
Curriculum Vitae

Name: Andrew Gonzalez

Date of Birth: 14 May 1972

Citizenship: Canadian, British

Address: McGill University
1205 Ave Docteur Penfield
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<http://gonzalezlab.weebly.com/>

Education:

1994-1998 Ph.D., Dept. Biology, Imperial College, University of London, UK

1991-1994 University of Nottingham, Nottingham, UK B.Sc. (Honours) Zoology

Professional Experience:

Academic Positions

March 2013 Professor, McGill University, Montreal, Canada.

June 2009 Present Director of the *Quebec Centre for Biodiversity Science*.

June. 2008 Associate Professor (tenured), McGill University, Montréal, Canada

Sept. 2005 Associate Member of the McGill School for Environment

Sept. 2003 Associate Professor (untenured), McGill University, Montréal, Canada.

2001-2003 Maître de Conférences (tenured), University of Paris VI, Paris, France.

1999-2001 Maître de Conférences (untenured), University of Paris VI, Paris, France.

Research Experience

Post-Doctoral:

1999 CNRS Poste Rouge: Lab. d'Ecologie, Ecole Normale Supérieure, Paris, France.

1998 NERC Centre for Population Biology, Silwood Park, UK.

Awards and Distinctions

2016-2018	Killam Research Fellow
2014-2024	Tier 1 Canada Research Chair in Biodiversity Science
2011	Tomlinson Science Award, Faculty of Science, McGill University.
2004-2014	Canada Research Chair II in Biodiversity science
1999	Pierre and Marie Curie European Post Doctoral Fellowship (declined).

Research Grants Awarded:

Major Research and Equipment Grants and Awards Presently Held:

2015-2021	NSERC CREATE: Biodiversity, ecosystem services and sustainability (co-PI)	\$300 000/yr
2015	Canada Foundation for Innovation Leaders Opportunity Fund: Large Experimental Array of Ponds	\$1M
2014-2021	Tier 1 Canada Research Chair in Biodiversity Science	\$200 000/yr
2013-2019	FQRNT <i>Quebec Centre for Biodiversity Science</i> (PI + 65 others)	\$570 000/yr
2014-2019	NSERC Discovery Grant: <i>Integrative biodiversity science for global change</i>	\$62,000/yr
2014-2017	NSERC Research Discovery Accelerator Supplement	\$40,000/yr

Major Research and Equipment Grants and Awards Previously Held:

2011-2014	FQRNT Team Grant. V. Millien, A Gonzalez, Ogden, N.	\$53 000/yr
2009-2014	Tier 2 Canada Research Chair in Biodiversity Science	\$100 000/yr
2011-2013	NSERC Strategic (231052): EM Bennett, A Gonzalez, MJ Lechowicz, J Rhemtulla.	2011: \$136,555; 2012: \$168,980; 2013 \$157,948
2011-2013	Max Bell Foundation: MJ Lechowicz, A Gonzalez & EM Bennett.	\$90,000/yr
2011-2013	Ouranos: A. Gonzalez, E. M. Bennett, J. Cardille, Lechowicz, M.	\$255 640
2009-2013	FQRNT <i>Quebec Centre for Biodiversity Science</i> (PI + 62 others)	\$300 000/yr
2011	NSERC Equipment Grant: G. Fussmann, A. Gonzalez, B. Beisner	\$59 950
2007-2009	FQRNT Team Grant. A. Gonzalez, F. Guichard and M. Loreau:	\$179 435
2006	NSERC Equipment Grant (with MJ Lechowicz, M Waterway)	\$20 000

2004	Canada Foundation for Innovation	\$551 945
2003	NERC Research Grant. F.S. Gilbert, P. Crittenden and A. Gonzalez:	£105 000
2000	Action Concerte pour la Recherche, Ministry of Research (France)	Eu 65 000

Publications:

Refereed Journal Publications (students are underlined)

In Revision:

- (90) Thompson, P. L. et al. (2016) Signatures of the collapse and incipient recovery of an overexploited marine ecosystem. *PRSB* (in prep)
- (89) O'Connor, M. I, Gonzalez, A. et al. (2015) A predictable biodiversity-ecosystem function relationship depends on trophic level and strengthens through time. *Oikos* (in revision).

Published or in press

- (88) Thompson, P. L. & Gonzalez, A. (2016) Ecosystem multifunctionality in metacommunities. *Ecology* (in revision)
- (87) Thompson, P. L., Rayfield, B., Gonzalez, A. (2016) Loss of habitat and connectivity erodes species diversity, ecosystem functioning and stability in metacommunity networks. *Ecography* (submitted for special issue)
- (86) Haddad, N. M., Gonzalez, A., Brudvig, L. A., Burt, M. A., Levey, D. J., Damschen, E. I. (2016) Experimental evidence does not support the Habitat Amount Hypothesis. *Ecography* (submitted for special issue).
- (85) Whiteley, J. A. and Gonzalez, A. (2016) Biotic nitrogen-fixation in the bryosphere inhibited more by drought than warming. *Oecologia* (in press)
- (83) Leo, S., Gonzalez, A., Millien, V. (2016) Multi-taxa integrated landscape genetics for zoonotic infectious diseases: Deciphering variables influencing disease emergence. *Genome* (in press)
- (82) Gonzalez, A. et al. (2015) Estimating local biodiversity change: a critique of papers claiming no net loss of local diversity. *Ecology* (in press)
- (81) Dupras, J. et al. (2016) The impacts of urban sprawl on ecological connectivity in the Montreal Metropolitan Region. *Environmental Science & Policy* 58: 61-73.
- (80) Low-Decarie, E., Kolber, M., Homme, P., Lofano, A., Gonzalez, A., Bell, G. (2015) Community rescue in metacommunities adapting to environmental stress. *PNAS* 112: 14307-14312.
- (79) Mitchell, M., Bennett, E.M., Gonzalez, A. et al. (2015) The Montérégie Connection: Linking landscapes, biodiversity, and ecosystem services, to improve decision-making. *Ecology and Society* 20: 15.
- (78) Tekwa, E., Nguyen, D., Juncker, D., Loreau, M., and Gonzalez, A. (2015) Patchiness in a

- microhabitat chip affects evolutionary dynamics of bacterial cooperation. *Lab on a Chip* 15, 3723-3729
- (77) Mitchell, M., Bennett, E.M., Gonzalez, A. (2015) Strong and nonlinear effects of fragmentation on ecosystem service provision at multiple scales. *Environmental Research Letters* 10: 094014
- (76) Rayfield, B., Pelletier, D., Dumitru, M., Cardille, J. and Gonzalez, A. (2015) Multi-purpose habitat networks for short-range and long-range connectivity: a new method combining graph and circuit connectivity. *Methods in Ecology and Evolution* DOI: 10.1111/2041-210X.12470
- (75) Dupras, J. et al. (2015) Towards the establishment of a green infrastructure in the region of Montreal (Quebec, Canada). *Planning Practice and Research* 30: 355-375.
- (74) Pedruski, M., Fussmann, G. and Gonzalez, A. (2015) A network approach reveals surprises about the history of the niche. *Ecosphere* (in press)
- (73) Thompson, P.*, Rayfield, B.* and Gonzalez, A. (2015) Robustness of the spatial insurance effects of biodiversity to habitat loss. *Evolutionary Ecology Research* 16: 445-460
- (72) Tekwa, E., Gonzalez, A., Loreau, M. (2015) Local densities connect spatial ecology to game, multilevel selection and inclusive fitness theories of cooperation. *Journal of Theoretical Biology* 7: 414-425.
- (71) Pedruski, M., Fussmann, G. and Gonzalez, A. (2015) Predicting the outcome of competition when fitness inequality is variable. *Royal Society Open Science* 2, 150274
- (70) Haddad, N.M., Brudvig, L., Clobert, J., Davies, K.F., Gonzalez, A. et al. (2015) Habitat Fragmentation and its Lasting Impact on Earth's Ecosystems. *Science Advances* 1, e1500052.
- (69) Thompson, P., Davies, J., and Gonzalez, A. (2015) Ecosystem functions are dependent upon zooplankton functional and phylogenetic diversity in natural pond communities. *PLoS One* 10: e0117595.
- (68) Thompson, P., Beisner, B., and Gonzalez, A. (2014) Warming induces synchrony and destabilizes experimental zooplankton communities. *Oikos* 124: 1171-1180.
- (67) Martins, K.T., Gonzalez, A. and Lechowicz, M. (2014) Pollination services are mediated by bee functional diversity and landscape context. *Agriculture, Ecosystems & Environment* 200: 12-20.
- (66) Turney, S., Gonzalez, A. and Millien, V. (2014) The negative relationship between mammal host diversity and Lyme disease incidence strengthens through time. *Ecology* 95: 3244-3250.
- (65) Marrotte, R., Gonzalez, A. and Millien, V. (2014) Landscape resistance and habitat combine to provide an optimal model of genetic structure and connectivity at the range margin of a small mammal. *Molecular Ecology* 23: 3983-3998.
- (64) Gomez GC, Guzman MH, Gonzalez, A. (2014) Population decline and the effects of disturbances on the structure and recovery of octocoral communities (Coelenterata: Octocorallia) in Pacific Panama. *Journal of the Marine Biological Association of the*

United Kingdom (online early)

- (63) Duncan, A., Gonzalez, A., Kaltz, O. (2014) Dispersal, environmental forcing and parasites combine to affect metapopulation synchrony and stability. *Ecology* (in press)
- (62) Vasseur, D., Fox, J. and Gonzalez, A. et al. (2014) Synchronous dynamics of zooplankton competitors prevail in temperate lake ecosystems. *Proceedings of the Royal Society, London B*. 281: 20140633
- (61) Ziter, C., Bennett, E.M., and Gonzalez A. (2014) Small forest fragments maintain aboveground carbon stocks at forest edge. *Oecologia* (in press).
- (60) Simon, J, Marrotte, RR, Desrosiers, J., Fiset, J, Gaitan, J, Gonzalez, A, Koffi JK, Lapointe F-J, Leighton, P.A., Lindsay L.R., Logan, T., Milord F, Ogden NH, Rogic, A, Roy-Dufresne E, Suter D, Tessier N, Millien V. (2014) Climate change and habitat fragmentation drive the occurrence of *B. burgdorferi*, the agent of Lyme disease, at the northern limit of its distribution. *Evolutionary Applications* (in press)
- (59) O’Farrill, G., Gauthier-Schampaert, K., Rayfield, B., Bodin, O., Sengupta, R., Gonzalez, A. (2014) The potential connectivity of waterhole networks and the effectiveness of a protected area under various drought scenarios. *PLoS One* 9(5): e95049
- (58) Mitchell, M., Bennett, E.M., Gonzalez, A. (2014) Agricultural landscape structure affects arthropod diversity and arthropod-derived ecosystem services. *Agriculture, Ecosystems and Environment* (on line early).
- (57) Mitchell, M., Bennett, E.M., Gonzalez, A. (2014) Forest fragments modulate the provision of multiple ecosystem services. *Journal of Applied Ecology* (in press)
- (56) Gonzalez, A. (2013) Biodiversity: the ecological deficit. *Nature* 503, 206-207.
- (55) Fussmann, G. and Gonzalez, A. (2013) Community evolutionary rescue in changing environments. *Interface focus* 6, 20130036.
- (54) Balvanera, P., Siddique, I., Dee, L., Paquette, A., Isbell, F., Gonzalez, A., Byrnes, J., O’Conner, M., Hungate, B. and Griffin, J.N. (2013) Linking biodiversity and ecosystem services: current uncertainties and the necessary next step. *BioScience* doi: 10.1093/biosci/bit003
- (53) Gomez GC, Guzman MH, Gonzalez A, Odalisca B. 2013. Survival, growth, and recruitment of octocoral species (Coelenterata: Octocorallia) in Coiba National Park, Pacific Panama. *Bulletin of Marine Science*. (In press).
- (52) Duncan, A., Gonzalez, A., Kaltz, O. (2013) Inflationary effects of temporal and spatial temperature variation on a parasite epidemic in experimental metapopulations. *Proceedings of the Royal Society, London B*. 280: 20131747–20131747.
- (51) Gross, K., Cardinale, C., Fox, J., Gonzalez, A. et al. (2013) Species richness and the temporal stability of biomass production: A new analysis of recent biodiversity experiments. *American Naturalist* 183, 1-12.
- (50) Ziter, C., Bennett, E.M., and Gonzalez A. (2013) Functional diversity and management mediate carbon storage in small forest fragments. *Ecosphere* 4, 1-21.
- (49) Mitchell, M., Bennett, E. M., and Gonzalez, A. (2013) Linking landscape connectivity and

- ecosystem service provision: current knowledge and research gaps. *Ecosystems* DOI: 10.1007/s10021-013-9647-2.
- (48) Loreau, M., Daufresne, T., Gonzalez, A., Gravel, D., Guichard, F., Leroux, S., Loeuille, N., Massol, F., Mouquet, N. (2013) Unifying sources and sinks in ecology and Earth sciences. *Biological Reviews* 88, 365-379.
- (47) Gonzalez, A., Ronce, O., Ferrière, R., Hochberg, M. E. (2013) Evolutionary rescue: an emerging focus at the intersection between ecology and evolution. *Philosophical Transactions of the Royal Society B* 368, 20120404.
- (46) Gonzalez, A. and Bell, A. (2013) Evolutionary rescue and adaptation to abrupt environmental change depends upon the history of stress. *Philosophical Transactions of the Royal Society B* 368, 20120079.
- (45) Cardinale, B., Duffy, E., Gonzalez, A., Hooper, D.U., Perrings, C. *et al.* (2012) Biodiversity loss and its impact on humanity. *Nature* 486, 59–67.
- (44) Hooper, D. U., Adair, E. C., Cardinale, B. J., Byrnes, J. E. K., Hungate, B. A., Matulich, K., Gonzalez, A. Duffy, E. J., Gamfeldt, L., O’Conner, M. (2012) A global synthesis reveals biodiversity loss as a major driver of ecosystem change. *Nature* 486, 105-108.
- (43) Lindo, Z., Whiteley, J., and Gonzalez, A. (2012) Nonrandom extinction and trophic contraction driven by experimental environmental change. *Global Change Biology* 18, 2448-2457.
- (42) Pillai, P., Gonzalez, A. and Loreau, M. (2012) Evolution of dispersal in a predator-prey metacommunity. *American Naturalist* 179, 204-216.
- (41) Pillai, P., Loreau, M. and Gonzalez, A. (2011) The spatial emergence of food web complexity. *Proceedings of the National Academy of Sciences, USA*. 48, 19293-19298.
- (40) Bell, G. and Gonzalez, A. (2011) Adaptation and Evolutionary Rescue in a metapopulation during environmental deterioration. *Science* 332: 1327-1330.
- (39) Millien, V. and Gonzalez, A. (2011) The maximal body mass-area relation in island mammals. *Journal of Biogeography* 38: 2278-2285.
- (38) Gonzalez, A., Lindo, Z. and Rayfield, B. (2011) Impacts of habitat destruction and fragmentation on ecological network structure and function. *American Journal of Botany* 98: 503-516.
- (37) Cardinale, B, J. *et al.* (2011) Functional role of producer diversity in ecosystems. *American Journal of Botany* 98: 572-592.
- (36) Mouquet, N., Matthiessen, B., Miller, T. and Gonzalez, A. (2011) Extinction debt in source-sink metacommunities. *PLoS One* 6: e17567.doi:10.1371
- (35) Anand, M., Gonzalez, A., Guichard, F., Kolasa, J. and Parrott, L. (2010) An ecological perspective on complexity: diversity, scale, memory and environmental Variability. *Diversity* 2: 398-410.
- (34) Lindo, Z., and Gonzalez, A. (2010) The bryosphere: an integral and influential component of the Earth’s biosphere. *Ecosystems* 13: 612-627.
- (33) Chisholm, C., Lindo, Z. and Gonzalez, A. (2010) Metacommunity diversity depends on

- network connectivity and arrangement in heterogeneous landscapes. *Ecography* 34, 415-424.
- (32) O'Farrill, G., Chapman, C. A. and Gonzalez, A. (2011) Origin and deposition sites influence seed germination and seedling survival of *Manilkara zapota*: implications for long-distance animal mediated seed dispersal. *Seed Science Research* 21, 305-313.
 - (31) Staddon, P., Lindo, Z., Crittenden, P., Gilbert, F., Gonzalez, A. (2010). Connectivity, non-random extinction, and ecosystem function in experimental metacommunities. *Ecology Letters* 13: 543-552.
 - (30) Bell, G. and Gonzalez, A. (2009) Evolutionary rescue can prevent extinction following environmental change. *Ecology Letters* 12: 942-948.
 - (29) Gonzalez, A. and Loreau M. (2009) Causes and consequences of compensatory dynamics in ecological communities. *Annual Reviews of Ecology, Evolution and Systematics* 40: 393-414.
 - (28) Gouhier, T., Guichard, F. and Gonzalez, A. (2010) Synchrony and stability of food webs in metacommunities. *American Naturalist* 175:E16-E34.
 - (27) Pillai, P., Loreau, M. and Gonzalez, A. (2010) A patch-dynamic framework for food web metacommunities. *Theoretical Ecology* 3: 223-237.
 - (26) Holland, T., Peterson, G.D., Gonzalez, A. (2009) Economic inequality predicts biodiversity loss: a cross-national analysis. *Conservation Biology* 23: 1304
 - (25) Perron, G., Gonzalez, A. and Buckling, A. (2008) The rate of environmental change drives adaptation to an antibiotic sink. *Journal of Evolutionary Biology* 21: 1724-1731.
 - (24) Hendry, A. and Gonzalez, A. (2008) Whither Adaptation? *Biology and Philosophy* 23: 673.
 - (23) Gardezi, T. and Gonzalez, A. (2008) Scale dependence of the species-energy relationship: evidence from fishes in thousands of lakes. *American Naturalist* 171(6): 800-815.
 - (22) Gonzalez, A., Lambert, A. and Ricciardi, A. (2008) When does ecosystem engineering facilitate invasion and species replacement. *Oikos* 117: 1247-1257.
 - (21) Perron, G, Gonzalez, A. and Buckling, A. (2007) Source-sink dynamics shape the evolution of antibiotic resistance and its pleiotropic fitness costs. *Proceedings of the Royal Society, London*. doi:10.1098/rspb.2007.0640
 - (20) Mikkelsen, G.M., Gonzalez, A., Peterson, G.D. (2007) Economic inequality predicts biodiversity loss. *PLoS ONE* 2: e444.
 - (19) Matthews, D. P. and Gonzalez, A. (2007) The inflationary effects of environmental fluctuations ensure the persistence of sink metapopulations. *Ecology* 88 (11): 2848-2856.
 - (18) Wright, D. H., Gonzalez, A. and Coleman, D. C. (2007) Changes in nestedness in experimental communities of soil fauna undergoing extinction. *Pedobiologia* 50: 497-503.
 - (17) Massin, N. and Gonzalez, A. (2006) Adaptive radiation in a fluctuating environment: disturbance affects the evolution of diversity in a bacterial microcosm. *Evolutionary Ecology Research* 8: 1-11.
 - (16) Descamps-Julien B. and Gonzalez A. (2005) Stable coexistence in a fluctuating

- environment: an experimental demonstration. *Ecology* 86: 2815-2824.
- (15) Fontaine, C. and Gonzalez A. (2005) Population synchrony induced by resource fluctuations and dispersal in an aquatic microcosm. *Ecology* 86: 1463-1471.
 - (14) Gonzalez, A. and Descamps, B. (2004) Population and community stability in a fluctuating environment. *Oikos* 106:105-116.
 - (13) Leibold, M. A., Holyoak, M., Mouquet, N., Amarasekare, P., Chase, J. M., Hoopes, M. F., Holt, R. D., Shurin, J. B., Law, R., Tilman, D., Loreau, M., Gonzalez, A. (2004) The metacommunity concept: a framework for multi-scale community ecology. *Ecology Letters* 7: 601-613.
 - (12) Srivastava, D.S., Kolasa, J., Bengtsson, J., Gonzalez, A., Lawler, S. P., Miller, T. E., Munguia, P., Romanuk, T., Schneider, D. C., Trzcinski, K. M. (2004) Are natural microcosms useful model systems for ecology? *Trends in Ecology and Evolution* 19: 379-384.
 - (11) Loreau, M., Mouquet, N. Gonzalez, A. (2003) Biodiversity as spatial insurance in heterogeneous landscapes. *Proceedings of the National Academy of Sciences, USA* 100: 12765-12770.
 - (10) Holt, R. D., Barfield, M., Gonzalez, A. (2003) Impacts of environmental variability in open populations and communities: "Inflation" in sink environments. *Theoretical Population Biology* 64: 315-330.
 - (9) Gonzalez, A. and Chaneton, E. (2002) Heterotrophic extinction, abundance and productivity in a fragmented microecosystem. *Journal of Animal Ecology* 71, 594-603.
 - (8) Gonzalez, A. and Holt, R. D. (2002). The inflationary effects of environmental fluctuations in source-sink systems. *Proceedings of the National Academy of Sciences, USA*, 99: 14872-14877.
 - (7) Gonzalez, A. (2000) Community relaxation in fragmented landscapes: the relation between species, area and age. *Ecology Letters* 3: 441-448.
 - (6) Cohen, J. E., Newman, C. M., Cohen, A. E., Petchey, O. L. P., Gonzalez, A. (1999) Spectral Mimicry: A method for synthesizing matching time series with different Fourier Spectra. *Circuits, Systems and Signal Processing* 18: 431-442.
 - (5) Gilbert, F. S., Gonzalez, A. and Evans-Freke, I. (1998) Corridors maintain species richness in fragmented landscapes of natural microecosystems. *Proceedings of the Royal Society London, Series B* 265: 577-582.
 - (4) Cohen, A. E., Gonzalez, A., Lawton, J. H., Petchey, O. L. and Cohen, J. E. (1998) A novel experimental apparatus to study the impact of white noise and 1/f noise on animal populations. *Proceedings of the Royal Society London, Series B*: 265: 11-15.
 - (3) Gonzalez, A., Lawton, J. H., Gilbert, F. S., Blackburn, T. M. and Evans-Freke, I. (1998). Metapopulation dynamics, abundance and distribution in a microecosystem. *Science* 281: 2045-2047.
 - (2) Petchey, O. L., Gonzalez, A. and Wilson, H. (1997) Effects on population persistence: the interaction between environmental noise colour, intraspecific competition and space.

Proceedings of the Royal Society London, Series B 264: 1841-1847.

- (1) Gonzalez, A., Rowe, C., Weekes, P., Whittle, D., Gilbert, F. S. and Barnard, C. J. (1994) Flower choice by honey bees (*Apis mellifera* L.) sex phase of flowers and preferences among nectar and pollen foragers. *Oecologia* 101: 258-26.

Edited Journals Issues:

- Gonzalez, A., Ronce, O., Ferrière, R., Hochberg, M. E. (2013) Evolutionary rescue in changing environments. *Philosophical Transactions of the Royal Society B*, 368.

Refereed Book Chapters:

- (9) Hendry, A., Millien, V., Gonzalez, A. and Larsson, H. (2013) How humans influence adaptive landscapes. pp. 180-197. In: *The Adaptive Landscape in Evolutionary Biology*. (Eds. Svensson, E. I. and Calsbeek, R.). Oxford University Press.
- (8) O’Farrill, G. and A. Gonzalez. (2010) Ecología y Conservación del tapir en la Región de Calakmul. In Ceballos, G., I. Lira, G. X. O’Farrill and A. Nolasco (eds.) *El tapir en México: Estudios de Caso y Conservación*.
- (7) Gonzalez, A. (2009) Metacommunities: spatial community ecology. *Encyclopedia of Life Sciences*.
- (6) Gonzalez, A., Mouquet, N., and Loreau, M. (2009) Biodiversity as spatial insurance: the effects of fragmentation and dispersal on ecosystem functioning. pp. 134-146. In: Naeem, S., Bunker, D, Hector, A. Loreau, M. and Perrings. C., eds., "Biodiversity, Ecosystem Functioning and Ecosystem Services". Oxford University Press
- (5) Gonzalez, A. and De Feo, A. (2007) Environmental variability modulates the insurance effects of diversity in nonequilibrium communities. pp. 159-177: In *The impact of environmental variability on ecological systems*. Eds. Vasseur, D. and McCann, K. Springer-Verlag.
- (4) Potvin, C., Chapin III, FS, Gonzalez, A., Leadley, P., Reich, P. and Roy, J. (2007) Plant biodiversity and responses to elevated carbon dioxide. pp. 125-134. In *Terrestrial ecosystems in a changing world*. Eds. Canadell, J., Pataki, D. and Pitelka, L. Springer-Verlag.
- (3) Gonzalez, A. (2005) Local and regional community dynamics in fragmented landscapes: insights from a bryophyte-based microcosm. pp. 146-170. In *Metacommunities: spatial dynamics and ecological communities*. Eds. Holyoak, M., Leibold, M. A. and Holt. R. D. The University of Chicago Press, Chicago.
- (2) Chase J. Amarasekare P. Cottenie K. Gonzalez, A. Holt R. Holyoak M. Hoopes Law R. M. Leibold M. A. Loreau M. Mouquet N. Shurin J. Tilman D. (2005). Competing theories for competitive metacommunities. pp. 335-355. In *Metacommunities: spatial dynamics and ecological communities*. Eds. Holyoak, M., Leibold, M. A. and Holt. R. D. The University of Chicago Press, Chicago
- (1) Loreau, M., Downing A., Emmerson, M., Gonzalez A., Hughes J., Inchausti , P., Joshi J.,

Norberg, J., O. Sala. O. (2002) A new look at the relationship between diversity and stability. pp. 79-91. In *Biodiversity and ecosystem functioning: synthesis and perspectives*. Oxford University Press, Oxford.

Published Letters, Technical Reports & Book Reviews:

Gonzalez, A. and Peres-Neto, P. (2015) Data curation: act to staunch loss of research data. *Nature* 520: 436.

Expert Panel on Biodiversity Science: *Canadian Taxonomy: exploring biodiversity, creating opportunity*. Council of Canadian Academies (2011).

Gonzalez, A. and Beisner, B. (2011) Homage to G. Evelyn Hutchinson. *Conservation Biology* 6: 1253-1254.

O’Farrill, G., Calmé, S., and Gonzalez, A. (2007) Interacciones en peligro: El caso del tapir y el zapote. *Ecofronteras* 18-20. *ECOFRONTERAS* 31:18-20.

O’Farrill, G., Calmé, S., and Gonzalez, A. (2006) *Manilkara zapota*: A new record of a species dispersed by tapirs. *Tapir Conservation* 15: 32-35.

Gonzalez, A. and Lawton, J. H. (1997) Food webs: integration of patterns and dynamics. Book Review. *Journal of Ecology* 85: 401-403.

Dissertations:

Gonzalez, A. (1998) Extinction: The role of habitat fragmentation and environmental variability. Ph.D. thesis, pp. 157, Imperial College, University of London.

Popular Science Articles

Gonzalez, A. (2007) Increasing inequality threatens biodiversity. Scitizen, 29 May, www.scitizen.com

Service & Contributions:

National:

2011-2014: Council Member of the Canadian Society for Ecology and Evolution.

2010-2011: Member of the expert panel for the Council of Canadian Academies formed to evaluate the “Canadian Taxonomy: Exploring biodiversity, creating opportunity”.

2006: Member of the local organising committee of the inaugural Canadian Society for Ecology and Evolution held in Montreal

International:

Future Earth secretariat: member of the global consortium that won the bid to host *Future Earth* secretariat: <http://www.futureearth.info/>

Ecological Society of America Eminent Ecologist awards subcommittee (2014-2016)

Journal Associate Editor:

Journal of Animal Ecology (January 2006-2009)

Oecologia (Sept. 2005-2009).

Invited Evaluator for *Faculty 1000* (<http://www.f1000biology.com/browse/>) since 2006.

Journal Reviewer:

Nature, Science, PNAS, The American Naturalist, Ecology, Ecology Letters, Ecological Entomology Freshwater Biology, Journal of Animal Ecology, Oecologia, Oikos, Proceedings of the Royal Society of London, Conservation Letters.

Grant referee :

NSERC Discovery grant : 2009, 2010, 2012, 2013, 2014, 2015, 2016

Canadian Foundation for Innovation : 2009, 2010, 2011, 2012

Fonds de Recherche sur la Nature et les Technologies : 2005

Swiss Science Federation (2005, 2006)

UK Natural Environment Research Council (2006)

Canada Research Chair Program: 2006, 2007, 2011, 2012, 2013, 2014

National Science Foundation (2008, 2012)

Teaching

Current Undergraduate and Graduate Teaching:

Course	Semester	Role	Contribution
Advances in Community Ecology	Winter	Coordinator	100%
Methods in Biology of Organisms (BIOL206)	Fall	Co-instructor	30%
Conservation Biology (BIOL465)	Fall	Co-instructor	33%
Ecological Dynamics (BIOL308)	Fall	Guest Lecture	

Undergraduate Student Supervision:

Honours and Independent Study Students:

Chloe Debyser (Honours, 9 credits) Phylogenetic plant community structure on Barro Colorado island.

Sophie Nitoslawski (Honours, MSE, 9 credits) Economic inequality and environmental degradation.

Robert Liveanu (Independent studies, Winter 2013, 3 credits). Evolution of yeast population size in fragmented landscapes.

Lauren Mechak (Independent studies, Winter 2013, 3 credits). Influence of avian and arthropod biodiversity on organic farm production.

Adam Meyer (Independent studies, Fall 2012, 6 credits). Bacterial resistance and adaptation to Dalapon.

Heather McIntosh (Independent studies, Fall 2012, 3 credits). Life history traits in fragmented landscapes.

Madeline McGreer (Honours 2011, 9 credits). Food webs in metacommunities.

Emma Weisbord (Honours 2009, 9 credits) Economic inequality and invasion success.

Carolyn Poutiainen (NSERC summer student, 2009) Climate change and extinction risk.

Leah Northfield (NSERC summer student, 2009). Dispersal and persistence in patchy populations.

Shruti Sayal (Independent studies, 3 credits, 2009). Population persistence in habitat networks.

Chelsea Chisholm (Honours 2009), BIOL479, (9 credits). Do corridors mitigate fragmentation in networks of differing topology.

Diane Luo (NSERC summer student, and Independent Studies 2008). Inequality and biodiversity loss.

Daniel Gartner (Honours 2007, BIOL479, 9 credits) A model for evaluating the spatial dynamics of biological insurance in fragmented ecosystems.

Aliya Kelly (Honours 2007, BIOL479, 9 credits) Ecosystem functioning in a moss microecosystem under multiple extinction scenarios.

David Matthews (Honours 2007, BIOL479, 9 credits) Evolutionary adaptation of *Pseudomonas fluorescens* to antibiotic treatments in source-sink environments.

Adam Michel (Honours 2006, BIOL479, 9 credits) Evolutionary Adaptation of *Pseudomonas fluorescens* to Thermal Stress in Source-Sink Environments

David Matthews (NSERC summer student, 2005) The inflationary effects of environmental fluctuations ensure the persistence of sink metapopulations.

David Matthews (Independent studies BIOL467, 6 credits, 2005-2006) The inflationary effects of environmental fluctuations ensure the persistence of sink metapopulations.

Martin Kastner (Independent studies BIOL467, 3 credits, 2006). The demographic and metabolic effects of abrupt environmental change in *Paramecium aurelia*.

Felipe Pérez-Jvostov (Independent studies BIOL467, 3 credits, 2005) Patch connectivity and its importance in a microarthropod community.

Loubaba Bennis (Independent studies BIOL477, 3 credits, 2005). Habitat fragmentation and population persistence: *Paramecium aurelia* as a model system.

Jean-Philip Lessard (Independent studies BIOL477, 6 credits, 2004). Local determinants of ant diversity.

Graduate Student Supervision:

Current students:

3. Alessandra Lorria (Ph.D. 2), co-supervised with Dr. Melania Cristescu) Adaptation and evolutionary rescue in *Daphnia pulex* is response to copper pollution.
2. Katie Millette (Ph.D. 1, co-supervised with Dr. Melania Cristescu) Adaptation and evolutionary rescue in *Daphnia pulex* is response to copper pollution.
1. Catalina Gomez (Ph.D. 1, co-supervised with Dr. Hector Guzman). Soft coral community diversity and stability in contrasting marine environments.

PhD and MSc Completed:

19. Sarah Leo (Ph.D. 1, co-supervised with Dr. Virginie Millien) Integrated landscape genetics of the Lyme disease vector (*Ixodes scapularis*) and its host (*Peromyscus leucopus*) in southern Québec.
18. Michael Pedruski (Ph.D, cosupervised with Dr. Gregor Fussmann). Niche vs. neutral dynamics in metacommunities.

17. Edward Wong (Ph.D., co-supervised with Dr. Michel Loreau): Public goods games in a spatial setting: theory and experiment.
16. Patrick Thompson (Ph.D 2) Metacommunities, resilience and environmental change.
15. Matthew Mitchell (Ph.D 3, co-supervised with Dr. Elena Bennett) Biodiversity and ecosystem services in fragmented landscapes.
14. Shaun Turney (M.Sc. 2, co-supervised with Dr. Virginie Millien) Testing the dilution effect of diversity on Lyme disease incidence in a fragmented landscape.
13. Carly Ziter (M.Sc. 2, co-supervised with Dr. Elena Bennett): Forest fragmentation and carbon sequestration.
12. Kyle Teixeira-Martins (M.Sc. 2, co-supervised with Dr. Martin Lechowicz): Wild bee diversity, pollination and landscape composition and configuration.
11. Robby Marrotte (M.Sc. 2, co-supervised with Dr. Virginie Millien): Forest fragmentation and dispersal of the white-footed mouse.
10. Jonathan Whiteley (Ph.D. 2012, NSERC PGS D scholarship): Biodiversity and stability in fluctuating environments. Biology Department, McGill University.
9. Pradeep Pillai (PhD 2011, co-supervised with Dr. Michel Loreau) The ecological and evolutionary assembly of trophic metacommunities. Biology Department, McGill University.
8. Catalina Gomez (M.Sc. 2011), co-supervised with Dr. Hector Guzman). Ecology of soft corals in disturbed environments. Biology Department, McGill University.
7. Georgina O'Farrill (PhD 2011, CONACYT scholar, co-supervised with Dr. Raja Sengupta): Functional consequences of mobile link species: tapir seed dispersal in a fragmented ecosystem. Biology Department, McGill University.
6. Tariq Gardezi (Ph.D. 2008, co-supervised with Dr. Andrew Hendry): Large-scale ecology of fish diversity in Canada. Biology Department, McGill University.
5. Tim Holland (M.Sc., 2008, NSERC PGS M scholarship, co-supervised with Dr. Garry Peterson): Inequality and biodiversity loss in the USA. Geography Department, McGill University.

4. Nirmala Massin (Ph.D 2006) Adaptive radiation in heterogeneous environments: effects of dispersal and disturbance. University of Paris VI.
 3. Blandine Descamps (Ph.D. 2005) Diversity and stability in fluctuating environments. University of Paris VI.
 2. Colin Fontaine (Masters 2002) Population synchrony: Dispersal and the Moran effect. University of Paris VI.
 1. Delphine Saudo (Masters 2001; co-supervised with Bernard Cazelles) Population synchrony in complex oscillating populations. University of Paris VI.
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Postdoctoral Researchers:

Dr. Jerome Dupras, NSERC (2014), Ecosystem service evaluation and ecological connectivity.

Dr. Cecile Albert, Marie Curie Fellowship (2010-2014), Landscape networks for climate change and biodiversity.

Dr. Zoe Lindo, NSERC Fellowship (2009-2012) Impacts of climate change and fragmentation on a boreal moss ecosystem.

Dr. Bronwyn Rayfield, NSERC Fellowship (2010-2012). Network analytic approaches to habitat fragmentation.

Research Assistants and Technicians:

Helen Elina (PhD) Research assistant, 2015-present.

Maria Dumitru (M.Sc.) Research assistant 2011-present.

Alan Dabrowski (MBA), Research assistant 2012-2013.

Mark Fox (M.Sc.) Research Technician 2005-2006.

Dr. Yelena Zhimbey, Research Assistant 2006.

Dr. Igor Mitrofanov, Research assistant 2006.

Professional Societies:

Ecological Society of America, British Ecological Society, Canadian Society for Ecology and Evolution.