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Education

- 2022 PhD., Biology (Ethology & Bioacoustics), University of Saint-Etienne, France.
Dissertation: *Multilevel communication of static and dynamic cues in the calls of domestic dog puppies (*Canis familiaris*).*
Advisors: Prof. David Reby and Prof. Nicolas Mathevon.
- 2018 BSc., Acoustics (Acoustics & Vibrations), University of Le Mans, France. I joined this degree directly in the third year.
- 2017 MSc., Biology (Ecophysiology, Ethology & Ecology), University of Strasbourg, France.
- 2015 BSc., Biology, University of Strasbourg, France.

Research positions

- 2025—present *Postdoctoral Fellow*, University of California, Los Angeles, USA. Advisor: Prof. Gregory Bryant.
- 2024—2025 *Postdoctoral Researcher*, University of Lund, Sweden. Advisors: Dr. Andrey Anikin.
- 2022—2024 *Postdoctoral Researcher*, University of Saint-Etienne, France. Advisors: Prof. David Reby and Prof. Nicolas Mathevon
- 2018 *Research Assistant*, Acoustics Group, CEREMA, Strasbourg, France. Advisors: Dr. Charlotte Curé and Dr. Fleur Visser

Journal publications

*Part of a special issue published in *Phil. Trans. B.* for which I served as lead guest editor.

†Co-first author.

Published articles

- Lego L, Cornec C, Corvin S, **Massenet M**, Papet L, Patural H, Reby D, Jouen F, Mathevon N. (2025) Nonlinear acoustic phenomena tune the adults' facial thermal response to baby cries with the cry amplitude envelope. *J. R. Soc. Interface* 22: 20250150. doi: 10.1098/rsif.2025.0150.
- Terrade A (†), **Massenet M** (†), Pernel L, Mathevon N, Anikin A, Reby D. (2025) Nonlinear phenomena make animal calls alarming for human listeners. *iScience* 28, 112600. doi:10.1016/j.isci.2025.112600.

Massenet M, Mathevon N, Anikin A, Briefer EF, Fitch WT, Reby D. (2025) Nonlinear phenomena in vertebrate vocalizations: mechanisms and communicative functions. *Phil. Trans. B* 380, 20240002. doi:10.1098/rstb.2024.0002. (*)

Massenet M, Pisanski K, Reynaud K, Mathevon N, Reby D, Anikin A. (2025) Acoustic context and dynamics of nonlinear phenomena in mammalian calls: the case of puppy whines. *Phil. Trans. B* 380, 20240022. doi:10.1098/rstb.2024.0022. (*)

Corvin S, **Massenet M**, Hardy A, Patural H, Peyron R, Fauchon C, Mathevon N. (2025) Nonlinear acoustic phenomena affect the perception of pain in human baby cries. *Phil. Trans. B* 380, 20240023. doi:10.1098/rstb.2024.0023 (*)

Root-Gutteridge H, **Massenet M**, Fournier F, Korzeniowska A, Pisanski K, Reby D. (2025) Vocal communication between humans and animals. In the 3rd Edition of the Encyclopedia of Animal Behaviour. Elsevier publisher. Page number

Massenet M, Philippe R, Pisanski K, Arnaud V, Barluet de Beauchesne L, Reynaud K, Mathevon N, Reby D. (2024) Puppy whines mediate maternal behavior in domestic dogs. *PNAS* 121, e2316818121. doi: 10.1073/pnas.2316818121.

Anikin A, Canessa-Pollard V, Pisanski K, **Massenet M**, Reby D. (2023). Beyond speech: Exploring diversity in the human voice. *iScience* 26, 108204. doi: 10.1016/j.isci.2023.108204.

Massenet M, Anikin A, Pisanski K, Reynaud K, Mathevon N, Reby D. (2022). Nonlinear vocal phenomena affect human perceptions of distress, size and dominance in puppy whines. *Proc. R. Soc. B* 289, 20220429. doi: 10.1098/rspb.2022.0429.

Anikin A, Pisanski K, **Massenet M**, Reby D. (2021). Harsh is large: nonlinear vocal phenomena lower voice pitch and exaggerate body size. *Proc. R. Soc. B* 288, 20210872. doi: 10.1098/rspb.2021.0872.

Barluet de Beauchesne L, **Massenet M**, Oudejans MG, Kok ACM, Visser F, Curé C. (2021). Friend or foe: Risso's dolphins eavesdrop on conspecific sounds to induce or avoid intra-specific interaction. *Anim. Cogn.* 25, 287–296. doi: 10.1007/s10071-021-01535-y.

Jourdain E, Karoliussen R, Curé C, **Massenet M**, Barrett-Lennard L, Ellis GM. (2019). A Case of Natural Killer Whale (*Orcinus orca*) Entrapment in Northern Norway: From Assessment to Rescue. *Aquat. Mamm.* 45, 14–20. doi: 10.1578/AM.45.1.2019.14.

Curé C, Isojunno S, I Vester H, Visser F, Oudejans M, Biassoni N, **Massenet M**, Barluet de Beauchesne L, Wensveen P, Sivle LD, Tyack PL, Miller PJO. (2019). Evidence for discrimination between feeding sounds of familiar fish and unfamiliar mammal-eating killer whale ecotypes by long-finned pilot whales. *Anim. Cogn.* 22, 863–882. doi: 10.1007/s10071-019-01282-1.

Conference article

Filesi F, Kristensen BD, Fonn EK, Zahl JH, **Massenet M**, Bryant GA, Thomsen L. (2025) Toddlers use vocal cues to infer male dominance over females in right-of-way conflict. *Proc. Annu. Meet. Cogn. Sci. Soc.*, 47. (<https://escholarship.org/uc/item/6033h88p>).

Article under review

Philippe R, Le-Bourdiac-Shaffii A, Kaltsatos V, Reby D, **Massenet M**. Vocal signatures of stress relief: effects of appeasing harness and synthetic pheromone on puppy whine acoustics in separation context (*Canis familiaris*). *Bioacoustics*.

Presentations at international conferences

Talks

2025 Massenet M, Reby D, Rouch J, Aubin T, Fonsceca P, Mathevon N, Grimault N. *Vocal communication of body size and motivation in hippopotamus*. 6th Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan (ASA/ASJ), Honolulu, Hawaii.

Massenet M, Anikin A, Pisanski K, Reynaud K, Mathevon N, Reby D. *Do nonlinear phenomena in dog puppy whines signal distress?* 29th International Bioacoustics Conference (IBAC), Kerteminde, Denmark.

2023 Massenet M, Anikin A, Pisanski K, Reynaud K, Mathevon N, Reby D. *Do nonlinear phenomena in puppy whines signal distress to human listeners?* 51th Conference of International Society of Applied Ethology (ISAE), Tallinn, Estonia.

2021 Massenet M, Friedrich C, Reynaud K, Mathevon N, Reby D. *Do bitches recognize their puppies' whines?* 58th Animal Behavioural Society Conference (ABS), Virtual meeting.

2020 Massenet M, Reynaud K, Mathevon N, Reby D. *Vocal cues in puppy whines*. Forum Acusticum (FA), Virtual meeting.

2018 Massenet M et al. *Sound playbacks reveal behavioral plasticity of long-finned pilot whales when detecting presence of fish versus mammal-eating killer whales*. 48th Conference of the French Society of Animal Behaviour (SFECA), Rennes, France.

Massenet M et al. *Acoustic discrimination of fish versus mammal-eating killer whales by long-finned pilot whales: evidence with playback experiments*. 8th International Workshop on the Detection, Detection, Classification, Localization, and Density Estimation (DCLDE) of marine mammals, Paris, France.

Posters

2021 Massenet M, Anikin A, Pisanski K, Mathevon N, Reby D. *Effect of nonlinear vocal phenomena on human perception of emotional state, size and dominance in puppy vocalizations*. Canine Science Forum (CSF), Virtual meeting.

2019 Massenet M, Reynaud K, Mathevon N, Reby D. *Are there individual differences in dog calls before 2-months-age?* 27th International Bioacoustics Conference (IBAC), Brighton, UK.

2017 Massenet M et al. *Long-finned pilot whales' behavioral adaptations in response to noise disturbance*. 47th Conference of the French Society of Animal Behavior (SFECA), Gif-sur-Yvette, France.

Symposium/congress organizing experiences

- 2025 Co-chair of a symposium on nonlinear phenomena in vertebrate vocalizations at the 29th International Bioacoustics Conference (IBAC), Kerteminde, Denmark.
- 2023 Organizer and lead for a 3-day workshop on nonlinear phenomena in animal vocalizations, coordinating 30 international specialists, Saint-Etienne, France.
- 2019 Co-organizer for the 27th International Bioacoustics Conference (IBAC), Brighton, UK.

Other organizing experiences

- 2019—2021 Organizer of EYB (ENES Young Brainstorming), in which masters, PhDs and postdocs discuss their research projects.
- 2019 —2020 Organizer of ENES weekly seminars, in which lab members share their research activities.

Editing and Reviewing

Lead guest editor for *Phil. Trans. B* in charge of coordinating peer-reviews of 6 articles and all activities related the special issue progress.

Ad hoc reviewer: *Science*, *Scientific Reports* and *Cognitive Science*.

Fieldwork

- 2025—present Acoustic recordings of play vocalizations, playback experiments, behavioral data collection in dogs and foxes. Data collection at dog parks around Los Angeles, and fox sanctuaries in California, Michigan, and Ohio.
- 2018—2022 Acoustic recordings of puppies, playback experiments in dogs, behavioral tests assessing puppies' temperament. Data collection at several Beagle dog breeders' facilities in France.
- 2021 Acoustic recordings and playback experiments, behavioral data collection and photo identification in killer whales. Data collection in Iceland.
- 2019 Playback experiments and behavioral data collection in fallow deer. Data collection at Petworth Park (UK).
- 2016—2019 Acoustic recordings, playback experiments, behavioral data collection and photo identification in Risso's dolphins. Data collection in the Azores.

Field training

- 2023 [Tropical Bioacoustics School](#) in French Guiana. Advanced fieldwork training on experimental design and data collection in a rainforest environment (acoustic recordings, playback experiments, propagation experiments).

Funding

- 2025 – 2027 Fyssen Foundation, postdoctoral fellowship (90,000€).

- 2023 University of Saint-Etienne, University of Lyon and Saint-Etienne City Office, symposium financial support (3,000€).
- 2022 CEVA Santé Animale, internship funding (12,000€).

Teaching

- 2019 – 2024 Tutor, University of Saint-Etienne (France).
Lectures on vocal communication in terrestrial mammals for MSc. students (~16h/year).
Lectures on soil fauna behavioral ecology for BSc. students (~20h/year).
Practical sessions on Praat and Soundgen (sound analysis and synthesis software) for MSc. students (~16h/year).

Project supervision

- 2025—present Supervisor of a team of five research assistants.
- 2019—2024 Main supervisor for five MSc. students and six BSc. students.

Professional affiliations

International Bioacoustics Society

Animal Behavior Society

International Society for Applied Ethology

French Society of Animal Behavior Study

Invited talks

- 2025 “*How do puppy whines mediate interactions with caregivers?*”, Department of Communication, University of California Los Angeles.

Public engagement

- 2022 “*Nonlinear phenomena are vocal indicators of distress in puppy whines*”, 4th ENES symposium, University of Saint-Etienne, France.
- 2021 “*How do nonlinear phenomena in puppy whines affect human perceptions of distress?*”, 3rd ENES symposium, University of Saint-Etienne, France.
- 2020 Public quiz about bioacoustics, European Researcher Night, Virtual meeting.
- 2019 “*What do animal tell us?*”, Pint of Science, Saint-Etienne, France.
- “*Interindividual differences in puppies’ whines*”, 2nd ENES Symposium, University of Saint-Etienne, France.

Selection of media coverage

- 2026 [“When a horse whinnies, there's more than meets the ear”](#), National Public Radio (NPR, American press)
- 2025 [“Babies’ cries can make humans physically hotter”](#), The Guardian (British press)
[“For Fuzz Sake”](#), Radio interview for a BBC documentary on sound distortion (British press)
- 2024 [“How a Puppy Whines Affects Their Mother’s Behavior”](#), Psychology Today (American press)
[“Dog mother recognize their puppies by their whining”](#), Krone (Austrian press)
[“Les chiots aussi ont une signature vocale qui permet à leur mère de les identifier”](#), Le Temps (Swiss press)
[“Les gémissements des chiots sont porteurs d’étonnantes informations”](#), Sciences et Avenir (French press)
[“Les chiennes reconnaissent leur petits grâce à leurs pleurs”](#), Radio interview for France Culture (French radio)
Live interview for RCF Saint-Etienne (French radio)
- 2023 TV appearance for a documentary series entitled “Wild Talk” produced by Off the Fence Production (UK TV production company)
- 2022 [“Puppies in distress?”](#), Blog of the Royal Society (British press)
[“Un chiot qui pleure, ça vous attriste ?”](#), IF Saint-Etienne (French press)
[“Chiens : il ne leur manque pas vraiment la parole”](#), Le Progrès (French press)
- 2020 TV appearance for a daily news program (“Le Journal de 13h”) on France 3 Rhône-Alpes

Software

R (acoustic analysis and synthesis: Soundgen and seewave R packages; statistical analyses: brms, lme4 R packages)

BORIS (behavioral analyses)

Praat (acoustic analyses)

MATLAB (programming)