

THIERRY OBERDORFF (short CV)



Nationality: French

Present position: Señor Scientist at the French Research Institute for Development (IRD) - <http://www.ird.fr>

Co-Leader Research Unit: BOREA - <http://www.mnhn.fr/mnhn/UMR7208/>

Professional address: (1) UMR BOREA MNHN/CNRS 7208/IRD 207/UPMC, Muséum National d'Histoire Naturelle, CP 53, 61 rue Buffon, 75231 Paris Cedex 5, France; (2) Unidad de Limnología y Recursos Acuáticos (ULRA), Universidad Mayor de San Simón (UMSS), Calle Sucre y Parque La Torre s/n, CP 2352, Cochabamba, Bolivia

Phone: (33) 1 40 79 37 67 – (591) 68511153

e-mail: oberdorf@mnhn.fr - thierry.oberdorff@ird.fr

.....

Education

Ph.D. in Aquatic Ecology. Museum of Natural History, París – 1994
Habilitation to Manage Research (HDR) – 1999

Specialties:

Freshwater Biodiversity
Conservation biology

Research interest

My research focuses on the role of different spatial scales in the regulation of freshwater communities. I am also interested in examining the consequences of anthropogenic effects on freshwater communities structure and function.

Subject Editor

Ecography - <http://www.ecography.org/>

Selected publications

See for more details: <http://scholar.google.fr/citations?user=p7nknEgAAAAJ&hl=fr&oi=sra>

Oberdorff T., Guégan J.F. & Hugueny B. (1995) Global scale patterns in freshwater fish species diversity. *Ecography* 18, 345-352.

Oberdorff T., Hugueny B & Guégan JF (1997) Evidence of historical effects on freshwater fish species diversity: comparison between Europe and North America. *Journal of Biogeography* 24, 461-467.

- Oberdorff T, Hugueny B, Compin A & Belkessam D (1998) Non-interactive fish communities in coastal streams of the North-Western France. *Journal of Animal Ecology* 3, 472-484.
- Guégan JF, Lek S & Oberdorff T (1998) Energy availability and habitat heterogeneity predict global riverine fish diversity. *Nature* 391, 382-384.
- Oberdorff T, Lek S & Guégan JF (1999) Patterns of endemism in riverine fish of the Northern Hemisphere. *Ecology Letters* 2, 75-81.
- Oberdorff T, Pont D, Hugueny B & Chessel D (2001) A probabilistic model characterizing riverine fish communities of French rivers: a framework for environmental assessment. *Freshwater Biology* 46, 399-415.
- Oberdorff T, Hugueny B & Vigneron T (2001) Is community richness related to environmental variability? An empirical answer for riverine fish. *Oikos* 93, 419-428.
- Oberdorff T, Pont D, Hugueny B & Porcher JP (2002) Development and validation of a fish-based index (FBI) for the assessment of rivers “health” in France. *Freshwater Biology* 47, 1720-1735.
- Hawkins BA, Field R, Cornell HV, Currie DJ, Guégan JF, Kaufman DM, Kerr, JT, Mittelbach GG, Oberdorff T, Porter EE & Turner JRG (2003) Energy, water, and broad-scale geographic patterns of species richness. *Ecology* 84, 3105-3117.
- Tales E, Keith P & Oberdorff T (2004) Density-range size relationships in French riverine fishes. *Oecologia* 138, 360-370.
- Irtz P, Argillier C & Oberdorff T (2004) Anthropogenic impacts on local-regional species richness relationship in French lacustrine fish communities. *Global Ecology and Biogeography* 13, 335-344.
- Currie DJ, Mittelbach GG, Cornell HV, Field R, Guégan JF, Hawkins B, Kaufman DM, Kerr JT, Oberdorff T, Turner JRG (2004) Predictions and tests of climate-based hypotheses of broad-scale variation in taxonomic richness. *Ecology Letters* 7, 1121-1134.
- Pont D, Hugueny B & Oberdorff T (2005) Modelling habitat requirement of European fishes: do species have similar responses to local and regional environmental constraints? *Canadian Journal of Fish and Aquatic Sciences* 62, 163-173.
- Tedesco P, Oberdorff T, Lasso CA, Zapata M & Hugueny B (2005) Evidence of history in explaining diversity patterns in tropical riverine fish. *Journal of Biogeography* 32, 1899-1907.
- Ibanez C, Oberdorff T, Teugels G, Momononekene V, Lavoué S, Fermon Y, Paugy D & Kamdem Toham A (2007) Fish assemblages structure and function along environmental gradients in rivers of Gabon (Africa). *Ecology of freshwater fish* 16, 315-334.
- Irtz P, Michonneau F, Oberdorff T, Whittier TR, Lamouroux N, Mouillot D & C Argillier (2007) Fish community comparisons along environmental gradients in lakes of France and Northeast USA. *Global Ecology and Biogeography* 16, 350-366.
- Lévêque C, Oberdorff T, Paugy D, Stiassny MLJ & PA Tedesco (2008) Freshwater fish: diversity and distribution patterns at global and continental scales. *Hydrobiologia* 595, 545-567.
- Leprieur F, Beauchard O, Blanchet S, Oberdorff T & Brosse S (2008) Fish invasions in the world's river systems : when natural processes are blurred by human activities. *PLOS Biology* 6, 404-410.
- Tedesco PA, Hugueny B, Oberdorff T, Mérigoux S & B de Mérona (2008). Hydrological seasonality and life history strategies of tropical freshwater fish. *Oecologia* 156, 691-702.

- Field R, Hawkins BA, Cornell HV, Field R, Guégan JF, Hawkins B, Currie DJ, Diniz-Filho AF, Kaufman DM, Kerr JT, Mittelbach GG, Oberdorff T, O'Brien E, Turner JRG (2009). Explaining spatial diversity gradients across scales : a meta-analysis. *Journal of Biogeography* 36, 132-147.
- Leprieur F, Brosse S, Garcia-Berthou E, Oberdorff T, Olden JD & CR Townsend (2009). Scientific uncertainty and the assessment of risks posed by non-native freshwater fishes. *Fish & Fisheries* 10, 88-99.
- Bini LM, Deniz-Filho JAF, Rangel TFLVB, Akre TSB, Albaladejo RG, Albuquerque FS, Aparicio A, Ajauro MB, Baselga A, Beck, J, Bellocq MI, Böhning-Gaese K, Borges PAV, Castro-Parga I, Chey VK, Chown SL, de Marco P, Dobkin DS, Ferrer-Castan D, Field R, Filloy J, Fleishman E, Gomez JF, Hortal J, Iverson JB, Kerr JT, Kissling WD, Kitching IJ, Leon-Cortez JL, Lobo JM, Montoya D, Morales-Castilla I, Moreno JC, Oberdorff T, Olalla-Tarraga MA, Pausas JG, Quian H, Rahbek C, Rodrguez MA, Rueda M, Ruggiero A, Sackmann P, Sanders NJ, Terribile LC, Vetaas OR & BA Hawkins (2009). Parameter estimation in geographical ecology: An empirical evaluation of spatial and non-spatial regression. *Ecography* 32, 193-204.
- Blanchet S, Leprieur F, Beauchard O, Staes J, Oberdorff T & S Brosse (2009). Broad-scale determinants of non-native species richness are context-dependent (2009). *Proceedings of the Royal Society (B)* 276, 2385-2394.
- Ibanez C, Belliard J, Hughes RM, Irz P, Kamdem-Toham A, Lamouroux N, Tedesco PA & Oberdorff T (2009). Convergence of temperate and tropical stream fish assemblages. *Ecography* 32, 193-204.
- Gaubert P, Denys G & Oberdorff T (2009). Genus-level supertree of Cyprinidae (Actinopterygii : Cypriniformes) using matrix representation with parsimony : partitioned qualitative clade « support » and test of macro-evolutionary scenarios. *Biological reviews* 84, 653-689.
- Blanchet S, Grenouillet G, Beauchard O, Tedesco PA, Leprieur F, Dürr H, Busson F, Oberdorff T & S Brosse (2010). Non-native species disrupt the worldwide patterns of freshwater fish body size: implications for Bergmann's rule. *Ecology Letters* 13, 421-431.
- Hugueny B, Oberdorff T & PA Tedesco (2010). Community ecology of river fishes: a large scale perspective. In : Community Ecology of Stream Fishes : Concepts, Approaches and Techniques (Gido K, Jackson DA Eds) *American Fisheries Society Symposium* 73, 23-62.
- Pereira HM, Leadley PW, Proença V, Alkemade R, Scharlemann JPW, Frernandez-Manjarrés JF, Araujo MB, Balvanera P, Biggs R, Cheung WWL, Chini L, Cooper HD, Gilman ER, Guénette S, Hurt GC, Huntington HP, Mace GM, Oberdorff T, Revenga C, Rodrigues P, Scholes RJ, Sumaila UR, Walpole M (2010). Scenarios for global biodiversity in the 21st century. *Science* 330, 1496-1501.
- Moya N, Hughes RM, Dominguez E, Gibon FM, Goitia E & T Oberdorff (2011). Macroinvertebrate-based multimetric predictive models for evaluating the human impact on biotic condition of Bolivian streams. *Ecological Indicators* 11, 840-847.
- Lauzeral C, Leprieur F, Beauchard O, Duron Q, Oberdorff T & S Brosse (2011). Identifying climatic niche shifts using coarse-grained occurrence data: a test with non-native freshwater fish. *Global Ecology and Biogeography* 20, 407-414.
- Leprieur F, Tedesco PA, Hugueny B, Beauchard O, Dürr HH, Brosse S & T Oberdorff (2011). Partitioning global patterns of freshwater fish beta diversity reveals contrasting signatures of past climate changes. *Ecology Letters* 14, 325-334.

- Oberdorff T, Tedesco PA, Hugueny B, Leprieur F, Beauchard O, Brosse S & HH Dürr (2011) Global and regional patterns in riverine fish species richness: A review. *International Journal of Ecology* doi: 10.1155/2011/967631.
- Torrente-Vilara G, Zuanon J, Leprieur F, Oberdorff T & PA Tedesco (2011) Effects of natural rapids and waterfalls on fish assemblage structure in the Madeira River (Amazon Basin). *Ecology of Freshwater Fishes* 20, 588-597.
- Villéger S, Blanchet S, Beauchard O, Oberdorff T & S Brosse (2011). Current and future patterns of freshwater fish homogenization over the globe. *Proceedings of the National Academy of Sciences* 108, 18003-18008.
- Tedesco PA, Leprieur F, Hugueny B, Brosse S, Dürr HH, Beauchard O, Busson F & T Oberdorff (2012). Patterns and processes of global riverine fish endemism. *Global Ecology and Biogeography* 21, 977-987.
- Brosse S, Beauchard O, Blanchet S, Dürr HH, Grenouillet G, Hugueny B, Lauzeral C, Leprieur F, Tedesco PA, Villéger S, Oberdorff T (2013). SPRICH: a database of freshwater fish species richness across the World. *Hydrobiologia* 700, 343-349.
- Sversut Dias M, Cornu JF, Oberdorff T, Lasso CA, Tedesco PA (2013). Natural fragmentation in river networks as a driver of speciation for freshwater fishes. *Ecography* 36, 683-689.
- Tisseuil C, Cornu JF, Beauchard O, Brosse S, Darwall W, Holland R, Hugueny B, Tedesco PA, Oberdorff T (2013). Global diversity patterns and cross-taxon convergence in riverine systems. *Journal of Animal Ecology* 82, 365-376.
- Tedesco PA, Oberdorff T, Cornu JF, Beauchard O, Brosse S, Dürr HH, Grenouillet G, Leprieur F, Tisseuil C, Zaiss R & Hugueny B (2013). A scenario for impacts of water availability loss due to climate change on riverine fish extinction rates. *Journal of Applied Ecology* 50, 1105–1115.
- Hette Tronquart N, Roussel JM, Dumont B, Archaimbault V, Pont D, Oberdorff T, Belliard J (2013). Food chain length and variability of water temperature. *Hydrobiologia* 718, 159–172.
- Dias MS, Oberdorff T, Hugueny B, Leprieur F, Jézéquel C, Cornu JF, Brosse S, Grenouillet G & PA Tedesco (2014) Global imprint of historical connectivity on freshwater fish biodiversity. *Ecology Letters* 17, 1130-1140.
- Leadley P, Proença V, Fernández-Manjarrés J, Pereira HM, Alkemade R, Biggs R, Bruley E, Cheung W, Cooper D, Figueiredo J, Gilman E, Guénette S, Hurt G, Mbow C, Oberdorff T, Revenga C, Scharlemann J, Scholes R, Stafford-Smith M, Sumaila R, Walpole M (2014). Interacting Regional Scale Regime Shifts for Biodiversity and Ecosystem Services. *BioScience* 64, 665-679.
- Toussaint A., Beauchard O., Oberdorff T., Brosse S & Villéger S (2014). Historical assemblage distinctiveness and the introduction of widespread non-native species explain worldwide change in freshwater fish taxonomic dissimilarity. *Global Ecology and Biogeography* 23, 574-584.