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Career summary

M.Sc. (zoology), McGill University, 1969; Ph.D. (biology), University of Colorado, 1971. Postdoctoral fellow at *Genetiska Institutionen*, Lunds Universitet, Sweden, in 1971-72. Research associate, then Research director at Université du Québec à Montréal, and finally Professor in the *Département de physique*. Moved to *Département de sciences biologiques*, Université de Montréal, in 1980 (Associate Professor). Full Professor in 1984.

Honors

- 1986 – *Michel-Jurdant* prize for Environment Sciences, Association canadienne-française pour l'Avancement des Sciences (ACFAS).
- 1989-1991 – Killam Research Fellow, Canada Council.
- 1992 – Elected *Fellow of the Royal Society of Canada* (Academy of Science).
- 1994 – Recipient of the *Distinguished Statistical Ecologist Award* of the *International Congress of Ecology (INTECOL)*.
- 1995 – Recipient of the Romanowski Medal (environmental science) of the Royal Society of Canada.
- 1999 – Recipient of the *Twentieth Century Distinguished Service Award* “for outstanding contribution to the synergistic development and direction of statistics, ecology, environment and society” awarded by the Ninth Lukacs Symposium “*Frontiers of Environmental and Ecological Statistics for the 21st Century*”.
- 2002 – *ISI Highly Cited Researcher in Ecology/Environment*, Institute for Scientific Information, USA (<http://isihighlycited.com/>).
- 2005 – Recipient of the *Prix Marie-Victorin*, the annual prize of the Government of Québec for highest achievements in research in pure and applied sciences.
- 2007 – Officer of the *National Order of Québec*.
- 2011 – Recipient of Université de Montréal *Excellence in Teaching Award*, *Full Professor* category.
- 2011 – Recipient of the *Excellence in Teaching Award* of the Faculty of Arts and Science, Université de Montréal, *Science Sector* category.

Scientific production

- 9 books on numerical ecology;
- 13 contributions to other books (chapters);
- 243 papers published or in press in refereed journals;
- 22 refereed conference proceedings;
- 1 English-French vocabulary of numerical ecology and statistics
- 236 papers presented at scientific conferences;
- 301 research seminars;
- 59 short courses given in 38 universities and scientific institutes around the world;
- 13 participations to international working groups.

Education

B.A., Collège Saint-Viateur, Outremont, 1965 (College affiliated to Université de Montréal).
 Two years of B.Sc. in biological sciences, Université de Montréal, 1965–1967.
 M.Sc., McGill University, 1969 (Zoology).
 Ph.D., University of Colorado, 1971 (Biology).

Positions held

- 1971–72: Postdoctoral fellow (CNRC), Genetiska Institutionen, Lunds Universitet, Sweden.
- 1972–73: Research associate, Centre de recherche écologique, Univ. du Québec à Montréal.
- 1973–80: Research director, Centre de recherche en sciences de l'environnement, Université du Québec à Montréal. NSERC Research Associate, 1977-80.
- 1980: Professor, Département de physique, Université du Québec à Montréal.
- 1980–84: Associate professor, Département de sciences biologiques, Université de Montréal.
- 1984– : Full professor, Département de sciences biologiques, Université de Montréal.

Publications

1. Books

- 1.1 Legendre, L. & P. Legendre. 1979. Écologie numérique. Tome 1: Le traitement multiple des données écologiques. Collection d'Écologie no 12. Masson, Paris et les Presses de l'Université du Québec. xiv + 197 p.
- 1.2 Legendre, L. & P. Legendre. 1979. Écologie numérique. Tome 2: La structure des données écologiques. Collection d'Écologie no 13. Masson, Paris et les Presses de l'Université du Québec. viii + 254 p.
- 1.3 Legendre, L. & P. Legendre. 1983. Numerical ecology. Developments in environmental modelling, 3. Elsevier Scientific Publ. Co., Amsterdam Netherlands. xvi + 419 p.
- 1.4 Legendre, L. & P. Legendre. 1984. Écologie numérique, deuxième édition revue et augmentée. Tome 1: Le traitement multiple des données écologiques. Masson, Paris et les Presses de l'Université du Québec. xv + 260 p.
- 1.5 Legendre, L. & P. Legendre. 1984. Écologie numérique, deuxième édition revue et augmentée. Tome 2: La structure des données écologiques. Masson, Paris et les Presses de l'Université du Québec. viii + 335 p.
- 1.6 Legendre, P. & L. Legendre [eds.] 1987. Developments in numerical ecology. NATO ASI series, Vol. G-14. Springer-Verlag, Berlin. xi + 585 pages.
- 1.7 Legendre, P. & L. Legendre. 1998. Numerical ecology, 2nd English edition. Elsevier Science BV, Amsterdam. xv + 853 pages. <<http://www.fas.umontreal.ca/biol/legendre/numecol.html>>
- 1.8 Borcard, D., F. Gillet and P. Legendre. 2011. Numerical ecology with R. Use R! series, Springer Science, New York. xi + 306 pp. ISBN: 978-1-4419-7975-9. e-ISBN: 978-1-4419-7976-6.
- 1.9 Legendre, P. & L. Legendre. 2012. Numerical ecology, 3rd English edition. Developments in Environmental Modelling, Vol. 24. Elsevier Science BV, Amsterdam. xiv + 990 pp. ISBN-13: 978-0444538680. <<http://www.elsevierdirect.com/ISBN/9780444538680/Numerical-Ecology>>

2. Refereed book chapters

- 2.1 Legendre, L. & P. Legendre. 1978. Associations. Pp. 261-272 in: Phytoplankton Manual. Monographs on oceanographic methodology no 6. UNESCO, Paris. 338 pp.
- 2.2 Legendre, P. & L. Legendre. 1982. Échantillonnage et traitement des données. Ch. 3 (pp. 163-216) in: S. Frontier [éd.] Stratégies d'échantillonnage en écologie. Collection d'Écologie no 16. Masson, Paris. xviii + 494 pp.
- 2.3 Legendre, P. 1983. Numerical ecology: developments and recent trends. 505-523 in: J. Felsenstein [ed.] Numerical taxonomy. Nato Advanced Study Institute Series G (Ecological Sciences), No. 1. x + 644 pp.
- 2.4 Legendre, P. 1987. Constrained clustering. Pp. 289-307 in: P. Legendre & L. Legendre [eds.]

- Developments in numerical ecology. NATO ASI series, Vol. G-14. Springer-Verlag, Berlin. xi + 585 pp.
- 2.5 Lapointe, F.-J. & P. Legendre. 1996. Evolution of the marsupial brain: Does it reflect the evolution of behavior? Pp. 187-212 *in*: Animal and their environment: A tribute to Paul Pirlot (ed. by T. Cabana). Orbis, Frelighsburg.
 - 2.6 Renaud, J. & P. Legendre. 1997. Nouveaux immigrants et localisation résidentielle. P. 103-127 *in*: D. Meintel, V. Piché, D. Juteau et S. Fortin [éds.] Le quartier Côte-des-Neiges à Montréal – Les interfaces de la pluriethnicité. L'Harmattan, Paris. 323 p.
 - 2.7 Legendre, P. et D. Borcard. 2006. Quelles sont les échelles spatiales importantes dans un écosystème ? Chapitre 19 (p. 425-442) *in*: J.-J. Droesbeke, M. Lejeune et G. Saporta (éds), *Analyse statistique de données spatiales*. Éditions TECHNIP, Paris. 468 pp. ISBN 10 : 2710808730.
 - 2.8 Makarevich, V., D. Kevorkov and P. Legendre. 2006. Phylogenetic network construction approaches. Pp. 61-97 *in*: *Applied Mycology and Biotechnology, Volume 6: Bioinformatics*. Elsevier Science B. V., Amsterdam.
 - 2.9 Legendre, P. 2007. Préface. Pp. III-IV *in*: Scherrer, B. Biostatistique. Chenelière Éducation, Montréal.
 - 2.10 Legendre, P. 2010. Coefficient of concordance. Pp. 164-169 *in*: *Encyclopedia of Research Design, Vol. 1*. N.J. Salkind, ed. SAGE Publications, Inc., Los Angeles. 1776 pp. ISBN: 9781412961271.
 - 2.11 Legendre, P. and H. J. B. Birks. 2012. Clustering and partitioning. Chapter 7, pp. 167-200 *in*: *Tracking Environmental Change using Lake Sediments, Volume 5: Data handling and numerical techniques*. H. J. B. Birks, A. F. Lotter, S. Juggins and J. P. Smol [eds.]. Springer, Dordrecht, The Netherlands. xi + 716 pp.
 - 2.12 Legendre, P. and H. J. B. Birks. 2012. From classical to canonical ordination. Chapter 8, pp. 201-248 *in*: *Tracking Environmental Change using Lake Sediments, Volume 5: Data handling and numerical techniques*. H. J. B. Birks, A. F. Lotter, S. Juggins and J. P. Smol [eds.]. Springer, Dordrecht, The Netherlands. xi + 716 pp.
 - 2.13 Legendre, P. 2013. Indicator species: computation. *Encyclopedia of Biodiversity, 2nd edition*. Simon Levin [ed.] Elsevier Science B. V., Amsterdam (in press).

3. Papers in refereed journals

- 3.1 Legendre, P. & P. Vaillancourt. 1969. A mathematical model for the entities species and genus. *Taxon* 18 (3): 245-252.
- 3.2 Legendre, P. & D. M. Steven. 1969. Dénombrement des chromosomes chez quelques cyprins. *Naturaliste can. (Québec)* 96 (6): 913-918.
- 3.3 Legendre, P. 1970. The bearing of *Phoxinus* (Cyprinidae) hybridity of the classification of its North American species. *Can. J. Zool.* 48 (6): 1167-1177.
- 3.4 Legendre, P. 1970. Comptage de vertèbres chez quelques cyprinidae du Québec et de l'Ontario.

Naturaliste can. (Québec) 97 (3): 325-329.

- 3.5 Legendre, P. 1971. Circumscribing the concept of the genus. *Taxon* 20 (1): 137-139.
- 3.6 Legendre, P., C. B. Schreck & R. J. Behnke. 1972. Taximetric analysis of selected groups of western North American Salmo with respect to phylogenetic divergences. *Syst. Zool.* 21 (3): 292-307.
- 3.7 Legendre, P. & D. J. Rogers. 1972. Characters and clustering in taxonomy: a synthesis of two taximetric procedures. *Taxon* 21 (5/6): 567-606.
- 3.8 Legendre, P. 1972. The definition of systematic categories in biology. *Taxon* 21 (4): 381-406.
- 3.9 Ahmad A., A. Chodorowski & P. Legendre. 1974. Studies on the effect of pollution on the diatom communities of St. Lawrence River near Montreal. 1. Physico-chemical and biological characterization of the two water masses (Ottawa and St. Lawrence rivers). *Water Pollution Research in Canada* 9: 135-141.
- 3.10 Legendre, P. 1975. A posteriori weighting of descriptors. *Taxon* 24 (5/6): 603-608.
- 3.11 Legendre, P. 1975. A field-trip micro-technique for studying fish leukocyte chromosomes. *Can. J. Zool.* 53 (10): 1443-1446.
- 3.12 Legendre, P. 1976. An appropriate space for clustering selected groups of Western North American Salmo. *Syst. Zool.* 25 (2): 193-195.
- 3.13 Legendre, P. & A. Chodorowski. 1977. A generalization of Jaccard's association coefficient for Q analysis of multi-state ecological data matrices. *Ekologia Polska* 25 (2): 297-308.
- 3.14 Legendre, P., F. Long, R. Bergeron & J.-M. Levasseur. 1978. Inventaire aérien de la faune dans le Moyen Nord québécois. *Can J. Zool.* 56: 451-462.
- 3.15 Legendre, P. & A. Beauvais. 1978. Niches et associations de poissons des lacs de la Radissonie québécoise. *Naturaliste can. (Québec)* 105: 137-158. [Traduction en anglais no 1275421 ENV. par le Bureau des Traductions, Secrétariat d'Etat, pour le compte de Environnement Canada].
- 3.16 Pinel-Alloul, B., P. Legendre & E. Magnin. 1979. Zooplankton limnétique de 46 lacs et 17 rivières du territoire de la Baie de James. *Can. J. Zool.* 57 (8): 1693-1709.
- 3.17 Legendre, P. 1979. Le protistologue et la taxinomie numérique. *L'Année Biologique* 18: 493-519.
- 3.18 Legendre, P., F. Long & A. Beauvais. 1980. Typologie écologique d'un groupe de lacs du Moyen Nord québécois. *Annales de Limnologie* 16 (2): 135-158.
- 3.19 André, P., P. Legendre & P. P. Harper. 1981. La sélectivité de trois engins d'échantillonnage du benthos lacustre. *Annales de Limnologie* 17: 25-40.
- 3.20 Troussellier, M. & P. Legendre. 1981. A functional evenness index for microbial ecology. *Microb. Ecol.* 7: 283-296.
- 3.21 Legendre, L., M. Fréchette & P. Legendre. 1981. The contingency periodogram: a method of identifying rhythms in series on nonmetric ecological data. *J. Ecol.* 69: 965-979.
- 3.22 Fortin, N. & P. Legendre. 1982. Application de la cartographie écologique à la localisation environnementale d'un réseau routier. *Naturaliste can. (Québec)* 109: 661-670.

- 3.23 Lamarche, A., P. Legendre & A. Chodorowski. 1982. Facteurs responsables de la distribution des gastéropodes dulcicoles dans le fleuve Saint-Laurent. *Hydrobiologia* 89: 61-76.
- 3.24 St-Louis, N. & P. Legendre. 1982. A water quality index for lake beaches. *Water Research* 16: 945-948.
- 3.25 Hudon, C., E. Bourget & P. Legendre. 1983. An integrated study of the factors influencing the choice of the settling site of *Balanus crenatus* cyprid larvae. *Can. J. Fish. Aquat. Sci.* 40: 1186-1194.
- 3.26 Legendre, L. & P. Legendre. 1983. Partitioning ordered variables into discrete states for discriminant analysis of ecological classifications. *Can. J. Zool.* 61: 1002-1010.
- 3.27 Legendre, P. & V. Legendre. 1984. Postglacial dispersal of freshwater fishes in the Québec peninsula. *Can. J. Fish. Aquat. Sci.* 41: 1781-1802.
- 3.28 Legendre, P., D. Planas & M.-J. Auclair. 1984. Succession des communautés de gastéropodes dans deux milieux différant par leur degré d'eutrophisation. *Can. J. Zool.* 62: 2317-2327.
- 3.29 De Puytorac, P., J. Grain, P. Legendre & J. Dévaux. 1984. Essai d'application de l'analyse phénétique à la classification du phylum des Ciliophora. *Journal of Protozoology* 31: 496-507.
- 3.30 Legendre, P. 1984. L'analyse des données en relation avec l'échantillonnage. *Revue d'Entomologie du Québec* 29: 86-100.
- 3.31 Legendre, P., B. Baleux & M. Troussellier. 1984. Dynamics of pollution-indicator and heterotrophic bacteria in a sewage treatment lagoon. *Appl. Environm. Microbiol.* 48: 586-593.
- 3.32 Legendre, P., S. Dallot & L. Legendre. 1985. Succession of species within a community: chronological clustering, with applications to marine and freshwater zooplankton. *American Naturalist* 125: 257-288.
- 3.33 Hudon, C., P. Fradette & P. Legendre. 1986. La répartition horizontale et verticale des larves de homard (*Homarus americanus*) autour des Iles-de-la-Madeleine, golfe du Saint-Laurent. *Can. J. Fish. Aquat. Sci.* 43: 2164-2176.
- 3.34 Gower, J. C. & P. Legendre. 1986. Metric and Euclidean properties of dissimilarity coefficients. *Journal of Classification* 3: 5-48.
- 3.35 Legendre, P. 1986. Reconstructing biogeographic history using phylogenetic-tree analysis of community structure. *Syst. Zool.* 35: 68-80.
- 3.36 Troussellier, M., P. Legendre & B. Baleux. 1986. Modeling of the evolution of bacterial densities in an eutrophic ecosystem (sewage lagoons). *Microbial Ecology* 12: 355-379.
- 3.37 Hudon, C. & P. Legendre. 1987. The ecological implications of growth forms in epibenthic diatoms. *Journal of Phycology* 23: 434-441.
- 3.38 Galzin, R. & P. Legendre. 1987. The fish communities of a coral reef transect. *Pacific Science* 41: 158-165.
- 3.39 Bell, M. A. & P. Legendre. 1987. Multicharacter chronological clustering in a sequence of fossil sticklebacks. *Syst. Zool.* 36: 52-61.
- 3.40 Legendre, P. & M. Troussellier. 1988. Aquatic heterotrophic bacteria: modeling in the presence

of spatial autocorrelation. *Limnology and Oceanography* 33: 1055-1067.

- 3.41 Ouimet, C. & P. Legendre. 1988. Practical aspects of modelling ecological phenomena using the cusp catastrophe. *Ecological Modelling* 42: 265-288.
- 3.42 Legendre, P. & M.-J. Fortin. 1989. Spatial pattern and ecological analysis. *Vegetatio* 80: 107-138.
- 3.43 Sokal, R. R., N. L. Oden, P. Legendre, M.-J. Fortin, J. Kim & A. Vaudor. 1989. Genetic differences among language families in Europe. *American Journal of Physical Anthropology* 79: 489-502.
- 3.44 Amanieu, M., P. Legendre, M. Troussellier & G.-F. Frisoni. 1989. Le programme Écothau: théorie écologique et base de la modélisation. *Oceanologica Acta* 12: 189-199.
- 3.45 Troussellier, M. & P. Legendre. 1989. Dynamics of fecal coliform and culturable heterotroph densities in an eutrophic ecosystem: stability of models and evolution of these bacterial groups. *Microbial Ecology* 17: 227-235.
- 3.46 Legendre, P., M. Troussellier, V. Jarry & M.-J. Fortin. 1989. Design for simultaneous sampling of ecological variables: from concepts to numerical solutions. *Oikos* 55: 30-42.
- 3.47 Fortin, M.-J., P. Drapeau & P. Legendre. 1989. Spatial autocorrelation and sampling design in plant ecology. *Vegetatio* 83: 209-222.
- 3.48 Sokal, R. R., N. L. Oden, P. Legendre, M.-J. Fortin, J. Kim, B. A. Thomson, A. Vaudor, R. M. Harding & G. Barbujani. 1990. Genetics and language in European populations. *American Naturalist* 135: 157-175.
- 3.49 Legendre, P., N. L. Oden, R. R. Sokal, A. Vaudor & J. Kim. 1990. Approximate analysis of variance of spatially autocorrelated regional data. *Journal of Classification* 7: 53-75.
- 3.50 Lapointe, F.-J. & P. Legendre. 1990. A statistical framework to test the consensus of two nested classifications. *Syst. Zool.* 39 (1): 1-13.
- 3.51 Ardisson, P.-L., E. Bourget & P. Legendre. 1990. Multivariate approach to study species assemblages at large spatiotemporal scales: The community structure of the epibenthic fauna of the Estuary and Gulf of St. Lawrence. *Can. J. Fish. Aquat. Sci.* 47: 1364-1377.
- 3.52 Hudon, C., P. Legendre, A. Lavoie, J.-M. Dubois & G. Vigeant. 1991. Effets du climat et de l'hydrographie sur le recrutement du homard américain (*Homarus americanus*) dans le nord du golfe du Saint-Laurent. Pp. 161-177 in: Therriault, J.-C. [éd.] Le golfe du Saint-Laurent: petit océan ou grand estuaire? *Can. Spec. Publ. Fish. Aquat. Sci.* 113.
- 3.53 Jarry, V., G.-F. Frisoni & P. Legendre. 1991. Organisation spatiale et modélisation écologique d'un peuplement phytoplanctonique de lagune (étang de Thau, France). *Oceanologica Acta* 14: 473-488.
- 3.54 Dufrêne, M. & P. Legendre. 1991. Geographic structure and potential ecological factors in Belgium. *J. Biogeogr.* 18: 257-266.
- 3.55 Lapointe, F.-J. & P. Legendre. 1991. The generation of random ultrametric matrices representing dendrograms. *Journal of Classification* 8: 177-200.
- 3.56 Legendre, P. & P. Dutilleul. 1991. Comments on Boyle's *Acidity and organic carbon in lake*

water: variability and estimation of means. *Journal of Paleolimnology* 6: 103-110.

- 3.57 Simard, Y., P. Legendre, G. Lavoie & D. Marcotte. 1992. Mapping, estimating biomass, and optimizing sampling programs for spatially autocorrelated data: Case study of the Northern Shrimp (*Pandalus borealis*). *Can. J. Fish. Aquat. Sci.* 49: 32-45.
- 3.58 Demers, S., J. Kim, P. Legendre & L. Legendre. 1992. Analyzing multivariate flow cytometric data in aquatic sciences. *Cytometry* 13: 291-298.
- 3.59 Leduc, A., P. Drapeau, Y. Bergeron & P. Legendre. 1992. Study of spatial components of forest cover using partial Mantel tests and path analysis. *Journal of Vegetation Science* 3: 69-78.
- 3.60 Borcard, D., P. Legendre & P. Drapeau. 1992. Partialling out the spatial component of ecological variation. *Ecology* 73: 1045-1055.
- 3.61 Lapointe, F.-J. & P. Legendre. 1992. A statistical framework to test the consensus among additive trees (cladograms). *Syst. Biol.* 41: 158-171.
- 3.62 Dutilleul, P. & P. Legendre. 1992. Lack of robustness in two tests of normality against autocorrelation in sample data. *J. Statist. Comput. Simul.* 42: 79-91.
- 3.63 Élie, D. & P. Legendre. 1992. Autocorrélation spatiale et déplacement de la criminalité. *Criminologie* 25: 139-154.
- 3.64 Bourgault, G., D. Marcotte & P. Legendre. 1992. The multivariate (co)variogram as a spatial weighting function in classification methods. *Mathematical Geology* 24: 463-478.
- 3.65 Bach, P., P. Legendre, M. Amanieu & G. Lasserre. 1992. Strategy of eel (*Anguilla anguilla* L.) exploitation in the Thau lagoon. *Estuarine, Coastal and Shelf Science* 35: 55-73.
- 3.66 Lapointe, F.-J. & P. Legendre. 1992. Statistical significance of the matrix correlation coefficient for comparing independent phylogenetic trees. *Syst. Biol.* 41: 378-384.
- 3.67 Planes, S., A. Lefèvre, P. Legendre & R. Galzin. 1993. Spatio-temporal variability in fish recruitment to a coral reef (Moorea, French Polynesia). *Coral Reefs* 12: 105-113.
- 3.68 Dutilleul, P. & P. Legendre. 1993. Spatial heterogeneity against heteroscedasticity: an ecological paradigm versus a statistical concept. *Oikos* 66: 152-171.
- 3.69 Legendre, P. 1993. Spatial autocorrelation: trouble or new paradigm? *Ecology* 74: 1659-1673 [Invited paper, published as part of a *Special Feature*].
- 3.70 Fromentin, J.-M., F. Ibanez & P. Legendre. 1993. A phytosociological method for interpreting plankton data. *Mar. Ecol. Progr. Ser.* 93: 285-306.
- 3.71 Cattaneo, A., P. Legendre & T. Niyonsenga. 1993. Exploring periphyton unpredictability. *Journal of the North American Benthological Society* 12: 418-430.
- 3.72 Lapointe, F.-J. & P. Legendre. 1994. A classification of pure malt Scotch whiskies. *Applied Statistics* 43: 237-257.
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- 3.74 Legendre, P. & D. Borcard. 1994. Rejoinder. *Environmental and Ecological Statistics* 1: 57-61.

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- 3.76 De Puytorac, P., J. Grain & P. Legendre. 1994. An attempt at reconstructing the phylogenetic tree of Ciliophora using parsimony methods. *European Journal of Protistology* 30: 1-17.
- 3.77 Roy, R., P. Legendre, R. Knowles & M.N. Charlton. 1994. Denitrification and methane production in sediment of Hamilton Harbour (Canada). *Microbial Ecology* 27: 123-141.
- 3.78 Legendre, P., F.-J. Lapointe & P. Casgrain. 1994. Modeling brain evolution from behavior: a permutational regression approach. *Evolution* 48 (5): 1487-1499.
- 3.78 Magnan, P., M. A. Rodríguez, P. Legendre & S. Lacasse. 1994. Dietary variation in a freshwater fish species: relative contribution of biotic interactions, abiotic factors, and spatial structure. *Can. J. Fish. Aquat. Sci.* 51: 2856-2865.
- 3.80 He, F., P. Legendre, C. Bellehumeur & J. V. LaFrankie. 1994. Diversity pattern and spatial scale: a study of a tropical rain forest of Malaysia. *Environmental and Ecological Statistics* 1: 265-286.
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- 3.82 Lapointe, F.-J. & P. Legendre. 1995. Comparison tests for dendrograms: a comparative evaluation. *Journal of Classification* 12: 265-282.
- 3.83 Pinel-Alloul, B., T. Niyonsenga & P. Legendre. 1995. Spatial and environmental components of freshwater zooplankton structure. *Écoscience* 2: 1-19.
- 3.84 Cadoret, L., P. Legendre, M. Adjerdoud & R. Galzin. 1995. Répartition spatiale des Chaetodontidae dans différents secteurs récifaux de l'île de Moorea, Polynésie française. *Écoscience* 2: 129-140.
- 3.85 Belgrano, A., P. Legendre, J.-M. Dewarumez & S. Frontier. 1995. Spatial structure and ecological variation of meroplankton on the French-Belgian coast of the North Sea. *Mar. Ecol. Progr. Ser.* 128: 43-50.
- 3.86 Belgrano, A., P. Legendre, J.-M. Dewarumez & S. Frontier. 1995. Spatial structure and ecological variation of meroplankton on the Belgian-Dutch coast of the North Sea. *Mar. Ecol. Progr. Ser.* 128: 51-59.
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- 3.88 Mesplé, F., M. Troussellier, C. Casellas & P. Legendre. 1996. Evaluation of simple statistical criteria to qualify a simulation. *Ecological Modelling* 88: 9-18.
- 3.89 Le Boulengé, É., P. Legendre, C. de le Court, P. Le Boulengé-Nguyen & M. Languy. 1996. Microgeographic morphological differentiation in muskrats. *J. Mammalogy* 77 (3): 684-701.
- 3.90 He, F. & P. Legendre. 1996. On species-area relations. *The American Naturalist* 148: 719-737.
- 3.91 Thomson, J. D., G. Weiblen, B. A. Thomson, S. Alfaro & P. Legendre. 1996. Untangling multiple factors in spatial distributions: lilies, gophers, and rocks. *Ecology* 77: 1698-1715. ["Concepts" paper.]

- 3.92 Casgrain, P., P. Legendre, J.-L. Sixou & C. Mouton. 1996. A graph-theory method to establish serological relationships within a bacterial taxon, with example from *Porphyromonas gingivalis*. *Journal of Microbiological Methods* 26: 225-236.
- 3.93 Morand, S., P. Legendre, S. L. Gardner & J.-P. Hugot. 1996. Body size evolution of oxyurid (Nematoda) parasites: the role of hosts. *Oecologia* 107: 274-282.
- 3.94 Legendre, P., R. Galzin & M. L. Harmelin-Vivien. 1997. Relating behavior to habitat: solutions to the fourth-corner problem. *Ecology* 78(2): 547-562.
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- 3.240 Manel, S., F. Gugerli, W. Thuiller, N. Alvarez, P. Legendre, R. Holderegger, L. Gielly and P. Taberlet. 2012. Broad-scale adaptive genetic variation in Alpine plants is mainly driven by temperature and precipitation. *Molecular Ecology* (in press).
- 3.241 Beltrán, C. M. C., F. García-Oliva, P. Legendre and L. I. Falcón. 2012. Nitrogenase activity and associated diversity of microbialite and mat-forming communities from different aquatic environments in Mexico. *Aquatic Microbial Ecology* (in press).
- 3.242 Lacoursière-Roussel, A., D. G. Bock, M. E. Cristescu, F. Guichard, P. Girard, P. Legendre and C. W. McKindsey. 2012. Disentangling invasion processes in a dynamic shipping-boating network. *Molecular Ecology* (in press).
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4. International working groups

- *The ecology of soft-bottom habitats: Matching spatial patterns with dynamic processes*. National Institute of Water and Atmospheric Research (NIWA), Hamilton, New Zealand, January-March 1994.
- *SCALE EXPERT Workshop (Spatial Comparisons Across Large Estuaries: EXPerimental Evaluation of Recent Technologies)*, Centre for Research on Ecological Impacts of Coastal Cities, University of Sydney, Sydney, Australia, 2-22 August 1999.
- *Integrating the Statistical Modeling of Spatial Data in Ecology*. Working Group, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, California. First meeting: 17-23 July 1999. Second meeting: 20-24 February 2000. Third meeting: 26 June - 1st July 2000.
- *Effects on macrobenthic fauna due to oil activities, analysed by different multivariate methods*. Åpent Seminar: Overvåking I Nordsjøen. Det Norske Veritas, Høvik, Norway, 4-6 februar 2000.
- *Diagnostic écologique des écosystèmes et des ressources marines côtières de la République d'Haïti*. Groupe de travail France-Haïti-Québec financé par l'AUPELF. Travaux de terrain du 7 au 21 mai 2000. Compte-rendu des résultats lors d'un séminaire à Port-au-Prince les 11 et 12 juillet 2001.
- *Spatial and temporal community dynamics*. Working Group, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, California. First meeting: 16-20 February 2004. Second meeting: 28 August - 3 September 2004. Third meeting: 23-27 May 2005.
- *European oceanographic expedition*. Participant in the **Momareto** (Ifremer, France) deep-sea research cruise on hydrothermal vents of the Mid-Atlantic Ridge, August 17 – September 6, 2006, on board the *Pourquoi Pas ?* oceanographic vessel of **Ifremer**. In charge of the abyssal sampling design and data analysis.
- *6^{ème} groupe de travail IMROP sur l'évaluation des ressources et l'aménagement des pêcheries*. Conference organised by *Institut mauritanien de recherches océanographiques et des pêches* (IMROP), Nouadhibou, Mauritania, December 11 – 16, 2006. Invited expert, member of the Scientific Committee, and Rapporteur of the Environment Commission.
- *Diagnostic écologique des écosystèmes et des ressources marines côtières de la République d'Haïti: 2e volet*. Groupe de travail France-Haïti-Québec financé par l'AUF. Travaux de terrain du 5 au 15 avril 2007.
- *FADA, the next step: exploring possible ways to analyse data* – Freshwater Animal Diversity Assessment (FADA) workshop in Bruges, Belgium, December 5-7, 2008.
- *An interdisciplinary approach to advancing landscape genetics*. Working Group, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, California. First meeting: 18-22 March 2009. Third meeting, 19-23 July 2010. Fourth meeting, 19-22 February 2011.
- *Landscape Genomics Workshop*, Trento, Italie, 23-24 août 2010. Support Action 'FoResTTraC' (Forest ecosystem genomics research), European Economic Community.
- *Community Phylogenetics Workshop*, Université du Québec à Montréal (UQAM), Montréal, October 11-14, 2011, under the auspices of the Québec Centre for Biodiversity Science (QCBS).