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Position

Principal Investigator, Institut de Biologie Valrose, Nice (since 2008)
 Research Director CNRS (Directeur de recherche)

Research Interests

Phenotypic plasticity and genotype-by-environment interactions
 Role of developmental architecture in the evolutionary process
 Evolution of reproductive life histories and germline development
 Natural genetic variation in *C. elegans*
 Evolution and ecology of *Caenorhabditis* nematodes

Education

2008	Postdoc, Centre d'Immunologie Luminy, Marseille
2004 – 2007	Postdoc, Institut Jacques Monod, Paris
2000 – 2003	Ph.D. (University of Cambridge & Princeton University)
1999	M.Phil. (University of Cambridge)
1995 – 1998	B.Sc. (University of Basel)

Qualifications, Awards and Fellowships

2014	Habilitation à diriger des recherches (HDR) (Université Côte d'Azur)
2012	Fellow, Berlin Institute for Advanced Study (Wissenschaftskolleg)
2010	Prize of the Schlumberger Foundation (FSER)
2009	Permanent position CNRS
2008	Start-up grant ATIP-AVENIR Jeunes Chercheurs (CNRS)
2008	Fellowship Roche Research Foundation
2006 – 2007	Fellowship Marie Skłodowska Curie Actions
2003 – 2005	Fellowship Swiss National Science Foundation
2000 – 2003	Fellowship Boehringer Ingelheim Fonds
1995 – 2003	Fellow of the Swiss Study Foundation – Fund for Young Talented People

Publications (2016 – 2021)

Vigne P*, Gimond C*, Ferrari C, Vielle A, Hallin J, Pino-Querido A, El Mouridi S, Mignerot L, Frøkjær-Jensen C, Boulin T, Teotonio H & Braendle C 2021 A single-nucleotide change underlies the genetic assimilation of a plastic trait. *Science Advances* 7: eabd9941. <https://doi.org/10.1126/sciadv.abd9941>
 *joint first authors

Lee D, Zdraljevic S, Stevens L, Wang Y, Tanny RE, Crombie TA, Cook DE, Webster AK, Chirakar R, Baugh LR, Sterken MG, Braendle C, Félix MA, Rockman MV & Andersen EC 2021 Balancing selection maintains hyper-divergent haplotypes in *C. elegans*. *Nature Ecology & Evolution*
<https://doi.org/10.1038/s41559-021-01435-x>

Noble LM, Yuen J, Stevens L, Moya N, Persaud R, Moscatelli M, Jackson J, Braendle C, Andersen EC, Seidel HS & Rockman MV 2021 Selfing is the safest sex for *Caenorhabditis tropicalis*. *eLIFE* 10: e62587. DOI: <https://doi.org/10.7554/eLife.62587>

- Ben-David E, Pliota P, Widen S, Koreshova A, Lemus-Vergara T, Verpukhovskiy P, Mandali S, Braendle C, Burga A & Kruglyak L 2021 Ubiquitous selfish toxin-antidote elements in *Caenorhabditis* species. *Current Biology* 31, 1-12. <https://doi.org/10.1016/j.cub.2020.12.013>
- Billard B, Vigne P & Braendle C 2020 A natural mutational event uncovers a life history trade-off via hormonal pleiotropy. *Current Biology* 30: 4142–4154. <https://doi.org/10.1016/j.cub.2020.08.004>
- Lee D, Zdraljevic S, Cook DE, Frézal L, Hsu JC, Sterken M, Riksen J, Wang J, Kammenga J, Braendle C, Félix MA, Schroeder FC & Andersen EC 2019 Selection and gene flow shape niche-associated variation in pheromone response. *Nature Ecology & Evolution* 3: 1455–1463. <https://doi.org/10.1038/s41559-019-0982-3>
- Gimond C*, Vielle A*, Soares N, Zdraljevic S, McGrath P, Andersen EC & Braendle C 2019 Natural variation and genetic determinants of *Caenorhabditis elegans* sperm size. *Genetics* 213: 615-632. <https://doi.org/10.1534/genetics.119.302462>
*joint first authors
- Shin H*, Braendle C*, Monahan KB*, Kaplan REW*, Zand TP, Sefakor Mote F, Craig DR, Peters E, Reiner DJ 2019 Developmental fidelity is imposed by genetically separable RafGEF activities that mediate opposing signals. *PLoS Genetics* 15(5): e1008056. <https://doi.org/10.1371/journal.pgen.1008056>
*joint first authors
- Stevens L, Félix MA, Beltran T, Braendle C, Caurcel C, Fausett S, Fitch D, Frézal L, Gosse C, Kaur T, Kiontke K, Newton M, Noble L, Richaud A, Rockman M, Sudhaus W & Blaxter M 2019. Comparative genomics of 10 new *Caenorhabditis* species. *Evolution Letters* 32: 217–236. <https://doi.org/10.1002/evl3.110>
- Frézal L, Demoinet E, Braendle C, Miska E & Félix MA 2018 Natural genetic variation in a multigenerational phenotype in *C. elegans*. *Current Biology* 28: 2588-2596. <https://doi.org/10.1016/j.cub.2018.05.091>
- Grimbert S & Vargas Velazquez AM & Braendle C 2018 Physiological starvation promotes *C. elegans* vulval induction. *G3 (Genes, Genomes, Genetics)* 8: 3069-3081. <https://doi.org/10.1534/g3.118.200449>
- Ferrari C, Salle R, Callemeyn-Torre N, Jovelín R, Cutter AD* & Braendle C* 2017 Ephemeral-habitat colonization and neotropical species richness of *Caenorhabditis* nematodes. *BMC Ecology*. <http://doi.org/10.1186/s12898-017-0150-z>
*corresponding authors
- Ludewig AH, Gimond C, Judkins JJ, Thornton S, Micikas RJ, Döring F, Antebi A, Braendle C & Schroeder FC 2017 Larval crowding accelerates *C. elegans* development and reduces lifespan. *PLoS Genetics* 13: e1006717. <https://doi.org/10.1371/journal.pgen.1006717>
- Vielle A, Callemeyn N, Gimond C, Poulet N, Gray JC & Cutter AD & Braendle C 2016 Convergent evolution of sperm gigantism and the developmental origins of sperm size variability in *Caenorhabditis* nematodes. *Evolution* 70: 2485-2503. <https://doi.org/10.1111/evo.13043>
- Poulet N, Vielle A, Gimond C, Carvalho S, Teotonio H* & Braendle C* 2016 Complex heterochrony underlies the evolution of hermaphrodite sex allocation in experimental *C. elegans* populations. *Evolution* 70: 2357-2369. <https://doi.org/10.1111/evo.13032>
*corresponding authors
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- Grimbert S, Tietze K, Barkoulas M, Sternberg PW, Félix MA & Braendle C 2016 Anchor cell signaling and vulval precursor cell positioning establish a reproducible spatial context during *C. elegans* vulval induction. *Developmental Biology* 416: 123-35. <https://doi.org/10.1016/j.ydbio.2016.05.036>
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- Samuel BS, Rowedder H, Braendle C, Félix MA & Ruvkun G 2016 *Caenorhabditis elegans* responses to bacteria from its natural habitats. *Proceedings of the National Academy of Sciences USA* 113: E3941-E3949. <https://doi.org/10.1073/pnas.1607183113>
- Cook DC, Zdraljevic S, Tanny RE, Seo B, Riccardi DD, Noble LM, Rockman MV, Alkema MJ, Braendle C, Kammenga JE, Wang J, Kruglyak L, Félix MA, Lee J & Andersen EC 2016 The genetic basis of natural variation in *C. elegans* telomere length. *Genetics* 204: 371-383. <https://doi.org/10.1534/genetics.116.191148>