

Dr. Camille DESJONQUERES
Post-doctoral fellow
University Wisconsin-Milwaukee

E-mail : cdesjonqu@gmail.com
Cell phone (US): +14144584065
Cell phone (Sp): +34644925948

Work address : 3209 N. Maryland Ave.
Milwaukee, WI 53201
USA

Date of birth: 29/11/1989
Last updated: 28/08/2020
web: <https://desjonqu.github.io>

Current and future appointments

- 04/2020-09/2020: *Post-doctoral fellow* – University of Wisconsin-Milwaukee, Biological sciences (Milwaukee, USA). The role of social plasticity in reproductive isolation (supervised by Rafael Rodríguez).
- 10/2020-12/2021: *Post-doctoral fellow* – St Andrews University, School of Biology (St Andrews, UK). Theoretical modelling of the role of social plasticity in reproductive isolation (supervised by Nathan Bailey).

Education

- 2013-2016: **PhD** – Muséum National d'Histoire Naturelle (MNHN), Paris – Population biology and ecology.
Thesis: Acoustic diversity and ecology of freshwater environments: exploration in temperate environments. Jérôme Sueur (MNHN) and Fanny Rybak (Université Paris-Sud).
- 2009-2013: **Diplôme de l'ENS** – Ecole Normale Supérieure de Paris – Sciences, technologies, health.
- 2010-2012: **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) et Simon Leather (Imperial College, Londres, UK). Duration: 5 mois.
First year internship: Evolution patterns of spiders in the Pacific Islands through molecular phylogeny. Rosemary Gillespie (University of California-Berkeley, USA). Duration: 4 mois.
- 2009-2010: **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). Durée: 2 mois.
- 2007-2009: Preparation school to the competitive examination for the admission to the "Grandes-Ecoles" (Lycée Saint-Louis, Paris).

Research experience

- 04/2019-03/2020: *Post-doctoral fellow* – Universidad Autónoma de Madrid. Climate change and breeding tolerance in frogs (supervised by Diego Llusia).
- 01/2017-01/2019: *Post-doctoral fellow* – University of Wisconsin-Milwaukee, department of biological sciences (Milwaukee, USA). Social ontogeny of insect communication (supervised by Rafael Rodríguez).

09/2012-08/2013: *Internship* – MNHN, Institut Systématique, Evolution et Biodiversité, UMR7205 (Paris, France). Diversity and structure of freshwater acoustic communities in temperate ecosystems (supervised by Jérôme Sueur and Fanny Rybak).

09/2011-10/2011: *Fieldwork* – Nouragues research station (French Guyana). Arthropod collection using the "bark-spraying" method (supervised by Jürgen Schmidl).

Teaching experience

2013-2016: *Teaching contract* – 64 hours each year (total 192 hours) – Master degree – Classes taught: statistics, ecology, population genetics and experimental methods for biodiversity inventory.

2014: *Teaching assistant* at Université de Genève – 28 hours – Master degree – Class: ecology of fluvial systems.

2010-2013: *Position as student examiner and trainer* 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

- **16** Original publications in peer reviewed journals (9 lead author)
- **135** citations (H index: 7)
- **9** oral presentations, **2** invited talk and **2** posters at international meetings
- **8** invited seminars
- Research funding accumulated: **1,209,937€** (**1,079,191€** as a PI)
- **23** reviews completed since 2016 in **13** journals. Associate editor for *Freshwater Biology*.

Qualifications

Languages: French: mother tongue, English: fluent, German: intermediate, Spanish: intermediate.

Coding: R: confirmed, Matlab: intermediate, Python: intermediate, bash: beginner.

Experimental techniques: acoustic monitoring, signal analysis, automatic signal processing, behavioural experiments (acoustic playback, monitoring behavioural sequences), statistical analysis (linear models, multivariate analysis, functional data analysis), freshwater assessment with macro-invertebrates.

Accepted publications in peer reviewed journals

1. **Desjonquères C.**, R. Holt, B. Speck, R.L. Rodríguez. Accepted. The relationship between a combinatorial processing rule and a continuous mate preference function in an insect. *Proceedings of the Royal Society B*.
2. Speck B., S. Seidita, S. Belo, S. Johnson, C. Conley, **C. Desjonquères** & R.L. Rodríguez. in press. Combinatorial signal processing in an insect. *The American Naturalist*.
3. Van der Lee, G. H., **C. Desjonquères***, J. Sueur, M. H. S. Kraak & P. F. M. Verdonchot. 2020. Freshwater ecoacoustics: listening to the ecological status of multi-stressed lowland waters. *Ecological Indicators*, 113, 106252.

*First authored paper

4. Greenhalgh, J. A., M. J. Genner, G. Jones, & **C. Desjonquères**. 2020. The role of freshwater bioacoustics in ecological research. *WIREs Water*.
5. Linke S., T. Gifford, **C. Desjonquères**. 2020. Six steps towards operationalising freshwater ecoacoustic monitoring. *Freshwater Biology*, 65 (1), 1-6.
6. **Desjonquères, C.***, T. Gifford & S. Linke. 2020. Passive acoustic monitoring as a potential tool to survey animal and ecosystem processes in freshwater environments. *Freshwater Biology*, 65 (1), 7-19. (cited 9 times).
7. Linke S., E. Decker, T. Gifford & **C. Desjonquères**. 2020. Diurnal variation in freshwater ecoacoustics: implications for site-level sampling design. *Freshwater Biology*, 65 (1), 86-95. (cited 9 times).
8. Karaconstantis, C., **C. Desjonquères***, T. Gifford, S. Linke. 2020. Spatio-temporal heterogeneity in river sounds – disentangling micro- and macro-variation in a chain of waterholes. *Freshwater Biology*, 65 (1), 96-106. (cited twice).
9. **Desjonquères, C.***, F. Rybak, J. S. Ulloa, A. Kempf, A. Bar Hen, & J. Sueur. 2020. Monitoring the acoustic activity of an aquatic insect population in relation to temperature, vegetation and noise. *Freshwater Biology*, 65 (1), 107-116. (cited 13 times).
10. Moreira Sugai, L. S., **C. Desjonquères**, T. Silva, & D. Llusia. 2019. Review and guidelines of survey designs for terrestrial acoustic monitoring. *Remote Sensing in Ecology and Conservation*. (cited 7 times).
11. **Desjonquères, C.***, B. Speck & R. L. Rodríguez. 2019. Signalling interactions during ontogeny are a cause of social plasticity in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Behavioural processes*, 166, 103887.
12. **Desjonquères, C.***, J. Maliszewski, E. N. Lewandowski, B. Speck & R. L. Rodríguez. 2019. Social ontogeny in the communication system of an insect. *Animal Behaviour*, 148, 93-103. (cited once).
13. **Desjonquères, C.***, F. Rybak, E. Castella, D. Llusia & J. Sueur. 2018. Acoustic communities reflects lateral hydrological connectivity in riverine floodplain similarly to macroinvertebrate communities. *Scientific Report*, 8 (1), 14387. (cited 9 times).
14. Linke, S., T. Gifford, **C. Desjonquères**, D. Tonolla, T. Aubin, L. Barclay, C. Karaconstantis, M. Kennard, F. Rybak & J. Sueur. 2018. Real-time Ecosystem Monitoring using Passive Acoustics in Freshwater Environments. *Frontiers in Ecology and the environment*, 16(4), 231-238. (cited 34 times).
15. **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. (Cited 32 times).
16. Cooper, L. C., **Desjonqueres, C.**, & Leather, S. R. 2014. Cannibalism in the pea aphid, *Acyrtosiphon pisum*. *Insect science*, 21(6), 750-758. (Cited 7 times).

Manuscripts in revision

1. Bailey, N., **C. Desjonquères**, A. Drago, J. G. Rayner, S. L. Sturiale, X. Zhang. Plastic Drive: Reconsidering Phenotypic Plasticity's Influence on Adaptive Evolution. In review in *Trends in Ecology and Evolution*.

*First authored paper

2. **Desjonquères, C.**, J. Maliszewski, R. L. Rodríguez. Juvenile social experience and practice influence adult mate preferences in an insect. In review in *Evolution*.
3. Abrahams, C., C. Desjonquères, J. Greenhalgh. Pond Acoustic Sampling Standard: A protocol for rapid acoustic sampling in small waterbodies. In review in *Methods in Ecology and Evolution*.

Other scientific contributions

1. S. Linke, T. Gifford & **C. Desjonquères**. 2020. Passive acoustics: a new addition to the freshwater monitoring toolbox. Special issue in *Freshwater Biology*.
2. **C. Desjonquères**. 2018. Ecoacoustics: The Ecological Role of Sounds edited by Almo Farina and Stuart H. Gage. *The Quarterly Review of Biology*, 93(2), 143-144.
3. R. L. Rodriguez & **C. Desjonquères**. 2018. Vibrational signals: sounds transmitted through solids. 2018. Accepted for publication in the 2nd edition of *Encyclopedia of Animal Behaviour*. (cited twice).
4. J. Sueur, T. Aubin, C. Simonis, L. Lellouch, E. C. Brown, M. Depraetere, **C. Desjonquères**, F. Fabianek, A. Gasc, S. LaZerte, J. Lees, J. Marchal, S. Pavoine, A. Stotz, L. J. Villanueva-Rivera, Z. Ross, C. G. Witthoft & H. Zhivomirov. (2019). Package ‘seewave’. (cited 7 times).
5. **C. Desjonquères**. 2016. Acoustic diversity and ecology of freshwater environments: exploration in temperate environments. PhD dissertation. (cited three times).

Communications at conferences and seminars

- 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 & 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.
- 31/08-05/09/11/2019:** International Bioacoustic Congress, Brighton, UK. Oral presentation.
- 05-09/11/2018:** 176th 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 Annual Meeting, Milwaukee, USA. Oral presentation.
- 20-24/05/2018:** Society for Freshwater Sciences Annual Meeting, Detroit, USA. Symposium co-host and oral communication.
- 13/02/2018:** Graduate seminar series. Purdue University, West Lafayette, USA. Invited seminar.
- 08-13/10/2017:** International Bioacoustic Congress, Haridwar, India. Oral presentation.

08-13/10/2017: International Bioacoustic Congress, Haridwar, India. Poster.

23-27/07/2017: International Congress for Conservation Biology, Cartagena, Colombie. Symposium co-host and oral communication.

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.

Mentorship

- Supervision of **14** undergraduate students, **1** Honours student and **2** master students
- **4** students co-authors on published articles or manuscripts in revision

Grants

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. Collaborator: Nathan Bailey.

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, with me as collaborator.

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.

Commissions of trust

Scientific reviewer for *Animal Behaviour*, *Bioacoustics*, *Biota Columbiana*, *Deep Sea Research Part I*, *Diversity*, *Ecological indicators*, *Ecology*, *Ecology and Evolution*, *Freshwater Biology*, *Hydrobiologia*, *Journal of the Royal Society Interface*, *PeerJ* and *Plos One* (Publont identifier: [1294815](#)).

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

Organisation of scientific meetings

- 02-05/02/2016: Member of the scientific comity of the 3rd Young Natural History scientists Meeting (Paris).
- 04-06/02/2015: Coordinator of the organisation of the 2nd Young Natural History scientists Meeting (Paris).

Membership in scientific societies

2018-present : Animal Behaviour Society ([ABS](#))

2018-present : Society for Freshwater Sciences ([SFS](#))

2017-2018 : Society for Conservation Biology ([SCB](#))

2015-present : Société Française d'Ecologie ([SFE](#))

2012-2015 : Société Française d'Acoustique ([SFA](#))

Administrative and associative responsibilities

- 01/04/2013-31/08/2016: Active member of the Bureau des Doctorants et étudiants du Muséum (student association of the MNHN; 150 members).
- 01/02/2014-31/01/2016: Elected at the lab council of the Institut SYstématique, Évolution, Biodiversité (non-permanent researcher representative; about 200 permanent researchers).
- 01/04/2014-01/04/2015: President of the Bureau des Doctorants et étudiants du Muséum (student association of the MNHN; 150 membres).
- 01/09/2012-31/03/2014: Co-management of an association to maintain sustainable farming, "LegUlm", AMAP de l'ENS (200 members)
- 15/01/2010-30/11/2010: Secretary of the sport association of the ENS (300 members)