# Bernard J. Crespi

# **Educational Background**

1987 Ph.D. Biology, University of Michigan, Ann Arbor, U.S.A.

1980 B.Sc. Biology (Honors), University of Chicago, Chicago, IL, U.S.A.

# **Employment History at Academic Institutions**

2001 - Current	Professor, Biological Sciences, Simon Fraser University
1997 - 2001	Associate Professor with tenure, Biological Sciences, Simon Fraser University
1992 - 1997	Assistant Professor, Biological Sciences, Simon Fraser University
1991 - 1992	NSF Environmental Biology Postdoctoral Fellow, Section of Ecology and Systematics, Corson Hall, Cornell University
1989 - 1990	NATO-NSF Postdoctoral Fellow, Animal Behaviour Research Group Department of Zoology, Oxford University
1988 - 1989	NSF Environmental Biology Postdoctoral Fellow, School of Biological Science, University of New South Wales

# **Semesterly Activity at Simon Fraser University**

Semester	Туре	Course	Number	Session	Туре	Hours	Enrollment
2011-3	Leave						
2011-2	Research						
2011-1	Teaching	Evolution of Health and Disease	BISC 441/880		Lecture	3.00	40
2010-3	Teaching	Evolution	BISC 300		Lecture	3.00	105
2010-2	Research						

2010-1	2010-1 Teaching Undergraduate Research		BISC 498		Directed Studies	3.00	1
2010-1	2010-1 Teaching Evolutionary Theory		BISC 806		Lecture	3.00	6
2009-3	Teaching	Evolution	BISC 300		Lecture	3.00	123
2009-2	Research						
2009-2	Teaching	Undergraduate Research	BISC 499		Directed Studies	3.00	1
2009-2	Teaching	Undergraduate Research	BISC 497		Writing- Intensive	3.00	1
2009-1	Teaching	Undergraduate Research I	BISC 498		Directed Studies	3.00	1
2009-1	Teaching	Evolution of Health and Disease	BISC 441/880		Lecture	3.00	
2008-3	Teaching	Evolution	BISC 300		Lecture	3.00	144
2008-2	Research						
2008-1	Teaching	Evolution of Health and Disease	BISC 441/880		Lecture	3.00	30
2005-3 to 2007-3	Research	Killam Research Fellowship					
2005-2	Teaching	Directed Readings	BISC890	G01.00	Directed Studies	1.50	1
2005-1	Teaching	Evolutionary Theory	BISC806	G01.00	Seminar	3.00	11
2004-3	Teaching	Intro to Ecology	BISC204	D01.00	Lecture	3.00	88
2004-3	Teaching	Undergraduate Research I	BISC498	D02.00	Directed Studies	1.50	1
2004-3	Teaching	Undergraduate Research II	BISC499	D05.00	Directed Studies	1.50	1
2004-3	Teaching	Undergraduate Research II	BISC499	D03.00	Directed Studies	1.50	1
2004-2	Other Paid Leave					0.00	0
2004-1	Teaching	Selected Topics in Behavioural Ecology	BISC473	D01.00	Lecture	2.80	14
2004-1	Teaching	Social Behaviour	BISC817	G01.00	Lecture	.20	1
2003-3	Study Leave					0.00	0

2003-2	Study Leave					0.00	0
2003-1	Study Leave					0.00	0
2002-3	Other Paid Leave					0.00	0
2002-2	Teaching	Undergraduate Research I	BISC498	D12.00	Seminar	3.00	1
2002-1	Teaching	Evolution	BISC400	D01.00	Lecture	1.50	155
2001-3	Teaching	Evolutionary Theory	BISC806	G01.00	Seminar	3.00	12
2001-2	Research						
2001-1	Teaching	Evolution of Social Behavior	BISC471	D01.00	Lecture	2.79	13
2001-1	Teaching	Social Behaviour	BISC817	G01.00	Seminar	.21	1
2000-3	Teaching	Undergraduate Research I	BISC498		Directed Studies	1.50	1
2000-2	Teaching	Evolution	BISC400		Lecture	3.00	103
2000-2	Teaching	Undergraduate Research I	BISC498		Directed Studies	1.50	1
2000-1	Teaching	Survival Strategies	BISC824		Seminar	3.00	5
2000-1	Teaching	Behavioural Ecology	BISC824		Lecture	3.00	5
1999-3	Teaching	Evolutionary Theory	BISC806		Seminar	3.00	17
1999-2	Teaching	Evolution	BISC400		Lecture	3.00	88
1999-1	Research					0.00	0
1998-3	Teaching	Introduction to Ecology	BISC204		Lecture	3.00	120
1998-2	Teaching	Evolution of Social Behaviour	BISC471		Lecture	3.00	16
1998-2	Teaching	Evolution of Social Behaviour	BISC817		Seminar	3.00	2
1998-1	Research	Fieldwork in Australia				0.00	0
1998-1	Teaching	Research Design	BISC490		Directed Studies	2.50	1
1998-1	Teaching	Research Technique	BISC491		Directed Studies	2.50	1

1998-1	Teaching	Research Reporting	BISC492	Directed Studies	2.0	1
1997-3	1997-3 Teaching Evolution		BISC400	Lecture	3.00	105
1997-2	Teaching	Evolution	BISC400	Lecture	3.00	79
1997-1	Research	Fieldwork in Australia			0.00	0
1997-1	Teaching	Undergrad. Research	BISC498	Directed Studies	1.50	1
1996-3	Teaching	Evolutionary Theory	BISC806	Seminar	3.00	10
1996-2	Teaching	Introduction to Ecology	BISC204	Lecture	3.00	47
1996-1	Research	Research Fieldwork in Australia			0.00	0
1995-3	Teaching	Evolution	BISC400	Lecture	3.00	138
1995-3	Teaching	Undergraduate Research	BISC498	Directed Studies	1.50	1
1995-3	Teaching	Social Insects	BISC817	Lecture	3.00	10
1995-2	Teaching	Introduction to Ecology	BISC204	Lecture	3.00	38
1995-2	1995-2 Teaching Ma Bel Eco		MASC502	Other	0.00	0
1995-1	Teaching	Research Design	BISC490	Directed Studies	2.50	1
1995-1	Teaching	Research Technique	BISC491	Directed 2.50 Studies		1
1995-1	Teaching	Research Reporting	BISC492	Directed Studies	2.50	1
1994-3	Teaching	Evolution	BISC400	Lecture	3.00	154
1994-3	Teaching	Evolutionary Theory	BISC806	Seminar	3.00	8
1994-2	Teaching	Introduction to Ecology	BISC204	Lecture	3.00	46
1994-2	Teaching	Undergraduate Research	BISC498	Directed Studies	1.50	1
1994-2	Teaching	Molecular Methods, Bamfield	MASC501	Other	0.00	0
1994-1	Research				0.00	0

1993-3	Teaching	Evolution	BISC400	Lecture	3.00	97
1993-2	Research				0.00	0
1993-1	Teaching	Evolution	BISC400	Lecture	3.00	153
1992-3	Teaching	Evolutionary Theory	BISC806	Seminar	3.00	7
1992-2	Research	Fieldwork in Australia (startup semester)			0.00	0
1992-1	Research	Fieldwork in Australia (startup semester)			0.00	0

# **Senior Supervisory Duties of a Thesis**

Name	Degree	Project/Thesis Title	Status	Began	Completed
Leach, Emma	MSc	Evolutionary genetics of schizophrenia	Active	20011- 3	
Dinsdale, Natalie	MSc	Personality genetics of autism and schizophrenia	Active	2009-3	
Elliot, Mick	Ph.D.	Phylogenetics of placentation	Active	2008-1	
Arbuthnott, Devin	M.Sc.	Mating behaviour of Timema	Completed	2007-1	2009-2
Jeffery, Erica	M.Sc.	Evolution of sexual conflict	Completed	2005-1	2007-3
Elliot, Mick	M.Sc.	Evolution of placentation	Completed	2004-1	2007-3
Joy, Jeff	Ph.D.	Phylogeny of gall midges	Active	2002-3	2009-3
Parent, Christine	Ph.D.	Phylogeny of Galapagos snails	Completed	2000-3	2008-1
Nosil, Patrik	M.Sc.	Ecology of speciation	Completed	2000-3	2006-2
Springer, Stevan	M.Sc.	Molecular speciation	Completed	1999-3	2003-2
Law, Jennifer	M.Sc.	Evolution of sex	Completed	1998-3	2001-3
Chapman, Thomas	Ph.D.	Relatedness and sociality	Completed	1994-1	2000-2
Kranz, Brenda	Ph.D.	Ecology of gall thrips	Completed	1995-1	2000-1
Harrison, Michelle	M.Sc.	Phylogenetics of Cancer crabs	Completed	1995-3	1997-3

# Serving on a Committee of a Thesis

Name	Degree	Project/Thesis Title	Status	Began	Completed
Kolte, Astrid (Univ. of Copenhagen)	Ph.D.	Genetics of recurrent miscarriage	Active	2010-3	
Watson, Corey	Ph.D.	Immunogenetics	Active	2008-1	
Keever, Carson	Ph.D.	Phylogenetics of starfish	Active	2007-1	2010-3
Davis, Bradley	M.Sc.	Behavior of archerfish	Active	2006-3	

Name	Degree	Project/Thesis Title	Status	Began	Completed
Ablard-Hickman, Kelly	Ph.D.	Mating behavior in insects	Active	2005-1	
Gray, Suzanne	Ph.D.	Evolution of fish polymorphism	Completed	2002-3	2006-1
Perry, Jennifer	M.Sc.	Beetle oviposition	Completed	2001-3	2004-3
Hoover, Shelley	Ph.D.	Honey bee genetics	Completed	2000-3	2006-1
Alexander, Heather	Ph.D.	Guppy evolution	Completed	1999-3	2005-2
Ragsdale, J. (Utah)	Ph.D.	Skew theory	Completed	1998-3	2007-1
Vos, Rutger	M.Sc.	Supertrees	Completed	2001-1	2005-1
Kuhnholz, Susanne	Ph.D.	Bark beetle phylogenetics	Completed	1995-3	2004-1
Mitchell, Jeremy	Ph.D.	Reef fish behavior	Completed	1995-3	2002-3
Sharpe, Fred	Ph.D.	Whale behavior	Completed	1992-3	2002-3
Willis, Pamela	M.Sc.	Porpoise hybridization	Completed	1997-3	2001-3
Morbey, Yolanda	Ph.D.	Salmon behavior	Completed	1996-1	2001-3
Tyerman, Jabus	M.Sc.	Social aphids	Completed	1997-3	2001-2
Heithaus, Michael	Ph.D.	Intraguild predation	Completed	1997-1	2001-2
Swanson, Andrew	Ph.D.	Kelp UV adaptation	Completed	1995-3	2000-1
Taylor, John	Ph.D.	Guppy microsatellites	Completed	1994-3	1999-3
Vanderkist, Brett	M.Sc.	Murrulet ecology	Completed	1996-3	1999-1
Robertson, lan	Ph.D.	Beetle behavior	Completed	1992-3	1997-3
Pocklington, Richard	M.Sc.	Human evolution	Completed	1994-1	1996-3
Sharpe, Fred	M.Sc.	Whale behavior	Completed	1992-3	1996-1
Duffy, Jacqueline	Ph.D.	Risk-taking in humans	Withdrawn	1991-1	1995-3
McGregor, Robert	Ph.D.	Selection in parasitoids	Completed	1990-3	1995-3
Jaramillo, A	Ph.D.	Ant foraging	Withdrawn	1993-3	1995-2
Abbot, Douglas	M.Sc.	Beetle parasite behavior	Completed	1991-1	1994-2
Zaklan, S	M.Sc.	Crab behavior	Completed	1991-3	1994-1

# **Supervision of Research Personnel**

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September 2011-current	Part time, Manal Abdur Rahman. Lab Manager
May 2011-current	Part time, Helen Crofts, Undergraduate assistant
May 2011-August 2011	Part time, Lorraine Schembri, Undergraduate assistant
December 2010-current	Full time, Daryn Stover, PDF
January 2008-current	Full Time, Laura Weir, NSERC PDF and Research Assistant
May 2010-August 2010	Full Time, Kendra Morgan, NSERC Undergraduate Research Award
May 2009-August 2009	Full Time, Philip Stead, NSERC Undergraduate Research Award
September 2008-Aug. 2011	Part Time, Kevin Simonetto, Research Assistant, Funded by NSERC
September 2008-April 2009	Part Time, Lisa Raeburn, Lab Technician, Funded by NSERC
June 2007- January 2010	Full Time, Tanja Schwander, Postdoctoral Fellow, Funded by Swiss NSF
September 2004 - January 2006	Part Time, Sampson Wu, Lab Technician, Funded by NSERC
September 2004 - September 2006	Full Time, Bono, J, Ph.D., Postdoctoral Fellow, Funded by: NSF
September 2001 - September 2003	Full Time, Loeb, M, Ph.D., Postdoctoral Fellow, Funded by: NSF
September 2001 - September 2003	Full Time, Thompson, G, Ph.D., Postdoctoral Fellow, Funded by: NSERC
September 2001 - September 2003	Full Time, Young, K, Ph.D., Postdoctoral Fellow, Funded by: NSERC
September 2000 - April 2001	Full Time, VanKoeveringe, M, Lab. Manager, Funded by: NSERC and B.C. First Jobs program
September 1999 - April 2000	Full Time, Bertrand, M, Lab. Manager, Funded by: NSERC and B.C. First Jobs program
January 1994 - January 1996	Full Time, Brown, W. D. Postdoctoral Fellow, Funded by: NSERC
January 1993 - January 1995	Part Time, Carmean, D., Lab. Manager, Funded by: NSERC

#### **Completed Works**

#### **REFEREED PUBLICATIONS**

Dinsdale, N., and Crespi, B. (2011) The borderline empathy paradox: evidence and conceptual models for empathic enhancements in borderline personality disorder. J. Personality Res. (in review).

Crespi B. and Thiselton DL. (2011) Comparative immunogenetics of autism and schizophrenia. Genes Brain Behavior (in press). DOI: 10.1111/j.1601-183X.2011.00710.x

Antolin MF, Jenkins K, Crespi B, Hanley KA, Omenn GS, Stearns SC. 2011 Evolutionary medicine in premedical undergraduate education: treating the patient In front of us. Evolution (in review).

Henry, L., Schwander, T. and B. J. Crespi (2011) Deleterious mutation accumulation in asexual *Timema* stick insects. Molecular Biology and Evolution (in press).

Schwander, T., Henry, L., and B. J. Crespi (2011) Molecular evidence for ancient asexuality in *Timema* stick insects. Current Biology 21:1129-1134. (cover article)

Frank, S. A. and Crespi, B. J. (2011) Pathology from evolutionary conflict, with a new theory of X versus autosome conflict over sexually-antagonistic traits. Proceedings of the National Academy of Sciences, 108: 10886-10893.

Crespi, B. J. (2011) Cancer risk and autism. Autism Research 4:302-310.

Somjee, U., K. Ablard, B. Crespi, P. W. Schaefer and G. Gries (2011) Local mate competition in the solitary parasitoid wasp *Ooencyrtus kuvanae*. Behavioral Ecology and Sociobiology 65:1071-1077.

Crespi, B. J. (2011) The evolutionary biology of child health. Proceedings of the Royal Society of London B. 278: 1441-1449.

Crespi, B. J. (2011) One hundred years of insanity: genomic, psychological and evolutionary models of autism in relation to schizophrenia. In: Textbook of Schizophrenia-Spectrum Disorders, edited by M. Ritsner, Springer.

Springer, S. A., B. J. Crespi and W. J. Swanson (2011) Beyond the phenotypic gambit: molecular behavioral ecology and the evolution of genetic architecture. Molecular Ecology 20:2240-2257.

Abbot P, Abe J, Alcock J, ... Crespi, B ... et al. (2011) Inclusive fitness theory and eusociality. Nature 471:E1-4.

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Crespi, B. J. (2010) The origins and evolution of genetic disease risk in modern humans. Year in Evolutionary Biology (Annals New York Academy of Sciences) 1206:80-109.

Summers, K. and B. Crespi (2010) Xmrks the spot: life-history tradeoffs, sexual selection, and the evolutionary ecology of carcinogenesis. Molecular Ecology 19:3022-3024,

Crespi, B. J. (2010) Revisiting Bleuler: the relationship of autism with schizophrenia. British Journal of Psychiatry 196:496.

Crespi, B. J. (2010) The emergence of human-evolutionary medical genomics. Evolutionary Applications (in press) DOI: 10.1111/j.1752-4571.2010.00156.x

Crespi, B., P. Stead and M. Elliot (2010) Comparative genomics of autism and schizophrenia. Proceedings of the National Academy of Sciences, USA 107:1736-1741

Arbuthnott, D., M. Elliot, M. McPeek and B. Crespi (2010) Divergent patterns of diversification in courtship and genitalic characters of *Timema* walking-sticks. Journal of Evolutionary Biology 23:1399-1411.

Schwander T., Vuilleumier S., Dubman J., Crespi B. (2010) Positive feedback in the transition from sexual reproduction to parthenogenesis. Proceedings of the Royal Society of London B. 277:1435-1442.

Crespi, B. (2010) The strategies of the genes: genomic conflicts, attachment theory and development of the social brain. Chapter in Art Petronis and Jonathon Mill (Editors). Brain, Behavior and Epigenetics.

Crespi, B. J., K. Summers and S. Dorus (2010) Evolutionary genomics of human intellectual disability. Evolutionary Applications 3:52-63.

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Crespi, B. (2009) Gender, biology and mathematics performance. Proceedings of the National Academy of Sciences, USA 196:E102.

Parent, C. E. and B. Crespi (2009) Ecological opportunity in adaptive radiation of Galapagos endemic land snails. American Naturalist 174:898-905.

Elliot, M. and B. Crespi (2009) Phylogenetic evidence for early hemochorial placentation in Eutheria. Placenta 30:949-967.

Arbuthnott, D. and B. Crespi (2009) Courtship and mate discrimination within and between species of *Timema* walking-sticks. Animal Behaviour 78:53-59.

Schwander, T. and B. Crespi (2009) Evidence for multiple direct transitions from sexual reproduction to apomictic parthenogenesis in *Timema* stick insects. Evolution

Schwander, T. and B. Crespi (2009) Twigs on the tree of life? Neutral and selective models for integrating macroevolutionary patterns with microevolutionary processes in the analysis of asexuality. Molecular Ecology 18:24-82.

Crespi, B. J. (2009) Evolutionary genetics of affective disorders. IN: Depression: Translational Approaches to Understanding and Treating, edited by C. Pariante and R. Nesse. Oxford University Press.

Crespi, B. J. (2009) Social conflict resolution, life history theory, and the reconstruction of skew. IN: Reproductive Skew in Vertebrates, edited by C. Jones and R. Hager, Cambridge University Press.

Crespi, B. J., K. Summers and S. Dorus (2009) Genomic sister-disorders of neurodevelopment: an evolutionary approach. Evolutionary Applications 2:81-100.

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Badcock, C. and B. Crespi (2008) Battle of the sexes may set the brain. Nature 454:1054-1055.

Crespi, B. J. (2008) Turner syndrome and the evolution of human sexual dimorphism. Evolutionary Applications 1:449-461.

Bono, J. and B. Crespi (2008) Cofoundress relatedness and group productivity in colonies of social Dunatothrips (Insecta: Thysanoptera) on Australian Acacia. Behavioral Ecology and Sociobiology 62:1489-1498.

Summers, K. and B. Crespi (2008) Molecular evolution of the prostate cancer susceptibility locus RNASEL: Evidence for positive selection. Infection, Genetics and Evolution 8:297-301.

Summers K, Crespi B. (2008) The androgen receptor and prostate cancer: A role for sexual selection and sexual conflict? Medical Hypotheses 70: 435-443.

Crespi, B. J. (2008) Language unbound: genomic conflict and psychosis in the origin of modern humans. IN: Social Communication, edited by David Hughes and Patricia D'Ettorre.

Crespi B. J. and C. Badcock (2008) Psychosis and autism as diametrical disorders of the social brain. Behavioral and Brain Sciences 31:284-320.

Crespi, B. J. (2008) Genomic imprinting in the development and evolution of psychosis. Biological Reviews 83:441-493.

Elliot, M. and B. Crespi (2008) Divergent brain-body allometry between mammals with invasive vs non-invasive placentation. Journal of Evolutionary Biology 21:1766-1776.

Sandoval, C. and B. Crespi (2008) Adaptive parallel evolution of dorsal stripes in *Timema* walking-sticks. Biological Journal of the Linnean Society 94:1-5.

Chapman, T.W. and B.J. Crespi (2008) The Evolutionary Ecology of Eusociality in Australian Gall Thrips: a 'Model Clades' Approach. In: Ecology of Social Evolution (editors Judith Korb and Jurgen Heinze). Princeton University Press.

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Thompson G. J., Lenz, M., Crozier, R. H., and Crespi, B. J. (2007) Molecular-genetic analyses of dispersal and breeding behaviour in the Australian termite *Coptotermes lacteus*: evidence for non-random mating in a swarm-dispersal mating system. Australian Journal of Zoology 55: 219-227.

Crespi B.J., K. Summers and S. Dorus (2007) Adaptive evolution of genes underlying schizophrenia. Proceedings of the Royal Society of London B 274:2801-2810.

Crespi B. J. (2007) Sly FOXP2: Genomic conflict in the evolution of language. Trends in Ecology and Evolution 22:174-175.

Crespi B. (2007) Comparative Evolutionary Ecology of Social and Sexual systems: Water-breathing Insects Come of Age. Pages 442-460, IN: E. Duffy and M. Thiel (Editors). Evolutionary Ecology of Crustacea, Oxford University Press.

Joy J. and Crespi, B. (2007) Adaptive radiation of gall-inducing insects on a single host plant. Evolution 61: 784-795.

Nosil P., B. J. Crespi, R. Gries, G. Gries. (2007) Natural selection and divergence in mate preference during speciation. Genetica 129:309-27.

McLeish M. J., Crespi, B. J., Chapman, T. W., and Schwarz, M. P. (2007) Parallel diversification of Australian gall-thrips on *Acacia*. Molecular Phylogenetics and Evolution 43:714-725.

Springer S. A. and B. J. Crespi (2007) Adaptive gamete-recognition divergence in a hybridizing *Mytilus* population. Evolution 61:772-83.

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Parent C. E. and Crespi B. J. (2006) Sequential colonization and diversification of Galapagos endemic land snail Genus *Bulimulus* (Gastropoda, Stylommatophora). Evolution 60:2311-28.

Bono J and B. J. Crespi (2006) Costs and benefits of joint colony founding in Australian *Acacia* thrips. Insectes Sociaux 53:489-495.

McLeish M. J., Chapman, T. W., Crespi, B J. (2006) Inbreeding ancestors: the role of sibmating in the social evolution of gall thrips. Journal of Heredity 97:31-38.

Nosil P, Crespi B. J. (2006) Ecological divergence promotes the evolution of cryptic reproductive isolation Proceedings of the Royal Society of London B 273:991-997.

Nosil P., Crespi B. J. Sandoval C. P., Kirkpatrick M. (2006) Migration and the genetic covariance between habitat preference and performance. American Naturalist 167:E66-78

Nosil P, Sandoval C. P., Crespi B. J. (2006) The evolution of host preference in allopatric vs. parapatric populations of *Timema cristinae* walking-sticks. Journal of Evolutionary Biology 19:929-942.

Nosil P, Crespi B. J. (2006) Experimental evidence that predation promotes divergence in adaptive radiation. Proceedings of the National Academy of Sciences U S A. 103:9090-9095.

Crespi B. J. (2006) The natural selection of psychosis. Behavioral and Brain Sciences 29:410-411

Elliot M. G., Crespi B. J. (2006) Placental invasiveness mediates the evolution of in viability in mammals. American Naturalist 168:114-120.

Crespi B. J. (2006) Cooperation: close friends and common enemies. Current Biology 16:414-415.

Badcock C, Crespi B. J. (2006) Imbalanced genomic imprinting in brain development: an evolutionary for the aetiology of autism. Journal of Evolutionary Biology 19:1007-1032.

Crespi B. J., Summers K. (2006) Positive selection in the evolution of cancer. Biological Reviews 81:407-424.

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Crespi, B. J. (2005) Parent-offspring conflict in farmers and foragers: a comparative approach. Current Anthropology 46:40-41

Summers K., B. Crespi (2005) Cadherins in maternal-foetal interactions: red queen with a green beard? Proceedings Royal Society of London B 272:643-649.

Crespi, B. J. and Summers, K. (2005) Evolutionary biology of cancer. Trends in Ecology and Evolution 20: 545-552.

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Willis P. M, Crespi B. J., Dill L. M., Baird R. W, Hanson M. B (2004) Hybridization between Dall's porpoises (*Phocoenoides dalli*) and harbour porpoises (*Phocoena phocoena*). Canadian Journal of Zoology 82: 828-834

Nosil, P. and B. J. Crespi. (2004) Does gene flow constrain adaptive divergence or vice versa? A test using ecomorphology in *Timema cristinae* walking-sticks. Evolution 58:102-112

Hallet, R.H., B. J. Crespi, & J.H. Borden (2004) Synonymy of *Rhyncophorus ferrugineus* (Olivier) and *R. vulneratus* (Panzer) (Coleoptera, Curculionidae, Rhynchophorinae). Journal of Natural History 38: 2863-2882

Crespi, B. J. and C. Semeniuk (2004) Parent-offspring conflict in the evolution of vertebrate reproductive mode. American Naturalist 163:635-653.

Crespi B. J. (2004) Vicious circles: positive feedback in major evolutionary and ecological transitions. Trends in Ecology and Evolution 19:627-633.

Crespi B. J. & M J. Fulton (2004) Molecular systematics of Salmonidae: combined nuclear data yields a robust phylogeny. Molecular Phylogenetics and Evolution 31:658-679.

Perry S. P., T. W. Chapman, M. P. Schwarz and B. J. Crespi (2004) Deadly sons and daughters: willingness and effectiveness in defense by soldiers of Australian gall-inducing thrips and the advantages of morphological castes. Behavioral Ecology and Sociobiology 56:602-610

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Miller D. & B. J. Crespi. (2003) The evolution of inquilinism, host-plant use and mitochondrial substitution rates in *Tamalia* gall aphids. Journal of Evoutionary Biology 16: 731-743

Nosil P., B. J. Crespi, & C.P. Sandoval. (2003) Reproductive isolation driven by the combined effects of ecological adaptation and reinforcement. Proceedings of the Royal Society of London B 270: 1911-1918

Crespi B. J. and S. Springer. (2003) Social slime molds meet their match. Science 299:56-57.

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Nosil P., Crespi, B. J. and C. P. Sandoval (2002) Host-plant adaptation drives the parallel evolution of reproductive isolation. Nature 417:440-443.

Morris D. C., Schwarz, M. P. and Crespi, B. J. (2002) Pleometrosis in phyllode-gluing thrips on Australian Acacia. Biological Journal of the Linnean Society. 75:467-474.

Crespi B. J. and R. Teo (2002) Comparative phylogenetic analysis of the evolution of semelparity and life history in salmonid fishes. Evolution 56:1008-1020.

Chapman T. W., B. D. Kranz, K. Bejah, D. Morris, M. P. Schwarz, and B. J. Crespi (2002) The evolution of soldier reproduction in social thrips. Behavioral Ecology 13:519-525.

Law J. and B. J. Crespi (2002) Recent and ancient parthenogenesis in *Timema* walking-sticks. Evolution 56:1711-1717.

Law J. and B. J. Crespi (2002) The evolution of geographic parthenogenesis in *Timema* walking-sticks. Molecular Ecology 11: 1471-1489.

Kranz B. D., Schwarz, M. P., Morris, D. C. and Crespi, B. J. (2002) Life history of *Kladothrips ellobus* and *Oncothrips rodwayi*: insight into the origin and loss of soldiers in gall-inducing thrips. Ecological Entomology 27:49-57.

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Crespi B. J. (2001) Evolution of social behavior. In International Encyclopedia of Social & Behavioral Sciences, Elsevier.

Crespi B. J. (2001) Eusocial Insects. In: Encyclopedia of Evolution. Oxford University Press.

Crespi B. J. (2001) The evolution of social behavior in microorganisms. Trends in Ecology and Evolution 16:178-183.

Kranz B.D., Chapman, T.W., Crespi, B.J. and Schwarz, M.P. (2001). Social biology and sex ratios in the gall-inducing thrips, *Oncothrips waterhousei* and *Oncothrips habrus*. Insectes Sociaux 48: 315-323.

Morris D. C., Schwarz, M.P., Crespi, B.J. and Cooper, S.J.B. (2001). Phylogenetics of gall-inducing thrips on Australian *Acacia*. Biological Journal of the Linnean Society 74:73-86.

Crespi B. J. (2001) Altruism in the outback. Natural History 110:56-62.

Kranz B. D., T. E. Wills, T. W. Chapman, D. C. Morris, B. J. Crespi and M. P. Schwarz (2001) A fully reproductive fighting morph in a soldier clade of gall-inducing thrips. Behavioral Ecology and Sociobiology 50:151-161.

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Crespi B. J. and J. E. Ragsdale (2000). The evolution of sociality via manipulation: why it is better to be feared than loved. Proceedings Royal Society of London. B. 267:821-828.

Crespi B. J. (2000) The evolution of maladaptation. Heredity 84:623-629.

Kranz B. J., M. P. Schwarz, L. Giles and B. J. Crespi (2000) Split sex ratios and virginity in a gall-inducing thrips. Journal of Evolutionary Biology 13:700-706.

Chapman T., B. J. Crespi, M. Schwarz and B. Kranz (2000) High relatedness and inbreeding at the origin of eusociality in Australian gall thrips. Proceedings of the National Academy of Sciences, USA 97:1648-1650.

Crespi B. J. and C. P. Sandoval. (2000) Phylogenetic evidence for the evolution of ecological specialization in *Timema* walking-sticks. Journal of Evolutionary Biology 13: 249-262.

Crespi B. J. (2000) Selection: Levels and Units. In Encyclopedia of the Life Sciences, MacMillan Publishers, London. http://www.els.net.

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Kranz B., M. Schwarz, L. Mound and B. J. Crespi. (1999) Social biology and sex ratio in the eusocial gall-inducing thrips *Kladothrips hamiltoni*. Ecological Entomology 24:432-442.

Harrison M. and B. J. Crespi. (1999) Phylogenetics of *Cancer* crabs. Molecular Phylogenetics and Evolution 12:186-199.

Crespi B. J. and P. Abbot (1999) The behavioral ecology and evolution of kleptoparasitism in Australian gall thrips. Florida Entomologist (Behavioral Ecology Symposium Issue) 82:147-164.

Harrison M. H. and B. J. Crespi. (1999) A phylogenetic test of ecomorphological adaptation in *Cancer* crabs. Evolution 53:961-965.

Morris D. L. A. Mound, M. P. Schwarz and B. J. Crespi. (1999) Morphological phylogenetics of Australian gall-inducing thrips and their allies: the evolution of host-plant affiliations, domicile use, and social behaviour. Systematic Entomology 24:289-299.

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Crespi B. J. and M. Worobey. (1998) Comparative analysis of gall morphology in Australian gall thrips: the evolution of extended phenotypes. Evolution 52:1686-1696.

Sandoval C., D. A. Carmean, and B. J. Crespi. (1998) Molecular phylogenetics of sexual and asexual Timema walking-sticks. Proceedings Royal Society of London B 265:589-595.

Mound L. A., B. J. Crespi and A. J. Tucker. (1998) Polymorphism and kleptoparasitism in thrips (Insecta, Thysanoptera, Phlaeothripidae) from woody stem galls on *Casuarina* trees, with a new species from Western Australia. Australian Journal of Entomology 37:8-16.

Chapman T. C. and B. J. Crespi. (1998) High relatedness and inbreeding in eusocial Australian gall thrips revealed by microsatellite analysis. Behavioral Ecology and Sociobiology 43:301-306.

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Crespi B. J., D. Carmean, L. A. Mound. M. Worobey and D. Morris. (1997) Phylogenetics of social evolution in Australian gall-forming thrips: evidence from mitochondrial DNA sequence, adult morphology, and gall morphology. Molecular Phylogenetics and Evolution 9:163-180.

Crespi B. J. and B. Vanderkist. (1997) Fluctuating asymmetry in functional and vestigial traits in a haplodiploid insect. Heredity 79:624-630.

Crespi B. J., D. Carmean, and T. Chapman (1997) The ecology and evolution of galling thrips and their allies. Annual Review of Entomology 42:51-71.

Crespi B. J. and J. C. Choe (1997) Evolution and explanation of social systems. Pp. 499-524 in: <u>The</u> Evolution of Social Behavior in Insects and Arachnids. Edited by J. Choe and B. Crespi. Cambridge University Press.

Smith D. R., B. J. Crespi, and F. L. Bookstein (1997) Asymmetry and morphological abnormality in bees *Apis mellifera*: effects of ploidy and hybridization. Journal of Evolutionary Biology 10: 551-574.

Brown W. D., B. J. Crespi and J. C. Choe (1997) Sexual conflict and the evolution of mating systems. Pp. 352-377, IN: The Evolution of Mating Systems in Insects and Arachnids. Edited by J. Choe and B. Crespi. Cambridge University Press.

Crespi B. J. and L. A. Mound (1997) Ecology and evolution of social behavior among Australian gall thrips and their allies. Pp. 166-180 in: The Evolution of Social Behavior in Insects and Arachnids. Edited by J. Choe and B. Crespi. Cambridge University.

Mound L. A., B. J. Crespi, and B. Kranz (1997) Gall-inducing Thysanoptera (Phlaeothripidae) on Acacia phyllodes in Australia: host-plant relations and keys to genera and species. Invertebrate Taxonomy 10:1171-1198.

---

Crespi B.J. (1996). Comparative analysis of the origins and losses of eusociality: causal mosaics and historical uniqueness. Pages 253-287 in: Phylogenies and the Comparative Method in Animal Behavior (E. Martins, ed.) Oxford University Press.

Crespi B.J., D. Carmean, L. Vawter and C. Dohlen (1996) The molecular systematics of Thysanoptera. Sytematic Entomology 21:79-87.

---

Crespi, B.J. (1995). Three conditions for the evolution of eusociality: are they sufficient? Insectes Sociaux 41: 395-400.

Carmean, D. and B.J. Crespi. (1995) Do long branches attract flies? Nature 373: 666.

Crespi, B.J. and D. Yanega. (1995) The definition of eusociality. Behavioral Ecology 6: 109-115.

Mound, L.A. and B.J. Crespi. (1995) Biosystematics of two new gall-inducing thrips with soldiers (Insecta: Thysanoptera) from Acacia trees in Australia. Journal of Natural History 29: 147-157.

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Taylor, P.D. and B.J. Crespi. (1994) ESS sex ratios when correlates of relatedness can be assessed. American Naturalist 143: 297-316.

Simon, C., F. Frati, P. Flook, A. Beckenbach, B.J. Crespi and H. Liu (1994) Evolution, weighting and phylogenetic utility of mitochondrial gene sequences and a compilation of conserved polymerase chain reaction primers. Annals of the Entomological Society of America 87: 651-701.

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Crespi B. J. (1993) Sex ratio selection in Thysanoptera. Pages 214-234, In: D.L. Wrensch and M. Ebbert (eds.). Evolution and Diversity of Sex Ratio in Insects and Mites. Chapman and Hall.

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Crespi B. J. (1992) Eusociality in Australian gall thrips. Nature 359: 724-726.

Crespi B. J. (1992) Natural selection and morphometrics. Pp. 55-64. In: J.T. Sorensen and R. Footit (eds.) Ordinations in the Study of Morphology, Evolution, and Systematics in Insects. Elsevier.

Crespi B. J. (1992) The behavioral ecology of Australian gall thrips. Journal of Natural History 26: 769-809.

Crespi B.J. (1992) Cannibalism and trophic eggs in subsocial and eusocial insects. In: M. Elgar and B.J. Crespi (eds.). Cannibalism: Ecology and Evolution among Diverse Taxa. Oxford University Press, Oxford U.K.

Mound L.A. and B.J. Crespi. (1992). The complex of phlaeothipine thrips (Insecta: Thysanoptera) in woody stem galls on Casuarina in Australia. Journal of Natural History 26: 395-406.

Elgar M. and B.J. Crespi. (1992). Cannibalism: Ecology and Evolution among Diverse Taxa. Oxford University Press, Oxford, U.K. (edited volume)

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Crespi B.J. (1991). Heterozygosity in the haplodiploid Thysanoptera. Evolution 45: 458-464.

Alexander R.D., K. Noonan, and B.J. Crespi. (1991). The evolution of eusociality, pp. 3-44 In: P.W. Sherman, J. Jarvis, and R.D. Alexander (eds.) The Biology of the Naked Mole Rat. Princeton University Press.

---

Crespi B. J. (1990) Subsociality and female reproductive success in a mycophagous thrips: an observational and experimental analysis. Journal of Insect Behavior 3:61-74.

Crespi B. J. (1990) The measurement of selection on phenotypic interaction systems. American Naturalist 135:32-47.

Crespi B. J. and P.D. Taylor. (1990). Dispersal rates under variable patch density. American Naturalist 135:48-62.

---

Crespi B. J. (1989) Facultative viviparity in a thrips. Nature 337:357-358.

Crespi B. J. and F. L. Booksein. (1989) A path-analytic model for the measurement of selection on morphology. Evolution 43:18-28.

Frank S. A. and B. J. Crespi (1989) Synergism between sib-rearing and female-biased sex ratios. Behavioral Ecology and Sociobiology 24:155-162.

Crespi B.J. (1989) Variable selection and size-related mating patterns in natural populations of *Elaphrothrips tuberculatus*: A path analysis. American Midland Naturalist 122: 142-150.

Crespi B. J. (1989) Causes of assortative mating in arthropods. Animal Behaviour 38:980-1000.

Crespi B. J. (1989) Sexual selection and assortative mating in subdivided populations of the thrips *Elaphrothrips tuberculatus* (Insecta: Thysanoptera). Ethology 3:265-278.

---

Crespi B. J. (1988) Sex ratio selection in a bivoltine thrips: Conditional sex ratio manipulation and fitness variation. Evolution 42:1199-1211.

Crespi B. J. (1988) Risks and benefits of lethal male fighting in the polygynous, colonial thrips *Hoplothrips karnyi*. Behavioral Ecology and Sociobiology 22: 293-301.

Crespi B. J. (1988) Adaptation, compromise and constraint: the development, morphometrics and behavioral basis of a fighter-flier polymorphism in male *Hoplothrips karny*i. Behavioral Ecology and Sociobiology 23: 93-104.

Crespi B. J. (1988) Alternative male mating tactics in a thrips: effects of sex ratio variation and body size. American Midland Naturalist 119: 83-92.

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Crespi B. J. (1986) Size assessment and alternative fighting tactics in *Elaphrothrips tuberculatus* (Insecta: Thysanoptra). Animal Behaviour 34: 1324-1335.

Crespi B. J. (1986) Territoriality and fighting in a colonial thrips, *Hoplothrips pedicularius*, and sexual dimorphism in Thysanoptera. Ecological Entomology 11: 119-130.

#### Other Publications, If Any: (e.g. technical reports, books)

Crespi B. J., D. C. Morris and L. A. Mound (2004) *Evolution of Ecological and Behavioural Diversity: Australian Acacia Thrips as Model Organisms*. Australian Biological Resources Study & CSIRO Entomology: Canberra, Australia. Book, 328 pages.

Crespi B.J. (2000) Closing the loop. Molecular Evolution: A Phylogenetic Approach. Bioessays 22:405. (book review)

Crozier R. and B.J. Crespi (2000) A life of insight - in Memorium William D. Hamilton (1936-2000). Obituary. Insectes Sociaux 47:1.

Crespi B.J. (2000) From genes to religion, and back. Levels and Units of Selection: Journal of Evolutionary Biology. 13:732-733. (book review)

Crespi B. J. (1998). Thysanoptera, An Identification Guide, 2nd Edition. Systematic Entomology. 24:101. (book review)

Choe J. and B. J. Crespi. (1997) The Evolution of Mating Systems in Insects and Arachnids. Cambridge University Press. (edited volume).

Choe J. and B.J. Crespi. (1997) The Evolution of Social Behavior in Insects and Arachnids. Cambridge University Press. (edited volume).

Crespi B. J. (1996) Thrips Biology and Management. Quart. Rev. Biol. 71:584. (book review)

Crespi B. J. (1995) Food for thought. Nutrition and Evolution in Insect Societies. Journal of Insect Behavior 8: 731-733. (book review)

Crespi B. J. (1995) Chemical Ecology of Thrips-Host Plant Interactions. Bulletin Entomological Society of Canada 27:105-106. (book review)

#### **Other Publications**

Crespi B. J. (1990) The social and sexual behavior of Australian gall thrips. pp. 297-298. In: Social Insects and the Environment. Proceedings of the XXIst International Congress of Entomology, Bangalore.

Crespi B. J. (1987) Fighting behaviour in male tubuliferan thrips. pp. 424-425. In: J. Holman, J. Pelikan, A.F.G. Dixon and L. Weismann (eds.). Population Structure, Genetics and Taxonomy of Aphids and Thysanoptera. SPB Academic Publishing, The Hague, Netherlands.

Crespi B. J. (1987) Behavioral Ecology of Mycophagous Thysanoptera. Ph.D. Thesis. University of Michigan, Ann Arbor.

### **Conferences, Workshops and Presentations**

### **Invited Talks**

2011	UBC, Biodiversity series
2011	European Society for Evolution, Invited symposium talk, evolutionary medicine
2011	Sociaty for the Study of Evolution, Evolutionary Medicine Symposium, Invited talk
2010	Gordon Conference, Genes & Behaviour, Invited Plenary Speaker, Ventura, California
2010	University of British Columbia, Mood Disorders Clinic, Grand Rounds
2009	University of British Columbia, Brain Research Institute
2009	Canadian Society of Physical Anthropology, Invited Plenary Speaker, Vancouver.
2009	'Darwin and Your Brain' Public Lecture, Harbour Centre, Simon Fraser University.

2008	Departmental Seminar SFU Department of Biosciences
2008	Departmental Seminar SFU Department of Archaeology
2008	Departmental Seminar SFU Department of Psychology
2008 2008 2008 2007 2007	Departmental Seminar SFU Department of Engineering Sciences US National Academy Sackler Symposium, Washington DC Invited Seminar, Yale University, Conference on Evolutionary Medicine Invited Seminar, UBC Brain Research Institute Invited Plenary Speaker, Conference on Depression, London UK
2002	University of Massachusetts. "The Charles P. Alexander Lecture"
2001-2007	Almost all invitations declined due to three small children at home
2000	Plenary Speaker. North American Section, International Union for the Study of Social Insects, Arkansas
1999	University of Puget Sound
1999 1998	University of Guelph Santa Fe Institute Meeting on Social Evolution
1998	University of California, Davis
1998	University of Paris (Juisseau Campus).
1998	University of Victoria
1998	Plenary Speaker, International Union for the Study of Social Insects, Adelaide.
1998	Penn State University
1998	University of Alberta
1997	European Science Foundation Workshop on Social Behavior, Castleton, U.K.
1997	University of Santa Barbara
1997	University of Maryland
1996	University of Calgary
1996	University of Alberta
1995	University of Kansas
1994	University of Montana, Missoula
1994	Plenary Speaker, Northeast Regional Animal Behavior Meetings, New Hampshire
1994	Animal Behavior Society, Invited Symposium Speaker, Seattle
1994	Society of the Study of Evolution, Athens, Georgia
1994	Animal Behavior Society, Seattle
1994	Northeast Regional Animal Behavior Meetings, New Hampshire

	1992	Harvard University, Cambridge, Mass.
	1992	University of Connecticut, Storrs
	1992	University of British Columbia
	1992	Simon Fraser University, Burnaby, B.C.
	1992	LaTrobe University, Melbourne
	1991	Cornell University, Ithaca
	1991	Penn State University, University Park, P.A.
	1991	University of Toronto
	1991	Queen's University Biological Station, Ont.
	1991	Simon Fraser University, Burnaby, B.C.
	1990	Syracuse University, N.Y.
	1990	University of Sheffield, U.K.
	1990	Brown University, Providence, R.I.
	1990	Imperial College at Silwood Park, U.K.
	1990	University of New Mexico, Albuquerque, N.M.
	1990	University of Keele, U.K.
	1990	University of Rochester, Rochester, N.Y.
	1989	Australian National University, Canberra, ACT.
	1989	Oxford University, Oxford, U.K.
	1989	Cambridge University, Cambridge, U.K.
	1989	University of Illinois, IL.
	1989	Princeton University, N.J.
	1989	University of New South Wales, NSW
	1989	University of Queensland, Brisbane, QLD.
	1988	University of California, Irvine, CA.
	1988	University of Florida, Gainesville, FL.
	1988	Simon Fraser University, Burnaby, B.C.
	1987	University of Rochester, Rochester, N.Y.
	1986	University of Georgia, Athens, GA.
	1985	Oxford University, Oxford, U.K.
Pre	sentations	
	2004-2010	Talks presented by 2-4 of my students and PDFs every year (except 2006) at Society for the Study of Evolution
	2004	Society for the Study of Evolution (4 talks)
	2004	International Congress of Entomology, Brisbane (1 talk)
	2003	Society for the Study of Evolution (3 talks)

2002	Society for the Study of Evolution (3 talks, 1 poster, with P. Nosil, C. Parent, S.Springer, J. Joy).
2002	Invited Symposium Speaker, International Union for the Study of Social Insects, Sapporo, Japan. 2002.
2001	Society for the Study of Evolution (2 talks, 1 poster, with P. Nosil, T. Chapman, B. Kranz, D., K. Bejah, M. Schwarz, J. Law)
2000	North American Section, International Union for the Study of Social Insects, Arkansas
1998	International Union for the Study of Social Insects, Adelaide, Australia. (with B. Kranz, first author and M.P. Schwarz)
1998	Society for the Study of Evolution (with M. Worobey)
1998	Society for the Study of Evolution (with T. Chapman, first author).
1998	Society for the Study of Evolution (with M. Harrison, first author).
1998	Society for the Study of Evolution (with C. Sandoval, first author, and D. Carmean)
1997	Society for the Study of Evolution (with B. Kranz, first author, M.P. Schwarz and L. Mound)
1997	Society for the Study of Evolution. (with T. Chapman, first author)
1997	Society for the Study of Evolution (with M. Harrison, first author).
1996	Behavioral Ecology Society, Canberra. (with T. Chapman)
1996	Speciation Meeting. "Speciation Meeting" Endless Forms: Species and Speciation" Asilomar, CA, (with *C. Sandoval, first author and D. Carmean)
1996	International Congress of Entomology, Florence. (with *B. Kranz, first author, M.P. Schwarz and L.A. Mound)
1996	Behavioral Ecology Society, Canberra (with B. Kranz, first author, and M.P. Schwarz)
1995	Entomological Society of Canada, Victoria
1995	Society for the Study of Evolution, Montreal
1995	Entomological Society of Canada, Victoria
1995	Society of the Study of Evolution, Montreal. (with P. Abbot and D. Carmean)
1994	Society of the Study of Evolution, Athens, Georgie
1992	Society for the Study of Evolution, Berkeley
1991	European Society of Evolutionary Biology, Debrecen, Hungary
1990	International Union for the Study of Social Insects, Bangalore, India
1989	Society for the Study of Evolution, Penn. State
1988	Society for the Study of Evolution, Asilomar, CA.
1988	International Congress of Entomology, Vancouver, B.C.
1987	Society for the Study of Evolution, Bozeman, MT.
1987	International Ethological Conference, Madison, WI.
1987	Animal Behavior Society, Williamstown, M.A.
1986	Animal Behavior Society, Tucson, AZ.

### **Research Funding**

Contract/Grant: Discovery Grant Awarded: 2009 Period: 2009 – 2014

Project Title: Integrating Phylogenetics, Evolutionary Genetics & Molecular Ecology in the

Study of Diversification

Funding: NSERC Type: External Annual: \$82,400 Total: 412,000

**Involvement**: Principal Investigator

PLUS Discovery Grant Accelerator Supplement, 2010-2012, 3 years, 40,000/year

Contract/Grant: Discovery Grant Awarded: 2004 Period: 2004 - 2009

Project Title: An Integrated Phylogenetic and Behavioral-Ecological Approach to the

**Evolution of Adaptive Radiation** 

Funding: NSERC Type: External Annual: \$75,500 Total: 377,500

Involvement: Principal Investigator

Contract/Grant: Research Grant Awarded: 2002 Period: 2002 - 2005

Project Title: Co-Evolution of Sociality and Sex Allocation: Phylogenetic Comparative

Approaches Using Insects.

Funding: Australian Research Council Discovery Grant Type: External Annual: 120,000

AUS Total: 360,000 AUS

Involvement: Principal Investigator Collaboration: I am a "1st partner" on this grant, which

supports my lab's travel and fieldwork

Contract/Grant: Equipment Grant Awarded: 2004 Period: 2004 - 2004

Project Title: An Inexpensive DNA Sequencer for Microsatellite Genotyping in Evolutionary

**Ecology** 

Funding: NSERC Type: External Annual: \$21,463 Total: 21,463

**Involvement:** Principal Investigator **Collaboration:** M. Hart, E. Elle, F. Breden

Institution of Co-Investigator(s): SFU

Contract/Grant: Operating Grant Awarded: 1999 Period: 1999 - 2004

Project Title: "An Integrated Phylogenetic and Ecological Approach to the Evolution of Insect

Reproductive Behaviour"

Annual: \$59,800 Total: \$299,000 Involvement: Principal Investigator

Contract/Grant: Research Grant Awarded: 2000 Period: 2000 - 2002

**Project Title:** Evolution of Social Behaviour in Australian gall-forming thrips n Acacia **Funding:** Australian Research Council, Large Grant **Type:** External **Total:** \$318,000

**AUS** 

Involvement: Principal Investigator Collaboration: I am "1st partner" on this grant, which

supports my lab's travel and fieldwork

Contract/Grant: Equipment Grant Awarded: 2000 Period: 2000 - 2000

Project Title: "Thermal Cycler for Polymerase Chain Reaction"

Funding: NSERC Type: External Total: \$12,642

Involvement: Principal Investigator

Contract/Grant: Research Grant Awarded: 1997 Period: 1997 - 1999

Project Title: Social Behaviour, Ecology and Evolution of Australian gall-forming thrips and

their allies.

Funding: Australian Research Council, Large Grant Total: \$212,000

Involvement: Principal Investigator Collaboration: I am "1st partner" on this grant, which

supports my lab's travel and fieldwork.

Contract/Grant: GREAT Award Awarded: 1997 Period: 1997 - 1999

**Project Title:** Cancer crab population structure **Funding:** B.C. Science Council **Total:** \$34,000

Contract/Grant: Operating Grant Awarded: 195 Period: 1995 - 1999

Project Title: "An Integrated Phylogenetic and Ecological Approach to the Evolution of Insect

Reproductive Behaviour".

Funding: Natural Science and Engineering Research Council Annual: \$37,800

Contract/Grant: Operating Grant Awarded: 1992 Period: 1992 - 1994

Project Title: "An Integrated Phylogenetic and Ecological Approach to the Evolution of Insect

Reproductive Behaviour"

Funding: Natural Science and Engineering Research Council Annual: \$32,200 Total:

\$96,600

Contract/Grant: Equipment Grant Awarded: 1993 Period: 1993 - 1993

Project Title: "Ultra-low Temperature Freezer for Preserving Biological Activity of Allozyme,

DNA and Tissue Samples"

Funding: Natural Science and Engineering Research Council Total: \$12,472

Contract/Grant: Development Grant Awarded: 1991 Period: 1991 - 1993

Project Title: "The Social Biology of Australian Gall Thrips" (for two periods of five-month's

work on the social biology and genetics of Australian gall thrips.) **Funding:** National Geography Society **Total:** \$24,800 US

Contract/Grant: Equipment Grant Awarded: 1992 Period: 1992 - 1992

**Project Title:** "A Cetus Thermal-Cycler for the Polymerase Chain Reaction" **Funding:** Natural Science and Engineering Research Council **Total:** \$11,502

Contract/Grant: President's Fund Awarded: 1992 Period: 1992 - 1992

Project Title: "An Integrated Phylogenetic and Ecological Approach to the Evolution of

Reproductive Behaviour"

Funding: Simon Fraser President's Fund Total: \$7,000

Contract/Grant: Fellowship Grant Awarded: 1989 Period: 1989 - 1991

Project Title: "Molecular Genetic and Systematics of Thysanoptera" (For two years of work

on evolution and genetics of Thysanoptera.)

Funding: NSF Environmental Biology Post-Doctoral Fellowship Grant

Contract/Grant: Research Grant Awarded: 1990 Period: 1990 - 1990

Project Title: "Genetic Analysis of Sex Ratio Evolution in Colonial Hoplothrips". (For

electrophoretic work on Hoplothrips)

Funding: Natural Environmental Research Council Total: \$2,700

**Involvement:** Joint Investigator **Collaboration:** (with Professor W.D. Hamilton).

Contract/Grant: Fellowship Grant Awarded: 1989 Period: 1989 - 1990

Project Title: "Genetic Analysis of Sex Ratio Evolution in Colonial Hoplothrips". (For one

year of work at Oxford University on sex ratio selection in Hoplothrips.)

Funding: NSF-NATO Post-Doctoral Fellowship

# **Active Service to Simon Fraser University**

#### **Departmental Committees**

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2010 – 2011	Chair, Strategic Planning Committee
2008 - 2009	Member, Tenure and Promotions Committee
2005 - 2008	Killam Research Fellowship, with Administrative Leave
2004 - 2005	Member, Tenure and Promotions Committee
2004 - 2005	Member, Physiology Search Committee
2002 - 2003	Member, Appointments Committee
2001 - 2002	Limited service on Departmental Committees due to (1) NSERC GSC-18 duties, (2) service on four Editorial Boards, (3) Parental leave, (4) not being tapped to serve on Search Committees. I was, however, a regular attendant and active participant in Departmental Meetings.
1999 - 2000	Member, Evolutionary Physiology Search Committee
1998 - 2000	Chair, Departmental Strategic Planning Committee
1998 - 2000	Member, Departmental Tenure Committee
1998 - 2000	Member, Course Planning Group
1998 - 2000	Member, Appointments Committee
1997 - 1999	Member, Plant Evolutionary Ecology Search Committee
1995 - 1996	Member, Genetics Search Committee
1993 - 1996	Member, Departmental Graduate Studies Committee
1994 - 1995	Member, Departmental Tenure Committee
1994 - 1995	Member, Departmental Structure Working Group

# **Active Service to the Academic Community**

2009		ichael Smith Foundation for Health Research, Review Panel, Clinical esearch
2008	G	rants Panel, US National Cancer Institute
2008 -	E	ditorial Board, Evolutionary Applications
2008 -	E	volution and Medicine Review, 'Senior Correspondent'
2008 -		oordinator, International Union for the Study of Social Insects, 2010 eeting
2008 -	N	SERC, Major Facilities Grants, Adjudication Panel Member
2007 – 2008		anada Research Chairs, College of Reviewers (member of panel that djudicates CRC applications from Universities across Canada)
2003 - 2006	S As	ssociate Editor, American Naturalist
2001 - 2011	E	xternal Examiner on Theses (several, details confidential)
2001 - 2009		enure and Full-Professor Promotion reviews (several Universities, etails confidential)
1992 - 2011	be Ed M N	eviewer for journals: American Naturalist, Autism, Behavioral Ecology, ehavioral Ecology and Sociobiology, Canadian Entomologist, coscience, Evolution, Evolutionary Applications, Insectes Sociaux, olecular Biology and Evolution, Molecular Phylogenetics and Evolution, ature, Quarterly Review of Biology, Science, Systematic Entomology, ystematic Zoology, Trends in Ecology and Evolution
1992 - 2011	R	eviewer of grant proposals, ARC, MRC, NERC, NSERC, NSF
2002 - 2003	G C	hair, NSERC Grant Selections Committee 18 (Ecology and Evolution)
2000 - 2003		ember, NSERC Grant Selections Committee 18 (Ecology and volution) (equivalent of NSF Panel Member).
2002 - 2002		ymposium Organizer, International Union for the Study of Social sects, Sapporo, 2002.
2000 - 2002	2 As	ssociate Editor, Evolution
1999 - 2002	? E	ditorial Board, Journal of Evolutionary Biology
1999 - 2002	? E	ditorial Board, Journal of Ethology
1997 - 2002	2 Ao	dvisory Editor, Behavioral Ecology and Sociobiology
1995 - 2002	th	established and ran an electronic mail network for scientists who use e polymerase chain reaction and DNA sequencing for insect /stematics and populations biology.
1999 - 2000		eviewer for Full Professor Decisions (or equivalent) (Dates onfidential), Smithsonian Institution, Ben-Gurion University

1999 - 2000	I was an organizer of the Canadian Society for Ecology and Evolution
1998 - 2011	I have given many interviews on my work to the CBC and other media.
1997 - 2000	Member, GSC-18 Reallocations Steering Committee

# **Awards, Honors and Scholarships**

2010	Type: Induction into the Royal Society of Canada
2009	<b>Type:</b> My PDF Tanja Schwander won the John Maynard Smith Award from the European Society for Evolutionary Biology (the Society's major Award honoring a young Evolutionary Biologist)
2008	Type: Appointment to 'University Professorship" Chair at Simon Fraser University
2008	Type: Appointment as "Founding Fellow", UBC Institute of Mental Health.
2007	<b>Type:</b> My PhD student Patrik Nosil won the NSERC Doctoral Prize (awarded for best two theses in Canada every year), the Governer General of Canada Gold Medal Award, and the Dobzhansky Prize (a top award from the Society for the Study of Evolution)
2005	Type: Killam Research Fellowship, Canada Council for the Arts
2004	Title: Whitley Award Type: Research Organization: Royal Society of New South Wales, Australia Details: for best book in evolutionary biology published in Australia in 2004.
2002	<b>Title:</b> "The Charles P. Alexander Lecture" <b>Type:</b> Honor <b>Organization:</b> Department of Entomology, University of Massachusetts
2001	Title: E.O. Wilson Award Type: Award Organization: American Society of Naturalists Details: Yearly international prize to recognize contributions to evolutionary biology and knowledge of a particular group of organisms, US \$2,000 award
1998	<b>Title:</b> "Travel and expenses for weeklong visit to Paris, with two talks presented. <b>Type:</b> Fellowship <b>Organization:</b> The University of Paris, Juisseau Campus".
1996	Title: "Travel expenses paid for collaborative visit to Flinders University, Adelaide."  Type: Fellowship  Organization: Flinders University of South Australia, Visiting Fellowship
1995	Title: "Yearly invited series of two lectures during week-long visit, in honor of eminent entomologist Dr. Charles Michener"  Type: Honor  Organization: The Michener Lectures, University of Kansas, Laurence, Kansas
1989	<b>Title:</b> Theosodius Dobzhansky Prize <b>Type:</b> Award <b>Organization:</b> Society for the Study of Evolution <b>Details:</b> Yearly international prize to recognize outstanding young evolutionary biologist, US \$5,000 award.