopically labelled disparlure enantiomers and application to the study of enantiomer discrimination in gypsy moth pheromone-binding proteins. European Journal of Organic Chemistry 40: 6807-6821.
- 32. <u>Faraone, N., MacPherson, S</u>. and Hillier, N.K. 2019. Behavioral responses of *Ixodes scapularis* to natural products: development of novel repellents. Experimental and Applied Acarology 79: 195-207.
- 33. <u>Goodwin, J</u>., Hillier, N.K., Roscoe, L. and Sweeney, J. 2019. Anatomy of the stridulatory apparatus of the of the beech leaf mining weevil (Coleoptera: Curculionidae) and behavioural responses to stridulation sounds. Entomologia Experimentalis et Applicata 167: 957-968.
- <u>Goodwin, J., Pawlowski, S.,</u> Mayo, P., Silk, P., Sweeney, J. and Hillier, N.K. 2019. Influence of trap color, type, deployment height, and a host volatile on monitoring invasive beech leaf mining weevil, *Orchestes fagi* L. (Coleoptera: Curculionidae), in Nova Scotia, Canada. The Canadian Entomologist 152:98-109.
- 35. <u>Little, C.M., Rand, E., MacIsaac, M</u>., Charbonneau, L. and Hillier, N.K. 2019. *FlySpotter*: using citizen science to identify range expansion and fruit at risk from *Drosophila suzukii* in Nova Scotia & Newfoundland and Labrador. Journal of the Acadian Entomological Society 15: 27-39.
- 36. <u>Little, C.,</u> Chapman, T.C. and Hillier, N.K. 2019. Considerations for Insect Learning in Integrated Pest Management. Journal of Insect Science 19: 1-14.
- 37. Hillier, N.K., <u>Evans, E</u>., and Evans, R.C. 2018. Novel insect florivory strategy initiates autogamy in unopened allogamous flowers. Scientific reports 8: 17077.
- 38. <u>Silver, N</u>., Blatt, S., and Hillier, N.K. 2018. Management of *Delia platura* (Diptera: Anthomyiidae) through selectively timed planting of *Phaseolus vulgaris* (Fabaceae) in Atlantic Canada. The Canadian Entomologist 150: 663-674. <u>https://doi.org/10.4039/tce.2018.36</u>
- <u>Little, C.,</u> Chapman, T.C. and Hillier, N.K. 2018. Effect of colour and contrast on susceptibility of highbush blueberries to infestation by *Drosophila suzukii*. Environmental Entomology, 47: 1242-1251. <u>https://doi.org/10.1093/ee/nvy102</u>
- Isitt, R.L., Huber, D.P.W., Bleiker, K.P., Hillier, N.K. and Pureswaran, D.S. 2018. The effect of feeding and mate presence on the pheromone blend of the spruce beetle, *Dendroctonus rufipennis* (Curculionidae: Scolytinae). Environmental Entomology 47: 1293-1299. <u>https://doi.org/10.1093/ee/nvy092</u>
- 41. Faraone, N., <u>MacPherson, S.</u>, and Hillier, N.K. 2018. Evaluation of repellent and insecticidal properties of a novel granite dust product in crop protection. Pest Management Science 4: 1345-1352.
- 42. <u>Kelly, J.A</u>., Cutler, C., Hillier, N.K. 2017. The life history, seasonality and natural enemies of *Aroga trialbamaculella* Chambers (Lepidoptera: Gelechiidae). Journal of the Acadian Entomological Society 13: 28-31.

- 43. <u>Nelson,</u> T.D., Sweeney, J.D., Hillier, N.K. 2017. Do visual cues associated with larger diameter trees influence host selection by *Tetropium fuscum* (Coleoptera: Cerambycidae)? The Canadian Entomologist, 149: 487-490.
- 44. Silk, P.J., Mayo, P.D, LeClair, G., Brophy, M., <u>Pawlowski, S.</u>, MacKay, C., Hillier, N.K., Hughes, C. and Sweeney, J.D. 2017. Semiochemical attractants for survey and detection of the beech leaf-mining weevil, *Orchestes fagi* (L.) (Curculionidae: Curculioninae: Rhamphini). Entomologia Experimentalis et Applicata, 164: 102-112.
- 45. Olsson, S.B., Bhardwaj, P.K., Brockmann, A., Chandrashekara, K., Gross, J., Harari, A., Hillier, N.K., Jacquin-Joly, E., Khesoh, V., Lima, E., Lofstedt, C., Marion-Poll, F., Ahmad Mir, B., Raguso, R.A., Rai, S., Poddar Sarkar, M., Seenivasagan, T., Shaankar, U.R. 2017. New Frontiers for Chemical Ecology. Journal of Chemical Ecology 43: 2-3.
- 46. <u>Saroli, J.A</u>., Cutler, G.C., and Hillier, N.K. 2016. Morphological Comparison of *Altica sylvia* (Malloch, 1919) and *Mantura chrysanthemi* (Koch, 1803) (Coleoptera: Chrysomelidae: Galerucinae: Alticini), with a Focus on Sexual Dimorphism. Coleopterists Bulletin 70:892-902
- 47. Hillier, N.K. and Dixon, P.L. 2016. *The Lingonberry Fruitworm*. Book Chapter, in *Compendium of Blueberry, Cranberry, and Lingonberry Diseases and Pests, Second Edition*, Eds. Polashock, J.J., Caruso, F.L., Averill, A.L., and Schilder, A.C. APS Press.
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- 83. Dixon, P. & Hillier, N.K. 2003. Insect pests of wild cranberry, *Vaccinium macrocarpon*, in Newfoundland and Labrador. Phytoprotection, 88: 139-145.
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3. Publications in Preparation

- 1. <u>Gaudet, K.</u>, Hillier, N.K., and Faraone, N. Lemongrass essential oil and *N*,*N*-diethyl-3-methyl benzamide inhibit attractant detection in blacklegged ticks *Ixodes scapularis* (Say) (Arachnida: Ixodidae). *In revision, Current Research in Insect Science*.
- 2. Sweeney, J., Hillier, N.K., <u>Hatt, E.</u> Developing traps for survey and monitoring spread of the beech leafmining weevil, *Orchestes fagi. In revision, Journal of the Acadian Entomological Society.*

4. Works in Progress

- 1. Hillier, N.K., House, D., de la Bastide, P., Finston, T., and Hermanutz, L. Monitoring multi-year pest damage and fungal incidence on endangered Long's Braya plants in Newfoundland. *In preparation, Biological Conservation*.
- 2. Hillier, N.K., Faraone, N., <u>Koerte, S.</u>, and Cloonan, K. Sprayable erythritol formulations for management of *Drosophila suzukii* in high bush blueberries. *In preparation, Journal of Economic Entomology.*
- 3. O'Driscoll, N.J., Kickbush, J.C., Turner, H.E., Klapstein, S., Doncaster, M., Stevens, K., Clarke, R., Bradford, M., Bowes, B., Rogers, J., Hillier, N.K., Mallory, M. *A multi-year study of methylmercury and nutrient export in surface water from Big Meadow Bog, Brier Island, Nova Scotia*. In: *Restoring a Ditched Peatland and a Globally Imperilled Herb: The First Ten Years*. Eds: Hill, N., O'Driscoll, N. *In preparation for Springer Nature Publishers: Book Series "Environmental Contamination and Remediation Management"*.

5. Non-refereed Publications

Internet publication

Acadia University Homepage: <u>http://www.acadiau.ca/~khillier/</u>

Acadia Viticultural Extension and Education Website: <u>http://viticulture.acadiau.ca/</u>

Other non-refereed publications

Hillier, N.K. 2012. Standard Operating Procedures (SOP) Manual for Acadia Insectary, including SOPs on Movement of Exotic Species and Authorization for Access. 2012. Biohazard Safety Manual submitted to the Canadian Food Inspection Agency (CFIA) for certification of the Insectary within the Weston Animal Care Facility as a CFIA Plant Pest Quarantine Biocontainment Centre.

Hillier, N.K. 2009. Book Review: Alternative Reproductive Tactics: An Integrative Approach. 1st Ed. Canadian Society of Zoologists Bulletin 40 (3).

Vickers, N.J. and Hillier, N.K. 2007. Book Review: Methods in Insect Sensory Neuroscience. Frontiers in Neuroscience. Quarterly Review of Biology 82: 57.

Dixon, P., Hendrickson, P., Hillier, N.K., and Porter, G. 2000. Insects on Wild Cranberries in Newfoundland, in: Cranberry Research Compilation, Cranberry Institute, Wareham, MA (Book Chapter).

Hillier, N.K. 1998. Insect Pests of Cranberries. Cranberry Development Workshop Report, Newfoundland Forest Resources & AgriFoods, St. John's, NL.

6. Research Grants and Funding

Under Review:

- 1. Nova Scotia Sustainable Communities Challenge Fund (\$195268) Hemlock Woolly Adelgid Biocontrol Rearing Facility support funds.
- Research Nova Scotia Forestry Missions (\$511000) Development of a biocontrol and integrated pest management strategy for invasive Hemlock Woolly Adelgid (PI with 4 coapplicants).

Awarded (over <u>\$24 million</u> secured since July 2007):

2023:

 NSERC Alliance (\$255,400) – Effects of changing temperature and humidity on tick response to repellents and acaricide efficacy in the context of climate change (PI: Nicoletta Faraone with 2 co-applicants).

- 2. Harrison McCain Vistorship Fund (\$6,000) Travel funding for collaborative research at the USDA, Hilo, Hawaii and Pohakuloa Training Area, US Army, Pohakuloa, Hawaii.
- 3. Acadia University 25.55 Research Fund (\$5,000) Acadia University 25.55 Research Fund (\$5,000) Investigating the olfactory role of ionotropic receptors in the spider mite, *Tetranychus urticae*.
- 4. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Continued optimization of delivery technology for a novel oviposition attractant for Soldier fly propagation. (Co-PI, Nicoletta Faraone).

2022:

- 5. Infectious Disease and Climate Change Fund, Public Health Canada (\$520,248) Assessing mosquito range expansion and vector potential in Nova Scotia 3 year project expansion request. Laura Ferguson (PI) with 6 Co-applicants.
- 6. Raddall Major Equipment fund (\$5000) Request for a bead grinder for molecular studies (Co-PI, Sarah Koerte with 7 Co-applicants).
- Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Optimization of delivery technology for a novel oviposition attractant for Soldier fly propagation. (Co-PI, Nicoletta Faraone).
- 8. Acadia University 25.55 Research Fund (\$5,000) Investigating the olfactory role of ionotropic receptors in the spider mite, *Tetranychus urticae*.
- Industry Research Assistance Program (NRC-IRAP-CTO) (\$5,000) Nanoencapsulation of Black Soldier Fly Semiochemicals with Oberland AgriScience Inc. Co-PI with Nicoletta Faraone.
- 10. SERG-International (\$5,000). Development of an effective field monitoring method for the whitemarked tussock moth (Year 4). PIs: Peter Mayo and Celia Boone with 5 research partners.
- 11. SERG-International (\$11,000). Insecticides for protection of hemlocks from hemlock woolly adelgid: efficacy and effects on non-target aquatic invertebrates (Year 2). PIs: Jon Sweeney with 7 research partners.
- 12. CanLyme Venture Fund (\$15,000). Questing activity and preference by off-host tick nymphs and adults (Acari: Ixodidae) in different vegetations and habitats. PI: Sarah Koerte with Co-PI's Nicoletta Faraone and N. Kirk Hillier).

- 13. Raddall Major Equipment fund (\$3,000) Request for Motorized Manipulator for Neurophysiological studies (Co-PI, Sarah Koerte).
- Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Development and testing of nanoencapsulated erythritol for integrated pest management of Spotted Wing Drosophila in berry crops (Co-PI, Nicoletta Faraone).
- Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Optimization and delivery of a novel oviposition attractant for Soldier fly propagation. (Co-PI, Nicoletta Faraone).

- 16. Parks Canada (\$145,000). Funding for a two year project investigating the non-target impacts of imidicloprid applications on insect biodiversity in Hemlock stands.
- 17. Canadian Forest Service (\$10,000) Contract supporting biodiversity studies of pollinators in Hemlock forest stands.
- 18. MITACS (\$45000). Funding for Post-doctoral researcher salary for collaborative research with Hallucinex. PI: Nicoletta Faraone, with Co-applicants Suzie Currie and Kirk Hillier.
- 19. NSERC Research Tools and Instrumentation Grant (\$95,954) Primary Investigator, with coinvestigators Dave Shutler, and Nicoletta Faraone, Acadia University.
- 20. SERG-International (\$5,000). Development of an effective field monitoring method for the whitemarked tussock moth (Year 3). PIs: Peter Mayo and Celia Boone with 4 research partners.
- 21. SERG-International (\$1,000). Pheromone and host plant odor detection and processing in spruce budworm (Year 3). Pl with 2 Co-applicants.
- 22. Acadia University 25.55 Research Fund (\$5,000) Assessing mosquito range expansion and vector potential in Nova Scotia.

- 23. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Investigating the optimal synthetic approaches for producing a water-soluble and highly stable cannabinoid/Cd complexes by exploring a variety of different delivery technologies, including micro and nano-encapsulation process II. Co-PI with Nicoletta Faraone (PI).
- 24. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Testing the impact of soil amendment with granite dust on CBD content in *Cannabis sativa*. Co-PI, Nicoletta Faraone.
- 25. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Development and testing of nanoencapsulated tick repellents for application to fabrics. Co-PI with Nicoletta Faraone (PI).
- 26. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Development and testing of tick treatments for domestic pets. Co-PI, Nicoletta Faraone.
- 27. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Development and testing erythritol for integrated pest management of Spotted Wing Drosophila in berry crops.
- 28. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Development of a novel oviposition attractant for Soldier fly propagation. Co-PI, Sean McCann.
- E-Tick Contract with Bishop's University (funded by Infectious Disease and Climate Change Fund, Public Health Canada National Research Council) – (\$22,000) – Management of E-tick expert identification panel for Nova Scotia. Co-PI with Dave Shutler.
- 30. Industry Research Assistance Program (NRC-IRAP) (\$175,780) 2- year contract with Atlantick for development of tick repellent technology. Co-PI with Nicoletta Faraone.
- 31. SERG-International (\$4,000). Development of an effective field monitoring method for the whitemarked tussock moth (Year 2). PIs: Peter Mayo and Celia Boone with 4 research partners.
- 32. SERG-International (\$3,000). Pheromone and host plant odor detection and processing in spruce budworm (Year 2). PI with 2 Co-applicants.
- 33. CanLyme Atlantic Canada Lyme Research Support Initiative (\$7,000) Olfactory basis of tick behavior and novel repellent development. Co-PI: Nicoletta Faraone.

34. Acadia University 25.55 Research Fund (\$4,000) – Investigating spider mite olfaction II.

- 35. National Research Council Industry Research Assistance Program (NRC-IRAP) (\$100,000) Contract with Aqualitas for cannabis-infused beverage development. Co-PI with Nicoletta Faraone and Matt McSweeney.
- 36. NSERC Collaborative Research and Development Program (\$173460 (\$127640 + \$45820 inkind) - 202 with Nutrilife Bioproducts.
- National Research Council Industry Research Assistance Program (\$4000) Contract with Dykeview farms to evaluate Erythritol as an alternative pest management treatment for blueberries (Kevin Cloonan, Co-PI).
- National Research Council Industry Research Assistance Program (\$4000) Contract with Bailly Fragrances for Identification of mood-enhancing ingredients for fragrance development.
- 39. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Investigating the optimal synthetic approaches for producing a water-soluble and highly stable cannabinoid/Cd complexes by exploring a variety of different delivery technologies, including micro and nano-encapsulation process. Co-PI with Nicoletta Faraone (PI).
- 40. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Development and testing of nanoencapsulation of tick repellents. Co-PI with Nicoletta Faraone (PI).
- 41. Nova Scotia Productivity and Innovation Voucher Program, Tier I (\$15,000) Testing the impact of soil amendment with granite dust on hemp propagation. Co-PI, Nicoletta Faraone.
- 42. Harrison McCain Vistorship Fund (\$4232) Hunting Hawaiian Bud moth. Travel funding for collaborative research at the USDA, Hilo, Hawaii.
- 43. Canada Nature fund Community-Nominated Priority Places (Total value: \$3,630,160 over 4 years, 50% leveraged from CNC-CNPP) Multi-partner Coordinated Recovery and Conservation Action for Species at Risk in Western Newfoundland. PI: Kathleen Blanchard with 16 Co-PIs/partners.
- 44. Infectious Disease and Climate Change Fund, Public Health Canada (\$250,589) Assessing mosquito range expansion and vector potential in Nova Scotia. Laura Ferguson(PI) with 3 Co-applicants.
- 45. Acadia University 25.55 Research Fund (\$4,000) Investigating spider mite olfaction I.
- NSERC Collaborative Research and Development Program One year extension (\$50000+\$16750 in-kind) - Insecticidal and behavioral effects of granite dust byproducts.
- 47. CanLyme Venture Grants (\$7,500) Olfactory basis of tick behavior and novel repellent development. PI: Nicoletta Faraone.
- 48. Research Contract Nutrilife Products (\$80,000). Evaluation of Pest Management products in Cannabis propagation. Co-PI with Nicoletta Faraone.
- 49. SERG-International (\$4,000). Development of an effective field monitoring method for the whitemarked tussock moth (Year 1). PIs: Peter Mayo and Celia Boone with 4 research partners.
- 50. SERG-International (\$6,000). Pheromone and host plant odor detection and processing in spruce budworm (Year 1). PI with 2 Co-applicants.

- 51. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) AtlanTick Natural Tick Repellent testing. Co-PI with Nicoletta Faraone (PI).
- 52. Nova Scotia Productivity and Innovation Voucher Program, Tier II (\$25,000) Impact of granite dust treatment on subsequent infestation of grapevines with mites. Co-PI with Nicoletta Faraone (PI).
- 53. Harrison McCain Vistorship Fund (\$5,775) Moth Pheromones of the Hawaiian Islands. Travel funding for collaborative research at the University of Hawaii, Manoa, Hawaii.
- 54. Raddall Research Fund, Major Equipment (\$8,500) Nanodrop Spectrophotometer. PI: A. Walker, with 5 Co-applicants.
- 55. Canadian National Wheat Cluster (\$468,674) Pyramiding Oviposition Deterrence and *Sm1* to control Wheat Midge. PI: A. Costamagna with 6 Co-applicants.
- 56. CanLyme Venture Grants (\$10,000) Olfactory basis of tick behavior and novel repellent development. PI: Nicoletta Faraone, with 2 Co-applicants.

- 57. Saskatchewan Ministry of Agriculture –Agriculture Development Fund (\$50,000) Quinoa Insect Research. Primary Investigator, Boyd Mori (AAFC), with 3 Co-Applicants.
- 58. National Research Council Industrial Research Assistance Program (\$3,500) Nutrilife and crop protection: Innovation comes from natural products. Co-PI with Nicoletta Faraone (PI).
- 59. Springboard Atlantic Innovation Mobilization Program (\$15,000) Patent application support for the Emerald Ash Borer (EAB) analog technology.
- 60. Arthur Irving Academy Environmental Science Research Awards (\$40,000, over 2 years) Towards an Understanding of *Crocanthemum canadense* (Rockrose) Biology: A Comparative Analysis of Biotic Challenges and Symbioses Across the Northeastern Range. PI: Rodger Evans, Acadia University, with 2 Co-applicants.
- 61. National Research Council Industrial Research Assistance Program (\$5,000) Efficacy testing of AtlanTick body spray as a novel tick repellent. Co-PI with Nicoletta Faraone (PI).
- 62. Nova Scotia Productivity and Innovation Voucher Program (\$12,500) AtlanTick Natural Tick Repellent testing. Co-PI with Nicoletta Faraone (PI).
- 63. Nova Scotia Productivity and Innovation Voucher Program (\$12,500) Impact of granite dust treatment on subsequent infestation of grapevines with mites. PI: Nicoletta Faraone, and 2 Co-applicants.
- 64. NSERC Engage (\$24,788) Development of a pheromone-based monitoring system for the goosefoot groundling moth, a pest of quinoa in western Canada.
- 65. Raddall Research Fund, Major Equipment (\$3,738) Gradient thermal cycler for development of novel primers for gene expression assays and for DNA barcoding biodiversity assays. PI with 3 Co-applicants.
- 66. Raddall Research Fund, Major Equipment (\$6,000) Polymerase Chain Reaction (PCR) workstation. PI: R. Easy with 3 Co-Applicants.
- 67. NSERC Discovery Grant (\$264,000) Pheromone blend complexity in heliothine moths.
- 68. NSERC Discovery Accelerator Supplement (\$120,000) Pheromone blend complexity in heliothine moths.

- Canadian Foundation for Innovation John Evans Leadership Fund (\$389,835) Acadia Quarantine Behavioral Bioassay Facility.
- 70. NSERC Research Tools and Instrumentation Grant (\$61,738) Replacement of total mercury in solids analyzer for the analysis of mercury contamination in sensitive ecosystems. Nelson O'Driscoll (Environmental Sciences, Acadia) Primary Applicant with 4 others.
- 71. NSERC Collaborative Research and Development Program (\$100,000+\$33,0000 in-kind) Insecticidal and behavioral effects of granite dust byproducts.
- 72. SERG-International (\$4,000) Effect of dosage and treatment frequency on efficacy of TreeAzin[®] Systemic Insecticide for protecting foliage from the beech leaf-mining weevil and preventing mortality of American beech in high value urban environments. PI: Dr. Jon Sweeney, CFS + 4 others).
- 73. Blomidon Naturalists Society Award (\$3,000) Co-Investigator, with Rodger Evans. Range and effects of induced autogamy on *Crocanthemum canadense* populations in Canada and Northeastern United States.
- Atlantic Canada Opportunities Agency, Atlantic Innovation Fund (ACOA-AIF; Total value including in-kind: \$ \$5,753,358; AIF funding component: \$ 2,993,531) Project Director: Hillier, N.K. with 7 Co-applicants. Development and commercialization of naturally-derived semiochemicals for insect pest management.

2016:

- 75. Acadia University 25.55 Research Fund (\$5,000) I DREAM of Olfactory Genes project.
- 76. Springboard Innovation Mobilization Program Proof-of-Concept Award (Value: \$15,000) Bacterial metabolites as insect repellents for crop protection.
- 77. Raddall Research Fund, Project support (\$6,500) Co-investigator, with Dave Shutler (Primary). Chemical Ecology of *Varroa* mites.
- 78. Springboard Innovation Mobilization Program (\$15,000) Marketing Support for Various Technologies Developed Under the Hillier AIF Project – Integrated Research, Development and Commercialization of Pheromones and other Semiochemical Products for Management of Insect Pests in Agriculture and Forestry.
- 79. Environment Canada, Habitat Stewardship Program (\$457,961 over 3 years) Primary Investigator, Dulcie House, Limestone Barrens Stewardship, Flowers Cove, NL. Stewardship and Active Restoration Reclaiming Limestone Barrens Habitat and Endemic Plants, Great Northern Peninsula.
- 80. NSERC Discovery Grant (\$28,000 one year) Comparative evolutionary physiology of olfaction in heliothine moths.

- Project Apis m. (PAm) Research Grant (\$85,500) Primary investigator, with coinvestigators Dave Shutler, Acadia University, and Chris Cutler, Dalhousie University. Chemical Ecology of *Varroa* mites.
- 82. Arthur Irving Academy Environmental Science Research Awards (\$40,000) Primary Investigator, Rodger Evans, Acadia University. Understanding the Challenges and Outcomes of Reproductive Biology in a Critically Imperiled Nova Scotia Endemic Plant, *Helianthemum canadense* (Rockrose): A Multi-Faceted Approach.

- 83. Raddall Research Fund, Major Equipment (\$3,382) Stimulus controller for electrophysiological studies.
- 84. Agriculture and Agri-Food Canada (\$18,000) Research contract for investigation of hybrid blueberry volatiles and effects on host choice by pest insects.
- 85. NSERC Engage (\$24,470 + \$2,000 in-kind) Insecticidal and behavioral effects of rock dust produced as a byproduct from the cutting of granite.
- 86. Nova Scotia Department of Agriculture Research Acceleration Fund (\$11,000) Coinvestigator with Chris Cutler, Dalhousie University). Development and testing of pheromone-based monitoring system for Blueberry Flea Beetle.
- 87. Organic Agriculture Centre of Canada, Organic Science Cluster II (\$68,800, including \$16,000 cash and \$6,800 in-kind in industry leveraged funds) Primary Investigator, Chris Cutler, Dalhousie University, NS. Evaluation of plant essential oils for protection against blueberry insect pests.
- 88. Nova Scotia Department of Agriculture Research Acceleration Fund (\$40,000) Chemical Ecology of the red-striped fireworm in wild blueberries.
- 89. Harrison McCain Vistorship Fund (\$5,224) Pheromones of Outbreaking and Invasive Hawaiian Insects. Travel funding for collaborative research at the University of Hawaii, Manoa, Hawaii.

2014:

- 90. Acadia University 25.55 Research Fund (\$4,768) Upgrade of insect collection facility Acadia Wildlife Museum.
- 91. Nova Scotia Department of Agriculture Research Acceleration Fund (\$32,500; with \$12,000 in other leveraged funding) Detection and monitoring technology for Spotted Wing Drosophila.
- 92. New Brunswick Department of Agriculture Innovative Research and Development Program (\$17,000; with \$3,000 in other leveraged funding) Co-investigator with Chris Cutler, Dalhousie University). Development and testing of pheromone-based monitoring system for Blueberry Flea Beetle.
- 93. Nova Scotia Department of Agriculture Research Acceleration Fund (\$17,000; with \$3,000 in other leveraged funding) Co-investigator with Chris Cutler, Dalhousie University).
 Development and testing of pheromone-based monitoring system for Blueberry Flea Beetle.
- 94. SERG-International (\$4,000) Primary Investigator with 3 Co-applicants) Impact, host breadth, and tools for detection and control of the invasive beech leaf-mining weevil, Orchestes fagi (L.).
- 95. Harrison McCain Vistorship Fund (\$5,224) Moth Pheromones of the Hawaiian Islands. Travel funding for collaborative research at the University of Hawaii, Manoa, Hawaii.
- 96. Canadian Bee Research Fund (\$7,660; with \$17,600 cash and in-kind from other sources) Primary Investigators, Dave Shutler and Kirk Hillier, Acadia University. Chemical attractants and repellents for *Varroa destructor* mites.

- 97. Nova Scotia Cooperative Employment Program (\$8,662) Laboratory Technician.
- 98. NSERC Engage (\$24,305 + \$4,000 in-kind) Management of the Invasive Beech Leaf-Mining Weevil, Orchestes fagi.

- 99. Harrison-McCain Emerging Scholar Award (\$14,800) Comparative physiology and genetics of moth olfaction.
- 100. Newfoundland Agri-Science Initiative (\$49,905 + \$32,000 in-kind; 100%) K. Hillier, P. Dixon, R. Hopkins and L. Madore. Development of lures and traps to monitor and control the cabbage maggot in Newfoundland and Labrador.
- 101. NSERC Interaction Grant (\$2,500) Preliminary discussions Bioforest technologies: tree vaccinations and monitoring of the Beech Leaf-mining weevil (Declined in lieu of other funding).
- 102. Nova Scotia Cooperative Employment Program (\$8,662) Laboratory Technician (Declined in lieu of other funding).
- 103. SERG-International (\$9,000; Primary Investigator with 3 Co-applicants) Risk of anthropogenic movement, host breadth, and tools for detecting the invasive beech leaf-mining weevil, *Orchestes fagi* (L.).
- 104. Invasive Species Centre, Program Funding (\$32,500) Primary Investigator with 3 Coapplicants. Tools for early detection of the beech leaf-mining weevil, *Orchestes fagi* (L.) and risk of anthropogenic movement.

2012:

- 105. Springboard Innovation Mobilization Program Award (\$15,000) Integrated Research, Development and Commercialization of Pheromones and other Semiochemical Products for the Management of Insect Pests in Agriculture and Forestry – Market Study Support for Three Agriculture Pests (Fruit Sector).
- 106. Acadia University 25.55 Research Fund (\$3,000) Hairpencils of the Heliothinae.
- NSERC Discovery Grant (\$71,250 three year extension for service on NSERC Evaluation Group 1501 in 2012-2015) - Comparative physiology and morphology of the moth olfactory pathway.
- 108. NSERC Engage (\$24,696) Attractants of Spotted Wing Drosophila.
- 109. National Research Council Canadian Forest Service (\$5,600) Research contract to characterize selected sensillar physiology in the Brown Spruce Longhorn Beetle.
- 110. Agriculture and Agri-Food Canada (\$7,000) Research contract for investigation of apple maggot olfactory host selection.
- 111. Springboard Innovation Mobilization Program Award (\$15,000) Integrated Research, Development and Commercialization of Pheromones and other Semiochemical Products for the Management of Insect Pests in Agriculture and Forestry – Product # 1- Emerald Ash Borer (EAB) Lure.
- 112. Deutscher Akademischer Austausch Dienst (German Academic Exchange), Faculty Research Award (\$5,637 €) - Olfactory physiology of coeloconic sensilla in *Manduca sexta*. Travel funding for collaborative research at the Max Planck for Chemical Ecology, Jena, Germany.
- SERG-International (\$7,000; Co-applicant) Comparative olfactory physiology of invasive North American *Tetropium fuscum* (F.) with native European *T. fuscum* and *T. castaneum* (L.)

2011:

114. Acadia University 25.55 Research Fund (\$3,500) – Olfactory physiology of coeloconic sensilla in Sphinx moth.

- 115. NSERC Engage Grant (\$24,228) Chemical ecology and life history of insect pests in wild blueberries: Management of red-striped fireworm.
- 116. NSDA Technology Grant (\$40,000) Ecology and management of the Blueberry Flea beetle. Collaborative grant with Chris Cutler, Dalhousie University.
- 117. WBPANS (\$6,000) Matching funds for Ecology and management of the Blueberry Flea beetle. Collaborative grant with Chris Cutler, Dalhousie University.
- 118. Atlantic Canada Opportunities Agency, Atlantic Innovation Fund (ACOA-AIF; Total value including in-kind: \$7,067,989; AIF funding component: \$2,781,112) Project Director: Hillier, N.K. with 7 Co-applicants. Integrated Research, Development and Commercialization of Pheromones and other Semiochemical Products for the Management of Insect Pests in Agriculture and Forestry.
- 119. Nova Scotia Cooperative Employment Program (\$2,700) Laboratory Technician.
- 120. Harrison-McCain Visitorship (\$5,000) Olfactory physiology of coeloconic sensilla in *Manduca sexta*. Travel funding for collaborative research at the Max Planck for Chemical Ecology, Jena, Germany.
- 121. Springboard Atlantic Technology Assessment Fund (\$12,000) Software consultation for Anatomy Interactive: Electronic Learning Modules for Human Physiology.
- 122. Acadia University 25.55 Research Fund (\$3,000) Physiology of antennal sensilla of the Brown Spruce Longhorn Beetle.
- 123. NSERC Engage Grant (\$20,101) Analysis of fluvalinate and amitraz concentrations and distribution within honeybee bodies.
- 124. Canadian Bee Research Fund (\$6,400; Co-Applicant) Dave Shutler, Primary Investigator; Elisabeth Frost, Senior Author – Effects of a miticide on honeybee memory.
- 125. NSERC Engage Grant (\$23,681) Development of an Integrated Pest Management System for Insect and Mite Pests in Nova Scotia Vineyards.
- 126. Bee Maid Research Fund (\$2,000; Co-Applicant) Dave Shutler, Primary Investigator, Elisabeth Frost, Senior Author – Effects of a miticide on honeybee memory.

2009:

2010:

- 127. NSERC Research Tools and Instrumentation Grant (\$19,112) Primary Applicant, *Group Submission*) –Confocal Upgrade for Acadia Centre for Microstructural Analysis.
- 128. Ducks Unlimited/Acadia Research Partnership Grant (\$15,000; Co-Applicant) Nelson O'Driscoll, Primary Investigator - Mercury concentrations in forested wetland songbirds and invertebrates in Nova Scotia, New Brunswick, and northern New England.
- 129. Article 25.55 University Research Fund (\$3,500) Development of Neuroanatomical Stains for Mapping the Insect Brain.
- 130. InNOVACorp Early Stage Commercialization Fund (\$9,025) Interactive Anatomy Software.
- 131. Nova Scotia Cooperative Employment Program (\$2,700) Laboratory Technician.
- 132. Inukshuk Wireless Learning Technology Development Award (\$22,615) Learning Modules for Human Physiology.
- 133. Canadian Foundation for Innovation Infrastructure Operating Fund (\$38,741) Acadia Chemical Analysis and Bio-Imaging Laboratory.
- 134. Canadian Foundation for Innovation (Total value: \$349,000; \$129,135 from CFI + \$129,135 from Nova Scotia Research Innovation Trust + \$90,730 combined industry and Acadia contributions) Acadia Chemical Analysis and Bio-Imaging Laboratory.

- 135. LI-COR Environmental Education Fund (LEEF) Grant (\$40,000; Co-Applicant) Ed Reekie, Primary Applicant – Matching funding for LEEF Ecophysiology Package.
- 136. NSERC Research Tools and Instrumentation Grant (\$32,746) Fixed-stage compound microscope.
- 137. Springboard Award Fund (\$20,000) Learning Modules for Human Physiology.
- 138. InNOVACorp Early Stage Commercialization Fund (\$15,600) Learning Modules for Human Physiology
- 139. TLEA Grant (\$17,220) Electronic Learning Modules for Human Physiology II

2008:

- 140. NSDA Technology Grant (\$40,000) Pheromone identification for blueberry spanworm control in wild blueberry. Collaborative grant with Chris Cutler, NSAC.
- 141. NSDA Technology Grant (\$40,000) Ecology and Chemical Ecology of the red-striped fireworm in wild blueberries. Collaborative grant with Chris Cutler, NSAC, and Sonia Gaul and Kenna MacKenzie, AAFC.
- 142. WBPANS (\$3,000) Matching funds for Ecology and Chemical Ecology of the red-striped fireworm in wild blueberries. Collaborative grant with Chris Cutler, NSAC, and Sonia Gaul and Kenna MacKenzie, AAFC.
- 143. CWBIRDI (\$3,000) Matching funds for Ecology and Chemical Ecology of the red-striped fireworm in wild blueberries. Collaborative grant with Chris Cutler, NSAC, and Sonia Gaul and Kenna MacKenzie, AAFC.
- 144. Article 25.55 University Research Fund (\$3,500) Neuroscience Technician.
- 145. NSERC Discovery Grant (\$118,750) Comparative physiology and morphology of the moth olfactory pathway
- 146. NSERC Research Tools and Instrumentation Grant (\$51,158) Dual-Electrode Neurophysiology Rig
- 147. TLEA Grant (\$15,620) Electronic Learning Modules for Human Physiology
- 148. Open Acadia (\$2,500) Electronic Learning Modules for Human Physiology (Seed Funding).

2007:

- 149. Article 25.55 University Research Fund (\$2,500) Ratiometric effects of pheromones on odour-mediated behaviour and physiology of the Gypsy Moth
- 150. Start-up Funding (\$23000) Acadia University \$20,000 cash, \$3,000 in-kind membership in ACMA.

8. Intellectual Property Development *

1. Sex Pheromone Components of Blueberry Spanworm *Itame argillacearia* (Lepidoptera: Geometridae). (2015) De Silva, E. C. A., Silk, P. J., Mayo, P., Hillier, N. K., Cutler, G. C. Provisional Patent.

* I am also Lead/Director on an ACOA-AIF project, which has an array of other intellectual property disclosures (details are confidential at present), licensed IP, and indirect patents filed.

9. Invited Seminars (I) and Presentations (P)

- 1. Hillier, N.K., Gaudet, K., Comeau-Ouellette, J., and Faraone, N. 2023. Comparative olfactory neuroethology of acid detection in acarines. ESA Annual Meeting, National Harbour, MD, USA (I).
- 2. Hillier, N.K. 2023. Natural products for modulating arthropod attraction and repulsion. Invited seminar, Department of Plant Protection, Hungarian Science Institute, Budapest, Hungary (I).
- 3. Faraone, N. and Hillier, N.K. 2022. Host detection by ticks in the context of repellent exposure. 3rd ISCE-APACE Joint Meeting, Kuala Lumpur, Malaysia. (I)
- 4. Faraone, N. and Hillier, N.K. 2022. What ticks don't like: formulations and deployment of novel natural product-based repellents. 3rd ISCE-APACE Joint Meeting, Kuala Lumpur, Malaysia. (I)
- 5. Faraone, N. and Hillier, N.K. 2022. Host detection by ticks and effect of repellent exposure. Symposium on integrative approaches in sensory physiology and host-seeking behavior in ticks of medical importance, International Congress of Entomology, Helsinki, Finland (I)
- Hillier, N.K. and Faraone, N. 2021. Development of natural products for management of acarine pests. Insect Chemical Ecology Research Symposium, Eastern Branch Entomological Society of America Meeting, Virtual (I)
- Hillier, N.K., <u>Evans, E.</u>, and Evans, R.C. 2018. Novel Insect Florivory Strategy Initiates Autogamy in Unopened Allogamous Flowers. Novel species interactions symposium, ESA/ESC Joint Annual Meeting, Vancouver, BC. (I).
- 8. Hillier, N.K. 2018. Evolution of Heliothine Moth Pheromone Diversity. The 10th International Workshop on Molecular Biology and Genetics of the Lepidoptera. Kolympari, Crete, Greece (I).
- 9. Hillier, N.K. 2018. Following your nose: Navigating stress, opportunity and mating. Keynote address, Dalhousie Agriculture Graduate Research Day, Truro, NS (I).
- 10. Hillier, N.K. 2018. Evolution of Moth Pheromone Diversity. Entomology Guest Seminar, Department of Biological Sciences, Edmonton, AB (I).
- 11. Hillier, N.K. 2017. Integrated Pest Management in Nova Scotia Grapes. Wine Export Workshop: Insights from Japan. Acadia University, Wolfville, NS (I).
- 12. Hillier, N.K. 2016. Development of monitoring systems for blueberry pests. Prince Edward Island Wild Blueberry Growers Annual General Meeting, Charlottetown, PEI (I).
- 13. Hillier, N.K. 2016. Insect Pest Management Strategies. Linking to Agriculture Symposium, Acadia University, Wolfville, NS (I).
- 14. Hillier, N.K. 2015. Pheromone communication in *Helicoverpa punctigera*. Chemical Ecology Symposium, Entomological Society of Canada Annual Meeting, Montreal, QC (I).

- 15. Hillier, N.K. 2015. Decoding evolution of pheromone communication. University of Manitoba, Winnipeg, MN (I).
- Hillier, N.K.*, <u>Little, C.</u>, <u>Crozier, H.</u>, <u>Goreham, S.</u>, <u>Thomas, L</u>., and Moreau, D. 2015. Choosey flies development of attractants for spotted wing drosophila. Invasive Species Symposium, Entomological Society of Canada Annual Meeting, Montreal, QC (I)
- 17. Hillier, N.K.*, <u>Rizzato, A.R.</u>, <u>McGuire, M.</u>, and <u>Rose, S.</u> 2015. Decoding evolution of pheromone communication in Heliothine moths. International Society for Chemical Ecology, Stockholm, Sweden (I).
- 18. Hillier, N.K. 2015. Sustainable Insect Pest Management. Linking to Agriculture Symposium, Acadia University, Wolfville, NS (I).
- 19. Hillier, N.K. 2015. Decoding evolution of pheromone communication in Heliothine moths. Carleton University, Ottawa, ON (I).
- 20. Hillier, N.K. 2015. Pheromone-Based Pest Management. Cross Border Commercial Innovations in Forestry Event, Canadian Consulate and Clemson Canada Centre, Clemson, SC (I).
- 21. Hillier, N.K. 2015. Evolution of pheromone communication in Heliothine moths. Clemson University, Clemson, SC (I).
- Hillier, N.K., <u>Little, C., Jabre, L., Saroli, J</u>., Dixon, P., Madore, L., Chapman, T., Moreau, D., Cutler, C. 2014. Development of trapping systems for pest management. Our Food Our Future Symposium, Corner Brook, NL (I).
- 23. Hillier, N.K. 2014. Modern chemical ecology in the context of Agriculture, Forestry and Evolution. Invited Speaker, University of Hawai'i at Manoa, Oahu, HI (I).
- 24. Hillier, N.K. 2014. Sex, Drugs and Neuroethology. Invited Speaker, Department of Entomology, Pennsylvania State University, PA (I).
- 25. Hillier, N.K. 2014. Neuroethology of Heliothinae. Invited Speaker, Department of Biology, West Virginia University, WV (I).
- 26. Hillier, N.K. 2014. Insect Chemical Ecology and Neuroethology. Invited Speaker, Department of Biology, Memorial University of Newfoundland, St. John's, NL (I).
- 27. Hillier, N.K. 2013. Picking the Insect Brain: Applied Chemical Ecology Based in Neural Approaches. Guest Speaker, Hawaiian Entomological Society, University of Hawai'i at Manoa, Oahu, HI (I) (K).
- 28. Hillier, N.K.*, Olsson, S.B., Grosse-Wilde, E., Reinecke, A., Hansson, B.S. 2013. Do we smell funny? Ionotropic receptors as a new paradigm for olfaction. Acadia University, Wolfville, NS (I).
- 29. Hillier, N.K. 2013. New tools for management of forest pests Atlantic Canada Forest Health Workshop, Fredericton, NB (I).

- 30. Hillier, N.K. and Dixon, P.L. 2011. The Lingonberry Fruitworm A Retrospective. Invited Symposium, Entomological Society of Canada Annual Meeting, Halifax, NS (I).
- 31. Hillier, N.K. 2011. Follow your nose what olfaction can tell us about the brain, behavior and evolution. Acadia University, Wolfville, NS. (I)
- 32. Hillier, N.K. 2010. Insect Olfaction: Bugs, Brains, and Behavior. Mount Allison University, Sackville, NB. (I)
- 33. Hillier, N.K. 2009. Insect Olfactory Neuroethology: Picking the Insect Nose. St. Francis of Xavier University, Antigonish, NS. (I)
- 34. Hillier, N.K. 2009. Insect Olfactory Neuroethology. Nova Scotia Agricultural College, Truro, NS. (I)
- 35. Hillier, N.K. 2008. Picking the Insect Nose: Digging Deeper into Odor Coding. Mount Saint Vincent University, Bedford, NS. (I)
- 36. Hillier, N.K. 2008. Insect Olfactory Neuroscience. Kentville Research Centre, Agriculture and Agri-Food Canada, Kentville, NS. (I)
- 37. Hillier, N.K. 2008. Sniffing out new science at Acadia: Insect olfactory coding. Dept. of Neurobiology, Dalhousie University, Halifax, NS. (I)
- 38. Hillier, N.K. 2008. Sniffing out new science at Acadia: What the heck is Olfactory Neuroethology? Dept. of Biology, Acadia University, Wolfville, NS. (I)
- 39. Hillier, N.K. 2007. Unraveling Insect Olfactory Coding. Acadia University, Wolfville, NS. (I)
- 40. Hillier, N.K. 2006. Insights from Isomorphy in Moth Olfactory Physiology. Institut National de la Recherche Agronomique, Centre de Recherches de Versailles, Versailles, France. (I)
- 41. Hillier, N.K. 2006. Isomorphic and Dimorphic Organization of Moth Olfaction. Department of Physiology and Sociobiology, Theodor Boveri Institut Universität Würzburg, Würzburg, Germany. (I)
- 42. Hillier, N.K. 2006. Picking Brains: Insights from Isomorphy in Moth Olfactory Physiology. Center for Insect Science, University of Arizona, AZ. (I)
- 43. Hillier, N.K. 2006. Picking the insect nose: Insights in olfactory coding. William Patterson University, NJ. (I)
- 44. Hillier, N.K. 2005. Insect olfactory processing and odor mediated behavior. University of South Carolina, Aiken, SC. (I)

8. Conference Presentations (Presenters indicated by asterisk, Students/Staff/PDFs supervised are <u>underlined</u>)

- 1. <u>Koerte, S., McMurray, C.,</u> Faraone, N. and Hillier, N.K^{*}. 2023. Questing activity and preference by off-host tick nymphs and adults (Acari: Ixodidae) in different vegetations and habitats. Ticknet Canada Annual Meeting, Toronto, Canada.
- <u>Muldoon, T.*, Yates, A., Bryk, V.</u>, Hillier, N.K., Ferguson, L., Faraone, N., Savage, J., Bouffard, J., and Shutler, D. 2023. eTick as a tool for monitoring range expansion and accidental introduction of tick species. Atlantic Canadian Association of Parasitologists Annual Meeting, Pictou, Nova Scotia.
- 3. <u>Newell, H.</u>*, O'Driscoll, N.J., Hillier, N.K., Rubinoff, D. 2023. MeHg and THg concentrations of invertebrates and surface soils from the island of Hawai'i: potential volcanogenic influence. Atlantic Universities Geological Conference, St. John's, NL, Canada.
- 4. Hillier, N.K.*, <u>Gaudet, K.</u>, <u>Comeau-Ouellette, J</u>., and Faraone, N. 2023. Comparative olfactory neuroethology of acid detection in acarines. European Society of Insect Taste and Olfaction (ESITO), Villasimius, Italy.
- Faraone, N.*, <u>Gaudet, K.</u>, <u>Anholeto, L.A.</u>, and Hillier, N.K. 2023. Lemongrass essential oil and *N*,*N*-diethyl-3methyl benzamide inhibit attractant detection in infected and non-infected blacklegged ticks *Ixodes scapularis* (Say) (Arachnida: Ixodidae). European Society of Insect Taste and Olfaction (ESITO), Villasimius, Italy.
- 6. <u>Isitt, R.L.*</u>, Bleiker. K.P., Heard, S.B., Hillier, N.K., Huber, D.P.W., Pureswaran, D.S., Sweeney, J.D. 2023. The many pheromone blends of the spruce beetle. . Joint meeting of the Entomological Society of Canada, and the Entomological Society of Saskatchewan, Saskatoon, SK, Canada.
- 7. <u>Swanburg, T.*</u>, Easy, R., Hillier, N.K., Ferguson, L. (2023, August 3). Detecting the spread of invasive mosquitoes and disease potential in Nova Scotia [Online Webinar]. Mersey Tobiatic Research Institute, Nova Scotia, Canada.
- 8. <u>Anholeto, L.A</u>.*, Blanchard, S., Chagas, A.C., Hillier, N.K., and Faraone, N. 2023. In vitro evaluation of essential oils and their binary mixtures against blacklegged ticks *Ixodes scapularis* (Acari: Ixodidae). XIV Simposio Brasileiro de Farmacognosia, São Luis, Marahhão, Brasil.
- 9. <u>Swanburg, T.L.</u>*, Easy, R.H., Hillier, N.K., Smith, T.G., Ferguson, L.V. 2023 Detecting the Spread of Invasive Mosquitoes and Disease Potential in Nova Scotia. Canadian Society of Zoologists Annual Meeting, Saskatoon, SK, Canada.
- O'Driscoll*, N.J., <u>Doncaster, M</u>., Klapstein, S., and Hillier, N.K. Examining export and bioaccumulation of methyl mercury in a wetland impacted by herring gull guano and water table restoration. Society of Environmental Toxicology and Chemistry (SETAC) Annual Meeting, Dublin, Ireland.
- 11. Faraone, N.* and Hillier, N.K. 2023. Formulations and deployment of novel natural product-based tick repellents and acaricides. Chemical Society of Canada Conference, Vancouver, BC.

- 12. Mayo, P.*, Silk, P., LeClair, G., Roscoe, L., MaGee, D., Abeysekera, D., Hillier, N.K., Ogden, J., McGill, A., Lavigne, D., and Boone, C. 2023. Improvement of semiochemical-based trapping method for whitemarked tussock moth. Spray Efficacy Research Group International Workshop, Victoria, BC.
- 13. <u>Voscort, L.*</u>, Sweeney, J.D., Smith, M.S., Vickruck, J., and Hillier, N.K.. 2023. Effects of imidacloprid basal bark sprays for hemlock woolly adelgid control on non-target pollinator communities. Spray Efficacy Research Group International Workshop, Victoria, BC.
- 14. <u>Voscort, L.*</u>, Vickruck, J., Sweeney, J.D., Smith, M.S., and Hillier, N.K.. 2023. Effects of imidacloprid basal bark sprays for hemlock woolly adelgid control on non-target pollinator communities. Atlantic Forest Health Workshop. Liverpool, NS.
- 15. <u>Chapman, C.N.*</u>, Sweeney, J.D., Smith, M., Hillier, N.K. 2023. Investigating the potential for non-target impacts of basal bark application of the insecticide, imidacloprid, on the forest arthropod communities in old eastern hemlock (*Tsuga canadensis*) forests in southwestern Nova Scotia. Atlantic Forest Health Workshop. Liverpool, NS.
- 16. Johns, R.C.*, Owens, E., Edwards, S., C. Hughes, Z. Honghao, N.K. Hillier, A. Morrison, Sweeney, J. 2023. Advances in our understanding of the ecology and management of the invasive beech leaf-mining weevil, *Orchestes fagi,* in Atlantic Canada. Atlantic Forest Health Workshop. Liverpool, NS.
- 17. Hussain, A.*, Hladun, S., Wist, T., Hillier, N.K., and Mori, B. 2022. Development of a pheromone monitoring system for the goosefoot groundling moth, *Scrobipalpa atriplicella* in quinoa (*Chenopodium quinoa*). 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- <u>Anholeto, L.A</u>.*, Figueiredo, A., Cola, D., Fantatto, R., Gainza, Y., Santos, I., Fraceto, L., Hillier, N.K., Faraone, N., and Chagas, A.C. 2022. Association of zinc nanoparticles with botanical compounds for cattle tick control. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 19. <u>Koerte, S.*, McMurray, C.</u>, Faraone, N. and Hillier, N.K. 2022. Creepers on the lurk: Questing activity and preference by off-host tick nymphs and adults (Acari: Ixodidae) in different vegetations and habitats. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 20. Hillier, N.K.*, <u>Ivey, V., Peskett, T., Koerte, S.,</u> Easy, R., <u>Gjelaj, E.</u>, and <u>Kelbratowski, K</u>. 2022. Investigating plasticity in moth pheromone communication. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 21. <u>Hobbs, S.*, Liu, J.</u>, Tahlan, K., and Hillier, N.K. 2022. Investigating olfactory sensitivity of Lepidoptera and Diptera to *Streptomyces* derived volatiles. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 22. <u>Koerte, S.*</u>, and Hillier, N.K. 2022. What makes the true armyworm march? The role of semiochemicals in the life of *Mythimna unipuncta*. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 23. <u>Weeraddanna, C.D.S</u>.*, Hillier, W., <u>Swanburg, T</u>., Hillier, N.K., Wijesundra, R., Ward, T., McCartney, C., Wist, T., Wise, I., Wolfe, S., and Costamagna, A.C. 2022. Electrophysiological and behavioral responses of wheat

midge, *Sitodiplosis mosellana* (Géhin) (Diptera: Cecidomyiidae) to volatile organic compounds (VOCs) emitted from pre and postanthesis stages of susceptible wheat. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.

- 24. <u>Muir, A.*</u>, Shutler, D. and Hillier, N.K. 2022. Chemical disruption of *Varroa destructor*. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 25. <u>Gaudet, K.*</u>, Faraone, N., and Hillier, N.K. 2022. Investigating chemoreception and behavioral responses of *Tetranychus urticae* Koch to naturally-based repellents and acaricides. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 26. Voscort, L.*, Sweeney, J., Smith, M., Vickruck, J., and Hillier, N.K. 2022. Determining non-target Effects of Imidacloprid Basal Bark Sprays for Hemlock Woolly Adelgid Control on Native Arthropod Pollinators. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 27. <u>Swanburg, T. L</u>.*, Easy, R. H., Hillier, N. K., Smith, T. G., Ferguson, L. V. 2022. Detecting the spread of invasive mosquitoes and disease potential in Nova Scotia. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 28. <u>Plazas, E</u>.*, Hillier, N.K. and Faraone, N. 2022. *Drosophila melanogaster* as neuropsychiatric model for the pharmacological characterization of psychoactive mushroom-derived alkaloids. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- **29.** Hillier, W., Hillier, N.K.*, Liu, J., <u>Gaetan, E</u>., Moore, A., and Tahlan, K. 2022. Investigating behavioral responses of *Drosophila melanogaster* to microbial volatiles. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- <u>Mullegama, S.*</u> and Hillier, N.K. 2022. Identification of compounds produced by male hairpencil glands of Heliothinae (Lepidoptera: Noctuidae) and their role in male autodetection and female mate acceptance. 2022 ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC.
- 31. <u>Voscort, L.</u>, Hillier, N.K., Sweeney, J.D., Smith, M.S., and Vickruck, J.L. 2022. Effects of imidacloprid for hemlock woolly adelgid (*Adelges tsugae*) control on non-target pollinator communities in eastern hemlock (*Tsuga canadensis*) forests in southwest Nova Scotia. Kespukwitk Conservation Showcase, White Point, NS.
- 32. <u>Swanburg, T.*,</u> Easy, R., Hillier, K., Ferguson, L. (2022, November 9). Detecting the spread of invasive mosquitoes and disease potential in Nova Scotia. Kespukwitk Conservation Showcase, Liverpool, Nova Scotia, Canada.
- 33. <u>Chapman, C.N.</u>, Sweeney, J.D., Smith, M., Hillier, N.K. 2022. Investigating the potential for non-target impacts of basal bark application of the insecticide, imidacloprid, on the forest arthropod communities in old eastern hemlock (*Tsuga canadensis*) forests in southwestern Nova Scotia. Kespukwitk Conservation Showcase, White Point, NS.

- 34. <u>Muir, A.*</u>, Shutler, D. and Hillier, N.K. 2022. Chemical disruption of *Varroa destructor*. 2022 Queer Atlantic Canadian STEM Colloquium, Halifax, Nova Scotia.
- 35. <u>Gaudet, K.</u>*, Hillier, N.K., and Faraone, N. 2022. Pre-exposure effects of lemongrass and diethlytoluamide on the olfaction and behaviour of *Ixodes scapularis*. Atlantic Canadian Association of Parasitologists Annual Meeting, Pictou, Nova Scotia.
- 36. <u>Anholeto, L</u>.*, Pickett, L., Hillier, N.K. and Faraone, N. 2022. Potential synergistic combinations of different essential oils for tick control. Atlantic Canadian Association of Parasitologists Annual Meeting, Pictou, Nova Scotia.
- 37. Faraone, N.*, and Hillier, N.K. 2022. What ticks don't like: formulations and deployment of novel natural product-based repellents. ISCE-APACE Joint Meeting, Kuala Lumpur, Malaysia.
- 38. Faraone, N.*, and Hillier, N.K. 2022. Host detection by ticks in the context of repellent exposure. ISCE-APACE Joint Meeting, Kuala Lumpur, Malaysia.
- **39.** <u>Hobbs, S.*, Liu, J.</u>, Tahlan, K., and Hillier, N.K. 2022. Investigating olfactory sensitivity of Lepidoptera and Diptera to *Streptomyces* derived volatiles. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- 40. <u>Mullegama, S.*</u> and Hillier, N.K. 2022. Identification of compounds produced by male hairpencil glands of Heliothinae (Lepidoptera: Noctuidae) and their role in male autodetection and female mate acceptance. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- **41.** <u>Koerte, S.*</u>, and Hillier, N.K. 2022. What makes the true armyworm march? The role of semiochemicals in the life of *Mythimna unipuncta*. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- 42. <u>Muir, A.*</u>, Shutler, D. and Hillier, N.K. 2022. Chemical disruption of *Varroa destructor*. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- **43.** <u>Gaudet, K.*</u>, Faraone, N., and Hillier, N.K. 2022. Investigating chemoreception and behavioral responses of *Tetranychus urticae* Koch to naturally-based repellents and acaricides. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- 44. Voscort, L.*, Sweeney, J., Smith, M., Vickruck, J., and Hillier, N.K. 2022. Determining non-target Effects of Imidacloprid Basal Bark Sprays for Hemlock Woolly Adelgid Control on Native Arthropod Pollinators. Annual Meeting of the Acadian Entomological Society, Truro, NS.
- 45. <u>Swanburg, T. L</u>.*, Easy, R. H., Hillier, N. K., Smith, T. G., Ferguson, L. V. 2022. Detecting the spread of invasive mosquitoes and disease potential in Nova Scotia. Annual Meeting of the Acadian Entomological Society, Truro, NS.

- **46.** <u>Mullegama, S</u>. * and Hillier, N.K. 2022. Identification of compounds produced by male hairpencil glands of Heliothinae (Lepidoptera: Noctuidae) and their role in male autodetection and female mate acceptance. Annual Meeting of the Acadia Entomological Society, Truro, NS.
- 47. <u>Swanburg, T. L</u>.*, Easy, R. H., Hillier, N. K., Smith, T. G., Ferguson, L. V. 2022. Detecting the spread of invasive mosquitoes and disease potential in Nova Scotia. Canadian Society of Zoologists Annual Conference (Virtual).
- 48. <u>Gaudet, K.*</u>, Faraone, N., and Hillier, N.K. 2022. Investigating natural-based repellents for *Tetranychus urticae* Koch using electrotarsogram and behavioral studies. Envirocon conference, Western University.
- 49. Sweeney, J.*, Edge, C., MacQuarrie, C., Hughes, C., Hillier, N.K., <u>Chapman, C., Voscort, L.</u>, Smith, M., Vickruck, J., and Lagalante, A. 2022. Insecticides for protecting hemlocks from hemlock woolly adelgid: efficacy and impacts on non-targets. Atlantic Canada Forest Health Workshop, Virtual.
- 50. O'Driscoll, N.J.*, <u>Doncaster, M.</u>, <u>Bowes, B.</u>, Klapstein, S.J. and Hillier, N.K. 2022. Examining export and bioaccumulation of methyl mercury in a bog habitat impacted by herring gull guano and water table restoration on Brier Island, Digby County, Nova Scotia. SETAC, Dublin, Ireland.
- 51. <u>Gaudet, K.*</u>, Faraone, N., and Hillier, N.K. 2022. Investigating the mechanism of a natural-based repellent and miticide for *Tetranychus urticae* Koch using electrotarsogram and behavioral studies. Virtual conference, International Branch of the Entomological Society of America.
- 52. <u>Weeraddana, C.D.S</u>.*, Hillier, W., <u>Swanburg, T</u>., Hillier, N.K., Ward, T., McCartney, C., Wist, T., Wise, I., Wolfe, S., and Costamagna, A.C. 2021. Exploiting volatile organic compounds (VOCs) in pre- and postanthesis stages of susceptible wheat. Entomological Society of America, Annual Meeting.
- 53. <u>Weeraddana, C.D.S</u>.*, Hillier, W., <u>Swanburg, T</u>., Hillier, N.K., Ward, T., Wijesundara, R., McCartney, C., Wist, T., Wise, I., Wolfe, S., and Costamagna, A.C. 2021. The effect of olfactory and tactile cues on wheat midge *Sitodiplosis mosellana* (Géhin) (Diptera: Cecidomyiidae) behavior on pre and postanthesis susceptible wheat. Annual meeting of the Entomological Society of Manitoba, Winnipeg, MB.
- 54. Hillier, N.K.*, <u>Ivey</u>, V., <u>Swanburg</u>, T., <u>Cloonan</u>, K., <u>Gjelaj</u>, E. and <u>Kelbratowski</u>, K. 2021. Blend reception and plasticity in moth olfaction. International Society for Chemical Ecology Annual General Meeting, Stellenbosch, South Africa.
- 55. Faraone, N.*, <u>Condran, G.</u>, and Hillier, N.K. 2021. Tick Repellents: Modulators of Electrophysiological and Behavioural Activities. International Society for Chemical Ecology Annual General Meeting, Stellenbosch, South Africa.
- 56. <u>Koerte, S.*</u>, and Hillier, N.K. 2021. Investigating the semiochemistry underlying host selection and oviposition of *Mythimna unipuncta*. International Society for Chemical Ecology Annual General Meeting, Stellenbosch, South Africa.

- 57. <u>Pickett, L.J.*</u>, Hillier, N.K., Faraone, N. 2021. Electrophysiological responses of *Ixodes scapularis* to host volatiles. International Society for Chemical Ecology Annual General Meeting, Stellenbosch, South Africa.
- 58. <u>Wang, H.V.*</u>, Hillier, N.K. and Faraone, N. 2021. Repellent and acaricidal effects of basil essential oil and rock dust on ticks. International Society for Chemical Ecology Annual General Meeting, Stellenbosch, South Africa.
- 59. <u>Clark, R.*, King, K.*, Muldoon, T.*</u>, Hillier, N.K., Savage, J., Chuard, P., Shutler, D. 2021. eTick as a Model for Effective Surveillance Using Citizen Science. Canadian Society for Zoology Annual Meeting, Virtual conference.
- 60. <u>Wang, H.V.*</u>, Hillier, N.K. and Faraone, N. 2020. Effects of Rock Dust on Lily Plant Volatile Emission. Phytochemical Society of North America, Annual General Meeting, Online Conference.
- 61. Faraone, N.*, <u>Light, M.</u>, Scott, C., <u>MacPherson, S.</u>, Hillier, N.K. 2020. Electrophysiological and behavioural responses of *Ixodes scapularis* to natural products. Acadian Entomological Society Annual General Meeting, Online conference.
- 62. <u>Ivey, V.*</u> and Hillier, N.K. 2020. Molecular and behavioral plasticity in the sex pheromone response of the corn earworm (*Helicoverpa zea*). Acadian Entomological Society Annual General Meeting, Online conference.
- 63. <u>Stegen, S.*</u>, Bent, E. and Hillier, N.K. 2020. Survey and incidence of Large Raspberry Aphid and associated viruses in Nova Scotia. 7th Annual Acadia Student Research and Creative Works Symposium, Wolfville, NS.
- 64. <u>Dhunna, V</u>*. and Hillier, N.K. Electrophysiological responses of spider mites to host plant volatiles. 7th Annual Acadia Student Research and Creative Works Symposium, Wolfville, NS.
- 65. Sweeney, J*., Hughes, C., Hongkao, Z., Hillier, N.K., Morrison, A., and Johns, R. 2020. The invasive Beech Leaf-Mining Weevil is killing mature American Beech in Nova Scotia. USDA Interagency Research Forum on Invasive species, Annapolis, MD.
- <u>Goodwin, J.T.L.*</u>, Pawlowski, S.P., Mayo, P., Silk, P.J., Hughes, C., Hillier, N.K., and Sweeney, J*. 2020. Influence of trap colour, trap type and trap height on detection of the invasive Beech Leaf-Mining Weevil, *Orchestes fagi*. USDA Interagency Research Forum on Invasive species, Annapolis, MD.
- 67. <u>Clarke, R.*</u>, Hillier, N.K., Klapstein, S., O'Driscoll, N. 2020. Influences of Water and Sediment Chemistry on Mercury Bioaccumulation in Freshwater Invertebrates from Two Lakes in Kejimkujik National Park, Canada. Society of Environmental Toxicology and Chemistry (SETAC) Annual Meeting, Dublin, Ireland.
- 68. Sweeney, J*., Hughes, C., Hongkao, Z., Hillier, N.K., Morrison, A., and Johns, R. 2019. Impact of the invasive beech leaf-mining weevil, *Orchestes fagi*, on American beech in Nova Scotia, Canada. National Forest Pest Forum, Ottawa.

- Weeraddana, C., Wist, T.*, McCartney, C., Vanderwel, D., Hillier, N.K., Wolfe, S., Wise, I., Costamagna, A. 2019. Wheat volatile analysis on susceptible and resistant lines to the orange wheat blossom midge, *Sitodiplosis mosellana* (Diptera: Cecidomyiidae). Entomological Society of America Annual Meeting, St. Louis, MO.
- 70. <u>Clarke, R.*</u>, Klapstein, S., Hillier, N.K., O'Driscoll, N. 2019. Influences of Water and Sediment Chemistry on Mercury Bioaccumulation in Freshwater Invertebrates from Two Lakes in Kejimkujik National Park, Canada. Society of Environmental Toxicology and Chemistry (SETAC) Annual Meeting, Toronto, Canada.
- 71. Faraone, N.*, <u>MacPherson, S.</u>, Hillier, N.K. 2019. Chemosensory and behavioral responses of *Ixodes scapularis* to natural products: role of chemosensory organs in volatile detection. European Society of Insect Taste and Olfaction (ESITO), Villasimius, Italy.
- 72. Hillier, N.K.*, <u>Cloonan, K</u>., and <u>Ferguson, L</u>. 2019. Pheromone blend complexity in Heliothine moths. European Society of Insect Taste and Olfaction (ESITO), Villasimius, Italy.
- 73. <u>Cloonan, K</u>.*, Hillier, N.K. 2019. *Helicoverpa punctigera* olfactory receptor neuron responses to heliothine sex pheromone components and their antennal lobe projection destinations. Joint meeting of the Entomological Society of Canada, Canadian Society of Ecology and Evolution and the Acadian Entomological Society, Fredericton, NB, Canada.
- 74. Hillier N.K.*, <u>MacVicar, L., Cloonan, K., Gjelaj, E., Swanburg, T., MacLean, L., Rizzato A.R.,</u> Easy, R. 2019. Investigating plasticity in moth pheromone receptor expression. Joint meeting of the Entomological Society of Canada, Canadian Society of Ecology and Evolution and the Acadian Entomological Society, Fredericton, NB, Canada.
- 75. Faraone, N.*, <u>MacPherson, S.</u>, Hillier, N.K. 2019. Behavioral responses of *Ixodes scapularis* to natural products: role of chemosensory organs in volatile detection. Joint meeting of the Entomological Society of Canada, Canadian Society of Ecology and Evolution and the Acadian Entomological Society, Fredericton, NB, Canada.
- 76. Shutler, D.*, <u>Moore, T</u>., Faraone, N., Hillier, N.K. 2019. Blind to what counts: nest odours. Joint meeting of the Entomological Society of Canada, Canadian Society of Ecology and Evolution and the Acadian Entomological Society, Fredericton, NB, Canada.
- 77. <u>Light, M.*</u>, Shutler, D., Cutler, C., Hillier, N.K. 2019. Chemical ecology and biology of *Varroa destructor*, a primary pest of western honey bees. Joint meeting of the Entomological Society of Canada, Canadian Society of Ecology and Evolution and the Acadian Entomological Society, Fredericton, NB, Canada.
- 78. <u>Clarke, R.*</u>, Klapstein, S., Hillier, N.K., O'Driscoll, N. 2019. Influences of Water and Sediment Chemistry on Mercury Bioaccumulation in Freshwater Invertebrates from Two Lakes in Kejimkujik National Park, Canada. Society of Environmental Toxicology and Chemistry (SETAC) Annual Meeting, Helsinki, Finland.

- 79. Sweeney, J.*, Hughes, C., Brodersen, G., <u>Goodwin, J.</u>, Hillier, N.K., Czerwinski, E., Goble, T., Johns, R., Kirichenko, N., Kenis, M., Stastny, M. 2019. Mitigating the impact of the invasive beech leaf-mining weevil, Orchestes fagi, in Nova Scotia. IUFRO meeting on Integrated Pest Management, Quebec City, QC.
- 80. <u>Goodwin, J.*, Pawlowski, S.</u>, Mayo, P., Silk, P., Sweeney, J., and Hillier, N.K. 2018. Evaluation and improvement of trapping for the invasive beech leaf mining weevil, *Orchestes fagi* (L.), in Nova Scotia, Canada. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 81. <u>Little, C.*</u>, <u>Rizzato, A.R.</u>, *Charbonneau, L.*, Chapman, T., and Hillier, N.K. 2018. Colour sensitivity and preference of spotted-wing drosophila (*Drosophila suzukii*). ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 82. <u>Discher, A.</u>*, and Hillier, N.K. 2018. Using microbial volatile organic compounds (MVOCs) produced by *Streptomyces* bacteria in controlling *Drosophila suzukii*. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 83. <u>Faraone, N.*</u>, Browne, R., and Hillier, N.K. 2018. Rock dust product for managing Acarine pests: Spider mites on grape vines as a case study. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 84. <u>MacPherson, S.</u>, Faraone, N.*, and Hillier, N.K. 2018. Inert granite dust for pest management: A preliminary study. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 85. <u>Light, M.</u>*, Shutler, D., Cutler, C., and Hillier, N.K. 2018. Investigating semiochemical control strategies for *Varroa destructor*, the primary pest of western honey bees. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- MacIsaac, M*., Faraone, N., and Hillier, N.K. 2018. Effects of inert granite dust on *Lilium* spp. volatile emissions and herbivory response of the lily leaf beetle, *Lilioceris lilii* (Scopoli) (Coleoptera: Chrysomelidae). ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 87. Hillier, N.K.* 2018. Pheromone diversity in heliothine moths. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- 88. <u>MacPherson, S.*</u>, Faraone, N., and Hillier, N.K. 2018. Olfaction in ticks: Physiological and behavioural investigation of tick response to essential oils for the development of new repellant products for human protection. ESA, ESC and ESBC Joint Annual Meeting, Vancouver, BC.
- Sweeney, J.*, Hughes, C., Brodersen, G., <u>Goodwin, J.</u>, Hillier, N.K., Czerwinski, E., Goble, T., Johns, R., Kirichenko, N., Kenis, M., and Stastny, M. 2018. Mitigating the impact of the European beech leaf mining weevil, *Orchestes fagi*, on American beech in Canada. Eastern CANUSA Forest Science Conference, Fredericton, NB.
- 90. <u>MacKinnon, S.*</u>, Landry, S., and Hillier, N.K. 2018. Gait Analysis in the Sagittal Plane of a Young Male Basketball Athlete with Bilateral Surgical Clubfoot Correction. 20th Biennial Meeting of the Canadian Society for Biomechanics (CSB) in Halifax, NS.

91. Hillier, N.K*. 2018. Evolution of Heliothine Moth Pheromone Diversity. International Society for Chemical Ecology, Budapest, Hungary.

92. <u>MacPherson S.</u>, Faraone N., Hillier N.K^{*}. Evaluation of repellent and insecticidal properties of a novel granite dust product in crop protection. International Society for Chemical Ecology, Budapest, Hungary.

- 93. Faraone, N.*, <u>MacPherson, S.</u>, Lloyd, V., Hillier, N.K. 2018. Olfactory basis of tick behavior and novel repellent development. International Society for Chemical Ecology, Budapest, Hungary.
- 94. Faraone, N.*, <u>MacPherson, S.</u>, Hillier, N.K. 2018. Development of novel tick repellents. Maritime Tick and Tick-Vectored Disease Research Conference, Sackville, NB.
- 95. <u>MacPherson, S.*</u>, N Faraone, Hillier, N.K. 2018. Behavioural investigation of tick (*Ixodes scapularis*) response to essential oils for the development of new repellant products. Maritime Tick and Tick-Vectored Disease Research Conference, Sackville, NB.
- <u>Clarke, R.*</u>, Klapstein, S., Hillier, N.K., O'Driscoll, N. 2018. Water and Sediment Chemistry Influences on Mercury Bioaccumulation in Freshwater Invertebrates from Two Lakes in Kejimkujik National Park, Nova Scotia. 6th Annual Acadia Graduate Student Symposium, Wolfville, NS.
- 97. Sweeney, J.*, Hughes, C., <u>Goodwin, J</u>., Hillier, N.K., <u>Pawlowski, S.</u>, Mayo, P., Roscoe, L., Czerwinski, E., Goble, T., Johns, R., Silk, P. 2018. Impact, survey and control of the beech leaf mining weevil, *Orchestes fagi*, an invasive pest of American beech in Nova Scotia, Canada. USDA Interagency Research Forum on Invasive species, Annapolis, MD.
- 98. <u>Goodwin, J.*, Pawlowski, S.</u>, Hillier, N.K. and Sweeney, J. 2018. Analysis of multimodal attractiveness cues in the invasive beech leaf mining weevil, *Orchestes fagi* L., in Nova Scotia, Canada. Spray Efficacy Research Group International Workshop, Edmonton, AB.
- 99. <u>Little, C.M.*, Rand, E.*</u>, Dixon, P., Moreau, D., Chapman, T.C., and Hillier, N.K. 2018. FlySpotter: A novel citizen science initiative to identify native and non-crop hosts for *Drosophila suzukii* in the Atlantic Provinces. Scotia Horticulture Congress, Greenwich, NS.
- 100. <u>MacDonald, M.*</u>, Blatt, S., and Hillier, N.K. 2018. Investigating management of *Delia* pests via host phenology shifts. Scotia Horticulture Congress, Greenwich, NS.

101. Faraone, N.*, <u>MacPherson, S.</u>, and Hillier, N.K. 2018. Inert granite dust for a more sustainable agriculture: a preliminary study. Scotia Horticulture Congress, Greenwich, NS.

102. Sweeney, J.*, Hughes, C., <u>Goodwin, J.</u>, Hillier, N.K., <u>Pawlowski, S.</u>, Roscoe, L., Mayo, P., Czerwinski, E., Goble, T., Johns, R., Silk, P. 2018. European beech leaf mining weevil: a new invasive established in Nova Scotia. Atlantic Canada Forest Health Workshop, Amherst, NS.

- 103. <u>Goodwin, J.*, Pawlowski, S.,</u> Hillier, N.K. and Sweeney, J. 2018. Multimodal Attractiveness Cues in the Beech Leaf Mining Weevil, *Orchestes fagi* L, in Nova Scotia, Canada. Atlantic Canada Forest Health Workshop, Amherst, NS.
- 104. <u>Light, M</u>.*, Shutler, D., Cutler, C., and Hillier, N.K. 2017. Management of *Varroa destructor* in western honey bees. Central Ontario Beekeepers Association, Centreville, ON.
- Light, M.*, Shutler, D., Cutler, C., and Hillier, N.K. 2017. Light, M.*, Shutler, D., Cutler, C., and Hillier, N.K. 2017. Semiochemical control of *Varroa destructor* primary pest of western honey bees. Atlantic Canada Association of Parasitologists AGM, Pictou, NS.
- 106. Hillier, N.K.*, <u>Rizzato, A.R.</u>, MacKay, C., <u>McGuire, M.</u>, and <u>MacKinnon, S.</u> 2017. Pheromone blend complexity in heliothine moths. European Symposium for Insect Taste and Olfaction, Villasimius, Italy.
- 107. Hillier, N.K.*, Rizatto, R., <u>Gjelaj, E</u>., MacKay, C., and Pawlowski, S. 2017. Pheromone Diversity in Heliothine Moths. International Society for Chemical Ecology Annual Meeting, Kyoto, Japan.
- 108. <u>Collins, A</u>.*, Shutler, D. and Hillier, N.K. 2017. The Acadia Beekeeping Club: A brief history of humble origins through our future plans. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 109. <u>Little, C.M</u>.*, Chapman, T.C. and Hillier, N.K. 2017. Effect of color and contrast on susceptibility of highbush blueberries to infestation by *Drosophila suzukii*. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 110. <u>Little, C.M</u>.*, Dixon, P.L., Moreau, D., Chapman, T.C., and Hillier, N.K. 2017. FlySpotter: A novel citizen science initiative to identify native and non-crop hosts for *Drosophila suzukii* in the Atlantic Provinces. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 111. <u>Goodwin, J</u>.*, Pawlowski, S., Silk, P., Sweeney, J., and Hillier, N.K. 2017. Analysis of multimodal attractiveness cues in the invasive beech leaf mining weevil, *Orchestes fagi* L., in Nova Scotia, Canada. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 112. Faraone, N.*, <u>Macpherson, S</u>. and Hillier, N.K. 2017. Inert granite dust for sustainable agriculture: a preliminary study. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 113. Hillier, N.K.*, <u>Evans, E.</u> and Evans, R.C. 2017. Induced autogamy and reproductive outcomes in *Crocanthemum canadense*. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 114. <u>Gjelaj, E</u>.*, Rizatto, R., Easy, R. and Hillier, N.K. 2017. Female Autodetection and Plasticity of Pheromone Response in *Helicoverpa zea*. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 115. <u>Light, M</u>.*, Shutler, D., Cutler, C., and Hillier, N.K. 2017. Semiochemical control of *Varroa destructor* primary pest of western honey bees. Acadian Entomological Society Meeting, Charlottetown, PEI.

- 116. <u>MacDonald, M</u>.*, Hiltz, K., Hillier, N.K., and Blatt, S. 2017. Determination of *Delia* Pest Species in Commercial Onion Crops in Nova Scotia. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 117. <u>Stevenson, M</u>.*, Hiltz, K., Hillier, N.K. and Blatt, S. 2017. Efficacy of entomopathogenic nematodes as a pest management strategy against Carrot Weevil, *Listronotus oregonensis*. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 118. <u>Light, M</u>.*, Shutler, D., Cutler, C., and Hillier, N.K. 2017. Semiochemical control of *Varroa destructor* primary pest of western honey bees. ICE-17, Pennsylvania State University, State College, PA.
- 119. reddy Pinnelli, G.*, Hillier, N.K., Lance, D.R., and Plettner, E. 2017. Synthesis and Applications of ¹⁷O, ¹⁸O & ²H Labelled (+)-Disparlure, and Their Analogues. 100th Meeting of the Canadian Society of Chemistry, Toronto, ON.
- 120. <u>Flinn, A.*</u>, Shutler, D., Hillier. N.K., and Little, C.M. 2017. Alternative management of *Varroa destructor* mites using their odour responses. Canadian Society of Ecology and Evolution, Victoria, BC.
- 121. Evans, E.*, Evans, R.C. and Hillier, N.K. 2017. Mixed mating and its ecological impact on an endangered plant, Crocanthemum canadense. Science Atlantic conference, Antigonish, NS.
- 122. <u>Gjelaj, E</u>.* and Hillier, N.K. 2017. Female autodetection and plasticity of pheromone response in the corn earworm moth, *Helicoverpa zea*. Science Atlantic conference, Antigonish, NS.
- 123. <u>Flinn, A</u>.*, Shutler, D., Hillier, N.K., and Little, C.M. 2017. Alternative management of *Varroa destructor* mites. Science Atlantic conference, Antigonish, NS.
- 124. Sweeney, J.*, Meating, J., Goble, T., Czerwinski, E., Hughes, C., Hillier, N.K, and Johns, R. 2017. Effect of dosage and treatment frequency on efficacy of TreeAzin[®] systemic insecticide for protecting foliage from the beech leaf-mining weevil and preventing mortality of American beech in high value urban environments. Spray Efficacy Research Group (SERG)-International Workshop, Fredericton, NB.
- 125. Hillier, N.K.*, <u>Rizzato, R</u>., and MacKay, C. 2016. Decoding variation in Heliothine moths. International Congress of Entomology, Orlando, FL.
- 126. <u>Little, C.M</u>.*, Chapman, T.W., Moreau, D.L., and Hillier, N.K. 2016. Susceptibility of Selected Boreal Fruits and Berries to the Invasive Pest *Drosophila suzukii* (Diptera: Drosophilidae). International Congress of Entomology, Orlando, FL.
- 127. <u>Isitt, R</u>.*, Huber, D., Bleiker, K., Hillier, N.K. and Pureswaran, D. 2016. Geographical variation in the pheromone blend of the spruce beetle, *Dendroctonus rufipennis* Kirby. Spray Efficacy Research Group (SERG)-International Workshop, Saskatoon, SK.
- 128. Hillier, N.K.*, <u>Rizzato, R</u>., and MacKay, C. 2015. Pheromone communication in *Helicoverpa punctigera*. Entomological Society of Canada Annual Meeting, Montreal, QC.

- 129. Faraone, N., Hillier, N.K., and Cutler, G.C*. 2015. Plant essential oils synergize and antagonize toxicity of different conventional insecticides against *Myzus persicae*. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 130. MacKay, C.*, Meating, J., Czerwinski, E., Johns, R., Silk, P., Hillier, N.K., and Sweeney, J. 2015. Effectiveness of TreeAzin as a control measure for *Orchestes fagi* (L.) (Coleoptera: Curculionidae). Entomological Society of Canada Annual Meeting, Montreal, QC.
- 131. <u>Isitt, R</u>.*, Bleiker, K., Pureswaran, D., Hillier, N.K. and Huber, D. 2015. Geographical variation in the aggregation pheromone blend of the spruce beetle, *Dendroctonus rufipennis*. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 132. <u>MacKay, C.</u>*, Sweeney, J., and Hillier, N.K. 2015. Olfactory receptor neuron responses of a longhorned beetle, *Tetropium fuscum* (Fabr.) (Coleoptera: Cerambycidae), to pheromone, host, and non-host volatiles. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 133. <u>Crozier, H</u>.*, Moreau, D. and Hillier, N.K. 2015. Olfactory and behavioral responses of *Drosophila suzukii* to volatiles produced from fruit of mid and late season cultivars of *Vaccinium corymbosum*. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 134. <u>Pawlowski, S</u>*., Sweeney, J., and Hillier, N.K. 2015. Using host plant phenology and conspecific volatiles to monitor invasive beech leaf-mining weevil in NS. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 135. Hillier, N.K., <u>Little, C., Crozier, H.*</u>, Chapman, T., Dixon, P.L., and Moreau, D. 2015. Chemical ecology of spotted wing drosophila. Entomological Society of Canada Annual Meeting, Montreal, QC.
- 136. Faraone, N., Hillier, N.K., and Cutler, G.C*. 2015. Plant essential oils synergize and antagonize toxicity of different conventional insecticides against *Myzus persicae*. Acadian Entomological Society 100th Anniversary Meeting, Fredericton, NB.
- 137. <u>Rizzato, A.R</u>*., and Hillier, N.K. 2015. Comparative Analysis of Pheromone Blend Divergence in Heliothine Moths. Acadian Entomological Society 100th Anniversary Meeting, Fredericton, NB.
- 138. <u>Little, C.M</u>*., Chapman, T., Moreau, D. and Hillier, N.K. 2015. Susceptibility of selected boreal fruits and berries to the invasive pest *Drosophila suzukii*. Acadian Entomological Society 100th Anniversary Meeting, Fredericton, NB.
- 139. Hillier, N.K*., Evans, R., House, D., <u>Kollipara, R., Luck, T.,</u> and Hermanutz, L. 2015. Conservation Chemical Ecology. Acadian Entomological Society 100th Anniversary Meeting, Fredericton, NB.
- 140. <u>Crozier, H.</u>*, Moreau, D. and Hillier, N.K. 2015. Responses of *Drosophila suzukii* to volatiles produced from fruit of mid and late season cultivars of *Vaccinium corymbosum*. Acadian Entomological Society 100th Anniversary Meeting, Fredericton, NB.

- 141. Hillier, N.K^{*}., <u>Rizzato, A.R.</u>, MacKay, C., <u>McGuire, M.</u>, and <u>Rose, S. 2015.</u> Decoding evolution of pheromone communication in Heliothine moths. International Society for Chemical Ecology, Stockholm, Sweden.
- 142. <u>Rizzato, A.R</u>*., and Hillier, N.K. 2015. Comparative Analysis of Pheromone Blend Divergence in Heliothine Moths. Canadian Society of Zoologists Annual Meeting, Calgary, AB.
- 143. Hillier, N.K.*, <u>Little, C., Crozier, H.,</u> Chapman, T., Dixon, P.L., and Moreau, D. 2015. Chemical ecology of spotted wing drosophila. 8th International Integrated Pest Management Symposium, Salt Lake City, UT, USA.
- 144. <u>Oosterhuis, R.</u>*, Shutler, D., and Hillier, N.K. 2015. Alternative Control Methods for *Varroa destructor* mites. Acadia Graduate Student Association Conference, Wolfville, NS.
- 145. Hillier, N.K., Sweeney, J.*, Johns, R., and Silk, P.J. 2015. Impact, host breadth, and tools for detection and control of the invasive beech leaf-mining weevil, *Orchestes fagi* (L.). Spray Efficacy Research Group (SERG)-International Workshop, Sault St. Marie, ON.
- 146. <u>Isitt, R</u>.*, Huber, D., Bleiker, K., Hillier, N.K., and Pureswaran, D. 2015. Geographical variation in the pheromones of the spruce beetle, *Dendroctonus rufipennis* Kirby. Spray Efficacy Research Group (SERG)-International Workshop, Sault St. Marie, ON.
- 147. Sweeney, J.*, Johns, R., Moise, E., Silk, P.J., Mayo, P., Hillier, N.K., <u>Pawlowski, S.</u>, Morrison, A., <u>MacKay, C.</u>, Hughes, C., Neville, R., Meating, J., and Czerwinski, E. 2015. European beech leaf mining weevil: a new invasive established in Nova Scotia. USDA Inter-Agency Research Forum on Invasive Species, Annapolis MD.
- 148. <u>MacKay, C</u>., E. Czerwinski, N. K. Hillier, J. Meating, E. Moise, A. Morrison, R. Johns, R. Neville, S. Pawlowski, P. Silk, J., and Sweeney. 2015. European beech leaf-mining weevil, *Orchestes fagi* (L.), in Nova Scotia: Life history, research, and impact. Atlantic Urban Forest Workshop.
- Hillier, N.K.*, Czerzinksi, E. <u>MacKay, C.</u>, Meating, J., Moise, E., Morrison, A., Johns, R., <u>Pawlowski, S.</u>, Silk, P.J., and Sweeney, J. 2014. The beech leaf-mining weevil, *Orchestes fagi* ecology and management. National Forest Pest Forum, Ottawa, ON.
- 150. <u>Little, C.M.</u>*, Chapman, T., Moreau, D., Dixon, P., and Hillier, N.K. 2014. Attractants and repellents of *Drosophila suzukii* Matsumura. Our Food Our Future Symposium, Corner Brook, NL.
- 151. <u>Saroli, J.,</u> Cutler, C., and Hillier, N.K^{*}. 2014. Chemical Ecology of the Blueberry Flea Beetle. Our Food Our Future Symposium, Corner Brook, NL.
- 152. <u>Buckland-Nicks, A.*</u>, Hillier, N.K., Avery, T.S., and O'Driscoll, N.J. 2014. Examination of mercury in life stages and body regions of dragonflies from Big Dam Lake, Kejimkujik National Park. Mersey Tobiatic Research Institute Conservation Science Meeting, Lunenburg, NS.

- 153. Shutler, D.*, <u>Oosterhuis, R.</u>, and Hillier, N.K. 2014. Stopping the mitey from falling: *Varroa* mites and honey bees. Atlantic Canada Association of Parasitologists, Annual meeting, Pictou, NS.
- 154. <u>Hanes, M</u>.*, Shutler, D., and Hillier, N.K. 2014. Identifying volatiles that attract or repel *Varroa* destructor mites to help manage honey bees. Atlantic Canada Association of Parasitologists, Annual meeting, Pictou, NS.
- 155. Hillier, N.K^{*}. 2014. Octopaminergic modulation of olfaction. Entomological Society of Canada Annual Meeting, Saskatoon, SK.
- 156. <u>Pawlowski, S.*</u>, Silk, P., <u>MacKay, C.</u>, Sweeney, J. and Hillier, N.K. 2014. Chemical ecology of the beech leaf mining weevil, *Orchestes fagi* L. Entomological Society of Canada Annual Meeting, Saskatoon, SK.
- 157. <u>Jabre, L.*</u>, Dixon, P., Parsons, C., Hopkins, R., and Hillier, N.K. 2014. Response of cabbage maggot, *Delia radicum*, to *Brassica* spp. volatiles. Entomological Society of Canada Annual Meeting, Saskatoon, SK.
- 158. <u>Crozier, H</u>.*, Moreau, D., and Hillier, N.K. 2014. *Drosophila suzukii* responses to volatiles produced by Jersey and Bluecrop cultivars of *Vaccinium corymbosum*. Acadian Entomological Society Meeting, Truro, NS.
- 159. Jabre, L.*, Dixon, P., Parsons, C., Hopkins, R., and Hillier, N.K. 2014. Studies on the interaction between the cabbage maggot, *Delia radicum*, and its host plants volatiles. Acadian Entomological Society Meeting, Truro, NS.
- 160. <u>Hanes, M.*, Oosterhuis, R</u>., Shutler, D., and Hillier, N.K. 2014. Evaluating attractants and lure trapping for *Varroa destructor* management. Acadian Entomological Society Meeting, Truro, NS.
- 161. Hillier, N.K.*, Haines, W., and Rubinoff, D. 2014. Tropical Chemical Ecology. Acadian Entomological Society Meeting, Truro, NS.
- 162. Moise, E.R.D.*, Morrison, A. Forbes, G., Hillier, N.K., Sweeney, J. and Johns, R. 2014. Assessing the threat of the invasive beech leaf mining weevil (*Orchestes fagi* L.) to secondary host plants in Atlantic Canada. Acadian Entomological Society Meeting, Truro, NS.
- 163. <u>Little, C.M.</u>*, Chapman, T., Moreau, D., Dixon, P., and Hillier, N.K. 2014. Assaying volatile compounds for attraction and repulsion of *Drosophila suzukii* Matsumura. ICE-14 Pennsylvania State University, State College, PA.
- 164. <u>Saroli, J.*</u>, Cutler, C., and Hillier, N.K. 2014. Chemical Ecology of the Blueberry Flea Beetle (*Altica sylvia* Malloch). ICE-14 Pennsylvania State University, State College, PA.
- 165. <u>Rizzato, A.R.*</u>, and Hillier, N.K. 2014. Comparative Analysis of Pheromone Blend Divergence in Heliothine Moths. ICE-14 Pennsylvania State University, State College, PA.

- 166. Sweeney, J., R. Johns, P. Silk, N.K. Hillier^{*}. 2014. European beech leaf-mining weevil, *Orchestes fagi* (L)., in Nova Scotia. Spray Efficacy Research Group (SERG)-International Workshop, Pittsburgh, PA.
- 167. Hillier, N.K*. 2014. Research and accomplishments under the Atlantic Innovation Fund Pheromone development and commercialization. Spray Efficacy Research Group (SERG)-International Workshop, Pittsburgh, PA.
- 168. Sweeney, J. *, Johns, R., Silk, P., Hillier, N.K., Morrison, A., <u>MacKay, C.</u>, and Neville, R. 2014. European beech leaf-mining weevil, *Orchestes fagi* (L)., in Nova Scotia: Overwintering habitat, risk of firewood, chemical ecology and development of survey tools. Atlantic Forest Heath Workshop, Charlottetown, PEI.
- 169. <u>MacKay, C. *</u>, Meating, J., Czerwinski, E., Johns, R., Silk, P., Hillier, N.K. and Sweeney, J. 2014. Effectiveness of TreeAzin[®] as a control measure for *Orchestes fagi* (L.) (Coleoptera: Curculionidae). Atlantic Forest Heath Workshop, Charlottetown, PEI.
- 170. <u>MacKay, C. *</u>, Hillier, N.K., Sweeney, J., Johns, R., Meating, J., Czerwinski, E., and Silk, P. 2013. Effectiveness of TreeAzin as a control measure for *Orchestes fagi* (L.) (Coleoptera: Curculionidae). Entomological Society of Canada Annual Meeting, Guelph, ON
- 171. Faraone, N.*, Cutler, G.C., Hillier, N.K., Chahil, G. and Rix, R. 2013. Insecticidal activity of essential oils extracted from aromatic plants against *Plutella xylostella* (Lepidoptera: Plutellidae) and *Myzus persicae* (Homoptera: Aphididae). Entomological Society of America Annual Meeting, Austin, TX.
- 172. Hillier, N.K.*, Little, C., <u>Thomas, L.</u>, and Moreau, D. 2013. Assaying volatile compounds for attraction and repulsion of *Drosophila suzukii*. Entomological Society of Canada Annual Meeting, Guelph, ON.
- 173. <u>Frost, E.H.</u>, Hillier, N.K.*, and Shutler, D. 2013. Bad Medicine? Fate and Behavioural Effects of Miticides on Honey Bees. Entomological Society of Canada Annual Meeting, Guelph, ON.
- 174. <u>McLauchlan, C.*</u>, Mallory, M., Hillier, N.K., McLellan, N., and Spooner, I. 2013. Spatio-temporal phenology of macroinvertebrates and bird use of a coastal wetland landscape near Aulac, NB. Atlantic Society of Fish and Wildlife Biologists Annual Meeting, Sackville, NB.
- 175. Hillier, N.K*., and <u>Deveau, A</u>. 2013. Olfactory Modulation via Blend Detection: Intra-sensillar Interactions of Gypsy Moth Pheromone. 2013, International Chemical Ecology Congress of the International Society for Chemical Ecology and the Asia Pacific Association of Chemical Ecologists, Melbourne, Australia.
- 176. Faraone, N.*, Cutler, G.C., Hillier, N.K., and Silk, P.J. 2013. Preliminary studies on host marking pheromone of *Rhagoletis mendax*. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 177. Sweeney, J.*, Johns, R., Morrison, A., Silk, P., and Hillier, N.K. 2013. European beech leaf-mining weevil, Orchestes fagi (L)., in Nova Scotia: Where does it overwinter and what is the risk of its human-assisted spread in firewood? Acadian Entomological Society Meeting, Charlottetown, PEI.

- 178. <u>Mackay, C.*</u>, Hillier, N.K., Sweeney, J., Johns, R., Meating, J., Czerwinski, E., and Silk, P. 2013. Biology and impact of the European beech leaf mining weevil, *Orchestes fagi*, on American beech in Nova Scotia. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 179. Jabre, L.*, Dixon, P.L., and Hillier, N.K. 2013. Using *Brassica* volatiles to develop lures and traps to control the cabbage root maggot. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 180. Hillier, N.K.*. 2013. Octopamine and Insect Learning. Acadian Entomological Society Meeting, Charlottetown, PEI.
- 181. Hillier, N.K.*, Olsson, S.B., Grosse-Wilde, E., Reinecke, A., and Hansson, B.S. 2012. Olfactory physiology of coeloconic sensilla in *Manduca sexta*. Entomological Society of Canada Annual Meeting, Edmonton, AB.
- 182. <u>Edmonds, S</u>.*, O'Driscoll, N., Evers, D., Hillier, N.K., and Atwood, J. 2012. Prevalence of blood parasites in overwintering Rusty Blackbirds: Understanding mercury in Rusty Blackbirds. International Rusty Blackbird Working Group Workshop, Plymouth, MA.
- 183. Hillier, N.K.*, Olsson, S.B., Grosse-Wilde, E., Reinecke, A., and Hansson, B.S. 2012. In Search of the Sarlacc: Olfactory physiology of coeloconic sensilla in *Manduca sexta*. Acadian Entomological Society Meeting, Fredericton, NB.
- 184. <u>MacKay, C.</u>*, Sweeney, J., and Hillier, N.K. 2012. Olfactory physiology of the Brown Spruce Longhorn Beetle, *Tetropium fuscum*. Acadian Entomological Society Meeting, Fredericton, NB.
- 185. <u>Burgart, C.S.F.</u>*, Blatt, S., and Hillier, N.K. 2012. Apple Cultivar Preference in the European Apple Sawfly and Apple Maggot Fly. Acadian Entomological Society Meeting, Fredericton, NB.
- 186. <u>Saroli, J</u>.*, Hillier, N.K., and Cutler, C. 2012. Chemical Ecology of the Blueberry Flea Beetle (*Altica sylvia* Malloch). Acadian Entomological Society Meeting, Fredericton, NB.
- 187. <u>Edmonds, S.</u>*, O'Driscoll, N., Evers, D., Hillier, N.K., and Atwood, J. 2012. Understanding mercury in Rusty Blackbirds. Bridging the Implementation Gap: Bird Conservation Conference in the Northeast, Plymouth, MS.
- 188. Wilson, B.C.*, <u>Beardsall, J., Smithers, J.</u>, Hillier, N.K., and McLeod, P. 2012. Short-term behavioural and cortisol responses to Alarm substance in *Danio rerio*. Canadian Society of Zoology Meeting, Sackville, NB.
- 189. <u>Charbonneau, L</u>*, Shutler, D., Hillier, N.K., and Rogers, R.E.L. 2011. Effect of fungal parasites on honeybee memory and learning. Entomological Society of Canada Annual Meeting, Halifax, NS.
- 190. <u>De Silva, E.C.A.*</u>, Silk, P.J. Hillier, N.K. and Cutler, G.C. 2011. Identification of sex pheromone components of the Blueberry Spanworm, *Itame argillacearia* (Lepidoptera), Entomological Society of Canada Meeting, Halifax, NS.

- 191. <u>Ferguson, L</u>*., Smith, T., and Hillier, N.K. 2011. Behavioural modification in Culex species caused by blood protozoa of frogs and snakes. Entomological Society of Canada Annual Meeting, Halifax, NS.
- 192. <u>Frost, E.</u>, Shutler, D*., and Hillier, N.K. 2011. Effects of cold immobilization and recovery period on honeybee learning, memory, and responsiveness to sucrose. Entomological Society of Canada Annual Meeting, Halifax, NS.
- 193. Hillier, N.K.* 2011. Effects of Octopamine in Insect Olfaction. Entomological Society of Canada Annual Meeting, Halifax, NS.
- 194. <u>MacKay, C.*</u>, Hillier, N.K., and Sweeney, J. 2011. Investigation of the olfactory physiology of the invasive brown spruce longhorn beetle (BSLB), *Tetropium fuscum* (Fabr.) (Coleoptera: Cerambycidae). Entomological Society of Canada Annual Meeting, Halifax, NS.
- 195. Hillier, N.K.* 2011. Electronic Learning Modules for Human Physiology. Association for the Advancement of Computing in Education Conference, Honolulu, HI (Peer-reviewed in E-Learn 2011 Proceedings ISBN: 1-880094-90-8).
- 196. Hillier, N.K*. 2011. Octopamine: Effects on olfactory sensitivity and learning in insects. International Society for Chemical Ecology Conference, Vancouver, BC.
- 197. <u>Edmonds, S.</u>*, O'Driscoll, N., Evers, D. and Hillier, N.K. 2011. Mercury as a potential threat to wetland breeding rusty blackbirds in the Northeast. 10th International Conference on Mercury as a Global Pollutant (ICMGP), Halifax, NS.
- 198. <u>Powell, S</u>.*, and Hillier, N.K. 2011. The effects of octopamine and epinastine on learning, memory and heart rate in heliothine moths. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Halifax, NS.
- 199. <u>Deveau, A</u>.*, and Hillier, N.K. 2011. Ratiometric effects of pheromones on odour-mediated behavior and neurophysiology of the Gypsy moth, *Lymantria dispar*. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Halifax, NS.
- 200. <u>Kelly, J.A</u>.*, Cutler, C., MacKenzie, K., Gaul, S., Avery, T., Stewart, D., and Hillier, N.K. 2010. Bycatch of Lepidoptera pheromone-based trapping trials yield 2 new species records in Nova Scotia, Canada, and potential attractants. Entomological Society of Americal Annual Meeting, San Diego, CA, USA.
- 201. <u>Edmonds, S.T</u>.*, O'Driscoll, N., Hillier, N.K., and Evers, D. 2010. Production and bioaccumulation of MeHg in the breeding habitat of the rusty blackbird. SETAC (Science and Technology for Environmental Protection) North America Conference, Portland, Oregon, USA.
- 202. <u>Edmonds, S.T</u>.*, O'Driscoll, N., Hillier, N.K., and Evers, D. 2010. Influencing factors in the biomagnification of mercury in breeding rusty blackbirds. SETAC (Science and Technology for Environmental Protection) Europe Conference, Seville, Spain.

- 203. <u>MacKay, C</u>.*, Hillier, N.K., and Sweeney, J. 2010. Antennal sensilla survey of the Brown Spruce Longhorn Beetle. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Fredericton, NB.
- 204. <u>Ferguson, L</u>.*, Smith, T., and Hillier, N.K. 2010. Modification of host-seeking behavior in parasitized *Culex territans* mosquitoes. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Fredericton, NB.
- 205. <u>McIntyre, E</u>.*, Smith, T., and Hillier, N.K. 2010. Host preference and attraction cues in *Culex territans* and *Culex pipiens* mosquitoes. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Fredericton, NB.
- 206. <u>Frost, E.H</u>.*, Shutler, D., and Hillier, N.K. 2010. Sublethal effects of the pyrethroid tau-fluvalinate on honeybee (*Apis mellifera*) cognition. North American Beekeeping Conference. Orlando, Florida.
- 207. Hillier, N.K.*, and <u>Schaffner, S</u>. 2009. Biohazard! Online Learning Modules for Human Anatomy and Physiology. Association of Atlantic Universities Teaching Showcase. Acadia University, Wolfville, NS.
- 208. Hillier, N.K.*, and <u>Kavanagh, R.M.B</u>. 2009. Role of Octopamine in Insect Olfaction. Association for Chemoreception Sciences, Sarasota, FL.
- 209. <u>Kavanagh, R.M.B</u>.*, and Hillier, N.K. 2009. Bugs and drugs: the effect of octopamine on the sensitivity of female olfactory receptor neurons to female conspecific sex pheromone in *Heliothis virescens*. Honours student presentation at the APICS Atlantic Undergraduate Biology Conference, Truro, NS. First place NSERC prize winner.
- 210. Hillier, N.K. 2008. Comparative physiology of the moth olfactory pathway. Entomological Society of Canada Annual Meeting, Ottawa, ON.
- 211. Hillier, N.K. 2008. Ratiometric effect of pheromones on odour-mediated behaviour and physiology of the Gypsy Moth. Canadian Society for Zoologists, Mount Saint Vincent University, Bedford, NS.
- 212. Hillier, N.K. 2008. Comparative insect olfaction: mixture detection, processing and output. Acadian Entomological Society, St. John's, NL.
- 213. Hillier, N.K.*, Vickers, N.J., Estock, M., Katz, R., and Gould, F.L. 2007. Mechanisms of olfactory preference: Divergence of pheromone attraction in male moths. International Society for Chemical Ecology, Jena, Germany.
- 214. Vickers, N.J.*, Hillier, N.K., Estock, M., Katz, R., and Gould, F. 2007. Shifting odors: Mechanisms underlying divergence in male moth pheromone preference. International Society for Neuroethology, Vancouver, BC.
- 215. Hillier, N.K.*, Vickers N.J., Hamilton J., Horovitz J., and Gould F.L. 2006. Shifts in the use of two aldehydes and the evolution of olfactory communication in Heliothine moths. Association for Chemoreception Sciences, Sarasota, FL.

- 216. Hillier, N.K.*, Vickers, N.J., Groot, A., Bennett, J., and Gould, F. 2005. A simple shift in peripheral olfactory specificity is associated with divergent male moth behavioral preference. Association for Chemoreception Sciences, Sarasota, FL.
- 217. Hillier, N.K.*, Vickers, N.J., and Linn, C.E. 2005. Inter- and intra-species antennal imaginal disc transplants: Behavior, sensory and central olfactory neurophysiology. Modulation of Chemosensory Signaling, Jackson WY.
- 218. Hillier, N.K.*, and Vickers, N.J. 2004. Physiology and glomerular projections of olfactory receptor neurons on the antenna of female Heliothis virescens (Lepidoptera: Noctuidae) responsive to behaviorally relevant odors. The Entomological Society of America, Salt Lake City, UT.
- 219. Vickers, N.J., Hillier, N.K., Groot, A*. and Gould, F. 2004. Olfactory communication: evolving new blends and novel preferences. The Entomological Society of America, Salt Lake City, UT.
- 220. Hillier, N.K.*, Vickers, N.J., and Linn, C.E. 2004. Inter- and intra-species antennal imaginal disc transplants: Behavior, sensory and central olfactory neurophysiology. Association for Chemoreception Sciences, Sarasota, FL.
- 221. Vickers, N.J.*, Hillier, N.K., Groot, A., and Gould, F. 2004. Olfactory communication: evolving new blends and novel preferences. Association for Chemoreception Sciences 26th, Sarasota, FL.
- 222. Vickers, N.J.*, Hillier, N.K., and Linn, C.E. 2003. Similar Olfactory but Different Behavioral Outcomes from Inter- and Intra-specific Antennal Imaginal Disc Transplants. Society for Neursocience, New Orleans, LA.
- 223. Hillier, N.K.*, and Vickers, N.J. 2003. The role of Heliothine hairpencil compounds in female *Heliothis virescens* (Lepidoptera: Noctuidae) behavior and mating. Association for Chemoreception Sciences 25th, Sarasota, FL.
- 224. Hillier, N.K.*, Dixon, P., and Larson, D. 2000. Monitoring and estimation of lingonberry fruitworm, Grapholita libertina (Lepidoptera: Tortricidae) populations using a synthetic sex attractant. Joint Annual Meeting of the Entomological Societies of Canada and America, Montreal QC.
- 225. Hillier, N.K.*, Dixon, P., and Larson, D. 1999. The identification and evaluation of sex attractants for the lingonberry fruitworm, *Grapholita libertina* (Lepidoptera: Tortricidae). Entomological Society of Canada, Saskatoon, SK.
- 226. Hillier, N.K.*, Dixon, P., Larson, D., Seabrook, W., and Hendrickson, P. 1998. Isolation of a sex attractant for the lingonberry fruitworm, Grapholita libertina (Lepidoptera: Tortricidae), in: Proceedings of the 29th Annual Atlantic Universities Undergraduate Biology Conference, Atlantic Provinces Council on the Sciences, Halifax, NS.

10. Refereeing/Judging Duties

CURRICULUM VITAE N. Kirk Hillier 2021-2022 Reviewer – BARD - US-Israel Binational Agricultural Research and Development Fund 2020-2021 Reviewer - Ontario Agri-Food Innovation Alliance Research Program. 2017-2018 Reviewer - United States-Israel Binational Science Foundation. 2017-2018 Reviewer - Research Competitiveness Program (RCP) at the American Association for the Advancement of Science (AAAS). Review – Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) 2016-2017 2010-Present Reviewer – European Commission FP7 funding agency. 2008-Present Reviewer – NSERC Discovery Grants, I2I Program, and NSERC CRD Grants 2009 Reviewer - NSERC Strategic Projects Panel 2008 Reviewer – Canada Foundation for Innovation (CFI): Leaders Opportunity Fund Judge – Biology Co-operative Education Program Presentations and Reports 2008-2009 External Reviewer: Agriculture and Agri-Food Canada – Peer Pairs Program 2008 2005 External Reviewer: Eloise Gerry Women in Science Graduate Awards 2006-Present External Reviewer for manuscripts and books from the following Journals: Proceedings of the National Academy for the Sciences Scientific Reports iScience Journal of Chemical Ecology The Canadian Entomologist Entomologia Experimentalis et Applicata Journal of Insect Science Journal of Economic Entomology Quarterly Review of Biology Journal of Applied Entomology Canadian Journal of Zoology Journal of Pest Science Frontiers Journals (multiple) INSECTS

11. Public Speaking

- 1. Hillier, N.K. 2023. Making sense of scents to control insects. Port Bistro IDEAS-ACADIA series, Port Williams, NS.
- 2. Hillier, N.K. 2016. Insect pests of wild blueberry monitoring of Red Striped Fireworm and Blueberry Flea Beetle. Prince Edward Island Wild Blueberry Growers Field Day, Savage Harbour, PEI.
- 3. Hillier, N.K. 2010. Establishing an Integrated Pest Management System for Nova Scotia Vineyards. Atlantic Canadian Wine Industry Partnering Forum, Acadia University, Wolfville, NS
- 4. Hillier, N.K. 2010. Anatomy Interactive! Acadia Teaching and Learning Symposium, Acadia University, Wolfville, NS
- 5. Hillier, N.K. 2009. Electronic Learning Modules for Human Physiology. Acadia Teaching and Learning Symposium, Acadia University, Wolfville, NS

- 6. Hillier, N.K. 2009. Meeting Mr. Right... Species. Faculty Showcase, Acadia University, Wolfville, NS.
- 7. Hillier, N.K. 2008. Olfactory Neuroscience: Smell's Great! Faculty Showcase, Acadia University, Wolfville, NS.

11. Popular Press

Acadia:

Two Acadia researchers receive John R. Evans Leaders Fund Awards <u>https://www2.acadiau.ca/home/news-reader-page/acadia-researchers-receive-cfis-john-r-evans-leader-funds.html</u>

Software Gives Students CSI Experience <u>http://ice.acadiau.ca/index.php/community-case-study-ii.html</u>

Acadia Researcher Earns \$20,000 Springboard Atlantic Award for Game-Based Anatomy & Physiology Software <u>http://www.acadiau.ca/whatsnew/newsrelease/2009/kirk_hillier_oct5.html</u>

Acadia Leading Research on Safer Pest Management

http://www2.acadiau.ca/acadia-news-reader/items/acadia-leading-research-on-safer-pest-management-1473.html

CFI Rewards Acadia Researchers http://www2.acadiau.ca/acadia-news-reader/items/cfi-rewards-acadia-researchers.119.html

CFI Rewards Researchers at Acadia

http://science.acadiau.ca/news-reader.2881/items/CFI_Rewards.html

ACOA Announces AIF award recipient - Kirk Hillier

http://ice.acadiau.ca/index.php/latest-news/items/acoa-announces-aif-award-recipient-dr-kirk-hillier.html

Acadia Researcher Finalist in BioInnovation Challenge

http://www2.acadiau.ca/acadia-news-reader/items/acadia-researcher-finalist-in-bioinnovationchallenge.html

Acadia Researcher Recognized Nationally

http://www2.acadiau.ca/acadia-news-reader/items/acadia-researcher-recognized-nationally.html

External:

Pōhakuloa Training Area's unique resources attract scientists from all over the world <u>https://www.army.mil/article/267278/pohakuloa training areas unique resources attract scientists from</u> <u>all over the world</u>

Mosquito Memory: Pest Management's New Hurdle (Commentary) <u>https://www.the-scientist.com/news-opinion/mosquito-memory-pest-management-s-new-hurdle-69720</u>

You guys have a lot of ticks! - Halifax Examiner https://www.halifaxexaminer.ca/tag/blacklegged-tick/

New app helps Maritime researchers keep track of ticks: E-Tick <u>https://atlantic.ctvnews.ca/new-app-helps-maritime-researchers-keep-track-of-ticks-1.5063396</u>

High Adaptability Allows Invasive Fruit Fly to Thrive in New Environments

https://entomologytoday.org/2020/06/09/high-adaptability-invasive-fruit-fly-new-environments-spottedwing-drosophila-phenotypic-plasticity/

Investments in Green Insect Management Help Protect Environment

https://www.canada.ca/en/atlantic-canadaopportunities/news/2017/07/investments in greeninsectmanagementhelpprotectenvironment.html

Springboard promotional video:

https://www.youtube.com/watch?v=MXgT4uW30vI&feature=youtu.be

Restoration efforts along the Limestone Barrens continue

http://www.northernpen.ca/community/restoration-efforts-along-the-limestone-barrens-continue-with-helpfrom-local-student-83823/

Acadia grabs \$3m for pest research

http://thechronicleherald.ca/novascotia/1484474-acadia-grabs-3m-for-pest-research

Acadia University receives ACOA Atlantic Innovation Fund for green insect pest management solutions

http://springboardatlantic.ca/news/entry/acadia-university-received-acoa-atlantic-innovation-fund-for-greeninsect-p

Acadia gets research funds for alternatives to pesticides <u>http://www.kingscountynews.ca/news/local/acadia-gets-research-funds-for-alternatives-to-pesticides-68573/</u>

How pheromones are reducing pesticide use in Quebec apple orchards <u>http://www.cbc.ca/news/canada/montreal/pheremones-pesticides-apple-orchards-1.3585104</u>

Pheromones offer green alternative to pesticide sprays <u>http://www.cbc.ca/news/technology/pheromones-offer-green-alternative-to-pesticide-sprays-1.3098862</u>

Sniffing Around for a Sustainable Future in Agriculture and Forestry http://nsrit.ca/projects/sniffing-around-for-a-sustainable-future-in-agriculture-and-forestry/

Pest Control Done Right. Springboard Atlantic Highlights Report 2011-2012.

Collaboration the Key to Marketing New Technologies

http://bioatlantech.ca/about/news_and_events/collaboration_the_key_to_getting_new_technologies_to_ma rket/

Sales for Acadia's Anti-Pest Tech. 2012. Entrevestor.com <u>http://www.entrevestor.com/index.php/site/blog_detail/sales_for_acadias_anti_pest_tech</u>

Research in Motion. 2012. Progress Magazine. Web Exclusive. <u>http://www.progressmedia.ca/article/2012/07/research-motion</u>

Greener Pastures. 2011. Progress Magazine. Vol. 18, No. 07, p. 62 (Interview Article)

Innovacorp Announces Round Two Participants in I-3 Technology Start-Up Competition <u>http://innovacorp.ca/news/i-3-Round-Two-2011-2012</u>

BioInnovation Challenge Finalists announced http://bioinnovation-challenge-finalists-announced/

Minister MacKay Announces Support for Research and Innovation in Atlantic Canada <u>http://mediaroom.acoa-apeca.gc.ca/e/media/press/press.shtml?5122</u>

Research Projects get ACOA Funds <u>http://thechronicleherald.ca/NovaScotia/1234094.html</u> (membership required to access)

Acadia University's Bug Research gets ACOA cash <u>http://www.nl.dailybusinessbuzz.ca/Provincial-News/2011-03-24/article-2361998/NS%3A-Acadia-Universitys-bug-research-gets-ACOA-cash/1</u>

MacKay Announces \$15 Million in Research Funding http://www.magic949.ca/news_story.php?newsID=4929

MacKay Announces \$15 Million in Research Funding

http://www.avrnetwork.com/news_story.php?newsID=4929

Anatomy Interactive – Youtube Teaser http://www.youtube.com/watch?v=HuwCPRTWiDM

CFI Rewards Researchers at Acadia

http://www.novanewsnow.com/Business/Agriculture/2010-01-12/article-596966/CFI-rewards-researchers-at-Acadia/1

A Bright Future for Viniculture in Nova Scotia http://www.nserc-crsng.gc.ca/ doc/NSERC-CRSNG/FactSheets/NS Factsheet EN.pdf

Companies Value Speedy Decisions on Engage Grants http://www.nsercpartnerships.ca/ docs/Media-Media/Bulletins-Bulletins/Vol1-Issue3-EN.pdf

Canadian Honey Council Report

http://www.honeycouncil.ca/documents/2010%20August%20Hivelights_low%20res.pdf

The Manitoba Beekeeper, Vol 4, Issue 3 http://manitobabee.org/hive/wp-content/uploads/2010/07/MBA-newsltr-2010-c-jul.pdf

IV. SERVICE

1. University and Community

(a) Student Counseling/Advising/Tutoring

2007-Present	Reader for honours theses in each year.
2010	Dept. of Environmental Sciences Seminar Assessor
2007-2010	1st year Biology Majors Tutorial (6 students each year)
2009, 2010	Acting Head of Department (brief rotation during a leave replacement)

(b) Committees*

2022-present	Biology Departmental Planning Commitee
2022-2023	Biology Departmental Review Committee
2020-2021	Senate Scholarships and Awards Committee
2020	Biology Departmental Review Committee
2019	Biology Departmental Review Committee
2013 – 2015	Ad-hoc Scholarships and Awards Committee
2012 - 2014	FPAS Nominating Committee (Chair 2013-2014)
2011-2012	K.C. Irving Centre Strategic Planning Committee
2009-2010	Biology Technical Needs Ad-Hoc Committee
	Biology Department Hiring Committee (New Faculty Position)
	FPAS Nominating Committee
	Atlantic Provinces Council on the Sciences – Acadia Representative
	Cognate, Departmental Review Committee – Randy Newman (Tenure and Promotion)
2008-2011	NSERC Adjudication Committee
	Acadia Nursing Program Review Committee
	Acadia Centre for Microstructural Analysis (ACMA)
2007	Honorary Degree Committee (Sabbatical replacement)

*Limited committee work in 2010-2011, due to parental and sabbatical leave.

(c) Community Service

2008-Present	Insect and pest identification services for regional and university community
2010-2017	Interviews for television and radio discussing Acadia University and pest management
2009	Insect wrangler – capture and maintenance of live beetles for film "I, Darwin"

2. Other Service and Professional Membership

2024-2025	Co-Chair, NSERC Evaluation Group 1501, Genes, Cells and Molecules.
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2022-2025 Member, NSERC Evaluation Group 1501, Genes, Cells and Molecules.

CURRICULUM VITAE N. Kirk Hillier 2023-2024 Member, Canadian Food Inspection Agency Steering Committee for the Canadian Plant Health Information System (CPHIS). Member, NSERC Joint Prizes Selection Committee 2020-2021 2019- present Topic Editor, Insects (Journal) 2018-present National Advisory Board for Eco-Canada Student Work and Internship Leadership Program 2014-Present Review Editor, Frontiers in Evolution and Ecology – Chemical Ecology. 2016-2019 Elected Councillor, International Society of Chemical Ecology. 2016-2017 President of the Acadian Entomological Society. 2015-2016 Vice President of the Acadian Entomological Society. 2013-2016 Elected Director-at-Large, Entomological Society of Canada. Review Editor, Frontiers in Physiology - Invertebrate Physiology. 2015-2021 2013-2020 Chair, Membership Committee, Entomological Society of Canada 2012-2015 Member, NSERC Evaluation Group 1501, Genes, Cells and Molecules. 2012-2013 Member, Ad-hoc Committee for Vision/Mission development and Joint Annual Meeting Committee, Entomological Society of Canada 2009-2011 Co-Chair, Organizing Committee – 2011 Joint Annual Meeting of the Entomological Society of Canada and the Acadian Entomological Society Secretary and Treasurer, Acadian Entomological Society 2009-2010 2008-2012 Member, Canadian Society of Zoologists 2011-2012 Chair, Web Content Committee, Entomological Society of Canada Chair, Marketing Committee, Entomological Society of Canada 2007-2011 2006-2007 Consultant: E. Obed. 2006. The Story of the Partridgeberry and its Fruitworm (Children's Novel) 2006 Information Technology Committee, Entomological Society of Canada 2005 Strategic Review Subcommittee, Entomological Society of Canada 2005-2007 Member, Sigma Xi Marketing Committee, Entomological Society of Canada 2004-2011 2004 Local Arrangements Committee, Entomological Society of America Annual Meeting 2003-Present Member, Association for Chemoreception Sciences (AChemS) 2000-Present Member, Entomological Society of Canada 2000-Present Member, Entomological Society of America 1999-Present Member, Acadian Entomological Society

3. Key Current and Former Research Collaborations

- (a) Internal to University
- Dr. Laura Ferguson Biology, Acadia University
- Dr. Nicoletta Faraone Chemistry, Acadia University
- Dr. Don Stewart Biology, Acadia University
- Dr. Brian Wilson Biology, Acadia University
- Dr. Dave Shutler Biology, Acadia University
- Dr. Todd Smith Biology, Acadia University
- Dr. Nelson O'Driscoll Tier 2 Canada Research Chair, Earth & Env. Sciences, Acadia University
- (b) External to University Current:

N. Kirk Hillier
Associate Professor, Biology, Memorial University of Newfoundland, St. John's, NL, Canada.
Professor Emeritus, Biology, Memorial University of Newfoundland, St. John's, NL, Canada.
Research Entomologist, United States Dept. of Agriculture, Agricultural Research Service, Pacific Basin Agricultural Research Centre, Hilo, HI, USA.
Ecological Data Program Manager, Natural Resources Division, Pohakuloa Training Area, HI, USA.
Assistant Professor, Chemical Ecology, Oregon State University, Corvallis, OR, USA
Full Professor, Chemical Ecology, Oregon State University, Corvallis, OR, USA
Research Scientist, Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, Kentville, NS, Canada.
Research Scientist, USDA-ARS, Columbia, MO, USA.
Professor, Université de Sousse, Tunisia.
Post-Doctoral Researcher, Université de Sousse, Tunisia.
Professor and Associate Dean Research, Nova Scotia Agricultural College, Truro, NS, Canada.
Helen I Battle Visiting Professor, Department of Biology, University of Western Ontario, London, ON, Canada.
Vice-President of Research, University of New Brunswick, Fredericton, NB, Canada.
Professor of Entomology, Director of the University of Hawaii Insect Museum, Department of Plant and Environmental Protection Sciences, College of Tropical Agriculture and Human Resources, University of Hawaiʻi Mānoa, Honolulu, HI, USA.
Research Ecologist, Kejimkujik National Park, NS, Canada.
Research Scientist, Canadian Forest Service, Atlantic Forestry Centre, Fredericton, NB, Canada.
Assistant Professor and Industrial Research Chair, Agricultural, Life and Environmental Sciences, University of Alberta, Edmonton, AB, Canada
Associate Professor, Department of Entomology. University of Manitoba, Winnipeg, MB, Canada
Professor, Chemistry, Simon Fraser University, Burnaby, BC, Canada
Professor, and NSERC-Industrial Research Chair in Multimodal Animal Communication Ecology, Simon Fraser University, Burnaby, BC, Canada
Research Scientist (Retired), Dept. of Entomology, Atlantic Cool Climate Crop Research Centre, Agriculture and Agri-Food Canada, NL, Canada.
Managing Director, Forest Protection Limited, Fredericton, NB, Canada.
Research Scientist, Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, Kentville, NS, Canada.

Dr. Fred GouldWilliam Neal Reynolds Professor of Agriculture, Dept. of Entomology, University of North Carolina, NC, USA.Dr. Will HainesJunior Researcher, Department of Plant and Environmental Protection Sciences, University of Hawai'i Mānoa, Honolulu, HI, USA.Dr. Bill HanssonDirector, Evolutionary Neuroethology, Max Planck Institut für Chemische Ökologie, Jena, Germany.Dr. Rob JohnsResearch Scientist, Canadian Forest Service, Atlantic Forestry Centre, Fredericton, NB, Canada.Dr. Christoph KleineidamFaculty, Dept. of Neurobiology, Universität Konstanz, Konstanz, Germany.Dr. David LarsonProfessor Emeritus, Dept. of Biology, Memorial Univ. of Newfoundland, NL, Canada.Dr. Charles E. LinnSenior Research Associate II, New York State Agriculture Experimental Station, Cornell University, NY, USA.Dr. Kenna MacKenzieResearch Centre, Kertville, NS, Canada.Dr. Deborah MoreauResearch Centre, Kentville, NS, Canada.Dr. Sill SeabrookProfessor Emeritus, Dept. of Biology, University of New Brunswick, NB Dr. Coby SchalDr. Nick J. StrausfeldDirector, Centre for Insect Science & Arizona Research Laboratories Division of Neurobiology, University of Vitah.Dr. Peter SilkResearch Scientist, Canadian Fredericton, NB, Canada.Dr. Nick J. StrausfeldDirector, Centre for Insect Science & Arizona Research Laboratories Division of Neurobiology, University of Vitah, UT, USA.Dr. Peter WitzgallProfessor, Chemical Ecology, SLU, Alnarp, Sweden.	CURRICULUM VITAE	N. Kirk Hillier
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