

## CV

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## Academic appointments

- 2015–... Permanent researcher (CR CNRS) at the Centre for Interdisciplinary Research in Biology (CIRB), Paris (France).  
Funding: ANR grant (PI), CNRS.
- 2014–2015 Fellow of the College of Life Sciences, Wissenschaftskolleg zu Berlin (Germany).
- 2013–2015 Lecturer (= Assistant Professor) in Evolutionary Theory, University of Exeter, Cornwall campus (UK).
- 2012–2013 Biodiversity Postdoctoral Fellow, University of British Columbia, Vancouver (Canada).  
Funding: NSERC-CREATE through UBC Biodiversity Research Centre.
- 2011–2012 Postdoc with M. Doebeli and S. Nuismer, University of British Columbia, Vancouver (Canada) and University of Idaho, Moscow (USA).  
Funding: NSF Grant to S. Nuismer.

## Education

- 2007–2011 PhD in Theoretical Evolutionary Ecology (Université Montpellier II and Centre for Functional and Evolutionary Ecology (CEFE), France); Advisor: S. Gandon (defended 2010-11-10, conferred 2011-02-18).
- 2005–2007 MSc in Ecology and Evolution (École Normale Supérieure and Université Paris 6).  
M2 thesis supervised by S. Gandon and T. Lenormand, Montpellier (FR) [5 months in 2007].  
M1 thesis supervised by S. Bonhoeffer and R. Regoes, ETH Zürich (CH) [5 months in 2006];
- 2004–2005 BSc in Biology (École Normale Supérieure, Paris, France).  
BSc thesis supervised by C. de Mazancourt, Imperial College (UK) [2 months in 2005].

## Teaching and Student supervision

### Teaching

- 01/2017 Summer school on Mathematical Biology, ICTP-SAIFR, São Paulo, Brazil.
- 2015, 2016 Jury member, Master 1 defences, École Normale Supérieure, Paris.
- Spring 2014 Trends in Ecology and Evolution, (BIO3131, Exeter). Module leader.
- 04/2013 Two lectures in Quantitative Methods in Ecology and Evolution, (Biology 501, UBC).

- 01/2013 Guest lectures on Game theory, in Evolutionary Ecology (Biology 418, UBC).
- 2011 *Qualification aux fonctions de Maître de Conférences*  
(= certification to teach at the level of an Assistant Professor in France)
- 2008–2011 Teaching assistant (*monitorat*) at Université Montpellier 2 (96h per year)
  - Introduction to Organismal Biology, lab instruction (1st year students)
  - Introduction to Ecology, tutorials and lab instruction (2nd and 3rd year students)

## Student and postdoc supervision

- 2016 Valentin Cocco and Alice L'Huillier (undergraduate project),
- 2016–2018 Pascal Campagne and Thomas Garcia (postdocs, funding: ANR),
- 2016 Lena Klay (undergraduate summer project).
- 2016–... François Bienvenu (PhD, co-supervised with A. Lambert),
- 2014 Joseph Denton (Master 1, co-supervised with F. Massol),
- 2013–2014 Alice Ekroth, Nick Hawkes and Emile Carstens (UG project),
- 2011 Fanny Gascuel (Master 1, co-supervised with C. Brouat and M. Choisy).

## Publications

Please check my Google Scholar profile, at <http://scholar.google.ca/citations?user=WkZgrYsAAAAJ>, for bibliometrics.

## Peer-reviewed articles

- [A17] **Débarre F**, Fidelity of parent-offspring transmission and the evolution of social behavior in structured populations. *Journal of Theoretical Biology* 420 26–35.
- [A16] **Débarre F**, Otto SP, Evolutionary dynamics of a quantitative trait in a finite asexual population. *Theoretical Population Biology* 108 75–88.
- [A15] Massol F, **Débarre F**, Evolution of dispersal in spatially and temporally variable environments: the importance of life cycles, *Evolution* 69: 1925–1937.
- [A14] **Débarre F**, Yeaman S, Guillaume F, Evolution of quantitative traits under a migration-selection balance: when does skew matter?, *The American Naturalist* 186 S37–S47.
- [A13] **Débarre F** Fitness costs in spatially structured environments. *Evolution* 69: 1329–1335.
- [A12] **Débarre F**, Nuismer SL, Doebeli M (2014) Multidimensional (co)evolutionary stability. *The American Naturalist* 184(2): 158–171.
- [A11] **Débarre F**, Hauert C, Doebeli M (2014) Social evolution in structured populations. *Nature Communications* 5: 3409 doi:10.1038/ncomms4409.
- [A10] Vines TH, Albert AYK, Andrew RL, **Débarre F**, Bock DG, Franklin MT, Gilbert KJ, Moore J-S, Renaut S, Rennison DJ (2014) The availability of research data declines rapidly with article age. *Current Biology* 24(1): 94–97.
- [A9] Gascuel F<sup>M</sup>, Choisy M, Duplantier J-M, **Débarre F**<sup>\*</sup>, Brouat C<sup>\*</sup> (2013) Host Resistance, Population Structure and the Long-Term Persistence of Bubonic Plague: Contributions of a Modelling Approach in the Malagasy Focus, *PLoS Computational Biology* 9(5): e1003039.

<sup>M</sup> Master student; <sup>\*</sup> Equal contribution in supervising the study.

- [A8] **Débarre F**, Ronce O, Gandon S (2013) Quantifying the effects of migration and mutation on adaptation and demography in spatially heterogeneous environments, *Journal of Evolutionary Biology* 26(6): 1185-1202.
- [A7] **Débarre F** (2012) Refining the conditions for sympatric ecological speciation, *Journal of Evolutionary Biology* 25(12): 2651-2660.
- [A6] **Débarre F**, Lion S, van Baalen M, Gandon S (2012) Evolution of host life-history traits in a spatially structured host-parasite system, *The American Naturalist* 179(1): 52-63.
- [A5] **Débarre F**, Lenormand T (2011) Distance-limited dispersal promotes coexistence at habitat boundaries: reconsidering the competitive exclusion principle. *Ecology Letters* 14(3): 260-266.
- [A4] **Débarre F**, Gandon S (2011) Evolution in heterogeneous environments: between soft and hard selection. *The American Naturalist* 177(3): E84-E97.
- [A3] **Débarre F**, Gandon S (2010) Evolution of specialization in a spatially continuous environment. *Journal of Evolutionary Biology* 23:1090-1099.
- [A2] **Débarre F**, Lenormand T, Gandon S (2009) Evolutionary Epidemiology of Drug-Resistance in Space *PLoS Computational Biology* 5(4): e1000337.
- [A1] **Débarre F**, Bonhoeffer S, Regoes RR (2007) The effect of population structure on the emergence of drug resistance during influenza pandemics *J R Soc Interface* 4(16): 893-906

## Chapters in collective volumes

- [B1] **Débarre F** and Gandon S (2008) Épidémiologie évolutive des maladies infectieuses. *In* Introduction à l'Épidémiologie Intégrative des Maladies Infectieuses et Parasitaires (eds. Guégan J-F & Choisy M), pp. 347-374. De Boeck Université, Collection Masters, Louvain-la-Neuve, Belgique.

## Conferences and seminars

### Conferences

- Aug 2017 Invited talk, European Society for Evolutionary Biology (ESEB), Groningen (NL)
- July 2017 Talk, Mathematical Models in Ecology and Evolution (MMEE), London (UK)
- Apr 2017 Invited talk, British Applied Math Colloquium (BAMC) 2017, Guildford (UK)
- Apr 2017 Invited talk, Modeling Biological Evolution (MBE), Leicester (UK)
- Feb 2017 Invited talk, Gordon Research Conference (GRC) on Speciation, Barga (Italy).
- Sept 2016 Invited talk, Japanese Society for Mathematical Biology (JSMB), Fukuoka (Japan).
- July 2016 Talk, Joint ECMTB-SMB Meeting, Nottingham (UK).
- June 2016 Talk, Fitness Workshop, Paris (FR).
- June 2016 Poster, 4th Toulouse Economics and Biology Workshop, Toulouse (FR).
- August 2015 Talk, European Society for Evolutionary Biology (ESEB) meeting, Lausanne (CH).
- July 2015 Talk, Society for Molecular Biology and Evolution (SMBE) meeting, Vienna (AT).
- July 2015 Invited talk, Mathematical Models in Ecology and Evolution (MMEE), Paris (FR).
- June 2015 Invited talk, Models in Ecology and Evolution, Montpellier (FR).

April 2015	Invited talk, Modelling Biological Evolution (MBE), Leicester (UK).
Dec 2014	Talk, British Ecological Society-Société Française d'Écologie, Lille (FR).
June 2014	Invited talk, Evolution, Raleigh, NC (USA)
June 2014	Invited talk, ECMTB meeting, Gothenburg (Sweden)
Jan 2014	Poster, PopGroup meeting, Bath (UK)
Sept 2013	Talk, Workshop "Mathematics for an Evolving Biodiversity", Montréal, QC (Canada)
June 2013	Talk, Evolution, Snowbird, UT (USA)
May 2013	Talk, CSEE, Kelowna, BC (Canada)
March 2013	Invited Talk, Workshop "Biological invasions and evolutionary biology", Lyon (FR)
Jan 2013	Poster, Workshop "Disease Dynamics 2013", UBC, Vancouver (Canada)
July 2012	Talk, Evolution-ESEB joint meeting, Ottawa (Canada)
May 2012	Talk, Evo-WIBO, Port Townsend, WA (USA)
Nov 2011	Talk, SFU-UBC-UVic Ecology and Evolution Retreat, Brackendale (Canada)
Aug 2011	Talk, ESEB XIII Congress, Tübingen (Germany)
May 2011	Talk, Workshop on Quantitative Genetics, La Colle s/ Loup (France)
June 2010	Talk, Models in Evolutionary Ecology Workshop, Montpellier (France)
Aug 2009	Talk, ESEB XII Congress, Torino (Italy)
Oct 2008	Talk, "R <sub>0</sub> and related concepts" meeting, Paris (France)
Aug 2008	Talk, "Petit Pois Déridé" French Population Genetics Meeting, Rennes (France)
Sep 2007	Poster, Jacques Monod Conference, Roscoff (France)
Aug 2007	Talk, ESEB XI Congress, Uppsala (Sweden)

## Seminars

The department or lab is indicated between [ ].

Dec 2016	Université de Toulouse [Ecology-Evolution] (FR)
Dec 2016	Université de Toulouse [Math] (FR)
Oct 2016	INRA MaIAGE, Jouy-en-Josas (FR)
Sep 2016	SOKENDAI [Math-Bio], Hayama (Japan)
Sep 2016	Kyushu University [Math-Bio] Fukuoka (Japan)
March 2016	Université Paris 6 [Laboratoire Jacques-Louis Lions] Paris (FR)
June 2015	Max Planck Institute for Evolutionary Biology, Plön (DE)
Nov 2014	Wissenschaftskolleg zu Berlin (DE)
July 2014	Université de Lille [Ecology-Evolution] (France)
May 2014	University of Basel [Ecology-Evolution] (Switzerland)
May 2014	University of Lausanne [Ecology-Evolution] (Switzerland)
March 2014	University of Zurich [Ecology-Evolution] (Switzerland)
March 2013	University of Helsinki [Mathematical Biology] (Finland)
Feb 2013	University of Idaho [Biology] (USA)
Nov 2012	Simon Fraser University [Biophysics] (Canada)
Oct 2012	Yale University [Jetz lab] (USA)
Sep 2012	University of British Columbia [Ecology-Evolution, External seminar] (Canada)
March 2012	University of Texas, Austin [Kirkpatrick lab] (USA)
Jan 2012	University of Toronto [Ecology-Evolution] (Canada)
Oct 2011	University of British Columbia [Ecology-Evolution, Internal seminar] (Canada)

Sep 2011 University of British Columbia [Mathematics] (Canada)  
 Apr 2011 INSA Lyon [Computer Science & Biology] (France)  
 Jan 2011 Institut des Sciences de l'Évolution [Ecology-Evolution], Montpellier (France)

## Grants and awards

### Grants, fellowships, scholarships

2016 Appel à projets incitatifs PSL environnement (PI: Stéphanie Manel)  
 2016 ESEB Special Topic Network (with Hanna Kokko (PI), Tim Connallon and Erik Svensson)  
 2016 ESEB Equal Opportunity Fund (with Line Ugelvig and Nicolas Rode).  
 2014 Agence Nationale de la recherche, ANR-14-ACHN-0003 "MOLA" (4+1 years).  
 2014 College of the Life Sciences Fellowship, Wissenschaftskolleg zu Berlin. £20 315.  
 2014 Travel award for International Cooperation, Université de Lille, with François Massol. 3000 € .  
 2012 2-year Biodiversity Postdoctoral Fellowship, Biodiversity Research Centre, UBC, CA\$100 000.  
 2007 3-year PhD Fellowship (*Allocation moniteur normalien*).  
 2004 4-year Scholarship, École Normale Supérieure. (Provides recipients with a status of Civil Servant, a full salary and is awarded to the top 20 Biology/Geology students in France.)

### Prizes and Awards

June 2014 Springer Best talk prize, 9th European Conference for Mathematical and Theoretical Biology (ECMTB 2014, Gothenburg, Sweden).  
 Jan 2013 Best poster prize, Workshop "Disease Dynamics 2013: Immunization, a true multi-scale problem" (UBC, Canada).  
 2012 Société Française d'Écologie's (SFÉ) Young investigator Award.

## Professional service

### Reviewing and Editing

Journals Reviewer for *Science*, *Nature*, *Proceedings of the Royal Society B*, *PNAS*, *Ecology Letters*, *Nature Communications*, *Evolution*, *The American Naturalist*, *PLOS Biology*, *PLOS Computational Biology*, *PLOS One*, *Journal of Theoretical Biology*, *Evolutionary Applications*, *Philosophical Transactions of the Royal Society*, *Theoretical Population Biology*, *BMC Evolutionary Biology*, *Scientific Reports*, *Oikos*, *Biology Letters*, *Axios Reviews*.  
 for a total of 96 reviews on 2017-03-01; "top referee" award for *Procs B* in 2010.  
 2017–2021 *Journal of Evolutionary Biology*: Board of Reviewing Editors  
 2017–2019 *Evolution*: Associate Editor

- Books    reviewer for Roberts and Company Publishers:
- 12 chapters of “The Analysis of Biological Data” (2nd ed.) by Whitlock & Schluter
  - “The Theory of Coevolution” by Nuismer.

## Organization of meetings, workshops and symposia

- July 2017    Co-organizer (with J. Peña) of a symposium “Social evolution in subdivided populations: Beyond the usual assumptions” at the MMEE meeting in London (UK).
- July 2016    Co-organizer (with L. Hindersin) of a symposium “Networks in Ecology and Evolution” at the joint ECMTB-SMB meeting in Nottingham (UK).
- August 2015    Co-organizer (with N. Rode et F. Blanquart) of a symposium “Adaptation in heterogeneous environments: insights from host-parasite systems” at the ESEB 2015 meeting in Lausanne (CH).
- Dec 2014    Co-organizer (with F. Massol, CNRS & Univ. Lille, FR) of a symposium on “Eco-evolutionary feedbacks: theoretical and empirical perspectives” at the joint meeting of the British Ecological Society (BES) and the Société Française d’Écologie (SFÉ) in Lille (FR).
- Oct 2013    Co-organizer of the 2013 UBC/SFU/UVic Ecology and Evolution Retreat (Canada).
- Oct 2012    Co-organizer of the 2012 UBC/SFU/UVic Ecology and Evolution Retreat (Canada).
- June 2010    Founding member and co-organizer of the student workshop “Models in Evolutionary Ecology” in Montpellier (FR) (the seventh edition took place in June 2016).

## Organized seminars and journal clubs

- 2012–2013    Organizer of the Biodiversity Lunchtime Internal Seminar Series (BLISS) at UBC, Vancouver (Canada).
- 2011–2013    Running the “Let’s Assume” theory Journal Club at UBC (Canada).
- 2008–2009    Founding member and organizer of the department’s bimonthly student seminar.
- March 2009    Organizer of the department’s fourth yearly “PhD students meeting”, CEFE, Montpellier (FR).

## Others

- Languages    French: mother tongue  
                   English: fluent  
                   German: good working knowledge
- Computing    Working with R, Mathematica, C and Matlab
- Citizenship    French