

4 CV of the researcher

Post-doctoral fellow
Université Grenoble Alpes

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Current appointments

01/06/2022-31/05/2023: *Post-doctoral fellow* – Université Grenoble Alpes, Laboratoire d'Ecologie Alpine (Gières, France). Passive acoustic monitoring of Alpine altitudinal gradients (supervised by Wilfried Thuiller).

Education

01/09/2013-21/11/2016: **PhD** – Muséum National d'Histoire Naturelle (MNHN), Paris – Population biology and ecology.

Thesis: Acoustic diversity and ecology of freshwater environments: exploration in temperate environments. Supervision: Jérôme Sueur (MNHN) and Fanny Rybak (Université Paris-Sud).

01/09/2009-31/08/2013: **Diplôme de l'ENS ('ENS degree')** – Ecole Normale Supérieure de Paris (ENS) – Sciences, technologies, health.

01/09/2010-31/08/2012: **Master's degree** – Ecole Normale Supérieure de Paris – Ecology, biodiversity and evolution.

Second year internship: Effect of plant host quality on cannibalism in aphids. Catherine Collins (Imperial College, Londres, UK) and Simon Leather (Imperial College, Londres, UK). Duration: 5 months.

First year internship: Evolution patterns of spiders in the Pacific Islands through molecular phylogeny. Rosemary Gillespie (University of California-Berkeley, USA). Duration: 4 months.

01/09/2009-31/08/2010: **Bachelor's degree** – Ecole Normale Supérieure de Paris – Biology.

Internship: Patterns of Coleoptera diversity in the Saratsi mountain range, Espiritu Santo, Vanuatu. Jürgen Schmidl (Friedrich-Alexander Universität Erlangen-Nürnberg, Allemagne). Duration: 2 months.

01/09/2007-31/08/2009: Preparation school to the competitive examination for the admission to the "Grandes-Ecoles" (Lycée Saint-Louis, Paris).

Professional experience

01/04/2020-31/05/2022: *Post-doctoral fellow* – St Andrews University, School of Biology (St Andrews, UK) and University of Wisconsin-Milwaukee, Biological sciences (Milwaukee, USA) . The role of social plasticity in reproductive isolation (supervised by Nathan Bailey and Rafael Rodríguez).

01/04/2019-31/03/2020: *Post-doctoral fellow* – Universidad Autónoma de Madrid, Terrestrial Ecology Group (Madrid, Spain). Climate change and breeding tolerance in frogs (supervised by Diego Llusia).

15/01/2017-14/01/2019: *Post-doctoral fellow* – University of Wisconsin-Milwaukee, department of biological sciences (Milwaukee, USA). Social ontogeny of insect communication (supervised by Rafael Rodríguez).

01/09/2013-31/08/2016: *Teaching contract* – MNHN (Paris, France) – 64 hours each year (total 192 hours) – Level: Masters degree – Classes taught: statistics, ecology, population genetics and experimental methods for biodiversity inventory.

- 01/09/2012-31/08/2013: *Internship* – MNHN, Institut Systématique, Evolution et Biodiversité (Paris, France). Diversity and structure of freshwater acoustic communities in temperate ecosystems (supervised by Jérôme Sueur and Fanny Rybak).
- 01/09/2010-31/05/2013: *Position as examiner and instructor* at Lycée Saint Louis – 50 hours – preparation school to the competitive examination for the admission to the "Grandes-Ecoles" – Classes: oral examinations in biology, chemistry and physics.

Research indicators

- **22** Original publications in peer reviewed journals (11 as lead author, 5 as last author)
- **352** citations (H index: 9)
- **35** communications at conferences and seminars (**13** oral presentations, **4** invited talk and **4** poster presentations at international meetings, **14** invited seminars)
- Cumulated research funding: **1,362,995€** (**1,211,444€** as a PI)
- **34** reviews completed since 2016 for **22** journals. Guest Editor for *Freshwater Biology*. Associate editor for *Methods in Ecology and Evolution*.

Accepted publications in peer reviewed journals

1. Ignacio Escalante, Jerald R. Kellner, Rafael L. Rodríguez, & **Camille Desjonquères**. Accepted. A female mimic signal type in the vibrational repertoire of male *Enchenopa* treehoppers. *Behaviour*.
2. **Desjonquères C.***, S. Villén-Pérez, P. de Marco, R. Márquez, J.F. Beltrán & D. Llusia. 2022. Acoustic species distribution models (aSDMs): A framework to forecast shifts in calling behaviour under climate change. *Methods in Ecology and Evolution*.
3. Bailey N. W., & **Desjonquères C.** 2022. The Indirect Genetic Effect Interaction Coefficient Ψ : Theoretically Essential and Empirically Neglected. *Journal Of Heredity*, 113 (1), 79-90.
4. Bailey N. W., **Desjonquères C.**, Drago A., Rayner J. G., Sturiale S. L., & Zhang X. 2021. A neglected conceptual problem regarding phenotypic plasticity's role in adaptive evolution: The importance of genetic covariance and social drive. *Evolution Letters*, 5(5), 444-457.
5. **Desjonquères C.***, Maliszewski J., & Rodríguez R. L. 2021. Juvenile social experience and practice have a switch-like influence on adult mate preferences in an insect. *Evolution*, 75(5), 1106-1116.
6. Abrahams C., **Desjonquères C.**, & Greenhalgh J. 2021. Pond Acoustic Sampling Scheme: A draft protocol for rapid acoustic data collection in small waterbodies. *Ecology and Evolution*.
7. **Desjonquères C.***, Holt R., Speck B., & Rodríguez R.L. 2020. The relationship between a combinatorial processing rule and a continuous mate preference function in an insect. *Proceedings of the Royal Society B*, 287 (1935), 20201278.
8. Speck B., Seidita S., Belo S., Johnson S., Conley C., **Desjonquères C.** & Rodríguez R.L.. 2020. Combinatorial signal processing in an insect. *The American Naturalist*, 196 (4), 406-413.
9. Van der Lee G. H., **Desjonquères C.***, Sueur J., Kraak M. H. S. & Verdonchot P. F. M. 2020. Freshwater ecoacoustics: listening to the ecological status of multi-stressed lowland waters. *Ecological Indicators*, 113, 106252.

*First authored paper

10. Greenhalgh J. A., Genner M. J., Jones G., & **Desjonquères C.** 2020. The role of freshwater bioacoustics in ecological research. *WIREs Water*, 7(3), e1416.
11. Moreira Sugai L. S., **Desjonquères C.**, Silva T., & Llusia D. 2019. A roadmap for survey designs in terrestrial acoustic monitoring. *Remote Sensing in Ecology and Conservation*, 6 (3), 220-235.
12. Linke S., Gifford T. & **Desjonquères C.** 2020. Six steps towards operationalising freshwater ecoacoustic monitoring. *Freshwater Biology*, 65 (1), 1-6.
13. **Desjonquères C.***, Gifford T. & Linke S. 2020. Passive acoustic monitoring as a potential tool to survey animal and ecosystem processes in freshwater environments. *Freshwater Biology*, 65 (1), 7-19.
14. Linke S., Decker E., Gifford T. & **Desjonquères C.** 2020. Diurnal variation in freshwater ecoacoustics: implications for site-level sampling design. *Freshwater Biology*, 65 (1), 86-95.
15. Karaconstantis C., **Desjonquères C.***, Gifford T. & Linke S. 2020. Spatio-temporal heterogeneity in river sounds – disentangling micro- and macro-variation in a chain of waterholes. *Freshwater Biology*, 65 (1), 96-106.
16. **Desjonquères C.***, Rybak F., Ulloa J. S., Kempf A., Bar Hen A., & Sueur J. 2020. Monitoring the acoustic activity of an aquatic insect population in relation to temperature, vegetation and noise. *Freshwater Biology*, 65 (1), 107-116.
17. **Desjonquères C.***, Speck B. & Rodríguez R. L. 2019. Signalling interactions during ontogeny are a cause of social plasticity in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Behavioural processes*, 166, 103887.
18. **Desjonquères C.***, Maliszewski J., Lewandowski E. N., Speck B. & Rodríguez R. L. 2019. Social ontogeny in the communication system of an insect. *Animal Behaviour*, 148, 93-103.
19. **Desjonquères C.***, Rybak F., Castella E., Llusia D. & Sueur J. 2018. Acoustic communities reflects lateral hydrological connectivity in riverine floodplain similarly to macroinvertebrate communities. *Scientific Report*, 8 (1), 14387.
20. Linke S., Gifford T., **Desjonquères C.**, Tonolla D., Aubin T., Barclay L., Karaconstantis C., Kennard M., Rybak F. & Sueur J. 2018. Freshwater ecoacoustics as a tool for continuous ecosystem monitoring. *Frontiers in Ecology and the environment*, 16(4), 231-238.
21. **Desjonquères C.***, Rybak F., Depraetere M., Gasc A., Le Viol I., Pavoine S., & Sueur J. 2015. First description of underwater acoustic diversity in three temperate ponds. *PeerJ*, 3, e1393.
22. Cooper L. C., **Desjonquères C.**, & Leather S. R. 2014. Cannibalism in the pea aphid, *Acyrthosiphon pisum*. *Insect science*, 21(6), 750-758.

Other scientific contributions

1. Linke S., **C. Desjonquères**, T. Gifford & L. Barclay. 2022. Freshwater Ecoacoustics—A New Addition to the Limnologists' Methods Toolkit. In: Reference Module in Earth Systems and Environmental Sciences. 4, 657-666.
2. Sueur J., Aubin T., Simonis C., Lellouch L., Brown E. C., Depraetere M., **C. Desjonquères**, Fabianek F., Gasc A., LaZerte S., Lees J., Marchal J., Pavoine S., Stotz A., Villanueva-Rivera L. J., Ross Z., Witthoft C. G. & Zhivomirov H. (2021). *Package 'see-wave'*.
3. Linke S., Gifford T. & **Desjonquères C.** 2020. Passive acoustics: a new addition to the freshwater monitoring toolbox. Special issue in *Freshwater Biology*.
4. **Desjonquères C.** 2018. Ecoacoustics: The Ecological Role of Sounds edited by Almo Farina and Stuart H. Gage. *The Quarterly Review of Biology*, 93(2), 143-144.

*First authored paper

5. Rodriguez R. L. & **Desjonquères C.**. 2019. Vibrational signals: sounds transmitted through solids. In: Choe, J.C. (Ed.), *Encyclopedia of Animal Behavior, (2nd ed.)*. 1, 508–517. Elsevier, Academic Press.
6. **C. Desjonquères**. 2016. Acoustic diversity and ecology of freshwater environments: exploration in temperate environments. [PhD dissertation](#).

Communications at conferences and seminars

- 27/09/2022:** Acoustics Methods Series, Online. Invited seminar.
- 20/09/2022:** Bridging Brains and Bioacoustics seminar, Online. Invited seminar.
- 07/09/2022:** BIOSEFAIR, Lyon, France. Invited seminar.
- 14/08/2022:** ESEB conference, Prague, Czech Republic. Symposium co-host and oral presentation.
- 01/08/2022:** Workshop "Full-stack bioacoustics: field kit to AI to action", Leiden, the Netherlands. Poster presentation.
- 25/05/2022:** OFB seminar series, online. Invited seminar.
- 11/03/2022:** Friday Lab Chat, online. Oral presentation.
- 24/11/2021:** Atelier INSU-INEE CNRS, Bordeaux, France. Invited seminar.
- 15/09/2021:** ESEB satellite meeting on reproductive isolation, online. Oral presentation.
- 14/12/2020:** Festival of Ecology of the British Ecological Society, online. Invited talk.
- 14/11/2020:** American Genetic Association president symposium, online. Invited talk by the president as a "presentation award".
- 05/11/2020:** Tropicon, twitter conference of the conservation ecology group at the British Ecological Society, online. [Twitter presentation](#).
- 14/10/2020:** Laboratoire d'Ecologie Fonctionnelle et Environnement, Toulouse, France. Invited seminar.
- 06/03/2020:** Laboratoire d'écologie Alpine, Grenoble, France. Invited seminar.
- 11/02/2020:** Center for Acoustics Research and Education (CARE) spring seminar series, University of New Hampshire, Durham, USA. Invited web-seminar.
- 20/01/2020 :** Centre d'Ecologie Fonctionnelle et Evolutive, Montpellier, France. Invited seminar.
- 05-06/12/2019:** Winter meeting of the Association for the Study of Animal Behaviour, London, UK. Oral presentation.
- 31/08-05/09/11/2019:** International Bioacoustic Congress, Brighton, UK. Invited talk and oral presentation.
- 05-09/11/2018:** Meeting of the Acoustical Society of America, Victoria, Canada. Invited talk.
- 04-06/09/2018:** Biotremology, Riva del Garda, Italy. Oral presentation.
- 02-06/08/2018:** Animal Behaviour Society Meeting, Milwaukee, USA. Oral presentation.
- 20-24/05/2018:** Society for Freshwater Sciences Annual Meeting, Detroit, USA. Symposium co-host and oral presentation.
- 13/02/2018:** Graduate seminar series. Purdue University, West Lafayette, USA. Invited seminar.
- 08-13/10/2017:** International Bioacoustic Congress, Haridwar, India. Oral presentation and poster.
- 23-27/07/2017:** International Congress for Conservation Biology, Cartagena, Colombia. Symposium co-host and oral presentation.

- 12/08/2016:** Seminar series of the Australian River Institute, Griffith University, Brisbane, Australie. Invited seminar.
- 25/03/2016:** Behavioural and molecular ecology club, University of Wisconsin-Milwaukee, Etats-Unis. Invited seminar.
- 09/11/2015:** Seminars of the Atelier de Bioinformatique, Muséum national d'Histoire naturelle, Paris, France. Invited seminar.
- 7-11/09/2015:** International Bioacoustic Congress, Murnau, Allemagne. Oral presentation.
- 29/11/2014:** Journée thématique Fleuves et rivières, Muséum national d'Histoire naturelle, Paris. Invited seminar.
- 16-18/06/2014:** Ecoacoustics, Muséum national d'Histoire naturelle, Paris. Oral presentation.
- 12-14/02/2014:** Young Natural History scientists Meeting, Muséum national d'Histoire naturelle, Paris. Oral presentation.
- 10/08/2013:** Acoustic Communication Summer school, Aarhus University, Denmark. Poster.

Grants

- 02/07/2021:** AQUACOSM transnational access (15,000 €).
- 01/03/2021:** Wageningen Environmental Research call for innovative project (25,000 €). Awarded to Gea van der Lee, with Piet Verdonchot and I as collaborators.
- 18/05/2019:** National Geographic Grant NGS-56852R-19 (20,000 \$). Awarded to Simon Linke, with Toby Gifford, Brendan Ebnar, Leah Barclay and I as collaborators.
- 11/04/2019:** NSF 3 year grant - IOS-1855962 (1,141,169 \$). Awarded to Rafael L. Rodríguez and I as co-PIs, with Nathan Bailey as collaborator.
- 15/06/2016:** Post-doctoral fellowship from Fondation Fyssen (50,000 €).
- 15/05/2016:** Grant Jean Walter Zellidja, mobility grant of the French Academy (3500 €).
- 24/03/2016:** Research Growth Initiative (105,922 \$). Awarded to Rafael L. Rodríguez, in collaboration with me.
- 17/04/2013:** Summer school "Acoustic Communication" grant (300 €).
- 21/03/2013:** Grant of the Association des Amis du Muséum (1,475 €).
- 25/01/2013:** Field work grant from LabEx BCDiv (7,160 €). Awarded to Jérôme Sueur, with Sandrine Pavoine, Romain Garrouste and I as collaborators.

Supervising and mentoring activities

- Supervision of **15** undergraduate students, **2** MS students, **4** PhD students, and **2** post-doctoral researchers
- **9** students co-authors on published articles.

Research expeditions and international secondments

- 11-26/08/2016:** *Fieldwork* – Ewamian Aboriginal Corporation, Talaroo (Australia). Assessing the potential of passive acoustic monitoring in freshwater environments: spatio-temporal variability of the soundscape (in collaboration with S. Linke and T. Gifford).
- 11-17/01/2015:** *Labwork* – University of Geneva (Switzerland). Identification of sound-producing insects (supervised by E. Castella).
- 01-30/09/2011:** *Fieldwork* – Nouragues research station (French Guyana). Arthropod collection using the "bark-spraying" method (supervised by J. Schmidl).

Commissions of trust

Scientific reviewer for *Animal Behaviour*, *Behavioural Ecology*, *Bioacoustics*, *Biodiversity and conservation*, *Biology letters*, *Biota Columbiana*, *Deep Sea Research Part I*, *Diversity*, *Ecological indicators*, *Ecological informatics*, *Ecology*, *Ecology and Evolution*, *Ecological Informatics*, *Freshwater Biology*, *Herpetological Conservation and Biology*, *Hydrobiologia*, *Journal of Evolutionary Biology*, *Journal of the Royal Society Interface*, *Methods in Ecology and Evolution*, *PeerJ*, *Plos One*, and *Proceedings of the Royal Society B*. (Publon identifier: [1294815](#)).

Grant reviewer for Agence Nationale de la Recherche (France), Universidad de Antioquia (Columbia), la région Auvergne-Rhône-Alpes (France) and the Natural Sciences and Engineering Research Council of Canada.

Guest editor for *Freshwater Biology* (01/01/2017-31/12/2019).

Associate editor for *Methods in Ecology and Evolution* (01/10/2020-30/09/2023).

Outreach programs and art-science collaborations

08/10/2021: Interactive seminar to high school students for the "[fête de la science](#)" on animal sound producers in freshwater. CEREEP, Saint-Pierre-lès-Nemours (France).

03/10/2020: Project for the [nuit blanche](#) in Paris. I am providing underwater recordings to Pierre Lanchantin and Maxime Rossi to present an evolving soundtrack – Paris (France).

20-21/01/2020: Interactive seminar to high school students for the "semaine des sciences" on animal sound producers in freshwater. Lycée Feuillade, Montpellier (France).

08/06-17/08/2019: Exhibition of a piece called [The Secret Sound of Ponds](#) in collaboration with Benjamin Gottesman and David Rothenberg as part of the [Depth](#) exhibition – Science Gallery, Detroit (USA).

12/10/2018: Performance of a piece by Marcelo Bonvicino at an Electroacoustic concert [Arts, écologies, transitions](#) using my underwater recordings – Université Paris 8, Paris (France).