

# **Curriculum vitae**

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**Michel Loreau**

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## **Personal information**

Born on April 22nd, 1954 in Uccle (Belgium). Belgian citizenship, married, father of four children.

Private address: 9 rue de la Chapelle, 09190 Gajan, France. Phone: +33 5 6103 5754.

Professional address: Theoretical and Experimental Ecology Station, UMR 5321 CNRS and Paul Sabatier University, 2 route du CNRS, 09200 Moulis, France. Phone: +33 5 6104 0578. Fax : +33 5 6196 0851. E-mail: michel.loreau@cnrs.fr.

## **Diplomas**

1976: Master of Zoological Sciences, with the highest distinction (Free University of Brussels, U.L.B., Belgium).

1977: Agrégé of the higher secondary education, with a high distinction (Free University of Brussels).

1983: Doctor of Science (Ph.D.), with the highest distinction summa cum laude (Free University of Brussels).

## **Positions held**

1977–1978 and 1980–1983: Research Assistant of the National Fund for Scientific Research (FNRS, Belgium) (1978–1980: interruption for non-military national service).

1983–1987: Senior Research Assistant of the National Fund for Scientific Research (Belgium) (with an exceptional renewal in 1985).

1984–1985: Visiting Fellow at Harvard University (Boston, U.S.A.) and at the University of California (Davis, U.S.A.).

1987–1988: Assistant Lecturer and Research Fellow at the Free University of Brussels (U.L.B., Belgium).

1989: Invited Lecturer at the University of Helsinki (Finland).

1990–1992: Programme Manager at the Science Policy Office (Belgium).

1988–1990 and 1992–1993: Assistant Lecturer at the Free University of Brussels.

1993: Visiting Scientist at Oak Ridge National Laboratory (Oak Ridge, U.S.A.).

1987–1996: Lecturer at the Free University of Brussels.

1997: Visiting Fellow at Kyoto University (Japan).

1994–1998: Second-grade Professor at Pierre and Marie Curie University (Paris, France).

1998–2002: First-grade Professor at Pierre and Marie Curie University (Paris, France).

2002–2005: Exceptional-grade Professor at Pierre and Marie Curie University (Paris, France).

1996–2005: Recipient of a Ph.D. supervision and research contract with the Ministry of National Education and the Ministry of Research (France).

1997–2011: Scientific Collaborator at the Free University of Brussels.

2005–2011: Full Professor at McGill University (Montreal, Canada).

2005–2011: Tier 1 Canada Research Chair in Theoretical Community and Ecosystem Ecology at McGill University (Montreal, Canada).

2008–2011: Associate Member of the McGill School of Environment at McGill University (Montreal, Canada).

2017: Visiting Fellow at Kyoto University (Japan).

2012–2018: Adjunct Professor at McGill University (Montreal, Canada).

2003–present: Staff Member of the International Ecology Institute (ECI, Germany).

2011–present: Exceptional-grade Research Director of the National Centre for Scientific Research (CNRS, France).

2013–present: Member of the Institute for Advanced Study in Toulouse (France).

## **Awards and distinctions**

1976: Paul Brien Prize (Belgium).

1977: Winner of the Competition for Travel Grants (Belgium).

1983: Winner of the Annual Competition of the Royal Academy of Belgium.

1984: NATO Scientific Research Fellowship (Belgium).

1991: Agathon De Potter Prize, Royal Academy of Belgium.

1993: Max Poll Prize, Royal Academy of Belgium.

1997: Research Fellowship of the Japan Society for the Promotion of Science.

2001: Finalist, with the BIODEPTH project (*Biodiversity and Ecological Processes in Terrestrial Herbaceous Ecosystems: Experimental Manipulations of Plant Communities*), of the Descartes Prize of the European Union.

2002: International Ecology Institute Prize (ECI, Germany).

2004: Silver Medal of the National Centre for Scientific Research (CNRS, France).

2009: Tomlinson Science Award, McGill University.

2008–2010: Ranked in the Top 10 list of the world's most highly cited researchers in the field of Ecology/Environment (Thomson Reuters).

2011: Per Brinck Oikos Award (Sweden).

2013: The Queen Elizabeth II Diamond Jubilee Medal (Canada).

2014–2015: Included in *The World's Most Influential Scientific Minds* (Thomson Reuters).

2017: Research Fellowship of the Japan Society for the Promotion of Science.

2007–2019: Highly Cited Researcher in the field of Ecology/Environment (Thomson Reuters and Clarivate Analytics).

2019: Grand Prix of the French Society of Ecology and Evolution.

2015–2020: European Research Council Advanced Grant.

2010–present: Fellow of the Royal Society of Canada (Academy of Science).

2013–present: Member of the Academia Europaea.

## **Administrative direction responsibilities**

1993–1994: Secretary of the Institute of Environmental and Land Management of the Free University of Brussels (Belgium).

1996–1999: Coordinator (with R. Ardit) of the Network *Biodiversity and Ecosystem Functioning: Theoretical and Experimental Approaches* of the Federative Institute of Basic and Applied Ecology (Paris, France).

1997–2000: Head of the *Biodiversity and Ecosystem Functioning* research team in the Laboratory of Ecology — Mixed Research Unit 7625 of Pierre and Marie Curie University, the Ecole Normale Supérieure and the National Centre for Scientific Research (CNRS, France). Research team comprising 28 persons (10 researchers and teachers-cum-researchers, 5 technicians and engineers and 13 Ph.D. students, not counting students at Master's and DEA levels).

2004–2007: Director of the Research Organisation *Dynamics of Biodiversity and Functioning of Continental Ecosystems* (GDR 2828) of the National Centre for Scientific Research (CNRS), grouping several hundreds researchers in France.

2006–2008: Focal point at McGill University for the Partnership between Canadian Universities and the Secretariat of the Convention on Biological Diversity (Canada). Member of the Working Group in charge of setting up this Partnership.

2008–2009: Coordinator of the *Conservation, Ecology, Evolution and Behaviour* Group in the Department of Biology at McGill University (Canada).

2011–2015: Deputy Director of the Experimental Ecology Station (USR 2936) of the National Centre for Scientific Research (CNRS, Moulis, France).

2012–2015: Head of the *Biodiversity and Ecosystem Functioning* research team in the Experimental Ecology Station (USR 2936) of the National Centre for Scientific Research (CNRS, Moulis, France).

2012–2016: Head of the Multidisciplinary Thematic Network *Human spatial behaviour, biodiversity and ecosystem services* of the National Centre for Scientific Research (CNRS, France).

2011–2017: Director of the Centre for Biodiversity Theory and Modelling of the National Centre for Scientific Research (CNRS, Moulis, France).

2016–2017: Deputy Director of the Theoretical and Experimental Ecology Station, UMR 5321 of the National Centre for Scientific Research (CNRS) and Paul Sabatier University (Moulis, France).

2016–2017: Head of the *Biodiversity and Ecosystem Functioning* research team in the Theoretical and Experimental Ecology Station, UMR 5321 of the National Centre for Scientific Research (CNRS) and Paul Sabatier University (Moulis, France).

2016–present: Director of the National Research Group *Theory and Modelling of Biodiversity* (GDR 3762) of the National Centre for Scientific Research (CNRS), grouping over a hundred researchers in France.

2016–present: Director of the Theoretical and Experimental Ecology Station, UMR 5321 of the National Centre for Scientific Research (CNRS) and Paul Sabatier University (Moulis, France).

## **Editorial responsibilities**

1996–1997: Member of the Editorial Board of *Acta Oecologica*.

1999–2002: Member of the Editorial Board of *Oecologia*.

1998–2004: Member of the Editorial Board of *Ecology Letters*.

2001–2005: Member of the Editorial Board of *Ecology* and *Ecological Monographs*.

2005: Member of the Editorial Board of the *Proceedings of the International Conference Biodiversity Science and Governance*, published by the National Museum of Natural History, Paris, France.

2003–2006: Member of the Editorial Board of *The American Naturalist*.

2002–present: Member of the Advisory Board of *Frontiers in Ecology and the Environment*.

2003–present: Member of the Editorial Board of *PLoS Biology*.

2004–present: Head of the Section *Community Ecology and Biodiversity* of the Faculty of 1000.

2012–present: Member of the Advisory Board of *PLoS Biology*.

Consulted as a referee by numerous scientific journals:

1. *Acta Oecologica*,
2. *Annales de la Société Entomologique de France*,
3. *Annales de la Société Royale Zoologique de Belgique*,
4. *Annales Zoologici Fennici*,
5. *Annals of Applied Biology*,
6. *Aquatic Living Resources*,
7. *Aquatic Microbial Ecology*,
8. *Basic and Applied Ecology*,
9. *Belgian Journal of Zoology*,
10. *BioScience*,
11. *Biotropica*,
12. *BMC Ecology*,
13. *Comptes rendus de l'Académie des Sciences, Sciences de la Vie*,
14. *Current Biology*,
15. *Diversity and Distributions*,
16. *Ecography*,
17. *Ecological Entomology*,
18. *Ecological Complexity*,
19. *Ecological Modelling*,
20. *Ecological Monographs*,
21. *Ecology*,
22. *Ecology Letters*,
23. *Ecoscience*,
24. *Estuaries*,
25. *Ethics in Science and Environmental Politics*
26. *European Journal of Entomology*,
27. *Experientia*,
28. *F1000 Research*,
29. *Frontiers in Ecology and the Environment*,
30. *Functional Ecology*,
31. *Global Change Biology*,
32. *Global Ecology and Biogeography*,
33. *International Journal of Plant Sciences*,
34. *Journal of Ecology*,
35. *Journal of Animal Ecology*,
36. *Journal of Environment and Development*,
37. *Journal of Mathematical Biology*,
38. *Journal of Molluscan Studies*,
39. *Journal of Sea Research*,

- 40. *Journal of Theoretical Biology*,
- 41. *Journal of Vegetation Science*,
- 42. *Marine Ecology Progress Series*,
- 43. *Mathematical Biosciences*,
- 44. *Methods in Ecology and Evolution*,
- 45. *Nature*,
- 46. *Nature Communications*,
- 47. *Nature Ecology & Evolution*,
- 48. *Netherlands Journal of Zoology*,
- 49. *New Phytologist*,
- 50. *Oceanologica Acta*,
- 51. *Oecologia*,
- 52. *Oikos*,
- 53. *Pedobiologia*,
- 54. *Philosophical Transactions of the Royal Society, Series B*,
- 55. *Plant Biology*,
- 56. *PLoS Biology*,
- 57. *PLoS Computational Biology*,
- 58. *Polar Biology*,
- 59. *Proceedings of the National Academy of Sciences of the USA*,
- 60. *Proceedings of the Royal Society, Series B*,
- 61. *Science*,
- 62. *Science Advances*,
- 63. *The American Naturalist*,
- 64. *Theoretical Ecology*,
- 65. *Theoretical Population Biology*,
- 66. *Trends in Ecology and Evolution*,
- 67. *Web Ecology*.

Consulted as a referee for chapters in the books:

- 1. Stork, N. E. (Ed.), 1990. — *Ground Beetles: Their Role in Ecological and Environmental Studies*. Intercept Ltd., Andover, U.K.
- 2. Hochberg, M. E., Clobert, J. & Barbault, R. (Eds), 1996. — *Aspects of the Genesis and Maintenance of Biological Diversity*. Oxford University Press, Oxford, U.K.
- 3. *Tendances Nouvelles en Modélisation pour l'Environnement*. Actes des Journées du programme Environnement, Vie et Sociétés, Centre National de la Recherche Scientifique, Paris, France (1996).
- 4. Brandmayr, P., Casale, A., Lövei, G. & Vigna Taglianti, A. (Eds), 2000. — *Natural History and Applied Ecology of Carabid Beetles*. Pensoft Publishers, Sofia, Bulgarie.
- 5. Holyoak, M., Leibold, M. A. & Holt, R. D. (Eds), 2005. — *Metacommunities: Spatial Dynamics and Ecological Communities*. University of Chicago Press, Chicago, U.S.A.
- 6. de Ruiter, P. C., Wolters, V. & Moore, J. C. (Eds), 2005. — *Dynamic Food Webs : Multispecies Assemblages, Ecosystem Development, and Environmental Change*. Academic Press, Burlington, U.S.A.
- 7. Lewis, M. A., Maini, P. K. & Petrovskii, S. V. (Eds), 2013. — *Dispersal, Individual Movement and Spatial Ecology: A Mathematical Perspective*. Springer, Berlin, Germany.

8. Chaddi, A. (Eds), 2016. — *Terrestrial Ecosystem Research Infrastructures*. CRC Press, Taylor & Francis Group, Boca Raton, U.S.A. (in preparation).

## **National and international scientific committees**

- 1991: Belgian representative in the EUROENVIRON Executive Committee.
- 1991: Belgian representative in the Preparatory Meeting for the EERO (European Environmental Research Organization) Standing Conference, in Davos (Switzerland).
- 1991–1992: Member of the International Group of Funding Agencies for Global Change Research (IGFA).
- 1991–1992: Member of the GENEVER Group of Global Change Coordinators.
- 1991–1992: Member of the National Advisory Council on Climate, Environment and Development (Belgium).
- 1991–1992: Supply member of the Committee of Advisory Nature STEP/EPOCH and of the Committee of the Environment Research Programme 1991–1994 of the European Communities.
- 1997: Member of the Working Group of the National Centre for Scientific Research (France) for setting up the *Continental Biosphere* national programme.
- 1998: Member of the Publication Review Committee of the International Union of Biological Sciences.
- 1995–1999: Member of the Scientific Board of the Centre of Functional and Evolutionary Ecology (CEFE) — UPR 8481 of the National Centre for Scientific Research (CNRS) in Montpellier (France).
- 1996–1999: Member of the Scientific Boards of the Laboratory of Biological Oceanography and Marine Plankton Ecology and the Laboratory of Marine Physics and Chemistry — UPRES-A 7076 and 7077 of the National Centre for Scientific Research in Villefranche-sur-Mer (France).
- 1996–1999: Member of the Scientific Board of the Oceanological Observatory of Banyuls-sur-Mer — UMR 7621, UMR 7628 and FR 639 of the National Centre for Scientific Research in Banyuls-sur-Mer (France).
- 1997–1999: Member of the Scientific Board of the Laboratory of Biometrics, Genetics and Biology of Populations — UMR 5558 of the National Centre for Scientific Research in Lyon (France).
- 1999: Member of the Scientific Committee of the *Tree Growth, Production and Dynamics of Forest Stands* programme of the National Institute of Agricultural Research (INRA, France).
- 1999: Member of the Scientific Evaluation Committee of the *Ecosystem Functioning and Conservation Biology* Laboratory — UMR 6553 of the National Centre for Scientific Research in Rennes (France).
- 1999: Member of the Scientific Committee of the international meeting *Herbivore Feeding Strategies, Population Processes and Impact on Biodiversity* of the Centre for Biological Studies

of Chizé (France), the National Centre for Scientific Research (France) and the Ungulate Research Group (United Kingdom), in Chizé (France).

1995–2000: Member of the National Board of Scientific Research (France) — Section 30: Biological Diversity, Populations, Ecosystems and Evolution.

2000: Deputy member of the Admission Jury of the competitive entry examinations of research scientists for the Universe Sciences Department of the National Centre for Scientific Research (France).

2000: Member of the Scientific Programmes Committee of the International Union of Biological Sciences.

1996–2001: Member of the Scientific Steering Committee and of the Executive Committee of DIVERSITAS, the international programme of biodiversity science.

1997–2001: Member of the Scientific Board of the *Biodiversity and Forest Management* programme of the ECOFOR (Forest ecosystems) Public Interest Group (France).

2000–2002: Member of the Scientific Steering Committee of the *Global Change and Terrestrial Ecosystems* (GCTE) Core Project of the International Geosphere–Biosphere Programme (IGBP).

2001–2002: Co-chair of the Task Force in charge of restructuring DIVERSITAS, the international programme of biodiversity science.

2001–2002: Member of the International Scientific Advisory Board of the Long-Term German Biodiversity Project of the German Science Foundation, in Jena.

2002: Chair of the Scientific Committee of the Review Conference of the European Science Foundation programme *Linking Community and Ecosystem Ecology* (LINKECOL), in Ceske Budejovice (Czech Republic).

2002: Member of the Scientific Committee of the Symposium *Regards Croisés sur les Changements Globaux* organised by the French National Committee of Global Change Research and the National Centre of Space Studies, in Arles (France).

2000–2003: Member of the Scientific Board of the *Quantitative Ecology* Incentive Coordinated Action of the Ministry of Research (France).

2003: Member of the Working Group *Research in the Service of Sustainable Development* of the Ministry of Research and New Technologies (France).

2003: Member of the *Ecology* Working Group of the National Institute of Agricultural Research (INRA, France).

2003: Chair of the International Selection Committee for the position of Executive Officer of the Global Water System Project of the Earth System Science Partnership.

1998–2004: Member of the Executive Committee of the International Union of Biological Sciences.

1999–2004: Chair of the Steering Committee of the European Science Foundation programme *Linking Community and Ecosystem Ecology* (LINKECOL).

2003–2004: Chair of the Scientific Committee of the International Conference *Linking Community and Ecosystem Ecology: Recent advances and Future Challenges*, in Palma de Mallorca (Spain).

1998–2005: Member of the International Scientific Committee of the ATIPE programme *Biodiversity Dynamics: From Organisms to Ecosystems* of the National Centre for Scientific Research (France).

2000–2005: Member of the Committee of the Ecological Society of America (ESA) in charge of writing a consensus white paper and an ESA Position statement on biodiversity and ecosystem functioning.

2001–2005: Leader of the *Biodiversity and Ecosystem Functioning* Working Group of the French Biodiversity Institute.

2001–2005: Member of the Scientific Board of the Department of Sciences of the Universe of the National Centre for Scientific Research (France).

2002–2005: Member of the Scientific Committee of the National Institute of Sciences of the Universe of the National Centre for Scientific Research (France).

2002–2005: Member of the Specialised Committee on Continental Surfaces and Interfaces of the National Institute of Sciences of the Universe of the National Centre for Scientific Research (France).

2003–2005: Chair of the Scientific Committee of the International Conference *Biodiversity Science and Governance* organised by France under the high patronage of Jacques Chirac, President of the French Republic, and Koïchiro Matsuura, Director-General of UNESCO, in Paris (France).

2003–2005: Chair of the Scientific Committee of the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).

2003–2005: Member of the Board of the Beijer International Institute of Ecological Economics of the Royal Swedish Academy of Sciences.

2004–2005: Chair of the Review Panel of the EuroDIVERSITY programme of the European Science Foundation.

2005: Chair of the Terrestrial Ecology Jury of the International Ecology Institute (ECI, Germany).

2005: Chair of the Evaluation Committee of the Laboratory *Ecology, Systematics and Evolution* — UMR 8079 of the National Centre for Scientific Research in Orsay (France).

2000–2006: Member of the Scientific Committee of the Ecotron of the Centre of Functional and Evolutionary Ecology (CEFE), in Montpellier (France).

2004–2006: Member of the National French Global Change Committee of the Academy of Sciences (France).

2005–2006: Member of the International Organising Committee of the Earth System Science Partnership Global Environmental Change Open Science Conference, *Global Environmental Change: Regional Challenges*, in Beijing (China).

2005–2006: Chair of the interim International Steering Committee of the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity (IMoSEB).

2005–2006: Member of the Scientific Board of the National Museum of Natural History (France).

2000–2007: Member of the Scientific Committee of the French Biodiversity Institute.

2002–2007: Chair of the Scientific Committee of DIVERSITAS, the international programme of biodiversity science.

2002–2007: Member of the Scientific Committee of the International Geosphere–Biosphere Programme (IGBP).

2002–2007: Member of the Scientific Committee of the International Human Dimensions Programme on Global Environmental Change (IHDP).

2006–2007: Co-chair of the International Steering Committee of the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity (IMoSEB).

2007: Member of the Scientific Committee of the Earth System Science Partnership, grouping the four international programmes on global change.

2007–2008: Member of the Strategic Network Selection Committee of the Natural Sciences and Engineering Research Council of Canada.

2008: Past Chair of the Scientific Committee of DIVERSITAS, the international programme of biodiversity science.

2008: Member of the Terrestrial Ecology Jury of the International Ecology Institute (ECI, Germany).

2003–2010: Member of the International Scientific Advisory Board of the Institute for Biodiversity and Ecosystem Dynamics of the University of Amsterdam (Netherlands).

2010–2011: Member of the Vanier Canada Graduate Scholarships Selection Committee of the Natural Sciences and Engineering Research Council of Canada.

2011: Chair of the Terrestrial Ecology Jury of the International Ecology Institute (ECI, Germany).

2006–2012: Member of the Scientific Board of the Scientific Interest Group *Ile-de-France Research Network on Sustainable Development* (France).

2007–2012: Member of the International Scientific Committee of the European Interdisciplinary Graduate School *Frontiers in Life Sciences* (France).

2009–2012: Member of the Ecological Society of America Eminent Ecologist and Distinguished Service Awards Subcommittee.

2011–2012: Member of the Scientific Committee in charge of establishing the perspectives of the Ecology and Environment Institute of the National Centre for Scientific Research (France).

2012: Member of the Selection Committee for applications for the Multidisciplinary Expert Panel of the Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services in France.

2009–2013: Member of the International Scientific Committee of the International Congress *Ecology: Into the Next 100 Years*, jointly organised by the British Ecological Society and the International Association for Ecology, in London (United Kingdom).

2012–2013: Member of the Scientific Committee of the quarterly programme *Mathematics of Bio-Economics* of Henri Poincaré Institute (France).

2012–2013: Member of the Search Committee for the Director of the Ecology and Environment Institute of the National Centre for Scientific Research (France).

2009–2014: Member of the International Advisory Committee of DIVERSITAS, the international programme of biodiversity science.

2014: Member of the Terrestrial Ecology Jury of the International Ecology Institute (ECI, Germany).

2011–2015: Member of the Scientific Committee of the Laboratory of Excellence *Towards a Unified theory of biotic Interactions: the roLe of environmental Perturbations* (TULIP) (France).

2012–2015: Chair of the International Scientific Advisory Board of the Laboratory of Excellence *Centre for the Study of Biodiversity in Amazonia* (CEBA) (France).

2015: Member of the Evaluation Panel of proposals of University of Gothenburg Centres for Global Societal Challenges (Sweden).

2016: Member of the Review Panel of the Helmholtz Institute for Functional Marine Biodiversity in Oldenburg (Germany).

2017: Member of the Terrestrial Ecology Jury of the International Ecology Institute (ECI, Germany).

2015–2018: Chair of the Scientific Committee of the CEntre for Synthesis and Analysis on Biodiversity (CESAB) (France).

2018–2019: Member of the Selection Committee for proposals of National Centres of Competence in Research of the Swiss National Science Foundation in the fields of *Biology and Environment*.

2019: Member of the Selection Board of senior members of the Academic Institute of France (IUF).

2012–present: Member of the Scientific Advisory Board of the German Centre for Integrative Biodiversity Research (iDiv) (Germany).

2012–present: Member of the International Scientific Advisory Committee of the Research Priority Programme on Global Change and Biodiversity of the University of Zürich (Switzerland).

2013–present: Member of the Executive Committee of the Laboratory of Excellence *Towards a Unified theory of biotic Interactions: the roLe of environmental Perturbations* (TULIP) (France).

2015–present: Member of the Management Committee of the European COST Action *Soil Fauna: Key to Soil Organic Matter Dynamics and Modelling*.

2018–present: Member of the Council for International Multidisciplinary Cooperation of Mendel University in Brno (Czech Republic).

2019–present: Member of the Scientific Advisory Board of Tara Oceans’ international programme *Global Ocean Systems Ecology and Evolution*.

2019–present: Member of the Scientific Advisory Panel of the Geneva Global Initiative (Switzerland).

## **University scientific committees**

1990–1993: Member of the Environment Council of the Free University of Brussels.

1993–1996: Member of the Committee of the Department of Animal Biology of the Free University of Brussels.

1993–1996: Member of the Committee of the Faculty of Sciences of the Free University of Brussels.

1993–1996: Member of the Committee of the Institute of Environmental and Land Management of the Free University of Brussels.

1994–1998: Member of the Commission of Specialists (Section 67: Population biology and ecology) at Pierre and Marie Curie University.

1998–2001: Member of the Scientific Board of the Life Sciences Department at Pierre and Marie Curie University.

1998–2001: Deputy member of the Commission of Specialists (Sections 67: Population biology and ecology, and 68: Organismic biology) at Pierre and Marie Curie University.

2002: Member of the Theses and Habilitations Commission, section Life and Health Sciences, at Pierre and Marie Curie University.

2001–2004: Member of the Commission of Specialists (Sections 67: Population biology and ecology, and 68: Organismic biology) at Pierre and Marie Curie University.

2002–2004: Deputy member of the Commission of Specialists (Section 67: Population biology and ecology) at the Ecole Normale Supérieure (Paris, France).

2004–2005: Deputy member of the Commission of Specialists (Section 67: Population biology and ecology) at Pierre and Marie Curie University.

2007: Ad hoc Member of the Reappointment, Promotion and Tenure Committee of the Department of Biology at McGill University.

2008–2009: Chair of the Search Committee for the Faculty Position in Biodiversity Science in the Department of Biology at McGill University.

2008–2009: Member of the Statutory Selection Committee for Professor Dominique Walker at McGill University.

2009–2010: Member of the Executive Committee of the McGill School of Environment at McGill University.

2010: Member of the Search Committee for the Liber Ero Chair in Environment at McGill University.

2008–2011: Member of the Reappointment, Promotion and Tenure Committee of the Department of Biology at McGill University.

2014: Member of the Selection Committee for the position as Lecturer in Ecological Systems Biology at the Ecole Normale Supérieure (Paris, France).

## **Other expert missions**

1988: Representative of the Foreign Office of the French Community of Belgium for an international cooperation project on *Biological Control of Schistosomiasis Vectors*, in Lwiro (Zaire).

1991: Belgian representative at the 4th EUREKA National Project Coordinators' Meeting (X-ray session on Environment), in Zwolle (Netherlands).

1993: Invited participation in the Workshop *Biodiversity and Ecosystem Function in a European Perspective* of the Commission of the European Communities and the DIVERSITAS international programme, in Wye (United Kingdom).

1993: Expert reviewer for Long-Term Research Grant proposals to the International Science Foundation.

1994: Invited participation in the scientific hearing on the Convention on Biological Diversity organised by the Belgian Office for Scientific, Technical and Cultural Affairs.

1994: Expert reviewer of the *Global Biodiversity Assessment* of the United Nations Environment Programme.

1995: Member of the panel of experts in charge of the evaluation of the proposals submitted to the *Environment and Climate Research and Technological Development Programme* (1994–1995) for the European Commission.

1995: Invited participation in the Peer Review Workshop of the *Global Biodiversity Assessment* of the United Nations Environment Programme, in Panama, as coordinator of Section 4, *Generation, maintenance and loss of biodiversity*.

1995: Invited participation in Section 4 Workshop II of the *Global Biodiversity Assessment* of the United Nations Environment Programme, in Paris.

1997: Representative of the Belgian National Committee at the 26th General Assembly of the International Union of Biological Sciences, in Taipei (Taiwan).

1998: Commissioned by the National Centre for Scientific Research (France) to write a report on the state-of-the-art in the field of biodiversity and ecosystem functioning.

1998: Member of the panel of experts established by the DIVERSITAS international programme to make a scientific assessment of the Convention on Biological Diversity, in Mexico City (Mexico).

- 1998: Expert evaluation of research projects submitted to the *Marine Biodiversity* Network of the *Dynamics of Biodiversity and Environment* National Programme (France).
- 1998: Invited participation in the Plenary Meeting of the International Group of Funding Agencies for Global Change Research, in Ispra (Italy).
- 1996–1999: Expert evaluation of proposals submitted to the Research Programme on Nature Conservation of the Flemish Government (Belgium).
- 1999: Member of the Working Group *Biodiversity and Ecosystem Function: Empirical and Theoretical Analyses of the Relationship* of the National Center for Ecological Analysis and Synthesis (Santa Barbara, U.S.A.).
- 1999: Expert evaluation of proposals to create Advanced Research Centres in Chile, for the National Fund for Science and Technology (FONDECYT, Chile).
- 1999: Session chairman in the International Meeting *Herbivore Feeding Strategies, Population Processes and Impact on Biodiversity*, in Chizé (France).
- 1999: Expert evaluation of proposals of International Programmes of Scientific Cooperation, for the National Centre for Scientific Research (France).
- 1997–2000: Expert evaluations of scientific projects for the *Employment* BQR (Research Quality Bonus) of the University of Paris XI (France).
- 1998 and 2000: Participation as an expert in the Eligibility Jury of the National Board of Scientific Research (France) — Section 12: Planet Earth: Surface Envelopes.
- 2000: Invited participation in the report *Le Monde Végétal: Du Génome à la Plante Entière* of the Academy of Sciences (France).
- 2000: Invited participation in the planning meeting for the International Programme on Ecosystem Change (IPEC) sponsored by the Scientific Committee on Problems of the Environment (SCOPE), in Paris.
- 2000: Expert evaluation of scientific projects for the *Methods, Models, Theories* Committee of the *Environment, Life and Societies* Programme of the National Centre for Scientific Research (France).
- 2000: Expert evaluation of a scientific programme for the European Science Foundation.
- 2000: Invited participation in the International Workshop *Ecosystem Nonlinear Responses to Global Change* of the *Global Change and Terrestrial Ecosystems* (GCTE) Core Project of the International Geosphere–Biosphere Programme (IGBP), in Pretoria (South Africa).
- 2000: Invited participation in the *Terrestrial Futures* Meeting of the International Geosphere–Biosphere Programme (IGBP), in Stockholm (Sweden).
- 2000: Participation as an invited expert in the autumn session of the National Board of Scientific Research (France) — Section 30: Biological Diversity, Populations, Ecosystems and Evolution.
- 2000: Chair of the Workshop *A New Look at the Relationship between Stability and Diversity* organised within the International Conference *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*, in Paris (France).

- 2001: Chair of the Beehive Sessions *Evolution in Mutualistic Ecosystems* organised within the Symposium *Oikos 2001: Ecology and evolution — From Genes to Ecosystems*, in Uppsala (Sweden).
- 2001: Expert evaluation of scientific projects for the Research Council for Biosciences and Environment of the Academy of Finland.
- 2001: Participation as an invited expert in the *Scientific Futures* Meeting of the National Board of Scientific Research (France) — Section 30: Biological Diversity, Populations, Ecosystems and Evolution.
- 2001: Invited participation in the International Workshop *Nonlinear Responses to Global Environmental Change : Critical Thresholds and Feedbacks* of the International Geosphere–Biosphere Programme (IGBP), in Durham (U.S.A.).
- 2001: Invited participation in the Colloquium *Science and Technology for Sustainability*, in Amsterdam (Netherlands).
- 2001: Expert evaluation of scientific projects for the National Environment Research Council (United Kingdom).
- 2001: Expert evaluation of Faculty Early Career Development (CAREER) proposals for the National Science Foundation (U.S.A.).
- 2001: Invited participation in the International Workshop *Disentangling Nature*, in Dundee (United Kingdom).
- 2001: Expert evaluation of proposals of research units, for the University Scientific Mission of the Ministry of Research and the Ministry of National Education (France).
- 2001: Consulted for nominations for the Dr A.H. Heineken Prize for Environmental Sciences of the Royal Netherlands Academy of Arts and Sciences.
- 2001: Expert evaluation of a research pole project for the National Institute of Agricultural Research (INRA, France).
- 2001: Member of the Expert Evaluators Panel for proposals submitted to the *Energy, Environment and Sustainable Development* programme of the European Union.
- 2001–2002: Member of the Working Group *The Metacommunity Concept: A Framework for Large-scale Community Ecology?* of the National Center for Ecological Analysis and Synthesis (Santa Barbara, U.S.A.).
- 2002: Expert evaluation of the project *An Integrated Study on Biodiversity Conservation under Global Change and Bioinventory Management System (DIVER)* for Kyoto University (Japan).
- 2002: Expert evaluation of documents to be negotiated in the Conference of the Parties of the Convention on Biological Diversity, for the French Biodiversity Institute.
- 2002: Lecture as an invited expert at the Environment Policy Committee of the Organisation of Economic Cooperation and Development (OECD).
- 2002: Expert evaluation of appointments and promotions of professors for the University of Texas, Austin, the University of Chicago and Washington University, St. Louis (U.S.A.).

- 2002–2003: Member of the Working Group *Knowledge Network for Biocomplexity* of the National Center for Ecological Analysis and Synthesis (Santa Barbara, U.S.A.).
- 2003: Expert evaluation of scientific careers for the National Research Foundation (South Africa).
- 2003: Expert evaluation of research projects for the Leverhulme Trust (United Kingdom).
- 2003: Expert evaluation of appointments and promotions of professors for Washington University, St. Louis, and the University of Nebraska, Lincoln (U.S.A.).
- 2003: Chair and organiser of the meeting of the European Science Foundation aimed at defining the scientific objectives and writing a call for proposals for the EUROCORES programme on biodiversity, in Paris (France).
- 2000–2004: Expert evaluation of applications to the *Young Researchers Incentive Coordinated Action* of the Ministry of Research (France).
- 2004: Expert evaluation of scientific projects for the Swiss National Science Foundation.
- 2004: Invited participation in the Conference *EC Global Change Research: International Partnership* of the European Commission, in Brussels (Belgium).
- 2004: Session chair and discussion leader in the Gordon Research Conference *Metabolic Basis of Ecology*, in Lewiston (U.S.A.).
- 2004: Expert evaluation of a promotion to full professor for the University of Texas, Austin (U.S.A.).
- 2004: Invited participation in the International Workshop *Integrated Modeling of Economies and Ecosystems* of the DIVERSITAS international programme, in Paris (France).
- 2005: Invited participation in the Earth System Science Partnership Consultation Meeting *Towards an Earth System Science Research Agenda for Europe* organised by the European Commission, in Brussels (Belgium).
- 2005: Consulted as an expert in the evaluation of the research networking instruments of the European Science Foundation.
- 2005: Participation as an invited expert in the Interministerial Meeting on the follow-up to the International Conference *Biodiversity Science and Governance* organised by France in Paris.
- 2006: Invited participation in the Round Table *Collaboration between the SCBD and Research Universities* organised by the Secretariat of the Convention on Biological Diversity, in Montreal (Canada).
- 2006: Expert evaluation of scientific projects for the Natural Sciences and Engineering Research Council of Canada.
- 2007: Invited participation in the North American Regional Consultation on an International Mechanism of Scientific Expertise on Biodiversity, in Montreal (Canada).
- 2007: Co-chair of the Workshop *Acting Together to Safeguard Biodiversity* within the Paris Conference for Global Ecological Governance, *Citizens of the Earth*, organised at the instigation of Jacques Chirac, President of the French Republic, in Paris (France).

2007–2008: Expert evaluation of Canada Research Chair projects.

2008: Invited participation in the coordination meeting between the International Mechanism of Scientific Expertise on Biodiversity and the Millennium Ecosystem Assessment that gave birth to the Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services, in Paris (France).

2008: Invited participation in the Ad Hoc Intergovernmental and Multistakeholder Meeting on an Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services, in Putrajaya (Malaysia).

2009: Expert evaluation of scientific projects for the Foundation for Research on Biodiversity (France).

2009: Expert evaluation of a promotion to full professor for Washington University, Saint-Louis, Missouri (U.S.A.).

2011: Expert evaluation of a research project for the Catholic University of Leuven (Belgium).

2012: Invited participation in the International Workshop *The Web of Life*, in Saint-André-de-Buèges (France).

2012: Invited participation in the panel discussion at the International Conference *Ecological Effects of Environmental Changes*, in Paris (France).

2013: Invited participation in the panel discussion at the Symposium *Economics and Law of Biodiversity* of the National Centre for Scientific Research, in the Oleron island (France).

2013: Expert evaluation of the applications for the full professorship in Theory in Biodiversity Sciences at Friedrich-Schiller University in Jena (Germany).

2013: Invited participation in the Workshop *Integrative Biodiversity Research: A Young Discipline Under Time Pressure*, in Leipzig (Germany).

2013: Invited participation in the International Workshop *Plant Diversity Effects on Ecosystem Resistance to and Recovery from Perturbations*, in Leipzig (Germany).

2014: Expert evaluation of the candidates shortlisted for the 2014 Balzan Prize in Basic and/or Applied Plant Ecology.

2015: Invited presentation of my scientific work at the meeting of the Scientific Committee of CDC Biodiversité, in Paris (France).

2015: Invited participation in the Ernst Strüngmann Forum *Evolutionary and Economic Strategies for Benefiting from Other Agents' Investments*, in Frankfurt (Germany).

2016: Tutor of Tamara Münkemüller for her training period as a researcher of the National Centre for Scientific Research (CNRS, France).

2016: Expert evaluation of a New Research Team project proposal for Paris Sciences et Lettres Research University (France).

2016: Invited participation in the Synthesis Centre Post-Doctoral Workshop, in Aix-en-Provence (France).

2017: Expert evaluation of research project proposals submitted to the Knut and Alice Wallenberg Foundation for the University of Gothenburg (Sweden).

2016–2019: Expert evaluation of European Research Council Sarting, Consolidator and Advanced Grant proposals.

2018: Expert evaluation of a Concerted Research Action proposal for the University of Namur and the Catholic University of Louvain (Belgium).

2019: Invited participation in the International Workshop *Leveraging Scale to Build Empirically Tractable Theory and Metrics of Stability and Coexistence*, in Leipzig (Germany).

2017–present: Member of the Working Group *Scaling-Up Productivity Responses to Changes in Biodiversity* of the National Center for Ecological Analysis and Synthesis (Santa Barbara, U.S.A.).

2017–present: Member of the Working Group *A Global Soil Biodiversity Database and Its Application to Data Synthesis and Theory Development* of the German Centre for Integrative Biodiversity Research (Leipzig, Germany).

2017–present: Leader (with A. Gonzalez) of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*.

## **Direction of scientific programmes**

1996–1999: Leader of the *Biodiversity and Ecosystem Functioning* programme within the framework of the *Biological Diversity* National Programme (France).

1999–2003: Leader of Core Programme Element 1 of the DIVERSITAS international programme and of Focus 4 of the *Global Change and Terrestrial Ecosystems* (GCTE) Core Project of the International Geosphere–Biosphere Programme (IGBP), *Biodiversity, Global Change and Ecosystem Functioning*.

1999–2004: Chair of the Steering Committee of the European Science Foundation programme *Linking Community and Ecosystem Ecology* (LINKECOL).

2002–2007: Chair of the Scientific Committee of DIVERSITAS, the international programme of biodiversity science.

## **Direction of research projects**

1989–1990: Research director of the project *Ecology, Cartography and Faunistics of Carabid Beetles from Belgium and Northern France* (1st phase) funded by the Fund for Joint Basic Research (Belgium) (€10,000). Project carried out in collaboration between the Free University of Brussels, the Catholic University of Louvain, the State Faculty of Agricultural Sciences at Gembloux, the University of Ghent and the Entomological Society of Northern France.

1991–1992: Research director of the project *Ecology, Cartography and Faunistics of Carabid Beetles from Belgium and Northern France* (2nd phase) funded by the Fund for Joint Basic Research (Belgium) (€10,000). Project carried out in collaboration between the Free University of Brussels, the Catholic University of Louvain, the University of Mons-Hainaut, the State Faculty of Agricultural Sciences at Gembloux, the University of Ghent, the Royal Institute of Natural Sciences of Belgium, the Institute for Nature Conservation at Hasselt and the Entomological Society of Northern France.

1996–1999: Leader in France of the BIODEPTH project (*Biodiversity and Ecological Processes in Terrestrial Herbaceous Ecosystems: Experimental Manipulations of Plant Communities*) funded by the European Commission within the framework of the *Environment and Climate Research and Technological Development Programme* (€1,600,000). Project carried out in collaboration between the Imperial College of Science, Technology and Medicine (Ascot, United Kingdom, J. H. Lawton coordinator), the University of Sheffield (United Kingdom), the University College Cork (Ireland), the Swedish University of Agricultural Sciences (Umeå, Sweden), Pierre and Marie Curie University (Paris, France), the University of Bayreuth (Federal Republic of Germany), the University of the Aegean (Mytilini, Greece), the Instituto Superior de Agronomia (Lisbon, Portugal) and the University of Zürich (Switzerland).

1998–2000: Coordinator of the joint research project *From Species Interactions to Biodiversity Dynamics*, funded by the International Cooperation Programme of the National Centre for Scientific Research (France) and the Royal Society (United Kingdom) (€10,000). Project carried out in collaboration between Pierre and Marie Curie University (Paris, France) and the Imperial College of Science, Technology and Medicine (Ascot, United Kingdom).

1998–2000: Coordinator of the project *Coupling between Nutrient Cycles and Structure of Food Webs in Lake Ecosystems: Consequences on the Regulation of Primary Producers*, carried out at the Ecole Normale Supérieure (Paris) and funded by the *Knowledge and Management of Hydrosystems* Public Research Organisation (France) (€12,000).

1998–2000: Coordinator of the project *Consequences of Dispersal on Regional and Local Processes in Plant Communities*, funded by the programme *Fragmented Populations, Extinctions, Habitat Selection and Conservation Biology* within the framework of the Interdisciplinary Research Programme *Environment, Life and Societies* of the National Centre for Scientific Research (France) (€12,000). Project carried out in collaboration between Pierre and Marie Curie University (Paris) and the University of Paris Sud (Orsay).

1999–2000: Coordinator of the project *Intraspecific Altruism and Interspecific Interactions* within the framework of the Franco–British *Alliance Integrated Actions Programme* (€6,000). Project carried out in collaboration between Pierre and Marie Curie University (Paris, France) and the University of Oxford (United Kingdom).

1998–2001: Leader in France of the project *Forest Successions in Central and Eastern Europe : Markov-chain Models as a Tool for Long-Term Predictions and Management*, funded by the European Commission within the framework of the *INCO-Copernicus* programme (€18,000). Project carried out in collaboration between the Dresden University of Technology (Germany, K.-F. Albrecht coordinator), the Institute of Atmospheric Physics (Moscow, Russia), the Research and Information Centre for Forest Resources (Moscow, Russia), the natural reserve Bryanskii Les (Bryanskaya Oblast, Russia) and Pierre and Marie Curie University (Paris, France).

1998–2001: Coordinator of the project *Biodiversity and Functional Processes in Terrestrial Herbaceous Ecosystems. 1. Theoretical Developments*, funded by the programme *Biodiversity and Ecosystem Functioning* within the framework of the Interdisciplinary Research Programme *Environment, Life and Societies* of the National Centre for Scientific Research (France) (€15,000). Project carried out in collaboration between Pierre and Marie Curie University (Paris) and the University of Paris Sud (Orsay).

1998–2001: Leader at Pierre and Marie Curie University of the project *Biodiversity and Functional Processes in Terrestrial Herbaceous Ecosystems. 2. Experimental Test*, funded by the programme *Biodiversity and Ecosystem Functioning* within the framework of the Interdisciplinary Research Programme *Environment, Life and Societies* of the National Centre for Scientific Research (France) (€23,000). Project carried out in collaboration between the University of Paris Sud (Orsay, P. W. Leadley coordinator) and Pierre and Marie Curie University (Paris).

1999–2002: Coordinator of the International Programme of Scientific Cooperation *Dynamics of Biodiversity: From Species Interactions to Ecosystem Functioning* of the National Centre for Scientific Research (France) (€15,000). Cooperation programme with the Imperial College of Science, Technology and Medicine (Ascot, United Kingdom).

1999–2004: Leader of the *Theoretical and Mechanistic Modelling* theme of the DIV-ECO National Research Consortium (GDR *Plant Diversity, Stability and Functioning of Ecosystems*) of the National Centre for Scientific Research (France). National Research Consortium including the Centre of Functional and Evolutionary Ecology (Montpellier, J. Roy coordinator), the Ecole Normale Supérieure (Paris), the University of Paris Sud, the Research Institute for Development (IRD, Bondy) and the University of Rennes 1.

2001–2004: Leader of the *Plant Diversity and Ecosystem Stability and Diversity, Trophic Interactions and Ecosystem Functioning* themes of the project *Interactions between Biodiversity and Functioning in Terrestrial Ecosystems: Basic and Applied Aspects* funded by the *Quantitative Ecology* Incentive Coordinated Action of the Ministry of Research (France) (€275,000). Project carried out in collaboration between the Centre of Functional and Evolutionary Ecology (Montpellier, J. Roy coordinator), the Ecole Normale Supérieure (Paris), Claude Bernard University (Lyon), the University of Paris Sud, the Research Institute for Development (IRD, Bondy), the National Institute of Agricultural Research (INRA, Clermont-Ferrand) and the University of Rennes 1.

2001–2004: Leader of the *Theoretical Modelling* theme of the project *Functional Significance of Biodiversity in Aquatic Ecosystems: Experimental and Theoretical Approaches* funded by the *Quantitative Ecology* Incentive Coordinated Action of the Ministry of Research (France) (€135,000). Project carried out in collaboration between the Ecole Normale Supérieure (Paris, G. Lacroix coordinator), Blaise Pascal University (Clermont-Ferrand, C. Amblard coordinator), the University of Paris Sud, the National Institute of Agricultural Research (INRA, Rennes) and Claude Bernard University (Lyon).

2001–2005: Leader of the modelling component of the project *Impact of Pollutants on the Structure and Functioning of Aquatic Ecosystems: Theoretical and Experimental Approaches*, funded by the Ministry of Land Management and the Environment (France) within the PNTOX programme (€110,000). Project carried out in collaboration between the National Institute of

Industrial Environment and Risks (Verneuil-en-Halatte, J.-M. Bonzom coordinator) and the Ecole Normale Supérieure (Paris).

2004–2007: Leader of the project *Ecological Stoichiometry, Food Webs and Functioning of Aquatic Ecosystems* (SERFEA), funded by the *Continental Ecosphere: Processes and Modelling* programme of the National Institute of Sciences of the Universe of the National Centre for Scientific Research (France) (€99,000).

2005–2007: Leader of the project *Infrastructure for a Theoretical Community and Ecosystem Ecology Laboratory*, funded by the Canada Foundation for Innovation, the Quebec Government and McGill University (\$329,000).

2006–2009: Leader of the theory and modelling component of the project *Impacts on Ecosystem Functioning of Biodiversity Within and Between Trophic Levels*, funded by the National Research Agency (France) (€500,000; subcontract €104,250). Project carried out in collaboration between the Ecole Normale Supérieure (Paris, F. D. Hulot coordinator), McGill University (Montreal, Canada), the Centre for Biological Studies of Chizé (France), the Centre of International Cooperation for Research in Agronomy for Development (CIRAD, Harare, Zimbabwe) and the Research Institute for Development (IRD, Bondy, France).

2006–2008: Leader of the theory and modelling component of the project *Predator Identity and Trophic Control of Biodiversity and Ecosystem Function*, funded by the National Science Foundation (U.S.A.) (subcontract \$39,000). Project carried out in collaboration with Yale University (New Haven, U.S.A., O. Schmitz coordinator).

2005–2010: Start-up grant for the establishment of the Theoretical Community and Ecosystem Ecology Laboratory, provided by McGill University (\$100,000).

2007–2010: Co-leader of the team research project *Causes and Consequences of Biodiversity Loss: Towards the Integration of Spatial and Trophic Complexities*, funded by the Quebec Nature and Technologies Research Fund (Canada) at McGill University (\$179,400).

2006–2011: Leader of the project *Merging Food Webs, Biodiversity and Ecosystem Functioning*, funded by the Natural Sciences and Engineering Research Council of Canada (\$40,000 per year, \$200,000 in total).

2009–2011: Founding member of the Center for Applied Mathematics in Bioscience and Medicine, funded by the *Mathematics of Information Technology and Complex Systems* (MITACS) Network of Excellence and McGill University (about \$180,000 per year, \$360,000 in total).

2005–2011: Leader of the project *Getting It Together for Life: Towards an Integrated Theory of Biodiversity and Ecosystem Functioning*, funded by the Canada Research Chair programme (\$200,000 per year, \$1,400,000 in total, terminated in 2011 following my departure from McGill University).

2009–2011: Scientific Director and coordinator of Axis 2, *Biodiversity changes and ecosystem services*, of the Quebec Centre for Biodiversity Science, funded by the Quebec Nature and Technologies Research Fund, McGill University, the University of Montreal, Laval University, and Sherbrooke University (Canada) (about \$400,000 per year, \$1,200,000 in total).

2011: Leader of the project *Toward a Predictive Theory of Biodiversity and Ecosystem Functioning*, funded by the Natural Sciences and Engineering Research Council of Canada (\$64,000 per year, \$320,000 in total, terminated in 2011 following my departure from McGill University).

2012–2013: Leader of the Theme *Living Earth* in the Prospective Reflection Workshop *Mathematics and Complexity of the Earth System*, funded by the National Research Agency (France) (D. Bresch coordinator, €170,000 in total).

2011–2015: Establishment of the Centre for Biodiversity Theory and Modelling at the Experimental Ecology Station in Moulis, funded by the National Centre for Scientific Research (CNRS) (2 long-term post-doctoral positions + €15,000), the Laboratory of Excellence *Towards a Unified theory of biotic Interactions: the roLe of environmental Perturbations* (TULIP) (€480,000), the Midi-Pyrénées Region (€296,300), the General Council of the Ariège Department (€70,000), the Ariège Prefecture (€20,000) and the Community of Saint-Girons Municipalities (€20,000).

2012–2015: Leader of the Exploratory Interdisciplinary Project *Human Spatial Behaviour, Biodiversity and Ecosystem Services* and then of the Multidisciplinary Thematic Network with the same title, funded by the National Centre for Scientific Research (CNRS, France) (€38,600).

2013–2016: Leader of the project *Effects of Human Spatial Behaviour on the Functioning and Stability of Coupled Ecological–Economic Systems*, funded by the Midi-Pyrénées Region (€69,800).

2014–2016: International Collaborator in the project *Community Efficiency: Testing MacArthur's Minimisation Principle for Competitive Communities*, funded by the Australian Research Council (D. Marshall coordinator, 465,000 \$ in total).

2015–2018: Leader of the project *Biodiversity and Ecosystem Stability in a Changing World : A Multi-scale Approach*, funded by the Midi-Pyrénées Region (€61,700).

2012–2020: Member of the Management Committee and Leader of the Modelling Platform of the AnaEE France project (*Analysis and Experimentation on Ecosystems – France*), funded by the *Investments for the Future* programme of the National Research Agency (France) (€14,000,000 in total).

2015–2020: Leader of the BIOSTASES project (*BIOdiversity, STAbility and sustainability in Spatial Ecological and social-ecological Systems*), funded by an European Research Council Advanced Grant (€2,092,600).

## **Management of scientific programmes**

1990–1992: Programme Manager at the Prime Minister's Services, Science Policy Office (Belgium), in charge of environmental issues.

Management and coordination of:

- the *Global Change* Belgian impulse programme (1990–1994);

- the Belgian contributions to the EUROTRAC project (EUROpean experiment on the TRAnsport and transformation of environmentally relevant trace Constituents in the troposphere over Europe) within the framework of the EUREKA European research and development initiative.

Conception and preparation of the *Marine Sciences* Belgian impulse programme (1992–1996).

Follow-up of:

- the STEP European programme (Science and Technology for Environmental Protection) (1989–1992);
- the EPOCH European programme (European Programme On Climatology and natural Hazards) (1989–1992);
- the REWARD European programme (REcycling WAste Research and Development) (1990–1992);
- the *Environment* European research programme (1991–1994);
- the COST European concerted actions (European Cooperation in Science and Technology) in the field of environment;
- the EUROENVIRON umbrella project within the framework of EUREKA;
- the *Man and the Biosphere* programme of UNESCO.

## **Organisation of scientific meetings**

1984: Organiser of the Colloquium *Feeding Strategies and Mechanisms* of the Royal Zoological Society of Belgium, in Brussels.

1987: Organiser (with J.-C. Verhaeghe) of the Conference of the Department of Animal Biology of the Free University of Brussels, in Treignes (Belgium).

1991: Organiser of the 1st National Information Meeting of the EUROTRAC project within the framework of EUREKA, in Brussels (Belgium).

1992: Member of the Organising Committee of the 8th European Carabidologists' Meeting – 2nd International Symposium of Carabidology, in Louvain-la-Neuve and Brussels (Belgium).

1995: Member of the Organising Committee of the IMACS First International Symposium on Mathematical Modelling and Simulation in Agriculture and Bio-Industries, in Brussels (Belgium).

1995: Member of the International Organising Committee of the 3rd International Symposium of Carabidology, in Kauniainen (Finland).

1996: Organiser of the meeting of the BIODEPTH European project, in Nemours (France).

1997: Organiser of the Workshop *Biodiversity and Ecosystem Functioning*, in Paris (France).

1997: Convener (with J. H. Lawton and S. W. Pacala) of the International Workshop *Biodiversity and Ecosystem Processes: Theory and Modelling*, in Ascot (United Kingdom).

- 1997: Convener (with J. H. Lawton) of the European Workshop *Biodiversity and Ecosystem Processes: Theory and Modelling*, within the framework of the *Terrestrial Ecosystem Research Initiative* of the European Commission, in Ascot (United Kingdom).
- 1998: Organiser of the France–Japan Workshop *Biodiversity and Ecosystem Functioning*, in Paris (France).
- 2000: Organiser (with S. Naeem and P. Inchausti) of the International Conference *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*, in Paris (France).
- 2003: Convener (with J Bengtsson) of the International Workshop *Ecosystem Evolution and Evolution in Ecosystems*, in Ekenäs (Sweden).
- 2005: Convener (with A. Hector) of the International Workshop *The Next Generation of Biodiversity and Ecosystem Functioning Research*, in Kota Kinabalu (Sabah, Malaysia).
- 2005: Convener (with A. Hector) of the International Conference *Biodiversity and Carbon Sequestration*, in Danum Valley (Sabah, Malaysia).
- 2006: Convener (with S. Naeem, D. Bunker, A. Hector and C. Perrings) of the International Workshop *The Consequences of Changing Biodiversity: Solutions and Scenarios*, in Ascona (Switzerland).
- 2011: Organiser (with C. Potvin) of the Workshop *How to Ace the Tenure-Track Interview* in the Conservation, Ecology, Evolution and Behaviour Graduate Student Symposium at McGill University, in Montreal (Canada).
- 2012: Organiser of the International Meeting of the Exploratory Interdisciplinary Project *Human Spatial Behaviour, Biodiversity and Ecosystem Services*, in Moulis (France).
- 2012: Convener (with N. Mouquet and Y. Lagadeuc) of the Workshops *Ecological Modelling, From Concept To Operational Research: Towards a Predictive Ecology?* in the Symposium *Perspectives* of the Ecology and Environment Institute of the National Centre for Scientific Research, in Avignon (France).
- 2014: Organiser of the International Meeting of the Multidisciplinary Thematic Network *Human Spatial Behaviour, Biodiversity and Ecosystem Services*, in Moulis (France).
- 2014: Organiser (with J. Clobert) of the International Workshop *Experimental and Theoretical Approaches to Habitat Fragmentation*, in Moulis (France).
- 2014: Organiser (with C. de Mazancourt) of the National Workshop *New Directions in Biodiversity Theory and Modelling*, in Moulis (France).
- 2015: Organiser (with J.-F. Arnaldi, R. Bertrand, B. Haegeman and C. de Mazancourt) of the National Workshop *Biodiversity: Measurement and Functional Role*, in Moulis (France).
- 2015: Organiser (with C. de Mazancourt) of the National Workshop *Biodiversity Theory and Modelling*, in Moulis (France).
- 2017: Convener (with S. Gaba and J. Lecomte) of the Workshop *Agroecology* in the Symposium *Perspectives* of the Ecology and Environment Institute of the National Centre for Scientific Research, in Bordeaux (France).

2017: Convener (with A. Gonzalez) of the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Mont-Saint-Hilaire (Canada).

2018: Convener (with A. Gonzalez) of the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).

2020: Convener (with S. Pimm, O. Petchey and I. Donohue) of the session *Biodiversity and the Multidimensionality of Ecological Stability* in the World Biodiversity Forum, in Davos (Switzerland).

## **Supervision of undergraduate research projects**

1. Servent, H., 1999. — *Dynamique Adaptative du Système Plantes-Décomposeurs et Evolution des Propriétés des Ecosystèmes*. Honours thesis, Ecole Normale Supérieure (Paris, France).
2. Mallard, F., 2006. — *Méta-écosystèmes: Vers une Expression Explicite des Nutriments dans les Modèles*. Honours thesis, Ecole Normale Supérieure (Paris, France) (co-supervisor: F. Guichard).
3. Le Bourlot, V., 2007. — *Conservation d'Espèces Multiples et Dynamique des Métacommunautés*. Honours thesis, Ecole Normale Supérieure (Paris, France).
4. Xiao, X., 2008. — *The Effects of Intra- and Interspecific Competition on the Dispersal Rates of Two Rotifer Species*. Honours thesis, McGill University (co-supervisor: G. Fussmann).
5. Aly Hassan, R., 2008. — *Evolving Complex Food Webs with Simple Physical and Biological Rules: A Model*. Undergraduate Student Research Award, McGill University.
6. Burgess, M., 2009. — *Spatial Insurance in Ecological and Economic Systems*. Undergraduate Student Research Award, McGill University.
7. Yanagimura, Y., 2009. — Biodiversity effects and species coexistence. Unfinished Honours thesis, McGill University.
8. Degano, D., 2010. — *Nutrient pulsing in herbivore-plant-nutrient systems and its effects on primary production*. Independent research project, McGill University (co-supervisor: C. de Mazancourt).

## **Supervision of Master's theses**

1. Bouyer, T., 1990. — *Contribution à l'Ecologie des Mollusques Dulcicoles de Lwiro (Zaïre), avec une Référence Spéciale à Biomphalaria pfeifferi*. Master's thesis, Free University of Brussels.
2. Walrant, A., 1990. — *Comparaison de Deux Méthodes d'Analyse du Régime Alimentaire d'Abax ater Villers (Coleoptera, Carabidae): La Dissection du Tube Digestif et l'Electrophorèse d'Iso-Enzymes*. Master's thesis, Free University of Brussels.

3. Nolf, C.-L., 1990. — *Aspects Démographiques et Structure Spatiale d'une Population de Abax ater Villers (Coleoptera, Carabidae)*. Master's thesis, Free University of Brussels.
4. Chaabane, K., 1990. — *Les Coléoptères Carabides dans la Lutte Biologique: Prédation des Pucerons*. Master's thesis in Environment, Free University of Brussels.
5. Daufresne, T., 1995. — *Mise en Evidence de Relations entre la Distribution Spatiale de Quelques Grands Coléoptères Carabiques (Coleoptera, Carabidae) et l'Abondance de leurs Proies Potentielles*. First-year Master's thesis, Ecole Normale Supérieure Agronomique de Toulouse (France).
6. Guillemain, M., 1995. — *Les Relations entre le Coléoptère Carabique Abax ater Villers et les Annélides : Approche de la Notion de Bioindicateur*. Master's (DEA) thesis, Pierre and Marie Curie University.
7. de Mazancourt, C., 1995. — *Modélisation de l'Influence Potentielle des Grands Herbivores sur le Cycle de l'Azote dans un Ecosystème de Savane*. Master's (DEA) thesis, Pierre and Marie Curie University.
8. Duboudin, C., 1996. — *Stabilité des Cycles Biogéochimiques Couplés*. Master's (DEA) thesis, Pierre and Marie Curie University.
9. Agostini, G., 1997. — *Le Cannibalisme chez les Coccinelles (Coleoptera : Coccinellidae): Mécanisme Naturel de Régulation des Populations?* First-year Master's thesis, Pierre and Marie Curie University (co-supervisors: J.T. Arnasson and F. Lorenzetti, University of Ottawa, Canada).
10. Dezert, M., 1997. — *Etude des Peuplements de Coléoptères Carabiques en Milieu Agricole Beauceron*. First-year Master's thesis, University of Orléans (France).
11. Dantier, I., 1997. — *Etude du Régime Alimentaire d'un Insecte : Pterostichus melanarius (Coleoptera, Carabidae)*. First-year Master's thesis, Pierre and Marie Curie University.
12. Mouquet, N., 1997. — *Immigration et Maintien de la Diversité Spécifique dans les Communautés Végétales*. Master's (DEA) thesis, Pierre and Marie Curie University.
13. Leriche, H., 1997. — *Etude Théorique de la Production Primaire d'un Ecosystème de Savane Humide en Réponse à l'Herbivorie*. Master's (DEA) thesis, Pierre and Marie Curie University.
14. Daufresne, T., 1997. — *Implication du Couplage Carbone–Azote dans la Biomasse Terrestre sur la Stabilité et la Persistance du Système Plante–Décomposeur*. Master's (DEA) thesis, Pierre and Marie Curie University.
15. Adouard, A., 1998. — *Etude du Régime Alimentaire de Pterostichus melanarius (Coleoptera, Carabidae) dans un Agro-écosystème*. First-year Master's thesis, Pierre and Marie Curie University.
16. Hulot, F. D., 1998. — *Effets de l'Augmentation de l'Apport en Nutriments sur l'Abondance des Différents Groupes Trophiques Constitutifs de Réseaux Hétérogènes: Approches Théoriques et Expérimentales*. Master's (DEA) thesis, Pierre and Marie Curie University (co-supervisor: G. Lacroix).

17. Mourlon, N., 1999. — *Biodiversité et Fonctionnement des Ecosystèmes: Modèles de Compétition entre Plantes pour les Nutriments*. Scientific option research project report, Ecole Polytechnique (Palaiseau, France).
18. Leclercq, N., 2000. — *La Régulation des Ressources par les Consommateurs*. Scientific option research project report, Ecole Polytechnique (Palaiseau, France).
19. August-Bernex, Z., 2000. — *Impact de la Biodiversité sur la Stabilité des Ecosystèmes en Environnement Fluctuant*. Master's (DEA) thesis, Pierre and Marie Curie University.
20. Loeuille, N., 2000. — *Coévolution Plantes-Herbivores: Diversité des Régimes Evolutifs et Implications en Termes de Mutualisme Indirect*. Master's (DEA) thesis, Pierre and Marie Curie University.
21. Servent, H., 2001. — *Coévolution entre Plantes et Décomposeurs et Evolution des Propriétés des Ecosystèmes*. Master's (DEA) thesis, Pierre and Marie Curie University.
22. Thébault, E., 2002. — *Impact de la Biodiversité sur le Fonctionnement des Ecosystèmes: Modèles à Plusieurs Niveaux Trophiques*. Master's (DEA) thesis, National Agricultural Institute of Paris-Grignon.
23. Cherif, M., 2002. — *La Stœchiométrie dans les Interactions Algues-Zooplancton: Couplage entre Modèles et Expériences*. Master's (DED) thesis, Pierre and Marie Curie University.
24. Cherif, M., 2003. — *L'Effet de la Stœchiométrie sur les Relations entre Producteurs Primaires, Herbivores et Décomposeurs*. Master's (DEA) thesis, Claude Bernard University (Lyon, France).
25. Hauzy, C., 2003. — *Comment Déterminer le Réseau d'Interactions des Ecosystèmes?* Master's (DEA) thesis, Pierre and Marie Curie University.
26. Goudard, A., 2004. — *Organisation des Ecosystèmes et Invasions Biologiques: Une Approche Théorique*. Master's (DEA) thesis, Pierre and Marie Curie University.
27. Kéfi, S., 2004. — *Discontinuous Transitions in Arid Ecosystems and Desertification*. Master's (DEA) thesis, Pierre and Marie Curie University (co-supervisor: M. van Baalen).
28. Kylafis, G., 2005. — *Les Conséquences Ecologiques et Evolutives de la Construction de Niche*. Master's thesis, Pierre and Marie Curie University.
29. Labrune, N., 2005. — *Modélisation des Effets Directs et Indirects d'une Pollution au Cuivre sur un Ecosystème d'Eau Douce*. Master's thesis, Pierre and Marie Curie University (co-supervisor: F. D. Hulot).
30. Faninger, T., 2008. — *The Influence of Parasites and their Manipulation Process on Food Webs*. Scientific option research project report, Ecole Polytechnique (Palaiseau, France).
31. Sapijanskas, J., 2009. — *Des Traits des Espèces aux Processus à l'Echelle de la Communauté: Exploration du Modèle de Compétition de MacArthur*. Master's thesis, AgroParisTech (Paris, France).
32. Fiszman, N., 2009. — *Variation in the Predator's Functional Response in a Prey-Predator System during an Invasion Process*. Scientific research project, Ecole Nationale Supérieure des Mines de Paris (France).

33. Larocque, A., 2011. — *Untangling Mechanisms behind the Stability–Diversity Relationship in Experimental Grasslands*. Master's thesis, McGill University (co-supervisor: C. de Mazancourt).
34. Auguères, A.-S., 2012. — *Etude Théorique du Potentiel de Régulation Biotique du Système Terre : Application au Domaine Océanique*. Master's thesis, University of the Mediterranean (Aix-Marseille II, France).
35. Bein, A., 2012. — *Consumer–Resource Coupling Stabilizes and Enhances Productivity in a Fluctuating Environment*. Master's thesis, McGill University (co-supervisor: C. de Mazancourt).
36. Lafuite, A.-S., 2013. — *Bio-economic Modelling for Biodiversity Conservation*. Master's thesis, AgroParisTech (Paris, France) (co-supervisor: F. Salanié).
37. Geimer, C., 2015. — *Ecosystem Stability in Space: An Empirical Analysis*. Master's thesis, Paul Sabatier University (Toulouse, France) (co-supervisor: S. Wang).
38. Cazalis, V., 2017. — *Modelling the Link between Human Demography and Nature through Ecosystem Services*. National Natural History Museum (Paris, France) (co-supervisor: K. Henderson).
39. Denise, G., 2017. — *Sustainable Land-Use Management under Biodiversity Lag Effects*. Toulouse School of Economics (France) (co-supervisors: A.-S. Lafuite et J.-P. Amigues).
40. Parisy, B., 2018. — *Contributions des Effets du Changement Climatique et de l'Evolution de l'Habitat dans les Prédictions de la Répartition des Espèces*. Master's thesis, Paul Sabatier University (Toulouse, France) (co-supervisor: R. Bertrand).
41. Acloque, A., 2019. — *Trophic Cascades and Biomass Distribution*. Master's thesis, Ecole Nationale Supérieure Agronomique de Toulouse (France) (co-supervisor: N. Galiana).
42. Wojcik, L., 2019. — *Entre Théorie Trophique et Données Macroécologiques: Relations Allométriques et Réponse Fonctionnelle*. Master's thesis, Rennes I University (France) (co-supervisor: M. Barbier).
43. Cavaillès, J., 2019. — *Destabilizing Effects of Controlling Ecosystem Behavior*. Master's thesis, Institut National des Sciences Appliquées de Toulouse and Paul Sabatier University (Toulouse, France) (co-supervisor: Y. Zelnik).

## **Supervision of Ph.D. theses**

1. Baluku, B., 1987. — *Contribution à l'Etude des Hôtes Intermédiaires des Bilharzioses : Ecologie des Mollusques Dulcicoles dans Deux Cours d'Eau du Zaïre Oriental*. Ph.D. thesis, Free University of Brussels (co-supervisor: G. Josens).
2. Chaabane, K., 1995. — *Bilan Energétique de Abax ater (Villers) (Coleoptera, Carabidae)*. Ph.D. thesis, Free University of Brussels (co-supervisor: G. Josens).

3. de Mazancourt, C., 1998. — *Effets Indirects des Herbivores sur les Producteurs Primaires par Recyclage des Nutriments: Conséquences Fonctionnelles et Evolutives*. Ph.D. thesis, Pierre and Marie Curie University.
4. Fournier, E., 1998. — *Impact de Nouvelles Pratiques Agricoles sur la Diversité des Carabides (Coleoptera, Carabidae) dans un Agro-écosystème Intensif*. Ph.D. thesis, National Agricultural Institute of Paris-Grignon.
5. Millien, V., 1999. — *Taille des Incisives et Structure de Taille des Communautés de Rongeurs: Aspects Ecologiques et Evolutifs en Milieu Insulaire*. Ph.D. thesis, University of Montpellier II (France) (co-supervisor: J.-J. Jaeger).
6. Mouquet, N., 2001. — *Dimensions Locale et Régionale de la Diversité: Conséquences sur la Coexistence dans les Communautés Végétales et leurs Propriétés*. Ph.D. thesis, Pierre and Marie Curie University.
7. Daufresne, T., 2001. — *Stæchiométrie Ecologique, Relations entre Autotrophes et Hétérotrophes et Fonctionnement des Ecosystèmes*. Ph.D. thesis, Pierre and Marie Curie University.
8. Hulot, F. D., 2001. — *Des Chaînes aux Réseaux Trophiques: Rôle de la Diversité Fonctionnelle dans le Fonctionnement des Ecosystèmes*. Ph.D. thesis, Pierre and Marie Curie University.
9. Loeuille, N., 2004. — *Coévolution et Fonctionnement des Ecosystèmes*. Ph.D. thesis, Pierre and Marie Curie University.
10. Thébault, E., 2005. — *Impact de la Structure Trophique sur la Relation entre Diversité et Fonctionnement des Ecosystèmes*. Ph.D. thesis, Pierre and Marie Curie University.
11. Goudard, A., 2007. — *Fonctionnement des Ecosystèmes et Invasions Biologiques: Importance de la Biodiversité et des Interactions Interspécifiques*. Ph.D. thesis, Pierre and Marie Curie University.
12. Cherif, M., 2007. — *Une Approche Stæchiométrique Intégrative des Interactions entre Producteurs Primaires, Herbivores et Décomposeurs et de leur Rôle dans les Ecosystèmes*. Ph.D. thesis, Pierre and Marie Curie University.
13. Hauzy, C., 2007. — *Comportements de Dispersion et Propriétés des Métacommunautés Proie-Prédateur: Approches Théoriques et Expérimentales*. Ph.D. thesis, Pierre and Marie Curie University (co-supervisor: F. D. Hulot).
14. Leroux, S. J., 2010. — *Constant and Temporally Variable Spatial Subsidies and the Strength of Trophic Cascades*. Ph.D. thesis, McGill University.
15. Kylafis, G., 2010. — *Niche Construction, Facilitation, and their Ecological and Evolutionary Consequences*. Ph.D. thesis, McGill University.
16. Pillai, P., 2011. — *The Ecological and Evolutionary Assembly of Trophic Metacommunities*. Ph.D. thesis, McGill University (co-supervisor: A. Gonzalez).
17. Sapijanskas, J., 2013. — *Disentangling and Predicting the Effects of Tree Diversity on Forest Ecosystem Functioning*. Ph.D. thesis, AgroParisTech (Paris, France).

18. Hatton, I., 2013. — *The Scaling of Growth across Levels of Organisation*. Ph.D. thesis, McGill University (co-supervisor: J. Davies).
19. Marleau, J., 2013. — *Integrating Metaecosystem Theory with Ecological Stoichiometry*. Ph.D. thesis, McGill University (co-supervisor: F. Guichard).
20. Auguères, A.-S., 2015. — *Biotic Regulation of Global Biogeochemical Cycles: A Theoretical Perspective*. Ph.D. thesis, Paul Sabatier University (Toulouse, France).
21. Tekwa, E. W., 2015. — *Spatial Theories and Experiments on the Evolution of Cooperation*. Ph.D. thesis, McGill University (co-supervisor: A. Gonzalez).
22. Lafuite, A.-S., 2017. — *Biodiversity Feedbacks and the Sustainability of Social-Ecological Systems*. Ph.D. thesis, Paul Sabatier University (Toulouse, France).
23. Portalier, S., 2018. — *The Effects of Physical Factors on the Structure of Communities*. Ph.D. thesis, McGill University (co-supervisors: G. F. Fussmann and M. Cherif).
24. Delsol, R., 2015–2018. — Biodiversity and ecosystem stability in a changing world: a multiscale approach. Unfinished Ph.D. thesis for personal reasons, Paul Sabatier University (Toulouse, France) (co-supervisor: B. Haegeman).
25. Liautaud, K., in progress. — Community stability and compositional turnover along environmental gradients. Ph.D. thesis, Paul Sabatier University (Toulouse, France) (co-supervisor: M. Scheffer).
26. Lee, S., in progress. — Predicting the effects of climate change on ecosystem functioning and stability using general ecosystem models. Ph.D. thesis, Paul Sabatier University (Toulouse, France) (co-supervisor: J. M. Montoya).
27. Bideault, A., in progress. — Effects of climate change on the structure and stability of food webs. Ph.D. thesis, Sherbrooke University (Canada) (co-directeur : D. Gravel).
28. Bengochea, D., in progress. — Modelling the long-term dynamics of human populations, land use and ecosystem services. Ph.D. thesis, Paul Sabatier University (Toulouse, France) (co-supervisor: K. Henderson).

## **Supervision of postdoctoral fellowships**

1. Behera, N., 1996. — Theoretical study of the relationship between biodiversity and ecosystem stability. Postdoctoral fellowship, Pierre and Marie Curie University.
2. Yachi, S., 1997–1999. — Modelling the effects of biodiversity on ecosystem functioning. Postdoctoral fellowship, Ecole Normale Supérieure (Paris, France).
3. Kokkoris, G., 2000. — Theoretical study of community invasibility. Visiting postdoctoral fellow, Ecole Normale Supérieure (Paris, France).
4. Emmerson, M., 2002. — Community assembly constraints on the relationship between biodiversity and ecosystem functioning. Visiting postdoctoral fellow, Ecole Normale Supérieure (Paris, France).

5. Cherif, M., 2007–2009. — Modelling environmental and body size constraints on the structure and functioning of food webs. Postdoctoral fellowship, McGill University.
6. Sun, C., 2007–2009. — Role of trait-mediated indirect interactions in the dynamics and functioning of food webs. Postdoctoral fellowship, McGill University.
7. Long, Z., 2007–2009. — Biodiversity, ecosystem functioning, and food web theory. Postdoctoral fellowship, McGill University.
8. Vallina, S. M., 2010. — Global relationship between phytoplankton diversity and productivity in the ocean. Visiting postdoctoral fellow, McGill University.
9. Calcagno, V., 2009–2011. — Role of trait-mediated indirect interactions in the dynamics and functioning of food webs. Postdoctoral fellowship, McGill University.
10. Isbell, F., 2010–2011. — Biodiversity and ecosystem multifunctionality. Postdoctoral fellowship, McGill University.
11. Revilla, T., 2011–2014. — Climate change and the disruption of ecological networks. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
12. Mellard, J., 2012–2015. — Persistence and adaptability of ecosystems in the face of environmental changes. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
13. Wang, S., 2013–2015. — Ecosystem stability across spatial scales. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
14. Bertrand, R., 2012–2016. — Effects of climate change on biodiversity. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
15. Valls, A., 2015–2016. — A review of the various approaches to the sustainability of coupled social–ecological systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
16. Zhang, Y., 2016. — Effects of spatial scale and climate variability on the diversity and stability of grassland ecosystems. Visiting postdoctoral fellow, Centre for Biodiversity Theory and Modelling (Moulis, France).
17. Lee, M., 2016. — Ecological stoichiometry of biological invasions. Visiting postdoctoral fellow, Centre for Biodiversity Theory and Modelling (Moulis, France).
18. Arnoldi, J.-F., 2014–2018. — New theoretical approaches to the stability of ecological systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
19. Montoya, D., 2015–2018. — Multiple ecosystem services in agricultural landscapes. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
20. Shanafelt, D., 2016–2018. — Stability of competitive and multitrophic systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
21. Zelnik, Y., 2016–2019. — Spatial dynamics and ecosystem stability. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).

22. Lafuite, A.-S., 2018–2019. — Spatial dynamics and sustainability of coupled social–ecological systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
23. Barbier, M., 2016–present. — Generic properties of complex ecosystems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
24. Henderson, K., 2016–present. — Sustainability of coupled social–ecological systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
25. Quévreux, P., 2018–present. — Diversity and stability of food webs in space. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).
26. Galiana, N., 2018–present. — Meta-analysis of the relationships between diversity and stability of ecological systems. Postdoctoral fellowship, Centre for Biodiversity Theory and Modelling (Moulis, France).

## **Supervision of other research projects**

1. Yuan, Z., 2014–2015. — Biodiversity and ecosystem functioning in temperate forests. Visiting scientist, Centre for Biodiversity Theory and Modelling (Moulis, France).
2. Rotter, P., 2015–2016. — Modelling the effects of nitrogen enrichment on terrestrial ecosystems. Erasmus mobility internship within a Ph.D., Centre for Biodiversity Theory and Modelling (Moulis, France).
3. Hu, D., 2017–2018. — A cybernetic approach to ecosystem functioning and stability. Visiting scientist, Centre for Biodiversity Theory and Modelling (Moulis, France).

## **Supervisory committees of Master's theses**

1. Brazeau, C., 2005–2009, McGill University.
2. Low-Décarie, E., 2007–2010, McGill University.
3. Velghe, K., 2009–2011, McGill University.
4. Osmond, M., 2011, McGill University.

## **Supervisory committees of Ph.D. theses**

1. Goreaud, F., 1997–2000, Ecole Nationale du Génie Rural, des Eaux et des Forêts (Nancy, France).
2. Raynaud, X., 2001–2004, University of Paris Sud (France).
3. Descamps, B., 2002–2005, Pierre and Marie Curie University.
4. Gauduchon, M., 2003–2006, Pierre and Marie Curie University.
5. Valeix, M., 2003–2006, Pierre and Marie Curie University.

6. Roussel, H., 2003–2006, Paul Sabatier University (Toulouse, France).
7. Artheau, M., 2003–2006, Paul Sabatier University (Toulouse, France).
8. Bérubé, V., 2009, Laval University (Quebec, Canada).
9. Hammond, T., 2008–2010, McGill University.
10. Ruiz-Jaen, M. C., 2005–2011, McGill University.
11. Whiteley, J., 2007–2011, McGill University.
12. Pedruski, M., 2009–2011, McGill University.
13. Low-Décarie, E., 2010–2011, McGill University.
14. Fouard, A., 2010–2011, McGill University.
15. Briceno, T., 2009–2012, HEC Montréal (Canada).
16. Jacquet, C., 2013–2015, University of Quebec in Rimouski (Canada) and Montpellier II University (France).
17. Guiet, J., 2013–2015, Montpellier II University (France).
18. Bisson, A., 2015–2016, Montpellier II University (France).

## **Examining boards of Ph.D. theses**

1. Martin, P. J., 1990, Free University of Brussels (Secretary).
2. Aron, S., 1990, Free University of Brussels (Secretary).
3. Chaabane, K., 1995, Free University of Brussels.
4. Dejaive, P.-A., 1995, Pierre and Marie Curie University.
5. Morvan, N., 1996, University of Rennes 1 (France).
6. Plantard, O., 1997, Pierre and Marie Curie University (Chair).
7. Ouedraogo, P., 1997, Pierre and Marie Curie University (Chair).
8. Rossi, J.-P., 1998, Pierre and Marie Curie University (Rapporteur and chair).
9. Zheng, D. W., 1998, Swedish University of Agricultural Sciences (Uppsala, Sweden) (Opponent).
10. Novoa, C., 1998, Pierre and Marie Curie University (Chair).
11. de Mazancourt, C., 1998, Pierre and Marie Curie University.
12. Fournier, E., 1998, National Agricultural Institute of Paris-Grignon (France).
13. Konate, S., 1998, Pierre and Marie Curie University (Chair).
14. François, F., 1999, University of Aix-Marseille 2 (France) (Rapporteur).
15. de Oliveira Barros, M. E., 1999, Pierre and Marie Curie University (Chair).
16. Loranger, G., 1999, Pierre and Marie Curie University (Chair).
17. Millien, V., 1999, University of Montpellier II (France).
18. Goreaud, F., 2000, Ecole Nationale du Génie Rural, des Eaux et des Forêts (Nancy, France).
19. Missa, O., 2000, Free University of Brussels.
20. Shin, Y.-J., 2000, Denis Diderot University (Paris, France).
21. Mermilliod-Blondin, F., 2000, Claude Bernard University (Lyon, France) (Rapporteur).
22. Mouquet, N., 2001, Pierre and Marie Curie University.
23. Daufresne, T., 2001, Pierre and Marie Curie University.
24. Cadet, C., 2003, Pierre and Marie Curie University.
25. Restif, O., 2003, Pierre and Marie Curie University (Chair).
26. Cattin, M.-F., 2004, University of Neuchâtel (Switzerland) (Rapporteur).

27. Le Chat, L., 2004, Pierre and Marie Curie University (Rapporteur).
28. Goudard, A., 2007, Pierre and Marie Curie University.
29. Cherif, M., 2007, Pierre and Marie Curie University.
30. Hauzy, C., 2007, Pierre and Marie Curie University.
31. Xu, Y., 2007, McGill University (Pro-Dean).
32. Morgan, S. K., 2008, McGill University (Acting chair).
33. Tardif, S. R., 2008, Sherbrooke University (Canada).
34. O'Brien, D. S., 2009, McGill University.
35. Meinard, Y., 2010, Paris Diderot University (France).
36. Crispo, E., 2010, McGill University.
37. Leroux, S., 2010, McGill University.
38. Li, Z., 2010, McGill University (Pro-Dean).
39. Pillai, P., 2011, McGill University.
40. Khorshidahmad, A., 2011, McGill University (Pro-Dean).
41. Pontarp, M., 2012, Lund University (Sweden) (Opponent).
42. Auguères, A.-S., 2015, Paul Sabatier University (Toulouse, France).
43. Guiet, J., 2016, Montpellier II University (France).
44. Olivier, T., 2019, National Museum of Natural History (France) (Rapporteur).

## **Examining boards of accreditations to supervise research**

1. Oberdorff, T., 1999, Paul Sabatier University (Toulouse, France) (Rapporteur).
2. Ferrière, R., 2000, Pierre and Marie Curie University (Chair).
3. Franc, A., 2002, University of Paris Sud (Orsay, France).
4. Bernard, O., 2004, University of Nice (France).
5. Chave, J., 2005, Paul Sabatier University (Toulouse, France) (Rapporteur).
6. Gaucherel, C., 2006, University of Paris Sud (Orsay, France).
7. Pavoine, S., 2014, University of Paris Sud (Orsay, France) (Rapporteur).
8. Jabot, F., 2015, Blaise Pascal University (Clermont-Ferrand, France) (Rapporteur).

## **Teaching responsibilities: practical and field courses**

1977–1987: Regular charge (120 hours a year) at the Free University of Brussels for courses in animal ecology, systematic zoology and soil zoology for students in the third year and the Master's degree in zoological sciences and for students in the third and fourth years in agricultural sciences.

1987–1988: Half-time charge (165 hours a year) at the Free University of Brussels for courses in animal biology for students in the first year in medical sciences, dental sciences and applied medical biology, and for students in the second year in biological sciences, geological sciences and agricultural engineering.

1988–1990: Idem, full-time charge (330 hours a year).

1992–1994: Full-time charge (330 hours a year) at the Free University of Brussels for a course in animal biology for students in the second year in biological, geological and agricultural sciences, and for courses in animal ecology, theoretical systematics and soil zoology for students in the Master's degree in zoological sciences and in the fourth year in agricultural sciences.

1995–2004: Field course (36 hours a year) of the module *Conservation Ecology and Management of Biological Resources* of the Master's degree (first year) in Population and Ecosystem Biology at Pierre and Marie Curie University.

## **Teaching responsibilities: courses**

1988–1989: Supply teacher at the Free University of Brussels for a course in general zoology for students in the first year in biological, geological and agricultural sciences.

1989–1990: Supply teacher at the Free University of Brussels for a course in general zoology for students in the second year in biological, geological and agricultural sciences.

1992–1994: Lectures on insects at the Free University of Brussels as part of a course in general zoology for students in the second year in biological, geological and agricultural sciences.

1986–1995: Free course *Ecology and evolution of communities* (15 hours a year) at the Free University of Brussels.

1994–1996: Course *Living Beings – Environment Interrelations: Ecology* (15 hours a year) at the Free University of Brussels for students in the Master's degree (DES) in Environmental Management and in the Master's degree in Tourism.

1994–2005: Full-time charge at Pierre and Marie Curie University, comprising the following courses:

- *Ecology of Populations and Interactions: Dynamics and Modelling*, for students in the Master's degree (first year) in Population and Ecosystem Biology (1994–2004);
- *Community Ecology*, for students in the Master's degree (first year) in Population and Ecosystem Biology (1994–2004);
- *Dynamics of Ecological Systems and Management of Biodiversity*, for students in the Master's degree (first year) in Population and Ecosystem Biology (1995–2004);
- *Biodiversity*, for students in the Master's degree (first year) in Biology of the Ecole Normale Supérieure (1994–1996);
- *Ecology of Communities and Ecosystems*, for students in the Master's degree (first year) in Biology of the Ecole Normale Supérieure (1996–2003);
- *General Ecology: Organisms, Populations, Communities, Ecosystems*, for students in the Master's degree (DEA) *Continental Biosphere: Soils, Ecosystems, Atmosphere* (1994–2002);
- *Ecosystem Modelling*, for students in the Master's degree (DEA) *Continental Biosphere: Soils, Ecosystems, Atmosphere* (1997–2002);

- *Interspecific Competition*, for students in the Master's degree (DEA) in Ecology (1994–2004);
- *Ecology and Evolution of Communities: From Biodiversity Dynamics to Ecosystem Functioning*, for students in the Master's degree (DEA) in Ecology (1995–2004);
- *Community and Ecosystem Ecology*, for students in the Master's degree (first year) in Science and Technology, Section *Ecology, Biodiversity, Evolution* (2004–2005);
- *Biogeochemical Cycles and Evolution of Ecosystems*, for students in the Master's degree (first year) in Science and Technology, Section *Ecology, Biodiversity, Evolution* (2004–2005);
- *Biodiversity and Ecosystem Functioning*, for students in the Master's degree (second year) in Science and Technology, Section *Ecology, Biodiversity, Evolution* (2004–2005);
- *Community Ecology*, for students in the Master's degree (first year) in Biology of the Ecole Normale Supérieure (2004–2005);
- *Biodiversity and Ecosystem Functioning*, for first-year students in Physics and Chemistry at the Ecole Normale Supérieure (2004–2005).

2005–2011: Full-time charge at McGill University, comprising the following courses:

- *Theoretical Ecology* (BIOL 434), for last-year undergraduate students in Biology (2006–2009);
- *Ecological and Societal Impacts of Biodiversity Change* (ENVR 380), for undergraduate students in Environment (2009);
- *Linking Community and Ecosystem Ecology* (BIOL 590), for graduate students in Biology (2006–2011);
- *Biodiversity and Ecosystems* (BIOL 310), for undergraduate students in Biology (2010–2011);
- *Biodiversity Science* (BIOL 645 at McGill University, BIO 6012 at the University of Montreal), summer course for graduate students affiliated to the Quebec Centre for Biodiversity Science (2010–2011).

Since 2016 : 10-hour course in the *Biodiversity and Ecosystems* module of the *Ecology and Evolution* Master's degree (second year) at Paul Sabatier University (Toulouse).

## **Invited courses**

1993–1994: Course *Interspecific Competition* (3 hours), for students in the Master's degree (DEA) *General Ecology and Plant Production* at the Ecole Normale Supérieure (Paris, France).

1993–1995: Lectures *How Do Animal Communities Organise?* in the programme of the Council of Permanent Education at the Free University of Brussels.

1995–1996: Course *Herbivores and Nutrient Recycling* (3 hours), for students in the Master's degree in Ecology at the Free University of Amsterdam (Netherlands).

1995–1998: Course *Ecology* (15 hours a year), for students in the Master's degree in Environmental Management and Engineering at the Ecole Nationale Supérieure des Mines de Paris.

1999: Course *Ecological Modelling* (20 hours) in the *Environmental Cartography* Summer School at the University of the Aegean (Mytilini, Greece).

2000: Lecture *Modelling Ecosystem Functioning in Response to Biodiversity Change* in the Advanced Study Course *Biodiversity in the Mediterranean Region: Evaluation, Threats and Strategies for its Conservation and Sustainable Use in the Face of Global Change* of the RICAMARE European project, at the University of Castilla – La Mancha (Toledo, Spain).

2000: Lectures *Biodiversity and Ecosystem Functioning* and *Diversity and Stability of Ecosystems* in the Postgraduate Course *Diversity in Time and Space* of Uppsala University (Sweden).

2000: Course *Biodiversity and Ecosystem Functioning* (4 hours) in the internal training programme *Ecology and Dynamics of Communities* of IFREMER (France).

1996–2002: Lecture *The Importance of Biodiversity in Ecosystem Functioning*, for students in the second year at the National Agricultural Institute of Paris-Grignon (INAPG, France).

2003: Lectures *Linking Community and Ecosystem Ecology: Biodiversity and Ecosystem Functioning* and *Linking Community and Ecosystem Ecology: Ecology and Evolution of Indirect Effects in Ecosystems* in the course *Biodiversity and Species Interactions* of the 3<sup>ème</sup> Cycle Romand en Sciences Biologiques and the National Centre of Competence in Research *Plant Survival in Natural and Agricultural Ecosystems*, in Neuchâtel (Switzerland).

2008: Course *Evolution of Ecosystems* (3 hours) at Sherbrooke University (Canada).

2008: Lecture *The Ecological Consequences of Biodiversity Loss* within the Mini-Science series *Ecology, Evolution and Extinction* at McGill University.

2012: Lecture *Biodiversity and Ecosystem Functioning* within the course *Biodiversity and Ecosystems* for undergraduate students in Biology at McGill University.

2012: Lecture *Biodiversity and Ecosystem Functioning* within the Summer School *Biotic Interactions: From Genes to Ecosystems* organised by the TULIP Laboratory of Excellence, in Lesponne (France).

2013: Lecture *Biodiversity and Ecosystem Services* within the quarterly programme *Mathematics of Bio-Economics* of Henri Poincaré Institute, in Paris (France).

2013: Lecture *Metacommunities and Metaecosystems* within the Thematic School *Interdisciplinary Approach to the Green and Blue Network* of the National Centre for Scientific Research, in Rennes (France).

2014: Course *Biodiversity and Ecosystem Functioning* (4 hours), for students in the Master's degree in Biosciences at the Ecole Normale Supérieure, in Lyon (France).

2014: Lecture *Modelling Changes in Biodiversity and Their Ecological and Societal Consequences* within the Young Researcher School *Multi-scale Modelling of Biological Systems*, in Toulouse (France).

2015: Lectures *Biodiversity and Ecosystem Functioning across Space and Diversity-stability relationships across Scales and Levels of Organisation* in the course *Ecological Networks in a Spatial Context : Beyond Local Analyses of Species Interactions* of the Doctoral Program in Ecology and Evolution of the Universities of Bern, Fribourg, Geneva, Lausanne and Neuchâtel, in Fribourg (Switzerland).

2013–2016: Course *Biodiversity and Ecosystem Functioning* (3 hours per year), for last-year undergraduate students in Biology at the Ecole Normale Supérieure, in Paris (France).

2016: Lectures *Biodiversity and Ecosystem Functioning* and *Environmental Change, Biodiversity and Ecosystem Functioning* in the course *Biodiversity and Ecosystem Functioning under Global Change: Theory and Experiment* of the Doctoral Program in Ecology and Evolution of the Universities of Bern, Fribourg, Geneva, Lausanne and Neuchâtel, in Fribourg (Switzerland).

2015–2018: Lecture *Biodiversity Loss and Its Consequences* (2 hours per year) at the Lycée du Couserans, in Saint-Girons (France).

2018: Lecture *Biodiversity Loss and Its Ecological and Societal Consequences* (3 hours) at the National School of Meterology, in Toulouse (France).

## **Teaching administrative responsibilities**

1988–1991: Member of the Examining Board of the Master's degree in Zoological Sciences at the Free University of Brussels.

1992–1995: Member of the Examining Board of the Master's degree in Agricultural Sciences at the Free University of Brussels.

1994–1995: Head (with M. E. Hochberg and Y. Michalakis) of the *Interspecific Interactions* module of the Master's degree (DEA) in Ecology of the University of Paris Sud, Pierre and Marie Curie University and the National Agricultural Institute of Paris-Grignon.

1994–1996: Member of the Environment Teaching Commission and the Examining Board of the Master's degree (DES) in Environmental Management at the Free University of Brussels.

1995–1996: Member of the Tourism Teaching Commission and the Examining Board of the Master's degree in Tourism at the Free University of Brussels.

1995–2000: Head of the two modules *Interspecific Interactions and Community Dynamics* of the Master's degree (DEA) in Ecology of the University of Paris Sud, Pierre and Marie Curie University and the National Agricultural Institute of Paris-Grignon.

1995–2004: Coordinator at Pierre and Marie Curie University of the European ERASMUS and SOCRATES Inter-University Cooperation Programmes in Ecology and Environmental Science.

1995–2004: Chairman of the Examining Board of the first-year Master's theses in Population and Ecosystem Biology at Pierre and Marie Curie University.

1995–2004: Member of the Examining Board of the Master's degree (DEA) in Ecology of the University of Paris Sud, Pierre and Marie Curie University and the National Agricultural Institute of Paris-Grignon.

1995–2004: Head of the *Conservation Ecology and Management of Biological Resources* module of the Master's degree (first year) in Population and Ecosystem Biology at Pierre and Marie Curie University.

1996–2004: Head of the *Ecology II: Structure, Functioning and Modelling of Ecosystems* module of the Master's degree (first year) in Population and Ecosystem Biology at Pierre and Marie Curie University.

1997–2001: Member of the Council of Education of the Life Sciences Department at Pierre and Marie Curie University.

2000–2003: Member of the Scientific Council of Research Projects of the Master's degree (first year) in Biology of the Ecole Normale Supérieure.

2000–2004: Director of the Master's degree (DEA) in Ecology of Pierre and Marie Curie University, the University of Paris Sud and the National Agricultural Institute of Paris-Grignon.

2000–2004: Head of the module *Ecology and Evolution of Communities: From Biodiversity Dynamics to Ecosystem Functioning* of the Master's degree (DEA) in Ecology of Pierre and Marie Curie University, the University of Paris Sud and the National Agricultural Institute of Paris-Grignon.

2000–2005: Member of the Board and of the Scientific and Educational Council of the Doctoral School *Diversity of the Living* of Pierre and Marie Curie University.

2004–2005: Head of the programme *Communities, Ecosystems and Global change* of the Master's degree in Science and Technology, Section *Ecology, Biodiversity, Evolution*, at Pierre and Marie Curie University.

2004–2005: Head of the *Community and Ecosystem Ecology* module of the Master's degree in Science and Technology, Section *Ecology, Biodiversity, Evolution*, at Pierre and Marie Curie University.

2004–2005: Head of the *Biogeochemical Cycles and Global Change* module of the Master's degree in Science and Technology, Section *Ecology, Biodiversity, Evolution*, at Pierre and Marie Curie University.

2004–2005: Head of the *Biodiversity and Ecosystem Functioning* module of the Master's degree in Science and Technology, Section *Ecology, Biodiversity, Evolution*, at Pierre and Marie Curie University.

2006: Examiner of the Master's thesis of C. Healy at McGill University.

2008: Member of the Ph.D. Comprehensive Examination Committee of K. Whitbeck at McGill University.

2006–2011: Member of the Ph.D. Qualifying Examination Committees of M. C. Ruiz-Jaen (2006), P. Pillai (2007), G. Kyafis (2007), S. J. Leroux (2007), J. Whiteley (2007), R. Feldman (2008), K. Whitbeck (2008), T. Hammond (2010), M. Pedruski (2010), I. Hatton (2010), J. Marleau (2010), A. Fouard (2011), E. Wong (2011) and S. Portalier (2011) at McGill University.

## Public relation activities

1983–1985: Interviews in radio programmes on insects on *Radio-Télévision Belge Francophone* (Belgium).

1993: Participation in a film on waste recycling for the Brussels-Capital Region (Belgium).

1998: Interview in the newspaper *Libération* (France) regarding an article on biodiversity and ecosystem stability.

1999: Interview in the newspaper *Le Monde* (France) regarding an article on trophic cascades and climate changes.

1999: Interviews in the newspaper *Le Monde* (France) and in the journals *Science et Vie*, *Eurêka*, *Le Courrier de l'Environnement*, *Science Actualités*, *Cultivars: les enjeux* (France) and *RDT Info* (European Commission, Belgium), interviews on the radio stations *Radio Alpes Mancelles* and *Radio Zinzine* (France) regarding the article “Plant diversity and productivity experiments in European grasslands” published in *Science*.

2000: Invited in the *Continent Sciences* radio programme of *France Culture* on scientific ecology.

2001: Interview by the journal *Biofutur* (France) regarding the article “Biodiversity and ecosystem functioning: current knowledge and future challenges” published in *Science*.

2001: Interview by the journal *Science* (USA) regarding a German biodiversity programme.

1999–2001: Numerous articles published in the popular and scientific popularisation press regarding my work on the impact of biodiversity on ecosystem functioning.

2002: Participation in the film *Terre Nourricière* produced by LILITH Production (France) on the interest of biodiversity for agricultural practices.

2005: Press conferences, interviews on the television channels *Télévision Française 1*, *TV 5*, *Canal+* (France) and *Potuguese Radio Television* (Portugal), radio programmes on *Europe 1* and *France Culture* (France), interviews on the radio stations *Radio France Internationale*, *Radiocity* (France), *Deutsche Welle* (Germany) and *Radio Canada* (Canada), interviews in the newspapers *Le Monde*, *Le Figaro*, *Libération*, *La Croix*, *Le Journal du Dimanche*, *Les Echos*, *Metro* (France), *El País* and *Berria* (Spain), interviews in the journals *Science* (USA) and *Le Journal du CNRS* (France), and interview in the online newspaper *Science and Development Network* regarding the challenges of biodiversity and the International Conference *Biodiversity Science and Governance*. Wide coverage of this event in the medias in France and abroad.

2005: Interview in the journal *Biotech Info* (France) and on the website of the Institute of Scientific and Technical Information (France) regarding open access to scientific information.

2005: Portrait in the newspaper *In Focus Science* (McGill University, Canada) on the occasion of my arrival at McGill University.

2005: Interview in the special issue *L'année de la Science* of the journal *Science et Vie* (France) regarding the perspectives of biodiversity science.

2006: Interview in the newspaper *Le Monde* (France) regarding the future of biodiversity in the 21<sup>st</sup> century.

2006: Interview by the journal *Science* (USA) regarding an article on the diversity of tropical forests.

2006: Interviews by the France-Presse Agency (France), the newspaper *Le Monde* (France) and the journal *Science* (USA) regarding the first meeting of the International Steering Committee of the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity.

2006: Interviews and wide coverage, in the medias of numerous countries, of the article “Diversity without representation” published in *Nature*.

2006: Interview by the BBC (United Kingdom) for a documentary film on biodiversity conservation.

2006: Interview in the journal *Planète Veolia Environnement* (France) on the importance of biodiversity for industry.

2007: Interview on the *Scitizen* web-based open science news source regarding biodiversity loss and conservation.

2007: Interview in the newspaper *McGill News* (McGill University, Canada) within an article on the biodiversity crisis.

2007: Interviews in the journals *Folha de São Paulo* and *O Estado de São Paulo* (Brazil) and on the website of *Agência FAPESP* (Brazil) regarding the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity.

2007: Interview in the newspaper *Le Devoir* (Canada) on biodiversity loss and the need for a new relationship between humanity and nature.

2007: Interview by the EFE news agency (Spain), published in several newspapers and websites, regarding the causes and consequences of biodiversity loss.

2007: Interviews on a large number of scientific news agency websites regarding the article “Impacts of plant diversity on biomass production increase through time because of species complementarity” published in the *Proceedings of the National Academy of Sciences of the U.S.A.*

2007: Interviews on the television channel *France 3* (France), on *Radio-Télévision Belge Francophone* (Belgium) and in the newspaper *The Daily Telegraph* (United Kingdom) regarding the conclusions of the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity.

2008: Interview in the newspaper *Le Monde* (France) regarding the consequences of biodiversity loss in deep-sea ecosystems.

2008: Interview in the newspaper *McGill Reporter* (Canada) regarding my research on biodiversity.

2008: Guest of the *Matin Première* programme of *Radio-Télévision Belge Francophone* (Belgium).

2009: Interview on Radio Canada regarding the 150th birthday of Darwin’s *The Origin of Species* and the theory of evolution.

2009 : Interview in a *News Feature* of the journal *Nature* regarding the relationship between biodiversity and ecosystem functioning.

2010: Interview on *Radio-Télévision Belge Francophone* (Belgium) regarding the international biodiversity year.

2010: Interview on the radio station *CKUT 90.3 FM* (Montreal, Canada) regarding the publication of my book *The Challenges of Biodiversity Science*.

2010: Interview in the scientific newsletter *Research Trends* regarding biodiversity and ecosystems.

2010: Interview on Radio Canada International regarding the ecological consequences of biodiversity loss.

2011: Public lecture on the ecological and societal consequences of biodiversity loss broadcast on the television channel *Canal Savoir* (Canada) and on *YouTube*.

2011: Interview in the newspaper *Strömstadstidning* (Sweden) on the occasion of my Per Brinck Oikos Award prize-giving ceremony.

2011: Interview by *Anges Gardiens de la Planète* as one of the world's 100 most influential opinion leaders in the environment, in preparation for the 1<sup>st</sup> Ecological Games in 2013 (excerpts on *YouTube*).

2011: Interviews in the journal *La Recherche* (France) and on the website *Science Daily* regarding the article "High plant diversity is needed to maintain ecosystem services" published in *Nature*.

2012: Interviews on the radio stations *Radio France* (France) and *La Voix de l'Amérique* (USA), in the newspaper *La Dépêche du Midi* (France) and in the journals *Science et Vie* and *CNRS International Magazine* (France) regarding the article "Biodiversity loss and its impact on humanity" published in *Nature* and the *Rio+20* United Nations Conference on Sustainable Development. Wide coverage of the article in the medias abroad.

2012: Article in *La Gazette Ariégeoise* (France) about my move to Moulis.

2012: Interview in the journal *Congressional Quarterly Global Researcher* (USA) regarding biodiversity loss and its causes and consequences.

2012: Interview in the journal *Science et Vie* (France) regarding species selection in biodiversity conservation policies.

2013: Interview on the website *AriègeNews* (France) regarding climate change and the Centre for Biodiversity Theory and Modelling.

2013: Interviews in the newspaper *Le Soir* (Belgium) on the website *Materia* (Spain) regarding biodiversity loss and its consequences.

2014: Interview in the journal *Science et Vie Junior* (France) regarding the effects of climate warming on biodiversity.

2000: Invited in the *Continent Sciences* radio programme of *France Culture* on scientific ecology.

2014: Invited in the *La Tête au Carré* radio programme of *France Inter* regarding the book *Biodiversité: Vers une Sixième Extinction de Masse*.

2014: Meeting debate in Paris regarding the book *Biodiversité: Vers une Sixième Extinction de Masse*.

2014: Interview on the website *Terraeco.net* (France) regarding the book *Biodiversité: Vers une Sixième Extinction de Masse*.

2015: Interview in the magazine *Exploreur* (France) regarding climate warming and biodiversity.

2015: Interviews on *Radio Canada*, in the newspaper *Le Figaro* (France) and in the magazine *Exploreur* (France) regarding the article “The predator–prey power law : biomass scaling across terrestrial and aquatic biomes” published in *Science*. Wide coverage of this article in the medias of numerous countries.

2016: Interview on *Radio France* regarding the causes of biodiversity loss.

2017: Interview in the magazine *GEO* (France) regarding biodiversity conservation.

2018: Interview on the blog *Reflections on Papers Past* regarding the publication in 2001 of my paper “Partitioning selection and complementarity in biodiversity experiments”.

2019: Video interview regarding the importance of biodiversity for future generations for the Foundation for Research on Biodiversity (France) (<https://www.youtube.com/user/biodiversite2010>).

2019: Panellist in the session “Why are we not reporting the biodiversity crisis ?” in the World Conference of Science Journalists, in Lausanne (Switzerland).

2019: Interview on *Radio Télévision Suisse* (Switzerland) regarding biodiversity loss.

2019: Interview in the magazine *Terra Darwin* (France) regarding the importance of cultivated biodiversity.

# Scientific work

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My research goal is to build the theoretical foundations for a new ecological synthesis that integrates the divergent perspectives of community ecology, evolutionary ecology and ecosystem ecology. I view theory as a powerful tool to generate, clarify and generalise new concepts and hypotheses; accordingly, I attach great importance to a tight interaction between the mathematical models I develop and empirical or experimental work on a wide range of ecosystems, both terrestrial and aquatic.

My main research theme during the past twenty years has been on the relationship between biodiversity and ecosystem functioning and on the ecological and societal consequences of biodiversity loss. This new field of research has experienced a dramatic growth to which I have strongly contributed, not only through my scientific work but also through my responsibilities in multiple national and international initiatives. I have also laid the theoretical foundations of three new research fields that address the spatial, evolutionary and societal dimensions of biodiversity and ecosystem functioning: metacommunity and metaecosystem ecology, evolutionary ecosystem ecology, and the dynamics and sustainability of human–nature interactions. Lastly, I have championed an integrative biodiversity science that transcends disciplinary boundaries.

I also strongly believe that science should become aware of its social responsibilities. Therefore, I have devoted significant efforts to fostering new research initiatives and linking science and policy in the area of biodiversity and ecosystem services internationally. In particular, I initiated and chaired the *Linking Community and Ecosystem Ecology* programme of the European Science Foundation; I restructured and chaired DIVERSITAS, the international programme of biodiversity science; I chaired the International Conference *Biodiversity Science and Governance* organised by France under the high patronage of the President of the French Republic and the Director-General of UNESCO; and I initiated and chaired the consultative process towards an International Mechanism of Scientific Expertise on Biodiversity, which gave birth to the Intergovernmental science–policy Platform on Biodiversity and Ecosystem Services.

My work has resulted in over 400 scientific publications, among which 7 books and numerous papers in the top disciplinary and multidisciplinary journals (7 in *Nature*, 7 in *Science*, 1 in *Nature Climate Change*, 5 in *Nature Communications*, 10 in *PNAS*, 27 in *Ecology Letters*,...). This work has exerted a profound influence over the development of ecology during the past twenty years, as attested, for example, by the large number of citations it has attracted (over 50,000 citations in Google Scholar).

# Scientific publications

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*Note: The names that are underlined below represent students, post-doctoral fellows or visiting scientists that have worked under my direct supervision on the publications concerned.*

## Books

1. Desender, K., Dufrêne, M., **Loreau, M.**, Luff, M. L. & Maelfait, J.-P. (Eds), 1994. — *Carabid Beetles: Ecology and Evolution*. Kluwer Academic Publishers, Dordrecht, Netherlands, 474 pp.
2. **Loreau, M.**, Naeem, S. & Inchausti, P. (Eds), 2002. — *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*. Oxford University Press, Oxford, United Kingdom, 294 pp.
3. Naeem, S., Bunker, D. E., Hector, A., **Loreau, M.** & Perrings, C. (Eds), 2009. — *Biodiversity, Ecosystem Functioning, and Human Wellbeing: An Ecological and Economic Perspective*. Oxford University Press, Oxford, United Kingdom, 368 pp.
4. Levin, S. A., Carpenter, S. R., Godfray, H. C. J., Kinzig, A. P., **Loreau, M.**, Losos, J. B., Walker, B. & Wilcove, D. S. (Eds), 2009. — *The Princeton Guide to Ecology*. Princeton University Press, Princeton, U.S.A., 809 pp.
5. **Loreau, M.**, 2010. — *The Challenges of Biodiversity Science*. Excellence in Ecology, International Ecology Institute, Oldendorf/Luhe, Germany, 120 pp.
6. **Loreau, M.**, 2010. — *From Populations to Ecosystems: Theoretical Foundations for a New Ecological Synthesis*. Monographs in Population Biology, Princeton University Press, Princeton, U.S.A., 297 pp.
7. Billé, R., Cury, P., **Loreau, M.** & Maris, V., 2014. — *Biodiversité: Vers une Sixième Extinction de Masse*. La Ville Brûle Editions, Montreuil, France, 199 pp.

## Publications in refereed scientific journals

8. **Loreau, M.**, 1977. — Etude de la distribution des Carabidae dans la vallée du Viroin (Belgique). *Annales de la Société Royale Zoologique de Belgique*, 107: 129–146.
9. **Loreau, M.**, 1982. — Analyse du régime alimentaire de *Abax ater* (Carabidae). *Annales de la Société Royale Zoologique de Belgique*, 112: 120.
10. **Loreau, M.**, 1983. — Le régime alimentaire de *Abax ater* Vill. (Coleoptera, Carabidae). *Acta Oecologica, Oecologia Generalis*, 4: 253–263.

11. **Loreau, M.**, 1983. — Le régime alimentaire de huit carabides (Coleoptera) communs en milieu forestier. *Acta Oecologica, Oecologia Generalis*, 4: 331–343.
12. **Loreau, M.**, 1984. — Niche differentiation, and the role of competition in forest carabid communities. *Annales de la Société Royale Zoologique de Belgique*, 114: 108–109.
13. **Loreau, M.**, 1984. — Etude expérimentale de l'alimentation de *Abax ater* Villers, *Carabus problematicus* Herbst et *Cychrus attenuatus* Fabricius (Coleoptera, Carabidae). *Annales de la Société Royale Zoologique de Belgique*, 114: 227–240.
14. **Loreau, M.**, 1984. — Population density and biomass of Carabidae (Coleoptera) in a forest community. *Pedobiologia*, 27: 269–278.
15. **Loreau, M.**, 1984. — Composition et structure de trois peuplements forestiers de Carabides. *Académie Royale de Belgique, Bulletin de la Classe des Sciences*, 70: 125–160.
16. **Loreau, M.**, 1984. — Les niches écologiques des Carabides en milieu forestier. I. Composantes spatio-temporelles. *Académie Royale de Belgique, Bulletin de la Classe des Sciences*, 70: 333–379.
17. **Loreau, M.**, 1984. — Les niches écologiques des Carabides en milieu forestier. II. Composante trophique et organisation générale des niches. *Académie Royale de Belgique, Bulletin de la Classe des Sciences*, 70: 480–525.
18. **Loreau, M.**, 1985. — Ecological niches and feeding strategies in carabid beetles. *Annales de la Société Royale Zoologique de Belgique*, 115: 103–104.
19. **Loreau, M.**, 1985. — Annual activity and life cycles of carabid beetles in two forest communities. *Holarctic Ecology*, 8: 228–235.
20. **Loreau, M.**, 1987. — Vertical distribution of activity of carabid beetles in a beech forest floor. *Pedobiologia*, 30: 173–178.
21. Baluku, B., Josens, G. & **Loreau, M.**, 1987. — Le régime alimentaire de *Biomphalaria pfeifferi* (Gasteropoda: Planorbidae) au Zaïre oriental. *Annales de la Société Royale Zoologique de Belgique*, 117: 93–94.
22. **Loreau, M.**, Baluku, B. & Josens, G., 1987. — Dynamique des populations de *Biomphalaria pfeifferi* (Gasteropoda: Planorbidae) au Zaïre oriental. *Annales de la Société Royale Zoologique de Belgique*, 117: 103.
23. **Loreau, M.** & Baluku, B., 1987. — Growth and demography of populations of *Biomphalaria pfeifferi* (Gastropoda, Planorbidae) in the laboratory. *Journal of Molluscan Studies*, 53: 171–177.
24. Baluku, B., Josens, G. & **Loreau, M.**, 1987. — Le régime alimentaire de *Biomphalaria pfeifferi* (Gastropoda: Planorbidae) au Zaïre oriental. *Revue de Zoologie africaine*, 101: 279–282.
25. **Loreau, M.**, Baluku, B. & Josens, G., 1987. — Dynamique des populations de *Biomphalaria pfeifferi* (Gastropoda: Planorbidae) au Zaïre oriental. *Revue de Zoologie africaine*, 101: 290–292.
26. **Loreau, M.** & Baluku, B., 1987. — Population dynamics of the freshwater snail *Biomphalaria pfeifferi* in Eastern Zaïre. *Journal of Molluscan Studies*, 53: 249–265.

27. **Loreau, M.**, 1987. — Community-wide seasonal trends in the niches of forest carabid beetles. *Acta Phytopathologica et Entomologica Hungarica*, 22: 175–185.
28. **Loreau, M.**, 1988. — Determinants of the seasonal pattern in the niche structure of a forest carabid community. *Pedobiologia*, 31: 75–87.
29. **Loreau, M.**, 1988. — Organisation saisonnière des niches dans un peuplement de carabides en relation avec la disponibilité des proies. *Annales de la Société Royale Zoologique de Belgique*, 118: 79–80.
30. **Loreau, M.**, 1989. — Dynamique et régulation des populations de carabides. *Annales de la Société Royale Zoologique de Belgique*, 119: 73–74.
31. **Loreau, M.**, 1989. — Coexistence of temporally segregated competitors in a cyclic environment. *Theoretical Population Biology*, 36: 181–201.
32. Baluku, B., Josens, G. & **Loreau, M.**, 1989. — Etude préliminaire de la densité et de la répartition des mollusques dans deux cours d'eau du Zaïre oriental. *Revue de Zoologie africaine*, 103: 291–302.
33. Baluku, B. & **Loreau, M.**, 1989. — Etude comparative de la dynamique des populations de *Biomphalaria pfeifferi* (Gastropoda, Planorbidae) dans deux cours d'eau du Zaïre oriental. *Revue de Zoologie africaine*, 103: 311–325.
34. **Loreau, M.**, 1989. — On testing temporal niche differentiation in carabid beetles. *Oecologia*, 81: 89–96.
35. Deffernez, L., Champagne, P., Verhaeghe, J.-C., Josens, G. & **Loreau, M.**, 1990. — Analysis of the spatio-temporal niche of foraging grassland ants in the field. *Insectes Sociaux*, 37: 1–13.
36. **Loreau, M.**, 1990. — Competition between age classes, and the stability of stage-structured populations: a re-examination of Ebenman's model. *Journal of theoretical Biology*, 144: 567–571.
37. **Loreau, M.**, 1990. — Competition in a carabid beetle community: a field experiment. *Oikos*, 58: 25–38.
38. **Loreau, M.**, 1990. — The Colwell-Futuyma method for measuring niche breadth and overlap: a critique. *Oikos*, 58: 251–253.
39. **Loreau, M.** & Baluku, B., 1991. — Shade as a means of ecological control of *Biomphalaria pfeifferi*. *Annals of Tropical Medicine and Parasitology*, 85: 443–446.
40. **Loreau, M.**, 1992. — Species abundance patterns and the structure of ground-beetle communities. *Annales Zoologici Fennici*, 28: 49–56.
41. **Loreau, M.**, 1992. — Time scale of resource dynamics and coexistence through time partitioning. *Theoretical Population Biology*, 41: 401–412.
42. **Loreau, M.** & Nolf, C.-L., 1993. — Occupation of space by the carabid beetle *Abax ater*. *Acta Oecologica*, 14: 247–258.
43. Chaabane, K., Josens, G. & **Loreau, M.**, 1993. — Quantitative assessment of consumption by *Abax ater* Villers (Coleoptera Carabidae). *Pedobiologia*, 37: 291–302.

44. Chaabane, K., **Loreau, M.** & Josens, G., 1993. — The life cycle of *Abax ater* (Coleoptera, Carabidae). *Belgian Journal of Zoology*, 123, Supplement 1: 8.
45. **Loreau, M.**, 1993. — How herbivores and other animals benefit plants and ecosystems. *Belgian Journal of Zoology*, 123, Supplement 1: 46.
46. Soki, K., Josens, G. & **Loreau, M.**, 1993. — Dynamics of the nests of *Cubitermes speciosus* (Isoptera, Termitidae): a long-term field study. *Belgian Journal of Zoology*, 123, Supplement 1: 68–69.
47. **Loreau, M.**, 1994. — Material cycling and the stability of ecosystems. *The American Naturalist*, 143: 508–513.
48. **Loreau, M.**, 1994. — Mass and energy flow in closed ecosystems: do ecological or mathematical constraints prevail? *Journal of theoretical Biology*, 168: 237–243.
49. **Loreau, M.** & Ebenhöh, W., 1994. — Competitive exclusion and coexistence of species with complex life cycles. *Theoretical Population Biology*, 46: 58–77.
50. **Loreau, M.**, 1995. — Consumers as maximizers of matter and energy flow in ecosystems. *The American Naturalist*, 145: 22–42.
51. **Loreau, M.**, 1995. — Large-scale ecology and conservation biology (Book review). *The Quarterly Review of Biology*, 70: 238–239.
52. **Loreau, M.**, 1995. — Marine rocky shores and community ecology: an experimentalist's perspective (Book review). *Acta Oecologica*, 16: 127–129.
53. Walrant, A. & **Loreau, M.**, 1995. — Comparison of iso-enzyme electrophoresis and gut content examination for determining the natural diet of the groundbeetle species *Abax ater* (Coleoptera: Carabidae). *Entomologia Generalis*, 19: 253–259.
54. DeAngelis, D. L., **Loreau, M.**, Neergaard, D., Mulholland, P. J. & Marzolf, E. R., 1995. — Modelling nutrient-periphyton dynamics in streams: the importance of transient storage zones. *Ecological Modelling*, 80: 149–160.
55. Martin, P., **Loreau, M.** & Josens, G., 1995. — Production in the ant *Leptothorax unifasciatus* (Hymenoptera, Formicidae). *Acta Oecologica*, 16: 295–311.
56. **Loreau, M.**, 1995. — Evaluating and monitoring the health of large-scale ecosystems (Book review). *Acta Oecologica*, 16: 408–409.
57. **Loreau, M.**, 1995. — Macroecology (Book review). *Acta Oecologica*, 16: 636.
58. Soki, K., Josens, G. & **Loreau, M.**, 1996. — Growth and demography of *Cubitermes speciosus* mounds (Isoptera, Termitidae). *Insectes sociaux*, 43: 189–200.
59. **Loreau, M.**, 1996. — Coexistence of multiple food chains in a heterogeneous environment: interactions among community structure, ecosystem functioning, and nutrient dynamics. *Mathematical Biosciences*, 134: 153–188.
60. Chaabane, K., **Loreau, M.** & Josens, G., 1996. — Individual and population energy budgets of *Abax ater* (Coleoptera, Carabidae). *Annales Zoologici Fennici*, 33: 97–108.
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## Reports

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404. **Loreau, M.**, 2008. — Foreword. In *DIVERSITAS Annual Report 2007: Integrating Biodiversity Science for Human Well-Being*, Paris, France, p. 1.
405. Mouquet, N., Lagadeuc, Y. & **Loreau, M.** (Coordinators), 2013. — Ecologie prédictive et changement planétaire. In *Prospective de l'Institut Ecologie et Environnement du CNRS*, Les Cahiers Prospectives, CNRS, Paris, France, pp. 9–44.
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## Theses

408. **Loreau, M.**, 1976. — *Contribution à l'Etude Ecologique des Carabidae de Treignes*. Master's thesis, Free University of Brussels.
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## **Anonymous publications**

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411. *Programme d'Impulsion "Global Change"*. Science Policy Office, Brussels, Belgium, 136 pp. (1991).
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413. The first annual meeting of Belgian EUROTRAC contributors. *EUROTRAC Newsletter*, 9: 20 (1992).
414. *A Belgian Contribution to the World's Environment and Development: National Research Programmes and Activities* (3 versions: English, French and Dutch). Science Policy Office, Brussels, Belgium, 20 pp. (1992).
415. *Linking Community and Ecosystem Ecology (LINKECOL) : An ESF Scientific Programme*. European Science Foundation, 8 pp. (2000).

# Scientific presentations

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## Invited talks and lectures

1. **Loreau, M.**, 1991. — The Belgian *Global Change* programme. Talk at the Symposium *Global Change: The Biological Perspective* of the International Union of Biological Sciences, in Brussels (Belgium).
2. **Loreau, M.**, 1993. — Ground beetles in a changing environment: determinants of species diversity and community assembly. Talk at the NATO Advanced Research Workshop *Biodiversity, Temperate Ecosystems, and Global Change*, in Montebello (Canada).
3. **Loreau, M.**, 1993. — Food webs or ecosystems? Trophic interactions as nutrient cycling pathways. Talk at the Workshop *Trophic Organization and Food Webs* of the British Council and the Centre National de la Recherche Scientifique, in Paris (France).
4. **Loreau, M.** & de Mazancourt, C., 1996. — Grazing optimization and nutrient cycling: some laws emerging. Talk at the Kyoto Conference on Mathematical Biology '96, in Kyoto (Japan).
5. **Loreau, M.**, 1997. — Biodiversity and ecosystem functioning: a mechanistic model. Talk at the International Workshop *Biodiversity and Ecosystem Processes: Theory and Modelling*, in Ascot (United Kingdom).
6. Yachi, S. & **Loreau, M.**, 1997. — Biodiversity and ecosystem sustainability in a fluctuating environment: the insurance hypothesis. Talk at the International Workshop *Biodiversity and Ecosystem Processes: Theory and Modelling*, in Ascot (United Kingdom).
7. **Loreau, M.**, 1997. — DIVERSITAS: national initiatives. Talk at the International Workshop *Developing Biodiversity Issues: Challenges for the Future* of the DIVERSITAS international programme, in Montreal (Canada).
8. **Loreau, M.**, 1997. — Biodiversity and ecosystem processes: a mechanistic model. Talk at the International Workshop *Biodiversity and Ecological Complexity*, in Kyoto (Japan).
9. Yachi, S. & **Loreau, M.**, 1997. — Biodiversity and ecosystem productivity in a fluctuating environment: the insurance hypothesis. Talk at the International Workshop *Biodiversity and Ecological Complexity*, in Kyoto (Japan).
10. **Loreau, M.**, 1997. — National and regional biodiversity programmes in Europe. Talk at the 2nd DIWPA Symposium *Monitoring and Inventorying of Biodiversity in Western Pacific and Asia*, in Taipei (Taiwan).
11. **Loreau, M.**, 1997. — Le programme *Biodiversité et fonctionnement des écosystèmes*. Talk at the seminar *Biodiversity* of the programme *Environment, Life and Societies* of the National Centre for Scientific Research, in Lyon (France).

12. **Loreau, M.**, 1998. — Linking global change and biodiversity research agendas. Talk at the Plenary Meeting of International Group of Funding Agencies for Global Change Research, in Ispra (Italy).
13. **Loreau, M.**, 1998. — Biodiversité et fonctionnement des écosystèmes. Talk at the Meeting of the *Biological Diversity* National Programme at the Academy of Sciences, in Paris (France).
14. **Loreau, M.** & Yachi, S., 1998. — Biodiversity and ecosystem processes: what have we learned from theory? Lecture at the France–Japan Workshop *Biodiversity and Ecosystem Functioning*, in Paris (France).
15. Yachi, S. & **Loreau, M.**, 1998. — How can complementarity among species affect productivity? A model for light-limited grassland ecosystems. Talk at the France–Japan Workshop *Biodiversity and Ecosystem Functioning*, in Paris (France).
16. **Loreau, M.**, 1998. — Conserving species or ecosystems? Constraints of ecosystems on species, constraints of species on ecosystems. Talk at the International Workshop *Evolutionary Conservation Biology: Adaptive Responses to Environmental Threats – From Individuals to Ecosystems*, in Laxenburg (Autriche).
17. **Loreau, M.**, 1999. — Biodiversité et fonctionnement des écosystèmes: progrès théoriques récents en rapport avec l’expérimentation. Lecture at the Workshop *Long-Term Changes in Diversity in Ecosystems: What Methodological Approaches for What Interpretations?* of the National Programme of Coastal Oceanography, in Wimereux (France).
18. **Loreau, M.** & Mouquet, N., 1999. — Metacommunity dynamics, local and regional coexistence, and ecosystem processes. Talk at the International Workshop *Dispersal: Its Evolution, Causes and Consequences*, in Roscoff (France).
19. **Loreau, M.**, 1999. — Linking evolutionary, community and ecosystem ecology. Talk at the Workshop *An Integrative Biology Approach to Episodic Events within Watershed Ecosystems* of the International Union of Biological Sciences, in São Pedro (Brazil).
20. **Loreau, M.**, 1999. — Grazing optimization and nutrient cycling: ecological and evolutionary implications. Talk at the International Meeting *Herbivore Feeding Strategies, Population Processes and Impact on Biodiversity*, in Chizé (France).
21. **Loreau, M.**, 1999. — Ecological and evolutionary conservation implications of species interactions in ecosystems. Lecture at the Norway/United Nations Conference on the Ecosystem Approach for Sustainable Use of Biological Diversity, in Trondheim (Norway).
22. **Loreau, M.**, 1999. — Biodiversity and ecosystem functioning: recent theoretical advances. Keynote lecture at the 8th European Ecological Congress (EURECO '99), in Porto Carras (Halkidiki, Greece).
23. Holt, R. D. & **Loreau, M.**, 1999. — Biodiversity and ecosystem functioning: the role of trophic interactions and the importance of system openness. Talk at the International Workshop *Biodiversity and Ecosystem Function: Empirical and Theoretical Analyses of the Relationship* of the National Center for Ecological Analysis and Synthesis, in Santa Barbara (U.S.A.).

24. Hector, A., Schmid, B., Beierkuhnlein, C., Caldeira, M. C., Diemer, M., Dimitrakopoulos, P. G., Finn, J. A., Freitas, H., Giller, P. S., Good, J., Harris, R., Höglberg, P., Huss-Danell, K., Joshi, J., Jumpponen, A., Körner, C., Leadley, P. W., **Loreau, M.**, Minns, A., Mulder, C. P. H., O'Donovan, G., Otway, S. J., Pereira, J. S., Prinz, A., Read, D. J., Scherer-Lorenzen, M., Schulze, E.-D., Siamantziouras, A.-S. D., Spehn, E. M., Terry, A. C., Troumbis, A. Y., Woodward, F. I., Yachi, S. & Lawton, J. H., 1999. — Biodiversity and the functioning of grassland ecosystems: multisite studies. Talk at the International Workshop *Biodiversity and Ecosystem Function: Empirical and Theoretical Analyses of the Relationship* of the National Center for Ecological Analysis and Synthesis, in Santa Barbara (U.S.A.).
25. **Loreau, M.**, 2000. — Biodiversity and ecosystem functioning: overview of theory. Lecture at the International Workshop *Biodiversity and Ecosystem Processes*, in Ascot (United Kingdom).
26. **Loreau, M.**, 2000. — Diversité, complexité, variabilité: une théorie des systèmes écologiques est-elle possible? Lecture at the Colloquium *Mathematics and Biology*, in Paris (France).
27. Daufresne, T. & **Loreau, M.**, 2000. — When do herbivores control plant nutrient limitation ? A stoichiometrically explicit model. Talk at the International Workshop *Stoichiometric Constraints on Carbon Sequestration in Ecosystems*, in Oslo (Norway).
28. **Loreau, M.**, 2000. — The need to link community and ecosystem ecology for biodiversity conservation. Lecture at the Seminar *Biodiversity and Biological Conservation*, in Barcelona (Spain).
29. **Loreau, M.**, 2000. — Biodiversity and ecosystem functioning: towards a new ecological synthesis. Talk at the Thailand–France Workshop *Dynamics of Biodiversity: From Genes to Ecosystems*, in Petchburi (Thailand).
30. **Loreau, M.**, 2000. — Linking community, evolutionary and ecosystem ecology: another perspective on plant–herbivore interactions. Keynote lecture at the 7th Benelux Congress of Zoology, in Brussels (Belgium).
31. **Loreau, M.** & Hector, A., 2000. — Selection and complementarity biodiversity effects: theoretical and methodological perspectives. Talk at the International Conference *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*, in Paris (France).
32. Hector, A., Giller, P. S., Joshi, J., Körner, C., **Loreau, M.**, Scherer-Lorenzen, M., Schmid, B., Spehn, E. M., Troumbis, A. Y. & Lawton, J. H., 2000. — The BIODEPTH project: an overview, reassessment and implications for future research on biodiversity and ecosystem functioning. Talk at the International Conference *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*, in Paris (France).
33. Hulot, F. D., Lacroix, G. & **Loreau, M.**, 2000. — Characterization of functional groups in freshwater food webs. Talk at the International Conference *Biodiversity and Ecosystem Functioning: Synthesis and Perspectives*, in Paris (France).
34. **Loreau, M.**, 2001. — Material cycling and the evolution of indirect interactions in ecosystems. Plenary lecture at the Symposium *Oikos 2001: Ecology and Evolution – From Genes to Ecosystems*, in Uppsala (Sweden).

35. **Loreau, M.**, 2001. — Biodiversity and ecosystem functioning. Talk at the Chinese–GCTE Global Change Conference, in Beijing (China).
36. **Loreau, M.**, 2001. — Does the Earth system need biodiversity? Plenary lecture at the Global Change Open Science Conference, *Challenges of a Changing Earth*, in Amsterdam (Netherlands).
37. **Loreau, M.**, 2001. — Biodiversity loss and the maintenance of our life-support system. Plenary lecture at the Symposium *The 1990s: Unforeseen Challenges and Lessons for Environmental Sciences* of the XIth General Assembly of the Scientific Committee on Problems of the Environment, in Bremen (Germany).
38. **Loreau, M.**, 2001. — Potential consequences of biodiversity loss on ecosystem functioning. Keynote lecture at the International Conference *Carbon Sinks and Biodiversity* under the Belgian Presidency of the European Union, in Liège (Belgium).
39. **Loreau, M.**, 2001. — Biodiversité et fonctionnement des écosystèmes. Lecture at the Thematic Conference *Environmental Sciences* of the Scientific Council of the National Institute of Agricultural Research (INRA), in Paris (France).
40. **Loreau, M.**, 2002. — Why link community and ecosystem ecology? Keynote opening lecture at the Review Conference of the European Science Foundation programme *Linking Community and Ecosystem Ecology* (LINKECOL), in Ceské Budejovice (Czech Republic).
41. **Loreau, M.**, 2002. — Potential consequences of biodiversity loss for ecosystem functioning. Lecture at the Environment Policy Committee of the Organisation of Economic Cooperation and Development (OECD), in Paris (France).
42. **Loreau, M.**, 2002. — An evolutionary perspective on ecosystem organisation. Lecture at the International Symposium *Integrative Biology and Complexity in Natural Systems*, in Paris (France).
43. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: using theory to understand experiments. Keynote lecture at the 2002 World Conference on Natural Resource Modelling, in Sigri (Lesvos, Greece).
44. **Loreau, M.**, 2002. — Understanding the relationship between diversity and productivity: insights from recent biodiversity experiments and theory. Talk at the Meeting of the *Knowledge Network for Biocomplexity* Working Group of the National Center for Ecological Analysis and Synthesis, in Santa Barbara (U.S.A.).
45. **Loreau, M.**, 2002. — Principles or specificities? Mechanistic approaches to ecosystem organisation. Talk at the International Workshop *Toward an Ecology Based on First Principles: Body Size, Temperature and Stoichiometry*, in Santa Fe (U.S.A.).
46. **Loreau, M.** & Bonzom, J.-M., 2002. — Impacts des polluants sur la structure et le fonctionnement des écosystèmes aquatiques : approches théorique et expérimentale. Talk at the Seminar of the National Programme of Ecotoxicology, in Paris (France).
47. **Loreau, M.**, 2002. — Conséquences de la perte de biodiversité pour le fonctionnement des écosystèmes. Lecture at the Symposium *Regards Croisés sur les Changements Globaux*, in Arles (France).

48. **Loreau, M.**, 2002. — Biodiversité et fonctionnement des écosystèmes. Lecture at the Environment Committee of the Academy of Sciences, in Paris (France).
49. **Loreau, M.**, 2002. — Biodiversité et fonctionnement des écosystèmes. Lecture at the Conference of the French Biodiversity Institute, in Tours (France).
50. **Loreau, M.**, 2003. — Consequences of biodiversity loss for ecosystem functioning. Verweij lecture at the Verweij Meeting, in Texel (Netherlands).
51. **Loreau, M.**, 2003. — Biodiversité et systèmes écologiques. Talk at the Working Group *Research in the Service of Sustainable Development* of the Ministry of Research and New Technologies, in Paris (France).
52. **Loreau, M.**, 2003. — Consequences of biodiversity loss for ecosystem processes and services. Keynote contribution to the Electronic Conference in support of the EU Greek Presidency Meeting of the European Platform for Biodiversity Research Strategy on *Biotic Resources in a Changing World: Science for Better Governance*.
53. **Loreau, M.**, 2003. — Evolution of ecosystem properties. Talk at the International Workshop *Ecosystem Evolution and Evolution in Ecosystems*, in Ekenäs (Sweden).
54. **Loreau, M.**, 2003. — How important is biodiversity for the functioning of the Earth system? Plenary lecture at the Third IGBP Congress, *Connectivities in the Earth System*, in Banff (Canada).
55. **Loreau, M.**, 2003. — L'enjeu écologique du développement durable: la substituabilité technique des services rendus par la nature? Talk at the France–Quebec Colloquium *Valeurs et Pratiques du Développement Durable*, in Paris (France).
56. **Loreau, M.** & Thébault, E., 2003. — Food-web constraints on biodiversity–ecosystem functioning relationships. Keynote lecture at the Food Web Symposium 2003, in Giessen (Germany).
57. **Loreau, M.**, 2004. — Biodiversity, species interactions and ecosystem functioning: a link between ecology and maximum entropy production? Talk at the International Workshop *Evaluating the Principle of Maximum Entropy Production for Plants and Terrestrial Ecosystems*, in Bordeaux (France).
58. **Loreau, M.**, 2004. — Biodiversité et fonctionnement des écosystèmes. Talk at the Conference of the Department of Biology of the Ecole Normale Supérieure, in Nouan-le-Fuzelier (France).
59. **Loreau, M.**, 2004. — Biodiversity and ecosystem functioning: using theory to understand experiments and patterns. Talk at the Workshop *Perspectives in Earth System Science: Human Interactions, Biodiversity and Biogeochemistry*, in Jena (Germany).
60. **Loreau, M.**, 2004. — Linking community and ecosystem ecology: what have we learned? Keynote opening lecture at the Conference *Linking Community and Ecosystem Ecology: Recent Advances and Future Challenges*, in Palma de Mallorca (Spain).
61. **Loreau, M.**, 2004. — Closing address of the Conference *Linking Community and Ecosystem Ecology: Recent Advances and Future Challenges*, in Palma de Mallorca (Spain).

62. **Loreau, M.**, 2004. — Challenges of biodiversity science. Keynote opening lecture at the Symposium *Biodiversity in a Changing World* of the Royal Netherlands Academy of Sciences, in Amsterdam (Netherlands).
63. **Loreau, M.**, 2004. — Biodiversity and the maintenance of ecosystem processes and services. Lecture at the XIVth International Colloquium on Soil Zoology and Ecology, in Rouen (France).
64. **Loreau, M.**, 2005. — Challenges of biodiversity science and governance. Plenary lecture at the International Conference *Biodiversity Science and Governance* organised by France under the high patronage of Jacques Chirac, President of the French Republic, and Koïchiro Matsuura, Director-General of UNESCO, in Paris (France).
65. **Loreau, M.**, 2005. — Closing address at the International Conference *Biodiversity Science and Governance* organised by France under the high patronage of Jacques Chirac, President of the French Republic, and Koïchiro Matsuura, Director-General of UNESCO, in Paris (France).
66. **Loreau, M.**, 2005. — Biodiversity and the maintenance of ecosystem processes and services. Keynote lecture at the General Assembly of the MarBEF European Network of Excellence, in Porto (Portugal).
67. Thébault, E. & **Loreau, M.**, 2005. — Food webs and the relationship between biodiversity and ecosystem functioning. Talk at the 52th Annual Meeting of the Ecological Society of Japan, in Osaka (Japan).
68. **Loreau, M.**, 2005. — Challenges of biodiversity science. Keynote opening lecture at the International Symposium on Biodiversity–Ecosystem Projects and Future Research Strategy, *Essential Subjects for Sustainable Development*, in Tokyo (Japan).
69. **Loreau, M.**, 2005. — Effects of biodiversity on ecosystem functioning. Talk at the International Workshop *Global Environmental Change and Biodiversity*, in Dourdan (France).
70. **Loreau, M.**, 2005. — The challenges of biodiversity. Lecture at the Conference *Complexity and Biodiversity, Two Keys for Innovation* organised by LVMH (Louis Vuitton, Moët Hennessy) Research Perfumes and Cosmetics, in Saint-Jean-de-Braye (France).
71. **Loreau, M.**, 2005. — Is biodiversity threatened? Plenary lecture at the first European Research and Innovation Exhibition, in Paris (France).
72. **Loreau, M.**, 2005. — New theoretical approaches to biodiversity and ecosystem functioning in food webs. Talk at the 90th Annual Meeting of the Ecological Society of America, in Montreal (Canada).
73. **Loreau, M.**, 2005. — New theoretical directions in biodiversity–ecosystem functioning research. Talk at the International Workshop *The next Generation of Biodiversity and Ecosystem Functioning Research*, in Kota Kinabalu (Malaysia).
74. **Loreau, M.**, 2005. — Challenges of biodiversity science. Keynote opening lecture at the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).

75. **Loreau, M.**, 2005. — Biodiversity as insurance: the ecological perspective. Talk at the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).
76. Loeuille, N., Bränström, N. A., Dieckmann, U. & **Loreau, M.**, 2005. — Emergence of complex size-structured food webs out of repeated adaptive radiation. Talk at the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).
77. **Loreau, M.**, 2005. — Towards an International Mechanism of Scientific Expertise on Biodiversity. Talk at the 11th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity, in Montreal (Canada).
78. **Loreau, M.**, 2006. — La biodiversité comme assurance: nouvelles perspectives sur la relation entre complexité et stabilité des écosystèmes. Keynote lecture at the 16<sup>th</sup> Symposium of Biological Sciences at the University of Montreal, in Montreal (Canada).
79. **Loreau, M.**, 2006. — Biodiversity as insurance: new perspectives on the relationship between the complexity and stability of ecosystems. Keynote lecture at the Peter Yodzis Colloquium in Fundamental Ecology, *Biodiversity, Structure and Function*, in Guelph (Canada).
80. **Loreau, M.**, 2006. — Biodiversity : challenges for science and society. Keynote lecture at the Science Symposium organised by the Academy of Sciences to celebrate the 75<sup>th</sup> anniversary of the International Council for Science (ICSU), in Paris (France).
81. **Loreau, M.**, 2006. — Merging population, ecosystem and evolutionary perspectives in ecology. Talk at the Gordon Research Conference *Metabolic Basis of Ecology*, in Lewiston (U.S.A.).
82. **Loreau, M.**, 2006. — Biodiversity and the Earth system. Plenary welcome speech at the Earth System Science Partnership Global Environmental Change Open Science Conference, *Global Environmental Change: Regional Challenges*, in Beijing (China).
83. **Loreau, M.**, 2006. — Global environmental change and human health. Welcome speech of the launch session of the *Global Environmental Change and Human Health* ESSP Joint Project during the Earth System Science Partnership Global Environmental Change Open Science Conference, *Global Environmental Change: Regional Challenges*, in Beijing (China).
84. **Loreau, M.**, 2006. — Improving the interface between biodiversity science and policy: towards an International Mechanism of Scientific Expertise on Biodiversity. Talk at the Earth System Science Partnership Global Environmental Change Open Science Conference, *Global Environmental Change: Regional Challenges*, in Beijing (China).
85. **Loreau, M.**, 2006. — Why should we care about biodiversity? Ecology meets ethics. Lecture at UNESCO's 21<sup>st</sup> Century Dialogues, *What future for the human species? What prospects for the planet?*, in Paris (France).
86. **Loreau, M.**, 2007. — Conclusions of the Workshop *Acting Together to Safeguard Biodiversity* within the Paris Conference for Global Ecological Governance, *Citizens of the*

*Earth*, organised at the instigation of Jacques Chirac, President of the French Republic, in Paris (France).

87. Yachi, S. & **Loreau, M.**, 2007. — Does complementary resource use enhance ecosystem functioning? A model of light competition in plant communities. Talk at the 54th Annual Meeting of the Ecological Society of Japan, in Matsuyama (Japan).
88. **Loreau, M.**, 2007. — Towards an International Mechanism of Scientific Expertise on Biodiversity. Opening lecture at the *Science–Policy Dialogue on Biodiversity* organised by the South African National Biodiversity Institute and DIVERSITAS, in Cape Town (South Africa).
89. **Loreau, M.**, 2007. — Scientific expertise on biodiversity and the consultative process towards an IMoSEB. Talk at the European Regional Consultation on an International Mechanism of Scientific Expertise on Biodiversity, in Geneva (Switzerland).
90. **Loreau, M.**, 2007. — Enjeux de la science et de la gouvernance de la biodiversité. Keynote opening lecture at the International Symposium *Conserver, Exploiter, Partager: Les Enjeux de la Mise en Oeuvre de la Convention sur la Diversité Biologique*, in Montreal (Canada).
91. **Loreau, M.**, 2007. — Biodiversity and ecosystem functioning: implications for the biosphere in a changing climate. Talk at the International Workshop *Biodiversity–Climate Interactions: Adaptation, Mitigation and Human Livelihoods* of the Royal Society and the UK Global Environmental Change Committee, in London (United Kingdom).
92. **Loreau, M.**, 2007. — Biodiversity: challenges for science and governance. Keynote lecture at the Sao Paulo State Science Fondation (FAPESP), in Sao Paulo (Brazil).
93. **Loreau, M.**, 2007. — Challenges of biodiversity science. Keynote opening lecture at the First EuroDIVERSITY Conference, *Challenges of Biodiversity Science*, in Marne-la-Vallée (France).
94. **Loreau, M.**, 2007. — The ecological consequences of biodiversity loss. Public lecture at the CosmoCaixa Museum, in Barcelona (Spain).
95. **Loreau, M.**, 2007. — The ecological consequences of biodiversity loss. The Cutting Edge Royal Society Lecture in Science at McGill University, in Montreal (Canada).
96. **Loreau, M.**, 2008. — Losing the parts might mean losing the whole, or why we should care about biodiversity. Keynote speech at the 5th Interdisciplinary Graduate Student Research Symposium McGill University, in Montréal (Canada).
97. **Loreau, M.**, 2008. — Merging food webs, biodiversity and ecosystem functioning. Keynote lecture at the 2008 Meeting of the Canadian Society for Ecology and Evolution, in Vancouver (Canada).
98. Pillai, P., **Loreau, M.** & Gonzalez, A., 2008. — A patch-dynamic framework for studying food-web metacommunities. Talk at the Annual 2008 Meeting of the Canadian Society for Ecology and Evolution, in Vancouver (Canada).
99. **Loreau, M.**, 2008. — An Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services. Opening talk of the side event within the 9th Conference of the Parties of the Convention on Biological Diversity, in Bonn (Germany).

100. **Loreau, M.**, 2008. — An Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services. Talk at the Symposium on the Centre for Biodiversity Science, in Montreal (Canada).
101. **Loreau, M.**, 2008. — Pourquoi se préoccuper de la biodiversité? Lecture at Marie de France International School, in Montreal (Canada).
102. **Loreau, M.**, 2009. — Les défis de la science de la biodiversité. Lecture at the Symposium *Face à la Crise Environnementale, la Recherche Scientifique Est-Elle la Solution ou une Partie du Problème?* organised within the 77th Congress of the Association Francophone pour le Savoir, in Ottawa (Canada).
103. **Loreau, M.**, 2009. — Diversity and stability of ecosystems: new perspectives on an old debate. Keynote opening lecture at the Scientific Conference of the *Biogeochemistry and Ecology of Continental Environments* Laboratory, in Paris (France).
104. **Loreau, M.** & de Mazancourt, C., 2009. — Diversity and stability of ecosystems: 1. New perspectives on an old debate. Talk at the International Workshop *Plant Interaction Networks*, in Weissenstein (Switzerland).
105. de Mazancourt, C. & **Loreau, M.**, 2009. — Diversity and stability of ecosystems: 2. Disentangling the effects of biodiversity on community stability. Talk at the International Workshop *Plant Interaction Networks*, in Weissenstein (Switzerland).
106. **Loreau, M.**, 2009. — Do simple biodiversity–ecosystem functioning relationships found in plant communities hold good in more complex ecosystems? Talk at the 94th Annual Meeting of the Ecological Society of America, in Albuquerque (U.S.A.).
107. Clark, C., Wu, J., Naeem, S., Flynn, D., Han, X., Bai, Y. & **Loreau, M.**, 2009. — Realistic trait distributions and variable assembly processes greatly influence the predicted biodiversity–ecosystem functioning relationship in the Eurasian steppe. Talk at the 94th Annual Meeting of the Ecological Society of America, in Albuquerque (U.S.A.).
108. **Loreau, M.**, 2010. — The ecological consequences of biodiversity loss. Talk at the InterAcademy Panel Biodiversity Conference, *Integrating ecosystem services into biodiversity management*, hosted by the Royal Society in London (United Kingdom).
109. **Loreau, M.**, 2010. — Biodiversity changes and ecosystem services. Talk at the Launch Day of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
110. **Loreau, M.**, 2010. — Les services écosystémiques: une solution à la crise de la biodiversité? Lecture at the Symposium *Biens et Services Écosystémiques: Quelles Occasions de Conservation de la Biodiversité?* organised within the 78th Congress of the Association Francophone pour le Savoir, in Montreal (Canada).
111. **Loreau, M.**, 2010. — Les conséquences écologiques de l'érosion de la biodiversité. Lecture at the Symposium *Nouvelles Perspectives en Science de la Biodiversité: De l'Etude du Vivant à l'Application*, organised within the 78th Congress of the Association Francophone pour le Savoir, in Montreal (Canada).
112. **Loreau, M.**, 2010. — Emergence of food webs in space and time. Talk at the 95th Annual Meeting of the Ecological Society of America, in Pittsburgh (U.S.A.).

113. **Loreau, M.**, 2010. — Microbial diversity, material cycling, and ecosystem functioning. Talk at the 13th International Symposium of the International Society for Microbial Ecology, in Seattle (U.S.A.).
114. **Loreau, M.**, 2010. — Les défis de la science de la biodiversité. Keynote lecture at the National Symposium of Scientific Ecology, *Ecologie 2010*, in Montpellier (France).
115. **Loreau, M.**, 2010. — Les conséquences écologiques et sociétales de l'érosion de la biodiversité. Public lecture at the Museum, in Toulouse (France).
116. **Loreau, M.**, 2010. — Diversity and stability of ecosystems: new perspectives on an old debate. Lecture at the Annual Meeting of the British Ecological Society, in Leeds (United Kingdom).
117. **Loreau, M.**, 2010. — Les conséquences écologiques et sociétales de l'érosion de la biodiversité. Public lecture at the Museum of Civilisation, in Quebec (Canada).
118. **Loreau, M.**, 2010. — The ecological consequences of biodiversity loss. Keynote lecture at the Symposium *Biodiversity: Basic Commodity or Luxury Item?* organised by the Catholic University of Leuven (Belgium).
119. **Loreau, M.**, 2010. — The ecological consequences of biodiversity loss. Keynote lecture at the 18th Mexican Congress of Botany, in Guadalajara (Mexico).
120. **Loreau, M.**, 2010. — The challenge of linking biodiversity science and policy. Closing lecture at the Annual Symposium of the Quebec Centre for Biodiversity Science, *Biodiversity Science in Quebec: 2010 and Beyond*, in Montreal (Canada).
121. **Loreau, M.**, 2010. — Les conséquences écologiques de l'érosion de la biodiversité. Lecture at the Laurentian Forestry Centre of the Canadian Forest Service, in Quebec (Canada).
122. **Loreau, M.**, 2011. — From populations to ecosystems: towards a unifying ecological theory. Per Brinck Oikos Award Lecture at the 2011 Oikos Meeting, in Tjärnö (Sweden).
123. **Loreau, M.**, 2011. — The ecological consequences of biodiversity loss. Talk at the International Conference *Cochabamba +1: Justice Climatique et Alternatives Ecologiques*, in Montreal (Canada).
124. **Loreau, M.**, 2011. — Diversity and stability of ecosystems: new perspectives on an old debate. Keynote opening lecture at the 7th European Conference on Ecological Modelling, in Riva del Garda (Italy).
125. **Loreau, M.**, 2011. — The ecological and societal consequences of biodiversity loss. Inaugural lecture of the series *Values in policy and climate change* organised by the Institute for Values in Policy and Science of Simon Fraser University, in Vancouver (Canada).
126. **Loreau, M.**, 2012. — Two decades of research into biodiversity and ecosystem functioning: results and perspectives. Talk at the International Conference *Planet Under Pressure*, in London (United Kingdom).
127. **Loreau, M.**, 2012. — Beyond food webs: ecological complexity and the webs of life. Talk at the International Conference *The Web of Life in a Changing World*, in Montpellier (France).

128. Gravel, D., **Loreau, M.**, Massol, F. & Mouquet, N., 2012. — Toward a spatial theory of interaction networks. Talk at the International Conference *The Web of Life in a Changing World*, in Montpellier (France).
129. Hector, A., Levine, J., **Loreau, M.** & Turnbull, L., 2012. — Predicting the effects of biodiversity loss: linking coexistence to ecosystem functioning. Talk at the International Conference *Ecological Effects of Environmental Changes*, in Paris (France).
130. **Loreau, M.**, 2012. — Biodiversity and ecosystem stability in the face of environmental changes. Talk at the International Conference *Ecological Effects of Environmental Changes*, in Paris (France).
131. **Loreau, M.**, 2012. — The challenges of biodiversity science. Lecture at the Annual Meeting of the Centre for the Study of Biodiversity in Amazonia (CEBA), in Cayenne (French Guiana).
132. **Loreau, M.**, 2012. — Metacommunities and metaecosystems: frameworks for multiscale community and ecosystem ecology. Talk at the *Dispersal* International Meeting, in Moulis (France).
133. **Loreau, M.**, 2012. — Biodiversity and ecosystem services. Keynote opening lecture at the Seminar *Values of Biodiversity and Ecosystem Services* of the National Alliance for Environmental Research, in Paris (France).
134. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Special guest lecture at the 2013 Meeting of the TULIP Laboratory of Excellence, in Toulouse (France).
135. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Keynote lecture at the Opening Symposium of the German Centre for Integrative Biodiversity Research (iDiv), *Integrative Biodiversity Research: A Young Discipline Under Time Pressure*, in Leipzig (Germany).
136. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Inaugural Sun Yat-sen Lecture in Ecology and Evolution at Sun Yat-sen University, in Guangzhou (China).
137. **Loreau, M.**, 2013. — Dispersal, biodiversity and ecosystem services. Talk at the European Association of Environmental and Resource Economists Pre-Conference Event *Trade and Species Dispersal: A Dialogue Between Economists and Ecologists*, in Toulouse (France).
138. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Keynote lecture at the 2013 Congress of the International Society for the History, Philosophy, and Social Studies of Biology, in Montpellier (France).
139. **Loreau, M.**, 2013. — Biodiversity and ecosystem stability in the face of environmental changes. Talk at the International Workshop *Biodiversity in a Changing World*, in Montreal (Canada).
140. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Keynote lecture at the 23rd Congress of the Italian Society of Ecology, *Ecology for a Sustainable Blue and Green Growth*, in Ancona (Italy).

141. **Loreau, M.**, 2013. — Biodiversity and ecosystem stability in the face of environmental changes. Keynote lecture at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).
142. **Loreau, M.**, 2013. — From populations to ecosystems: towards a unifying ecological theory. Lecture at the Catholic University of Louvain, in Louvain-la-Neuve (Belgium).
143. **Loreau, M.**, 2013. — The consequences of biodiversity loss. Public lecture and debate within the *Débats de l'ULB* series, in Brussels (Belgium).
144. **Loreau, M.**, 2013. — Towards a new ecological synthesis. Closing address at the Paul Duvigneaud Symposium, *Towards a New Ecological Synthesis*, in Brussels (Belgium).
145. **Loreau, M.**, 2013. — Biodiversity loss and the ecological debt. Talk at the 2013 Meeting of the Midi-Pyrénées Partnership in Ecology and Environnement of the CNRS, in Toulouse (France).
146. **Loreau, M.**, 2014. — Biodiversity and ecosystem stability in the face of environmental changes. Keynote lecture at the Symposium *Modelling in Agroecology* of the National Institute of Agricultural Research (INRA), in Paris (France).
147. **Loreau, M.**, 2014. — Modelling biodiversity and ecosystems. Public lecture in the series *Les Découvrades*, in Toulouse (France).
148. **Loreau, M.**, 2014. — Relationships between the diversity and stability of ecological systems at multiple scales and hierarchical levels. Special guest lecture at the 2014 Meeting of the TULIP Laboratory of Excellence, in Toulouse (France).
149. **Loreau, M.**, 2014. — Diversity and stability of ecological systems at multiple scales. Lecture at the Ramon Margalef Summer Colloquium, in Barcelona (Spain).
150. **Loreau, M.**, 2014. — Can ecology and economics marry? A theoretical ecologist's standpoint. Plenary talk at the Symposium *Eco<sup>2</sup>, Exploring the Fundamental Links between Ecology and Economics*, in London (United Kingdom).
151. **Loreau, M.**, 2014. — Biodiversity and stability of ecological systems at multiple scales. Talk at the International Workshop *Networks on Networks*, in Göttingen (Germany).
152. **Loreau, M.** & Wang, S., 2014. — Biodiversity and ecosystem services in fragmented landscapes. Talk at the International Workshop *Experimental and Theoretical Approaches to Habitat Fragmentation*, in Moulis (France).
153. Wang, S., Haegeman, B. & **Loreau, M.**, 2014. — Spatial dynamics and metacommunity stability. Talk at the International Workshop *Experimental and Theoretical Approaches to Habitat Fragmentation*, in Moulis (France).
154. Haegeman, B. & **Loreau, M.**, 2014. — Consumer dispersal, resource competition, and metacommunity diversity. Talk at the International Workshop *Experimental and Theoretical Approaches to Habitat Fragmentation*, in Moulis (France).
155. **Loreau, M.**, 2014. — Biodiversity and stability of ecological systems at multiple scales. Keynote lecture at the Symposium *Biodiversity Research at the Crossroads: Understanding the Long-Term Dynamics of Ecosystems*, in Wageningen (Netherlands).

156. **Loreau, M.**, 2015. — Diversity–stability relationships across scales and levels of organisation. Talk at the Symposium *The Functions and Values of Biodiversity*, in Oxford (United Kingdom).
157. **Loreau, M.**, 2015. — Biodiversité et fonctionnement des écosystèmes. Talk at the National Workshop *Biodiversity: Measurement and Functional Role*, in Moulis (France).
158. **Loreau, M.**, 2015. — Les conséquences écologiques et sociétales de l'érosion de la biodiversité. Public lecture at the Parc Galea (Taglio-Isolaccio, France).
159. **Loreau, M.**, 2015. — L'érosion de la biodiversité et ses conséquences. Lecture at the 5th Rencontres avec les Scientifiques du Parc Naturel Régional des Pyrénées Ariégeoises, in Saint-Girons (France).
160. **Loreau, M.**, 2016. — Biodiversity and ecological stability across scales and levels of organisation. Lecture in the series *Séminaires Rhône-Alpins de Modélisation du Vivant*, in Lyon (France).
161. **Loreau, M.**, 2016. — Biodiversity and stability of ecological systems: a new look at an old debate. Lecture at Ecole Normale Supérieure, in Paris (France).
162. **Loreau, M.**, 2016. — Biodiversité et fonctionnement des écosystèmes: vers une nouvelle synthèse écologique. Talk at the Symposium *Représenter le Vivant*, in Toulouse (France).
163. **Loreau, M.**, 2016. — Biodiversity and ecological stability across scales and levels of organisation. Keynote lecture at the Conference *Global Change and Biodiversity: Integrating Mechanisms of Interactions, Feedbacks and Scale*, in Ascona (Switzerland).
164. **Loreau, M.** & Arnoldi, J.-F., 2016. — Reconnecting stability theory with ecological data. Talk at the International Workshop *Dimensions of Stability*, in Moulis (France).
165. **Loreau, M.**, 2016. — Biodiversity and ecosystem services: linking science and policy. Talk at the European Research Council Conference *Frontier Research and Science Diplomacy*, in Brussels (Belgium).
166. **Loreau, M.**, 2016. — Potentialités et écueils de la modélisation prédictive en écologie. Talk at the Symposium *Modélisation: Succès et Limites* of the National Centre for Scientific Research (CNRS) and the Academy of Technologies, in Paris (France).
167. **Loreau, M.**, 2017. — The ecosystem: superorganism, or collection of individuals? Talk at the Symposium *Théories des Ecosystèmes*, in Montpellier (France).
168. **Loreau, M.**, 2017. — Effects of biodiversity on ecosystem functioning. Talk at the International Workshop *Dynamic Vegetation Models: The Next Generation*, in Laxenburg (Austria).
169. **Loreau, M.**, 2017. — Ecosystem services: the way forward for biodiversity conservation? Talk at the Symposium *Philosophie des Ecosystèmes*, in Montpellier (France).
170. **Loreau, M.**, 2017. — Les conséquences écologiques et sociétales de l'érosion de la biodiversité. Public lecture in Melle (France).
171. **Loreau, M.**, 2017. — Biodiversity and ecosystem functioning across scales: some theoretical considerations. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Mont-Saint-Hilaire (Canada).

172. **Loreau, M.**, 2017. — Linking biodiversity, ecosystems and people across scales: challenges for ecology and sustainability. Keynote lecture at the Symposium *Biodiversity: Mechanisms and Consequences*, in Sapporo (Japan).
173. **Loreau, M.**, 2017. — Linking biodiversity, ecosystems and people across scales: challenges for ecology and sustainability. Keynote lecture at the International Workshop *From Biodiversity to Sustainability: Key Challenges of Theoretical Ecology*, in Kyoto (Japan).
174. **Loreau, M.**, 2017. — Linking biodiversity, ecosystems and people across scales: challenges for ecology and sustainability. Keynote lecture at the 149th Seminar of the Research Institute for Humanity and Nature, *Observation, Analysis and Theory in Ecology for the Next Generations*, in Kyoto (Japan).
175. **Loreau, M.**, 2018. — Evolution of ecosystems: theoretical foundations. Talk at the Workshop *Evolution of Ecosystems*, in Paris (France).
176. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Keynote lecture at the International Workshop *Ecological-Economic Resilience of Ecosystems*, in Bordeaux (France).
177. Arnoldi, J.-F., Barbier, M., Bunin, G. & **Loreau, M.**, 2018. — Generic assembly patterns in complex ecological communities. Lecture at the International Workshop *Stochastic Models in Ecology and Evolutionary Biology*, in Venice (Italy).
178. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Keynote lecture at the International Workshop *Stochastic Models in Ecology and Evolutionary Biology*, in Venice (Italy).
179. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Honorary Lecture at the International Conference *Models in Ecology Population Dynamics, Ecology and Evolution*, in Leicester (United Kingdom).
180. **Loreau, M.**, 2018. — Linking biodiversity, ecosystems and people across scales . Talk at the 2018 Meeting of the TULIP Laboratory of Excellence, in Toulouse (France).
181. **Loreau, M.** & Wang, S., 2018. — Biodiversity and ecosystem stability across scales: insights from metacommunity theory. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).
182. Haegeman, B., Delsol, R. & **Loreau, M.**, 2018. — Spatial scaling of biodiversity and ecosystem stability. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).
183. Thompson, P. L., Isbell, F., **Loreau, M.**, O'Connor, M. I. & Gonzalez, A., 2018. — The strength of the biodiversity–ecosystem function relationship depends on spatial scale. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).
184. Barbier, M., Arnoldi, J.-F., Bunin, G. & **Loreau, M.**, 2018. — Order and disorder in complex communities and metacommunities. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).

185. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2018. — The three regimes of spatial recovery. Talk at the Workshop of the International Working Group *Scaling Biodiversity and Ecosystem Functioning in Time and Space*, in Saint-Lizier (France).
186. **Loreau, M.**, 2019. — Biodiversity and stability of ecological systems: new perspectives on an old debate. Plenary lecture at the LifeWatch ERIC Scientific Community Meeting, in Rome (Italy).
187. **Loreau, M.**, 2019. — Long-term dynamics and sustainability of human–nature interactions. Plenary talk at the Conference *Global Change and Biodiversity: Integrating the Impact of Earth and World Drivers across Scales*, in Ascona (Switzerland).
188. **Loreau, M.**, 2019. — Biodiversité et fonctionnement des écosystèmes. Lecture at the 7th Rencontres avec les Scientifiques du Parc Naturel Régional des Pyrénées Ariégeoises, in Saint-Girons (France).

## Invited seminars

189. **Loreau, M.**, 1984. — Niche differentiation and community organization in forest carabid beetles. Seminar at Harvard University (Cambridge, U.S.A.).
190. **Loreau, M.**, 1985. — Niche differentiation and community organization in forest carabid beetles. Seminar at the University of California (Davis, U.S.A.).
191. **Loreau, M.**, 1988. — Le principe d'exclusion compétitive: évolution des idées et expérimentation. Seminar at the Research Centre in Natural Sciences (Lwiro, Zaire).
192. **Loreau, M.**, 1989. — Are carabid communities structured by competition? Seminar at the University of Helsinki (Finland).
193. **Loreau, M.**, 1989. — The descriptive and heuristic power of niche studies. Seminar at the University of Helsinki (Finland).
194. **Loreau, M.**, 1991. — The nature of community organization: from community to populations to community. Seminar at the University of Bonn (Germany).
195. **Loreau, M.**, 1991. — Resource partitioning and community organization: a combined field and theoretical study on model organisms. Seminar at the University of Bayreuth (Germany).
196. **Loreau, M.**, 1992. — Partage des ressources et organisation des peuplements: les carabides comme organismes modèles. Seminar at the Ecole Normale Supérieure (Paris, France).
197. **Loreau, M.**, 1993. — Resource partitioning and community organization: carabid beetles as model organisms. Seminar at Oak Ridge National Laboratory (Oak Ridge, U.S.A.).
198. **Loreau, M.**, 1993. — Determinants of species diversity and community organization in ground beetles. Seminar at the University of Antwerp (U.I.A., Belgium).
199. **Loreau, M.**, 1996. — Biodiversité et fonctionnement des écosystèmes: quelques questions théoriques. Seminar at Pierre and Marie Curie University (Paris, France).

200. **Loreau, M.**, 1996. — Biodiversity and ecosystem functioning: some theoretical issues at the interface between ecosystem and community ecology. Seminar at Kyoto University (Japan).
201. **Loreau, M.**, 1996. — Biodiversité et fonctionnement des écosystèmes: quelques questions théoriques à l'interface entre écologie des populations et écologie des écosystèmes. Seminar at Claude Bernard University (Lyon, France).
202. **Loreau, M.**, 1996. — Biodiversité et fonctionnement des écosystèmes: quelques questions théoriques à l'interface entre écologie des populations et écologie des écosystèmes. Seminar at the University of Paris Sud (Orsay, France).
203. **Loreau, M.**, 1997. — Ecosystem development explained by competition within and between material cycles. Seminar at Kyoto University (Japan).
204. **Loreau, M.**, 1998. — Biodiversity and ecosystem functioning: new insights from theoretical models. Seminar at Rutgers University (New Brunswick, U.S.A.).
205. **Loreau, M.**, 1998. — Biodiversité et fonctionnement des écosystèmes: théories et modèles à l'interface entre écologie des populations et écologie des écosystèmes. Seminar at the National Institute of Research in Computer Science and Automation (INRIA, Villefranche-sur-Mer, France).
206. **Loreau, M.**, 1999. — Biodiversité et fonctionnement des écosystèmes: apports récents de la théorie et de la modélisation. Seminar at the Centre of Functional and Evolutionary Ecology (CNRS, Montpellier, France).
207. **Loreau, M.**, 1999. — Biodiversity and ecosystem functioning: recent theoretical advances. Seminar at the University of Chicago (U.S.A.).
208. **Loreau, M.**, 2001. — Linking community, evolutionary and ecosystem ecology: another perspective on plant–herbivore interactions. Seminar at the University of Amsterdam (The Netherlands).
209. **Loreau, M.**, 2001. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at Kyoto University (Japan).
210. **Loreau, M.**, 2001. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at Kyushu University (Fukuoka, Japan).
211. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at the University of Lausanne (Switzerland).
212. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at the University of Florida (Gainesville, U.S.A.).
213. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at Florida State University (Tallahassee, U.S.A.).
214. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: current knowledge and future challenges. Seminar at the University of Neuchâtel (Switzerland).
215. **Loreau, M.**, 2003. — Biodiversité et fonctionnement des écosystèmes. Seminar at the National Institute of Agricultural Research (INRA Narbonne, France).

216. **Loreau, M.**, 2003. — An evolutionary perspective on ecosystem organisation. Seminar at the Centre of Functional and Evolutionary Ecology (CNRS, Montpellier, France).
217. **Loreau, M.**, 2003. — An evolutionary perspective on ecosystem organisation. Seminar at Princeton University (Etats-Unis).
218. **Loreau, M.**, 2003. — Biodiversity and ecosystem functioning: using theory to understand experiments. Seminar at Princeton University (U.S.A.).
219. **Loreau, M.**, 2003. — Biodiversity and ecosystem functioning: using theory to understand experiments. Seminar at Rutgers University (New Brunswick, U.S.A.).
220. **Loreau, M.**, 2004. — Biodiversity and ecosystem functioning: using theory to understand experiments. Seminar at McGill University (Montreal, Canada).
221. **Loreau, M.**, 2002. — Biodiversity and ecosystem functioning: another perspective on biodiversity conservation. Seminar at the University of Lausanne (Switzerland).
222. **Loreau, M.**, 2005. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the University of California (Santa Cruz, U.S.A.).
223. **Loreau, M.**, 2005. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at Stanford University (U.S.A.).
224. **Loreau, M.**, 2005. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the University of California (Davis, U.S.A.).
225. **Loreau, M.**, 2005. — Evolution of ecosystems. Seminar at McGill University (Montreal, Canada).
226. **Loreau, M.**, 2005. — New directions in biodiversity–ecosystem functioning research. Seminar at the Imperial College (Ascot, United Kingdom).
227. **Loreau, M.**, 2005. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the University of Ottawa (Canada).
228. **Loreau, M.**, 2005. — Biodiversité et fonctionnement des écosystèmes: un exemple d’interaction réussie entre théorie et expériences. Seminar at the University of Montreal (Canada).
229. **Loreau, M.**, 2006. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the University of Toronto (Canada).
230. **Loreau, M.**, 2006. — Les défis de la science et de la gouvernance de la biodiversité. Seminar at Laval University (Quebec, Canada).
231. **Loreau, M.**, 2006. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at Queen’s University (Kingston, Canada).
232. **Loreau, M.**, 2006. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the University of Quebec in Trois-Rivières (Canada).
233. **Loreau, M.**, 2006. — Biodiversity as insurance: new perspectives on the relationship between the complexity and stability of ecosystems. Seminar at the University of Zürich (Switzerland).

234. **Loreau, M.**, 2006. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at the Stazione Zoologica Anton Dohrn (Naples, Italy).
235. **Loreau, M.**, 2006. — Challenges of biodiversity science and governance. Seminar at the Secretariat of the Convention on Biological Diversity, in Montreal (Canada).
236. **Loreau, M.**, 2006. — Biodiversity and ecosystem functioning: linking theory and experiments. Seminar at McMaster University (Hamilton, Canada).
237. **Loreau, M.**, 2008. — Challenges of biodiversity science. Seminar at the University of Quebec at Rimouski (Canada).
238. **Loreau, M.**, 2008. — Biodiversité et fonctionnement des écosystèmes: un exemple d'interaction réussie entre théorie et expériences. Seminar at Sherbrooke University (Canada).
239. **Loreau, M.**, 2009. — The ecological consequences of biodiversity loss. Seminar at the National Wildlife Research Centre (Ottawa, Canada).
240. **Loreau, M.**, 2010. — Biodiversity, ecosystem functioning, and ecosystem services. Seminar at the Interuniversity Research Centre on the Analysis of Organisations (CIRANO, Montreal, Canada).
241. **Loreau, M.**, 2010. — The challenges of biodiversity science. Inaugural seminar of the Quebec Centre for Biodiversity Science (Montreal, Canada).
242. **Loreau, M.**, 2010. — Biodiversité et fonctionnement des écosystèmes: comment le lien entre préoccupations sociétales, théorie et expériences est en train de transformer l'éologie. Seminar at Laval University, in Quebec (Canada).
243. **Loreau, M.**, 2010. — The challenges of biodiversity science. Seminar at the University of Zürich (Switzerland).
244. **Loreau, M.**, 2011. — Biodiversité et fonctionnement des écosystèmes: comment le lien entre préoccupations sociétales, théorie et expériences est en train de transformer l'éologie. Seminar at the University of Montreal (Canada).
245. **Loreau, M.**, 2011. — Biodiversity and ecosystem functioning: how linking societal concerns, theory and experiments is transforming ecology. Seminar at Simon Fraser University (Vancouver, Canada).
246. **Loreau, M.**, 2012. — From populations to ecosystems: towards a unifying ecological theory. Seminar at the Toulouse School of Economics (France).
247. **Loreau, M.**, 2012. — Diversity and stability of ecosystems: new perspectives on an old debate. Seminar at the National Institute of Agricultural Research (INRA Avignon, France).
248. **Loreau, M.**, 2013. — Evolution of ecosystems. Seminar at Sun Yat-sen University (Guangzhou, China).
249. **Loreau, M.**, 2015. — Diversity–stability relationships across scales and levels of organisation. Seminar at the University of Minnesota (Saint Paul, U.S.A.).
250. **Loreau, M.**, 2015. — Biodiversity and stability in ecological systems across scales and levels of organisation. Seminar at the Chizé Centre for Biological Studies (France).

251. **Loreau, M.**, 2016. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at Aix-Marseille University (France).
252. **Loreau, M.**, 2016. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at the Theoretical and Experimental Ecology Station (Moulis, France).
253. **Loreau, M.**, 2017. — Linking biodiversity, ecosystems and people across scales: challenges for ecology and sustainability. Seminar at Kyushu University (Fukuoka, Japan).
254. **Loreau, M.**, 2017. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at the German Centre for Integrative Biodiversity Research (Leipzig, Germany).
255. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at Mendel University, in Brno (Czech Republic).
256. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at the Institute of Botany of the Chinese Academy of Sciences, in Beijing (China).
257. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at Peking University, in Beijing (China).
258. **Loreau, M.**, 2018. — Biodiversity and stability of ecological systems: a new look at an old debate. Seminar at Lanzhou University, in Lanzhou (China).

## Papers at scientific meetings

259. **Loreau, M.**, 1981. — Analyse du régime alimentaire de *Abax ater* (Carabidae). Talk and poster at the Meeting *Ecology of Epigeic Invertebrates* of the Royal Zoological Society of Belgium, in Ghent (Belgium).
260. **Loreau, M.**, 1982. — Trophic role of carabid beetles in a forest. Talk at the 8th International Colloquium of Soil Zoology, in Louvain-la-Neuve (Belgium).
261. **Loreau, M.**, 1983. — Niche differentiation, and the role of competition in forest carabid communities. Talk at the Colloquium *Interspecific Competition* of the Royal Zoological Society of Belgium, in Antwerp (Belgium).
262. **Loreau, M.**, 1984. — Niche differentiation and community organization in forest carabid beetles. Talk at the 17th International Congress of Entomology, in Hamburg (Federal Republic of Germany).
263. **Loreau, M.**, 1984. — Ecological niches and feeding strategies in carabid beetles. Talk at the Colloquium *Feeding Strategies and Mechanisms* of the Royal Zoological Society of Belgium, in Brussels (Belgium).
264. **Loreau, M.**, 1986. — Community-wide seasonal trends in the niches of forest carabid beetles. Talk at the 6th European Carabidologists' Meeting, in Balatonalmadi (Hungary).

265. **Loreau, M.**, Baluku, B. & Josens, G., 1986. — Dynamique des populations de *Biomphalaria pfeifferi* (Gastropoda: Planorbidae) au Zaïre oriental. Talk at the Meeting *Zoology of Africa* of the Royal Zoological Society of Belgium, in Tervuren (Belgium).
266. Baluku, B., Josens, G. & **Loreau, M.**, 1986. — Le régime alimentaire de *Biomphalaria pfeifferi* (Gastropoda: Planorbidae) au Zaïre oriental. Poster at the Meeting *Zoology of Africa* of the Royal Zoological Society of Belgium, in Tervuren (Belgium).
267. **Loreau, M.**, 1987. — Différenciation des niches et organisation des communautés chez les Carabides. Talk at the Conference of the Department of Animal Biology of the Free University of Brussels, in Treignes (Belgium).
268. **Loreau, M.**, 1987. — Organisation saisonnière des niches dans un peuplement de carabides en relation avec la disponibilité des proies. Talk at the Meeting *Study of Arthropods* of the Royal Zoological Society of Belgium, in Brussels (Belgium).
269. **Loreau, M.**, 1988. — Dynamique et régulation des populations de carabides. Talk at the Colloquium *Population Biology* of the Royal Zoological Society of Belgium, in Louvain-la-Neuve (Belgium).
270. **Loreau, M.**, 1988. — The nature of the structuring of ecological communities: the example of carabid beetles. Talk at the Symposium *Invertebrates of Belgium*, in Brussels (Belgium).
271. Dufrêne, M., Auverlot, E., Baguette, M., Desender, K., **Loreau, M.**, Pollet, M., Rasmont, P. & Valemberg, J., 1988. — Le projet *Ecologie, Cartographie et Faunistique des Coléoptères Carabidae de Belgique et du Nord de la France*. Poster at the Symposium *Invertebrates of Belgium*, in Brussels (Belgium).
272. **Loreau, M.**, 1989. — The significance of intra- and interspecific competition in carabid beetles. Talk at the 7th European Carabidologists' Meeting in London (United Kingdom).
273. **Loreau, M.**, 1991. — The EUROTRAC project. Talk at the 1st National Information Meeting of the EUROTRAC project within the framework of EUREKA, in Brussels (Belgium).
274. **Loreau, M.**, 1992. — Models of climate change impacts on ecosystems and hydrology. Talk at the Meeting *Advanced Climate Change Impacts Models* of the GENEVER Group of Global Change Coordinators, in Bedford (United Kingdom).
275. **Loreau, M.** & Nolf, C.-L., 1992. — Spatial structure and dynamics of a population of *Abax ater* Villers (Coleoptera, Carabidae). Talk at the 8th European Carabidologists' Meeting – 2nd International Symposium of Carabidology, in Louvain-la-Neuve (Belgium).
276. Chaabane, K., Josens, G. & **Loreau, M.**, 1992. — Laboratory measurements of consumption and growth in *Abax ater* Villers (Coleoptera, Carabidae). Talk at the 8th European Carabidologists' Meeting – 2nd International Symposium of Carabidology, in Louvain-la-Neuve (Belgium).
277. Chaabane, K., Josens, G. & **Loreau, M.**, 1992. — Respiration measurements in *Abax ater* Villers (Coleoptera, Carabidae). Poster at the 8th European Carabidologists' Meeting – 2nd International Symposium of Carabidology, in Louvain-la-Neuve (Belgium).
278. **Loreau, M.**, 1993. — How herbivores and other animals benefit plants and ecosystems. Talk at the 3rd Belgian Congress of Zoology, in Liège (Belgium).

279. Chaabane, K., **Loreau, M.** & Josens, G., 1993. — The life cycle of *Abax ater* (Coleoptera, Carabidae). Poster at the 3rd Belgian Congress of Zoology, in Liège (Belgium).
280. Soki, K., Josens, G. & **Loreau, M.**, 1993. — Dynamics of the nests of *Cubitermes speciosus* (Isoptera, Termitidae): a long-term field study. Talk at the 3rd Belgian Congress of Zoology, in Liège (Belgium).
281. **Loreau, M.**, 1994. — Optimization of matter and energy flow by consumers in ecosystems. Talk at the 6th International Congress of Ecology, in Manchester (United Kingdom).
282. **Loreau, M.**, 1994. — Material cycling and the resilience and resistance of ecosystems. Poster at the 6th International Congress of Ecology, in Manchester (United Kingdom).
283. Chaabane, K., **Loreau, M.** & Josens, G., 1994. — The energy budget of *Abax ater* (Coleoptera, Carabidae). Poster at the 1st Benelux Congress of Zoology, in Leuven (Belgium).
284. **Loreau, M.**, 1995. — Les organismes comptent-ils dans les écosystèmes? L'apport de la modélisation. Talk at the 4th Conference in Life Sciences of Pierre and Marie Curie University, in Paris (France).
285. Soki, K., Josens, G. & **Loreau, M.**, 1995. — Etude démographique longitudinale d'une population de nids de *Cubitermes speciosus* (Termitinae, Termitidae). Talk at the Annual Colloquium of the French Section of the International Union for the Study of Social Insects, in Brussels (Belgium).
286. Chaabane, K., **Loreau, M.** & Josens, G., 1995. — Individual and population energy budgets of *Abax ater* (Coleoptera, Carabidae). Poster at the 3rd International Symposium of Carabidology, in Kaunianinen (Finland).
287. Guillemain, M., **Loreau, M.** & Daufresne, T., 1995. — Distribution of carabid beetles in relation to prey abundance. Poster at the 3rd International Symposium of Carabidology, in Kaunianinen (Finland).
288. de Mazancourt, C., **Loreau, M.** & Abbadie, L., 1996. — Optimisation par l'herbivorie et recyclage des nutriments: modèle de l'influence potentielle des herbivores dans une savane de Côte d'Ivoire. Poster at the Conference *New Trends in Environmental Modelling of the Environment, Life and Societies* programme of the National Centre for Scientific Research, in Paris (France).
289. de Mazancourt, C., **Loreau, M.** & Abbadie, L., 1996. — Rôle fonctionnel des herbivores: modèle du cycle de l'azote dans une savane de Côte d'Ivoire. Talk at the Symposium *Biodiversity and Ecosystem Functioning*, in Paris (France).
290. de Mazancourt, C., **Loreau, M.** & Abbadie, L., 1996. — Grazing optimization and nutrient cycling: a model of the potential impact of large herbivores in a savanna ecosystem. Talk at the Ecological Summit 96, in Copenhagen (Denmark).
291. de Mazancourt, C., **Loreau, M.** & Abbadie, L., 1996. — Optimisation par l'herbivorie et recyclage des nutriments: être ou ne pas être mangé? Talk at the 18th Colloquium of Population Biology and Genetics, in Grenoble (France).

292. de Mazancourt, C. & **Loreau, M.**, 1997. — Grazing optimization and nutrient cycling: should plants evolve defence in a patchy environment? Talk at the 1st Scientific Conference of the Laboratory of Ecology, in Paris (France).
293. Depret-Fournier, E. & **Loreau, M.**, 1997. — Influence of agricultural management practices on the structure of ground-beetle communities. Talk at the 1st Scientific Conference of the Laboratory of Ecology, in Paris (France).
294. de Mazancourt, C. & **Loreau, M.**, 1997. — Grazing optimization and nutrient cycling: should plants evolve defence in a patchy environment? Poster at the Symposium *Herbivores, Plants and Predators* of the British Ecological Society and the Dutch ecological society, in Wageningen (Netherlands).
295. Depret-Fournier, E., **Loreau, M.** & Havet, P., 1997. — Effects of new agricultural management practices on the structure and diversity of ground-beetle communities (Coleoptera, Carabidae): first results. Talk at the 23rd Congress of the International Union of Game Biologists, in Lyon (France).
296. de Mazancourt, C. & **Loreau, M.**, 1998. — Grazing optimization and species replacement in plant communities. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
297. Mouquet, N. & **Loreau, M.**, 1998. — Competition for space and immigration in plant communities: consequences for diversity and ecosystem functioning. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
298. Yachi, S. & **Loreau, M.**, 1998. — Biodiversity and ecosystem productivity in a fluctuating environment: the insurance hypothesis. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
299. Yachi, S. & **Loreau, M.**, 1998. — How can diversity increase productivity of a light-limited plant ecosystem? Talk and poster at the GCTE–LUCC Open Science Conference on Global Change, in Barcelona (Spain).
300. Yachi, S. & **Loreau, M.**, 1998. — Modelling the effects of biodiversity on productivity of a light-limited plant ecosystem. Poster at the Annual Meeting of the Society for Experimental Biology, in York (United Kingdom).
301. de Mazancourt, C. & **Loreau, M.**, 1998. — Grazing optimization and species replacement in plant communities. Talk at the 7th International Congress of Ecology, in Florence (Italy).
302. Depret-Fournier, E., **Loreau, M.** & Havet, P., 1998. — Comparison of structural diversity of carabid beetle communities (Coleoptera, Carabidae) within an intensive agricultural landscape. Talk at the 7th International Congress of Ecology, in Florence (Italy).
303. **Loreau, M.**, 1998. — Biodiversity and ecosystem functioning: lessons from a theoretical model. Talk at the 7th International Congress of Ecology, in Florence (Italy).
304. **Loreau, M.**, 1998. — Ecosystem development explained by competition within and between material cycles. Talk and poster at the 7th International Congress of Ecology, in Florence (Italy).

305. Yachi, S. & **Loreau, M.**, 1998. — Biodiversity and ecosystem productivity in a fluctuating environment: the insurance hypothesis. Talk at the 7th International Congress of Ecology, in Florence (Italy).
306. Fournier, E. & **Loreau, M.**, 1998. — Activity and habitat choice in relation with hungry state in *Pterostichus* species. Talk at the 9th European Carabidologists' Meeting, in Cosenza (Italy).
307. **Loreau, M.**, 1998. — Biodiversity and ecosystem functioning: state of the art and perspectives in France. Talk at the Meeting of the Network *Biodiversity and Ecosystem Functioning: Theoretical and Experimental Approaches* of the Federative Institute of Basic and Applied Ecology (Paris, France).
308. Daufresne, T. & **Loreau, M.**, 1998. — Coupling constraints and their implications in ecosystem processes: the example of carbon–nutrient coupling in primary producer–decomposer systems. Talk at the Workshop *Community Patterns and Processes*, in Ascot (United Kingdom).
309. Mouquet, N. & **Loreau, M.**, 1998. — Immigration and species richness in a competitive plant community: a regional perspective. Poster at the Workshop *Community Patterns and Processes*, in Ascot (United Kingdom).
310. Daufresne, T. & **Loreau, M.**, 1999. — Carbon–nutrient coupling in biomass and its consequences for the functioning of ecosystems: the example of primary producer–decomposer systems. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
311. Hulot, F. D., Lacroix, G. & **Loreau, M.**, 1999. — Effects of nutrient enrichment and fish stock on freshwater food webs: a theoretical and experimental approach. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
312. Mouquet, N. & **Loreau, M.**, 1999. — Coexistence in a metacommunity. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
313. Daufresne, T. & **Loreau, M.**, 1999. — Les contraintes de couplage et leurs implications dans le fonctionnement des écosystèmes: exemple du couplage carbone–nutriment dans le système producteurs primaires–décomposeurs. Talk at the 1st Functional Ecology Conference, in Montpellier (France).
314. Hulot, F. D., Lacroix, G. & **Loreau, M.**, 1999. — Effets de l'augmentation de la charge en nutriments et en poissons sur l'abondance des groupes trophiques d'un réseau trophique lacustre: approches théorique et expérimentale. Talk at the 1st Functional Ecology Conference, in Montpellier (France).
315. Mouquet, N. & **Loreau, M.**, 1999. — Coexistence in a metacommunity. Poster at the British Ecological Society Annual Symposium, *Ecological Consequences of Environmental Heterogeneity*, at the University of Sussex (United Kingdom).
316. Mouquet, N., Moore, J., **Loreau, M.** & Lawton, J. H., 2000. — Plant species diversity and ecosystem functioning: why the mechanism that promotes coexistence matters. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).

317. Daufresne, T. & **Loreau, M.**, 2000. — When do herbivores control plant nutrient limitation? Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
318. Hulot, F. D., Morin, P. J. & **Loreau, M.**, 2000. — Cascade trophique et compétition : approches théorique et expérimentale en microcosmes avec algues et protistes. Poster at the 2nd Functional Ecology Conference, in Lalonde-les-Maures (France).
319. Loeuille, N. & **Loreau, M.**, 2001. — Consequences of plant–herbivore coevolution on the dynamics and functioning of ecosystems. Talk at the Annual Scientific Conference of the Laboratory of Ecology, in Paris (France).
320. Hulot, F. D., Tolian, M., Lacroix, G. & **Loreau, M.**, 2001. — Nutrient enrichment and fish stock effect on the abundance of trophic groups of freshwater food webs: a meta-analysis. Talk at the 28th Congress of the Societas Internationalis Limnologiae, in Melbourne (Australia).
321. Loeuille, N. & **Loreau, M.**, 2002. — Coévolution plante–herbivore: régimes possibles et importance de la dynamique des nutriments. Talk at the 4th Functional Ecology Conference, in Toulouse (France).
322. Roussel, H., Ait-Aissa, S., Baird, D., Chauvet, E., Coquery, M., Garabetian, F., Gauthier, L., Gerino, M., Hulot, F. D., Lagadic, L., Lauer, A., **Loreau, M.**, Morin, A., Palluel, O., Pandard, P., Porcher, J. M., Poulsen, V., Vervier, P. & Bonzom, J.-M., 2002. — Impact du cuivre sur la structure et le fonctionnement d'un écosystème aquatique: étude en mésocosme lotique. Talk at the 4th Functional Ecology Conference, in Toulouse (France).
323. Bonzom, J.-M., Hulot, F. D., **Loreau, M.**, Magaud, H., Mercier, A., Poulsen & Thybaud, E., 2002. — Effects of the 4-nonylphenol in freshwater mesocosms. Poster at the 12th Annual Meeting of the Society of Environmental Toxicology and Chemistry, in Vienna (Austria).
324. Hulot, F. D., Magaud, H., Bonzom, J.-M. & **Loreau, M.**, 2002. — Direct and indirect effects of 4-nonylphenol on functional groups of a lotic ecosystem. Talk at the 12th Annual Meeting of the Society of Environmental Toxicology and Chemistry, in Vienna (Austria).
325. Hulot, F. D., Lacroix, G., **Loreau, M.**, Lescher-Moutoué, F. & Tolian, M., 2002. — Size-based functional groups in pelagic communities: heterogeneous responses to nutrient enrichment and fish presence within trophic levels. Poster at the 9th European Ecological Congress, in Lund (Sweden).
326. Loeuille, N. & **Loreau, M.**, 2003. — Effets de l'enrichissement sur les réseaux trophiques: faut-il prendre en compte l'évolution? Talk at the 5th Functional Ecology Conference, in Nancy (France).
327. Thébault, E. & **Loreau, M.**, 2003. — Food-web constraints on biodiversity–ecosystem functioning relationships. Poster at the 5th Functional Ecology Conference, in Nancy (France).
328. Loeuille, N. & **Loreau, M.**, 2003. — Effects of enrichment on food webs: should we consider evolution? Talk at the Annual Scientific Conference of the Laboratories of Ecology and Evolutionary Parasitology, in Paris (France).

329. Cherif, M., **Loreau, M.** & Lacroix, G., 2003. — Primary producers within ecosystems under stoichiometric constraints. Talk at the Meeting *Planktonic Primary Producers*, in Paris (France).
330. Loeuille, N. & **Loreau, M.**, 2003. — Effects of nutrient enrichment on food webs: can evolution buffer top-down effects? Talk at the Meeting *Planktonic Primary Producers*, in Paris (France).
331. Schmit, D. & **Loreau, M.**, 2003. — The direct and indirect effects of copper pollution in model ecosystems. Talk at the Meeting *Planktonic Primary Producers*, in Paris (France).
332. Thébault, E. & **Loreau, M.**, 2003. — Food-web constraints on biodiversity–ecosystem functioning relationships. Talk at the Meeting *Planktonic Primary Producers*, in Paris (France).
333. Goreaud, F., Courbaud, B., **Loreau, M.** & Millier, C., 2003. — Using IBMs to study the link between spatial structure and dynamics of plant communities. Talk at the 2nd International Conference on Mathematical Ecology, in Alcala (Spain).
334. Thébault, E. & **Loreau, M.**, 2004. — Relation entre diversité et stabilité des écosystèmes: impact de la structure trophique, approche théorique. Talk at the 6th Functional Ecology Conference, in Rennes (France).
335. Cherif, M. & **Loreau, M.**, 2004. — La stœchiométrie et ses implications dans le fonctionnement des réseaux trophiques. Poster at the 6th Functional Ecology Conference, in Rennes (France).
336. Cherif, M. & **Loreau, M.**, 2004. — La stœchiométrie et ses implications dans le fonctionnement des réseaux trophiques. Poster at the Conference of the Department of Biology of the Ecole Normale Supérieure, in Nouan-le-Fuzelier (France).
337. **Loreau, M.** & Loeuille, N., 2004. — Evolution of size-structured food webs. Talk at the Conference *Linking Community and Ecosystem Ecology: Recent Advances and Future Challenges*, in Palma de Mallorca (Spain).
338. Thébault, E. & **Loreau, M.**, 2004. — Food-web constraints on the relationship between diversity and ecosystem functioning. Poster at the Conference *Linking Community and Ecosystem Ecology: Recent Advances and Future Challenges*, in Palma de Mallorca (Spain).
339. Cherif, M. & **Loreau, M.**, 2004. — Stoichiometry and the functioning of multitrophic systems. Poster at the Gordon Research Conference *Metabolic Basis of Ecology*, in Lewiston (U.S.A.).
340. Loeuille, N. & **Loreau, M.**, 2004. — Testing the Energetic Equivalence Rule using a coevolutionary assembly model. Poster at the Gordon Research Conference *Metabolic Basis of Ecology*, in Lewiston (U.S.A.).
341. Thébault, E. & **Loreau, M.**, 2004. — Trophic interactions and the relationship between species diversity and ecosystem stability. Talk at the Annual Scientific Conference of the Laboratories of Ecology and Evolutionary Parasitology, in Paris (France).
342. Thébault, E. & **Loreau, M.**, 2005. — Food webs and the relationship between biodiversity and ecosystem functioning. Talk at the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).

343. Fontaine, C., Dajoz, I., Mériguet, J. & **Loreau, M.**, 2005. — Functional diversity of plant–pollinator communities enhances ecosystem sustainability. Talk at the First DIVERSITAS Open Science Conference, *Integrating Biodiversity Science for Human Well-Being*, in Oaxaca (Mexico).
344. Goudard, A. & **Loreau, M.**, 2007. — Non-trophic interactions, biodiversity and ecosystem functioning: an interaction web model, applied to biological invasions. Talk and poster at the 9th Functional Ecology Conference, in Biarritz (France).
345. Leroux, S. J. & **Loreau, M.**, 2007. — Allochthonous flows and the strength of trophic cascades. Talk at McGill Biology Graduate Students' Symposium, in Montreal (Canada).
346. Kylafis, G. & **Loreau, M.**, 2007. — Ecological and evolutionary consequences of niche construction. Talk at McGill Biology Graduate Students' Symposium, in Montreal (Canada).
347. Cherif, M. & **Loreau, M.**, 2008. — A theoretical study of interactive effects of herbivores and decomposers on nutrient recycling. Talk at the 2008 Annual Meeting of the Canadian Society for Ecology and Evolution, in Vancouver (Canada).
348. Kylafis, G. & **Loreau, M.**, 2008. — Ecological and evolutionary consequences of niche construction. Talk at the 2008 Annual Meeting of the Canadian Society for Ecology and Evolution, in Vancouver (Canada).
349. Leroux, S. J. & **Loreau, M.**, 2008. — The subsidy hypothesis and the strength of trophic cascades across ecosystems. Talk at the Annual 2008 Meeting of the Canadian Society for Ecology and Evolution, in Vancouver (Canada).
350. Cherif, M., Aly Hassan, R., Long, Z. & **Loreau, M.**, 2008. — Evolving complex food webs with simple physical and biological rules: a project. Poster at the Gordon Research Conference *Metabolic Basis of Ecology*, in Biddeford (U.S.A.).
351. Sun, C., Schmitz, O. J. & **Loreau, M.**, 2008. — Carnivore hunting mode and plant species coexistence. Poster at the 2008 Annual Meeting of the Society for Mathematical Biology, in Toronto (Canada).
352. Long, Z. T., Cherif, M. & **Loreau, M.**, 2008. — Coexistence of predators depends on differences in their sizes and the sizes of their prey. Talk at the 93<sup>rd</sup> Annual Meeting of the Ecological Society of America, in Milwaukee (U.S.A.).
353. Sun, C., Schmitz, O. J. & **Loreau, M.**, 2008. — Dynamics and ecological functioning of ecosystems with different predator hunting modes. Talk at the 93<sup>rd</sup> Annual Meeting of the Ecological Society of America, in Milwaukee (U.S.A.).
354. Leroux, S. J. & **Loreau, M.**, 2009. — Consumer-mediated recycling and cascading trophic interactions. Talk at the Annual 2009 Meeting of the Canadian Society for Ecology and Evolution, in Halifax (Canada).
355. Pillai, P., **Loreau, M.** & Gonzalez, A., 2009. — Emergence of food web structure at the metacommunity scale. Talk at the Annual 2009 Meeting of the Canadian Society for Ecology and Evolution, in Halifax (Canada).

356. Leroux, S. J. & **Loreau, M.**, 2009. — Effects of temporally variable subsidies on the strength of cross-system trophic cascades. Talk at the 94th Annual Meeting of the Ecological Society of America, in Albuquerque (U.S.A.).
357. de Mazancourt, C., Haegeman, B. & **Loreau, M.**, 2009. — How does diversity stabilise communities? A new predictor for community variance. Talk at the 94th Annual Meeting of the Ecological Society of America, in Albuquerque (U.S.A.).
358. Pillai, P., **Loreau, M.** & Gonzalez, A., 2009. — Modeling food-web interactions in a metacommunity. Talk at the 94th Annual Meeting of the Ecological Society of America, in Albuquerque (U.S.A.).
359. Hatton, I. & **Loreau, M.**, 2009. — What is regulating the diverse populations of large African mammals? Talk at the Second DIVERSITAS Open Science Conference, *Biodiversity and Society: Understanding Connections, Adapting to Changes*, in Cape Town (South Africa).
360. Gonzalez, A., Mouquet, N. & **Loreau, M.**, 2009. — Biodiversity as spatial insurance in fragmented landscapes. Poster at the Second DIVERSITAS Open Science Conference, *Biodiversity and Society: Understanding Connections, Adapting to Changes*, in Cape Town (South Africa).
361. Cherif, M. & **Loreau, M.**, 2010. — Impacts of herbivores on decomposition and nutrient availability: when does stoichiometry matter? Talk at the Annual 2010 Meeting of the Canadian Society for Ecology and Evolution, in Quebec (Canada).
362. Kylafis, G. & **Loreau, M.**, 2010. — Niche construction in the light of niche theory. Talk at the Annual 2010 Meeting of the Canadian Society for Ecology and Evolution, in Quebec (Canada).
363. Larocque, A., de Mazancourt, C. & **Loreau, M.**, 2010. — Disentangling the mechanisms of the diversity–stability relationship. Talk at the Annual 2010 Meeting of the Canadian Society for Ecology and Evolution, in Quebec (Canada).
364. Marleau, J. N., Guichard, F. & **Loreau, M.**, 2010. — Destabilization of spatially coupled ecosystems: the role of nutrients. Talk at the Annual 2010 Meeting of the Canadian Society for Ecology and Evolution, in Quebec (Canada).
365. Hatton, I. & **Loreau, M.**, 2010. — What is regulating the diverse populations of large African mammals? Talk at the Annual 2010 Meeting of the Canadian Society for Ecology and Evolution, in Quebec (Canada).
366. Long, Z. T., Leroux, S. J. & **Loreau, M.**, 2010. — Interactive effects of enrichment and the manipulation of intermediate hosts on infection prevalence and food web structure. Talk at the 95th Annual Meeting of the Ecological Society of America, in Pittsburgh (U.S.A.).
367. Isbell, F. & **Loreau, M.**, 2010. — How many species are needed to maintain functional grassland ecosystems? Talk at the Annual Symposium of the Quebec Centre for Biodiversity Science, *Biodiversity Science in Quebec: 2010 and Beyond*, in Montreal (Canada).
368. Sapijanskas, J. & **Loreau, M.**, 2010. — Cascading extinctions, functional complementarity, and selection in two-trophic-level model communities: a trait-based mechanistic approach.

- Talk at the Annual Symposium of the Quebec Centre for Biodiversity Science, *Biodiversity Science in Quebec: 2010 and Beyond*, in Montreal (Canada).
369. Marleau, J. N., Bein, M., de Mazancourt, C. & **Loreau, M.**, 2010. — The effect of fishing pressure on nutrient cycles in spatially subdivided littoral ecosystems in Lake Tanganyika. Poster at the Annual Symposium of the Quebec Centre for Biodiversity Science, *Biodiversity Science in Quebec: 2010 and Beyond*, in Montreal (Canada).
370. Bein, A. M., McIntyre, P. B., Vadeboncoeur, Y., de Mazancourt, C. & **Loreau, M.**, 2011. — Fish enhance productivity in aquatic ecosystems: theoretical insights and observations from the littoral zone of Lake Tanganyika. Talk at the 2011 American Society of Limnology and Oceanography Aquatic Sciences Meeting, in San Juan (U.S.A.).
371. Wong, E., Gonzalez, A. & **Loreau, M.**, 2011. — Social structure and response for prokaryotes: measurements of social evolution. Poster at the Annual 2011 Meeting of the Canadian Society for Ecology and Evolution, in Banff (Canada).
372. Wong, E., Gonzalez, A. & **Loreau, M.**, 2011. — Social structure and response for prokaryotes: measurements of social evolution. Poster at the CAMBAM End of Year Poster Exhibition Session, in Montreal (Canada).
373. Calcagno, V., Sun, C., Schmitz, O. J. & **Loreau, M.**, 2011. — Herbivore behavioral adjustments in a tritrophic food web: implications for plant species coexistence. Talk at the Second Entomophagous Insects Conference, in Antibes (France).
374. Isbell, F., Calcagno, V., Hector, A., Connolly, J., Harpole, W. S., Reich, P. B., Scherer-Lorenzen, M., Schmid, B., Tilman, D., van Ruijven, J., Weigelt, A., Wilsey, B. J., Zavaleta, E. S. & **Loreau, M.**, 2011. — How many species are needed to maintain ecosystem functioning and services? Talk at the 96th Annual Meeting of the Ecological Society of America, in Austin (U.S.A.).
375. Pillai, P., Gonzalez, A. & **Loreau, M.**, 2011. — The evolution of omnivore and generalist feeding, and the emergence of network complexity in metacommunity food webs. Talk at the 96th Annual Meeting of the Ecological Society of America, in Austin (U.S.A.).
376. Long, Z. T., Leroux, S. J., Faninger, T. & **Loreau, M.**, 2011. — Interactive effects of enrichment and the manipulation of intermediate hosts by parasites on infection prevalence and food web structure. Talk at the 21st Biennial Conference of the Coastal and Estuarine Research Foundation, in Daytona Beach (U.S.A.).
377. Wong, E., Gonzalez, A. & **Loreau, M.**, 2011. — Using localized interaction framework to measure and model ecosystem dynamics. Talk at the 2011 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
378. Marleau, J. N. & **Loreau, M.**, 2011. — The effects of nutrient co-limitation and stoichiometric imbalances on ecosystem dynamics. Talk at the 2011 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
379. Sapijanskas, J., Potvin, C. & **Loreau, M.**, 2011. — Shedding light on nutritional interactions: litter production by neighbours contributes to overyielding in a tropical tree plantation. Talk at the 2011 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).

380. Bein, A. M., McIntyre, P. B., Vadeboncoeur, Y., de Mazancourt, C. & **Loreau, M.**, 2011. — Enhanced and constant productivity in impoverished and fluctuating environments. Poster at the 2011 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
381. Wong, E., Gonzalez, A. & **Loreau, M.**, 2012. — The evolution of cooperation in chemotactic bacteria in spatial networks: microfluidic design and model. Talk at the International Congress *Evolution 2012*, in Ottawa (Canada).
382. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2012. — Size-related effects of physical factors on the structure of phytoplankton communities. Poster at the Gordon Research Conference *Metabolic Basis of Ecology*, in Biddeford (U.S.A.).
383. Marleau, J. N., Guichard, F. & **Loreau, M.**, 2012. — The effects of spatial configurations on metaecosystem stability and functioning. Talk at the 97th Annual Meeting of the Ecological Society of America, in Portland (U.S.A.).
384. Sapijanskas, J., Paquette, A., Potvin, C., Kunert, N. & **Loreau, M.**, 2012. — Tropical tree diversity enhances light capture through overyielding, plastic architectural changes, and temporal niche differences. Poster at the 97th Annual Meeting of the Ecological Society of America, in Portland (U.S.A.).
385. Marleau, J. N., Guichard, F. & **Loreau, M.**, 2012. — Bridging the gap : the importance of finite spatial structure in ecology. Talk at the 2012 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
386. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2012. — Size-related effects of physical factors on the structure of phytoplankton communities. Poster at the 2012 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
387. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2013. — Size-related effects of physical factors on the structure of phytoplankton communities. Talk at the Annual 2013 Meeting of the Canadian Society for Ecology and Evolution, in Kelowna (Canada).
388. Vallina, S. M., Follows, M. J., Dutkiewicz, S., Montoya, J. M., Cermenio, P. & **Loreau, M.**, 2013. — Global relationship between phytoplankton diversity and productivity in the ocean: killing-the-winner. Talk at the International Worshop *Biodiversity in a Changing World*, in Montreal (Canada).
389. Wong, E., **Loreau, M.** & Gonzalez, A., 2013. — Habitat structure influences the evolution of cooperation. Talk at the 11th INTECOL Congress, *Ecology: Into the Next 100 Years*, in London (United Kingdom).
390. Haegeman, B. & **Loreau, M.**, 2013. — Modelling consumer–resource interactions in a metacommunity framework. Talk at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).
391. Auguères, A.-S. & **Loreau, M.**, 2013. — Can organisms regulate global biogeochemical cycles? Talk at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).

392. Mellard, J. & **Loreau, M.**, 2013. — Evolutionary responses to environmental change in a simple model: how do trophic interactions affect adaptation, persistence, and ecosystem functioning? Talk at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).
393. de Mazancourt, C., Isbell, F., Larocque, A., Berendse, F., De Luca, E., Grace, J. B., Haegeman, B., Polley, H. W., Roscher, C., Schmid, B., Tilman, D., van Ruijven, J., Weigelt, A., Wilsey, B. J. & **Loreau, M.**, 2013. — Predicting ecosystem stability from community composition and biodiversity. Talk at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).
394. Wang, S. & **Loreau, M.**, 2013. — Environmental synchrony and dispersal interactively affect the stability of metacommunities. Talk at the 2013 Congress of the International Society for Ecological Modelling, *Ecological Modelling for Ecosystem Sustainability in the Context of Global Change*, in Toulouse (France).
395. Wong, E., **Loreau, M.** & Gonzalez, A., 2013. — The effects of connectivity and local clustering on cooperation and population density in habitat networks. Talk at the 2013 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
396. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2013. — Size-related effects of physical factors on the structure of phytoplankton communities. Talk at the 2013 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
397. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2014. — The physics of predator-prey interactions: predicting the optimal prey size. Talk at the International Workshop *Networks in Ecology*, in Norrbyn (Sweden).
398. Haegeman, B. & **Loreau, M.**, 2014. — Modelling the interplay of resource competition and dispersal. Talk at the Workshop *Microcosms and Dispersal*, in Moulis (France).
399. Wang, S. & **Loreau, M.**, 2014. — Ecosystem stability in space: a general framework and a case study with metapopulation models. Talk at the Workshop *Microcosms and Dispersal*, in Moulis (France).
400. Bertrand, R., Morin, X. & **Loreau, M.**, 2014. — Projected species distribution models over the time: a risky business? Talk at the International Workshop *The Response of Organisms to Climate Change in Heterogeneous Environments*, in Loches (France).
401. Wong, E., **Loreau, M.** & Gonzalez, A., 2014. — Habitat structure mediates cooperation in microfluidic and simulation experiments. Talk at the Conference *Genomes to Biomes Montreal 2014*, in Montreal (Canada).
402. Marleau, J. N., Guichard, F. & **Loreau, M.**, 2014. — The emergence of nutrient colimitation in metaecosystems. Exposé à la Conférence *Genomes to Biomes Montreal 2014*, à Montréal (Canada).
403. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2014. — The physics of predator-prey interactions: predicting the optimal prey size. Poster at the Gordon Research Conference *Unifying Ecology across Scales*, in Biddeford (U.S.A.).

404. Guichard, F., Marleau, J. N. & **Loreau, M.**, 2014. — Nonequilibrium spatial dynamics in finite-size meta-ecosystems. Talk at the 99th Annual Meeting of the Ecological Society of America, in Sacramento (U.S.A.).
405. Shanafelt, D. W., Dieckmann, U., Jonas, M., Franklin, O., Perrings, C. & **Loreau, M.**, 2014. — Biodiversity, productivity, and the spatial insurance hypothesis revisited. Talk at the 99th Annual Meeting of the Ecological Society of America, in Sacramento (U.S.A.).
406. Revilla, T. A., Encinas-Viso, F. & **Loreau, M.**, 2014. — Robustness of mutualistic networks under phenological change and habitat destruction. Talk at the 99th Annual Meeting of the Ecological Society of America, in Sacramento (U.S.A.).
407. Mellard, J. P., de Mazancourt, C. & **Loreau, M.**, 2014. — Evolutionary responses to environmental change: how do trophic interactions affect adaptation and persistence? Talk at the 99th Annual Meeting of the Ecological Society of America, in Sacramento (U.S.A.).
408. Wang, S. & **Loreau, M.**, 2014. — Ecosystem stability in space: theoretical framework and dynamical models. Talk at the 99th Annual Meeting of the Ecological Society of America, in Sacramento (U.S.A.).
409. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2014. — Optimal foraging revisited: physics predicts optimal prey size. Talk at the 2014 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
410. Mellard, J. P., de Mazancourt, C. & **Loreau, M.**, 2014. — Evolutionary responses to environmental change: how do trophic interactions affect adaptation and persistence? Talk at the Joint 2014 Annual Meeting of the British Ecological Society and the Société Française d'Ecologie, in Lille (France).
411. Wang, S. & **Loreau, M.**, 2014. — Ecosystem stability in space: theoretical framework and dynamical models. Talk at the Joint 2014 Annual Meeting of the British Ecological Society and the Société Française d'Ecologie, in Lille (France).
412. Bertrand, R., Morin, X. & **Loreau, M.**, 2014. — Projecting species distribution models over time: a risky business? Talk at the Joint 2014 Annual Meeting of the British Ecological Society and the Société Française d'Ecologie, in Lille (France).
413. Vallina, S. M., Montoya, J. M., **Loreau, M.**, Follows, M. J., Dutkiewicz, S. & Le Quéré, C., 2015. — An ecosystem marine mechanistic model of modular complexity ( $em^4c$ ): functional diversity, stability and productivity. Talk at the 2015 ASLO Aquatic Sciences Meeting, in Granada (Spain).
414. Cardinale, B. J., Allington, G. R. H., Brown, D. G., Byrnes, J., Duffy, E., Gamfeldt, L., Gonzalez, A., Hooper, D. U., Isbell, F., Lefcheck, J. S., **Loreau, M.** & O'Connor, M. I., 2015. — Is biodiversity declining at local scales or not? A critique of recent high-profile claims of no net loss of local biodiversity. Talk at the 100th Annual Meeting of the Ecological Society of America, in Baltimore (U.S.A.).
415. Portalier, S., Cherif, M., Fussmann, G. F. & **Loreau, M.**, 2015. — Physics, body size, and the structure of food webs. Talk at the 100th Annual Meeting of the Ecological Society of America, in Baltimore (U.S.A.).

416. Gonzalez, A., Cardinale, B. J., Allington, G. R. H., Byrnes, J., Endsley, K. A., Brown, D. G., Hooper, D. U., Isbell, F., **Loreau, M.** & O'Connor, M. I., 2015. — Overcoming the challenges of estimating local biodiversity change. Talk at the 2015 Annual Meeting of the British Ecological Society, in Edinburgh (United Kingdom).
417. Lafuite, A.-S., Salanié, F. & **Loreau, M.**, 2016. — Biodiversity loss, ecosystem service debt, and the sustainability of social-ecological systems. Talk at the World Conference on Natural Resource Modelling, in Flagstaff (U.S.A.).
418. Isbell, F., Craven, D., Connolly, J., **Loreau, M.**, Schmid, B., Beierkuhnlein, C., Bezemer, T. M., Bonin, C., Bruelheide, H., de Luca, E., Ebeling, A., Griffin, J. N., Guo, Q., Hautier, Y., Hector, A., Jentsch, A., Kreyling, J., Lanta, V., Manning, P., Meyer, S. T., Mori, A. S., Naeem, S., Niklaus, P. A., Polley, H. W., Reich, P. B., Roscher, C., Seabloom, E. W., Smith, M. D., Thakur, M. P., Tilman, D., Tracy, B. F., van der Putten, W. H., van Ruijven, J., Weigelt, A., Weisser, W. W., Wilsey, B. & Eisenhauer, N., 2016. — Biodiversity increases the resistance of ecosystem productivity to climate extremes. Talk at the 101st Annual Meeting of the Ecological Society of America, in Fort Lauderdale (U.S.A.).
419. Tredennick, A. T., de Mazancourt, C., **Loreau, M.** & Adler, P. B., 2016. — Disentangling the drivers of species synchrony in natural plant communities: environmental forcing, demographic stochasticity, and interspecific interactions. Talk at the 101st Annual Meeting of the Ecological Society of America, in Fort Lauderdale (U.S.A.).
420. Portalier, S., Cherif, M., Fussmann, G. F. & **Loreau, M.**, 2016. — Structure of food webs: physics and body size matter. Talk at the 101st Annual Meeting of the Ecological Society of America, in Fort Lauderdale (U.S.A.).
421. Wang, S. & **Loreau, M.**, 2016. — Biodiversity and ecosystem stability in dynamical metacommunities. Talk at the 101st Annual Meeting of the Ecological Society of America, in Fort Lauderdale (U.S.A.).
422. Arnoldi, J.-F., **Loreau, M.** & Haegeman, B., 2016. — Variability and the structural stability of ecosystems: two sides of the same coin. Talk at the International Workshop *Early Warning Signs of Ecosystem Degradation: Theory and Applications on Ecological Data*, in Montpellier (France).
423. Delsol, R., Haegeman, B. & **Loreau, M.**, 2016. — The relationships between spatial scaling of biodiversity and ecosystem stability. Talk at the 2016 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Grenoble (France).
424. Arnoldi, J.-F., **Loreau, M.** & Haegeman, B., 2016. — Variability and the structural stability of ecosystems: two sides of the same coin. Talk at the 2016 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Grenoble (France).
425. Delsol, R., Haegeman, B. & **Loreau, M.**, 2016. — Spatial scaling of biodiversity and ecosystem stability with a simple model. Talk at the International Conference on Ecological Sciences *Sfécologie 2016*, in Marseille (France).
426. Arnoldi, J.-F., **Loreau, M.** & Haegeman, B., 2016. — Variability and the structural stability of ecosystems: two sides of the same coin. Talk at the International Conference on Ecological Sciences *Sfécologie 2016*, in Marseille (France).

427. Auguères, A.-S. & **Loreau, M.**, 2016. — Ultimate colimitation of oceanic primary production. Talk at the International Conference on Ecological Sciences *Sfécologie 2016*, in Marseille (France).
428. Lafuite, A.-S., Salanié, F. & **Loreau, M.**, 2016. — Biodiversity loss, ecosystem service debt, and the sustainability of social-ecological systems. Talk at the International Conference on Ecological Sciences *Sfécologie 2016*, in Marseille (France).
429. Portalier, S., Cherif, M., Fussmann, G. & **Loreau, M.**, 2016. — Physical factors and the size structure of food webs. Talk at the 2016 Symposium of the Quebec Centre for Biodiversity Science, in Montreal (Canada).
430. Montoya, D., Haegeman, B., Gaba, S., de Mazancourt, C., Bretagnolle, V. & **Loreau, M.**, 2017. — The stability of crop production: trade-offs in pollination-dependent agriculture. Talk at the Ecology & Agriculture Summit for Young Scientists, in Chizé (France).
431. Montoya, D., Haegeman, B., Gaba, S., de Mazancourt, C., Bretagnolle, V. & **Loreau, M.**, 2017. — Provisioning and stability of multiple ecosystem services in agroecosystems. Talk at the AgreenSkills Annual Meeting 2017, in Paris (France).
432. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2017. — Disturbances and stability in spatial ecosystems. Poster at the Symposium *Nonlinear Dynamics and Complex Structures*, in Oldenburg (Germany).
433. Montoya, D., Haegeman, B., Gaba, S., de Mazancourt, C., Bretagnolle, V. & **Loreau, M.**, 2017. — Ecosystem service stability in agricultural systems. Talk at the 2017 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Paris (France).
434. Arnoldi, J.-F., Barbier, M., Bunin, G. & **Loreau, M.**, 2017. — Generic assembly patterns in large ecological communities. Talk at the 2017 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Paris (France).
435. Barbier, M., Arnoldi, J.-F., Bunin, G. & **Loreau, M.**, 2017. — When complex begets simple: generic diversity and stability patterns in ecosystem assembly. Talk at the 2017 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Paris (France).
436. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2017. — How disturbances shape stability in space. Talk at the 2017 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Paris (France).
437. Lee, S., Montoya, J. M. & **Loreau, M.**, 2017. — Modeling the effects of phytoplankton temperature traits on global diversity patterns. Talk at the 2017 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Paris (France).
438. Arnoldi, J.-F., **Loreau, M.** & Haegeman, B., 2017. — The variability spectrum and the diversity–stability relationship. Talk at the International Conference *Ecology Across Borders*, in Ghent (Belgium).
439. Henderson, K. & **Loreau, M.**, 2017. — Sustainable interactions: feedbacks and concepts of human population growth and land cover change. Talk at the International Conference *Ecology Across Borders*, in Ghent (Belgium).

440. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2017. — How disturbances shape stability in space. Talk at the International Conference *Ecology Across Borders*, in Ghent (Belgium).
441. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2018. — The three regimes of spatial recovery. Talk at the International Conference *Models in Ecology Population Dynamics, Ecology and Evolution*, in Leicester (United Kingdom).
442. Lautaud, K., van Nes, E., Scheffer, M. & **Loreau, M.**, 2018. — Uniting individualistic and organismic visions of nature with competition theory. Talk at the International Conference *Models in Ecology Population Dynamics, Ecology and Evolution*, in Leicester (United Kingdom).
443. Arnoldi, J.-F., Barbier, M., Bunin, G. & **Loreau, M.**, 2018. — Generic assembly patterns in complex ecological communities. Talk at the International Conference *Models in Ecology Population Dynamics, Ecology and Evolution*, in Leicester (United Kingdom).
444. Montoya, D., Haegeman, B., Gaba, S., de Mazancourt, C., Bretagnolle, V. & **Loreau, M.**, 2018. — Provisioning and stability of multiple ecosystem services in agroecosystems. Talk at the AgreenSkills Annual Meeting 2018, in Edinburgh (United Kingdom).
445. Shanafelt, D. W. & **Loreau, M.**, 2018. — Stability across food chains. Talk at the 103<sup>rd</sup> Annual Meeting of the Ecological Society of America, in New Orleans (U.S.A.).
446. Jaillard, B., Deleporte, P., **Loreau, M.** & Violle, C., 2018. — A systemic approach to Biodiversity–Ecosystem Functioning relationships: how to cluster species for what they do, not for what they are? Talk at the 2018 Annual Meeting of the National Research Group *Statistical Ecology*, in Grenoble (France).
447. Zelnik, Y., Arnoldi, J.-F. & **Loreau, M.**, 2018. — The three regimes of spatial recovery. Talk at the 2018 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Saint-Martin-de-Londres (France).
448. Lautaud, K., Barbier, M. & **Loreau, M.**, 2018. — The role of ecosystem engineers in shaping community patterns along spatial environmental gradients. Talk at the 2018 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Saint-Martin-de-Londres (France).
449. Galiana, N., Barbier, M., de Mazancourt, C. & **Loreau, M.**, 2019. — Can biomass distribution across trophic levels predict the prevalence of trophic cascades? Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).
450. Lautaud, K., Barbier, M., Scheffer, M. & **Loreau, M.**, 2019. — The role of biodiversity in protecting communities against collapse. Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).
451. Barbier, M., Arnoldi, J.-F., Galiana, N. & **Loreau, M.**, 2019. — Collective properties in food webs. Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).
452. Henderson, K., Cazalis, V. & **Loreau, M.**, 2019. — An ecological theory of human population growth. Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).

453. Aubrée, F., David, P., Jarne, P., **Loreau, M.**, Mouquet, N. & Calcagno, V., 2019. — How should community adaptation affect diversity–functioning relationships? Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).
454. Quévrefeu, P., Barbier, M. & **Loreau, M.**, 2019. — Perturbation transmission in metacommunities. Talk at the 2019 Annual Meeting of the National Research Group *Theory and Modelling of Biodiversity*, in Moulis (France).