

Wen-Juan Ma

Assistant Professor
Biology Department | Vrije Universiteit Brussel

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Education

10.2009-12.2014 **Ph.D. Evolutionary Genetics**, University of Groningen, The Netherlands
09.2006-07.2009 **M.S. Evolutionary Ecology**, *Summa cum laude*
Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences
09.2002-07.2006 **B.S. Biological Science**, *Summa cum laude*
Nanyang Normal University, China

Academic Employment

01.2023- **Assistant Professor**, Biology Department, Vrije Universiteit Brussel, Brussels, Belgium
08.2020-12.2022 **Postdoctoral research associate**, Department of Molecular Biosciences,
The University of Kansas, Lawrence, KS, USA
06.2018-07.2020 **NIH Postdoctoral research associate**, Department of Biology, Amherst College, MA, USA
08.2018-10.2018 **Visiting scholar**, Department Ecologie Systematics and Evolution,
Université of Paris-Sud, Orsay, France
03.2018-05.2018 (Informal) **visiting scholar**, Department of Biology, University of Indiana, IN, USA
08.2014-02.2018 **SNSF Postdoctoral fellow**, Department of Ecology and Evolution,
University of Lausanne, Switzerland
08.2014-01.2018 **Teaching assistant**, Department of Ecology and Evolution
University of Lausanne, Switzerland
01.2010-01.2014 **Graduate teaching assistant**, University of Groningen, the Netherlands
07.2009-08.2009 **Research associate**, Chinese Academy of Science, Xishuangbanna, China
09.2003-08.2005 **Undergraduate teaching assistant**, Nanyang Normal University, China

Honors, Awards, Fellowships and Grants

Pending grants

2025	€653,117	FWO junior research grant (PI)
2024	€650,000	COST – Tree of sex consortium

Grant/Fellowship/Honors (in total: €1,763,200; \$27,500; ¥12,000)

2025	€250	ESEB conference aid grant
2025	\$2,000	SMBE aid and gender equality grant
2025	€25,500	VUB-CSC joint PhD grant , co-PI with Qi Zhou, Zhejiang University, China
2024	€55,000	ULB-VUB seed grant for joint PhD , co-PI with Jean-François Flot
2023	€500	FWO travel grant
2023-2027	€100,000	VUB startup funding , Vrije Universiteit Brussel, Belgium
2023-2028	€1,499,950	ERC (European Research Council) Starting Grant
05.2022	€500	ESEB2022 conference aid grant
02.2022	\$25,000	K-INBRE Postdoc Awards Year 2022
08.2021	€1,000	ESEB satellite symposium fund, ‘The remarkable diversity in the rate and mechanisms of sex chromosome evolution’
05.2018	\$500	Travel grant, Society for the Study of Evolution

06.2016	¥1,000	Team award to fig-fig wasp coevolution, Chinese Academy of Sciences, China
2013	€500	Travel grant, Dutch Uyttenboogaart-Eliassen Foundation
2009-2014	€80,000	PhD Ubbo Emmius faculty fellowship , University of Groningen, The Netherlands
2009	¥2,000	Best master thesis award of DiAo, Chinese Academy of Sciences, China
2009	Top 4%	Outstanding Graduate in Xishuangbanna Tropical Botanical Garden, CAS, Chinese Academy of Sciences, China
2002-2006	¥4,000	First-Class Departmental Scholarship for 4 years, Nanyang Normal University, China
2006	Top 1%	Outstanding Graduate, Nanyang Normal University, China
2004	¥5,000	National Scholarship for Excellent Study (Top 0.1%), Nanyang Normal University, China

Grant/fellowship passed interview stage but not funded

12.2024	€556,984	FWO junior research grant (PI) (top 25%, the runner up for the funding)
09.2019	£725,397	*Royal Society University Research Fellowship , shortlisted. I wrote the proposal by myself .
03.2018	€195,455	**Maire-Curie Postdoc fellowship ‘Guppy Young Y’ was awarded the ‘Marie Skłodowska-Curie Actions Seal of Excellence’. I wrote the proposal by myself .

*Top 20% of proposals from all science domains (life science, physics, chemistry) were shortlisted.

** The proposal was scored 89.5 right below the cutoff of 92 funded score for that round of funding.

Publications

Total citations until 06.2025: 845, h-index: 15, i10-index: 17

A full list of my publications and citation statistics is available at Google Scholar:

https://scholar.google.com/citations?hl=en&user=D21ZTf0AAAAJ&view_op=list_works&sortby=pubdate

ORCID: <https://orcid.org/0000-0003-2585-6406>

31. JAD Vidal, D Charlesworth, **W-J Ma**, Q Zhou, R Utsunomia, AJB Gomes, AB da Silva, F Porto-Foresti, T Liehr, M de Bello Cioffi. (2025) Cytological and preliminary genomic analysis of two *Leptodactylus* frog species (Anura, Leptodactylidae) with recently evolved large meiotic rings of multiple X and Y sex chromosomes
 - bioRxiv
 - DOI: <https://doi.org/10.1101/2025.03.27.645801>
30. E.A. Lucotte, P Jay, Q Rougemont, L Boyer, A Cornille, A Snick, A Labat, E Chain, M Duhamel, J Gendelman, **W-J Ma**, R K Hayes, M.H. Berlin M.E. Hood, R.C. Rodriguez de la Vega, T Giraud. (2025). Repeated loss of function at HD mating-type genes and of recombination in anther-smut fungi. doi: <https://doi.org/10.1038/s41467-025-60222-5>
 - In press
 - **Nature Communications (IF=14.920, citation=3)**
29. D Jeffries, C Benvenuto, A Böhne, C Fraisse, S Garcia, P Jay, L Kratochvíl, CE McDonough-Goldstein, A Ruiz-Herrera, CG Sotero-Caio, MA. Wilson, **Tree of Sex Consortium**+, KS Jaron. (2025). The Tree of Sex consortium: A global initiative for studying the evolution of reproduction in eukaryotes
 - In press
 - **Journal of Evolutionary Biology**
28. B. Augstenová[†], **W-J Ma**. (2025). Decoding *Dmrt1*: Insights into vertebrate sex determination and gonadal sex differentiation. arXiv: <https://doi.org/10.48550/arXiv.2407.12060>
 - In press
 - **Journal of Evolutionary Biology (IF=2.441, citation=1)**
27. P Veltsos, S Shinde[†], **W-J Ma**. (2024). Sex chromosome evolution: the classical paradigm and so much beyond.
 - In press.
 - **Encyclopedia of Evolutionary Biology. (citation=1)**
26. **W-J Ma**, M. Rovatsos. (2022) Sex chromosome evolution: The remarkable diversity in the evolutionary rates and mechanisms.
 - **Journal of Evolutionary Biology** 35: 1581-1588 (IF=2.441, citation=6)

25. **W-J Ma**, K. Brunsell^{**}, E. Knoles^{##}, MM. Schoaib^{##}, RL Unckless (2022). Hoisted with his own petard: how sex-ratio meiotic drive in *Drosophila affinis* creates resistance alleles that limit its spread.
- **Journal of Evolutionary Biology** 35: 1765-1776 (**IF=2.441, citation=5**)
24. **W-J Ma**, P Veltsos (2021). The diversity and evolution of sex chromosomes in frogs.
- **Genes** 12: 483. (**IF=4.096, citation=52**)
- <https://doi.org/10.3390/genes12040483>
23. **W-J Ma**, BA Pannebakker, X Li[#], E Geyverink, SY Anvar, P Veltsos, T Schwander, L van de Zande, LW Beukeboom. (2021). A single QTL with large effect is associated with decay of female functional virginity in an asexual parasitoid wasp.
- **Molecular Ecology** 30: 1979-1992. (**IF=6.131, citation=14**)
- doi: 10.1111/mec.15863.
22. **W-J Ma**, F Carpentier[#], T Giraud, M Hood. (2020). Differential gene expression between fungal mating types is associated with sequence degeneration.
- **Genome Biology and Evolution** 12: 234-258. (**IF=3.726, citation=14**)
- doi: <https://doi.org/10.1093/gbe/evaa028>
21. **FE Hartmann**^{*}, **W-J Ma**^{*}. (2020). Digest: Climate plays marginal role for homomorphic sex chromosome differentiation in common frogs.
- **Evolution** 74: 690-693. (**IF=4.201, citation=2**)
- doi : <https://onlinelibrary.wiley.com/doi/10.1111/evo.13936>
20. P Veltsos, N Rodrigues[#], T Studer^{##}, **W-J Ma**, S Sermier^{**}, N Perrin. (2020). No evidence that Y-chromosome differentiation affects male fitness in a Swiss population of common frogs.
- **Journal of Evolutionary Biology** 33: 401-409. (**IF=2.792, citations=17**)
- doi: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jeb.13573>
19. FE Hartmann, RC Rodríguez de la Vega, P Gladieux, **W-J Ma**, J Antonovics, ME Hood, T Giraud. (2019). Higher gene flow in sex-related chromosomes than in autosomes during fungal divergence.
- **Molecular Biology and Evolution** 37: 668-682. (**IF=14.797, citations=25**)
- doi : <https://doi.org/10.1093/molbev/msz252>
18. **W-J Ma**, L Santos Del Blanco, JR Pannell. (2019). A new biological species in the *Mercurialis annua* polyploidy complex: functional divergence in inflorescence morphology and hybrid sterility.
- **Annals of Botany** 124: 165-178. (**IF=4.041, citations=5**)
- doi : <https://doi.org/10.1093/aob/mcz058>
17. **W-J Ma**, R Sermier^{**}, P Veltsos, DJ Parker, N Perrin. (2018). Evolutionary and developmental dynamics of sex-biased gene expression in common frogs with proto-Y chromosomes.
- **Genome Biology** 19: 156. (**IF=13.214, citation=36**)
- doi : <https://doi.org/10.1186/s13059-018-1548-4>
16. DL Jeffries, G Lavanchy^{##}, R Sermier^{**}, MJ Sredl, I Miura, A Borzée, LN Barrow, D Canestrelli, P-A Crochet, C Dufresnes, J Fu, **W-J Ma**, C Macías Garcia, K Ghali[#], AG Nicieza, RP O'Donnell, N Rodrigues[#], A Romano, Í Martínez-Solano, I Stepanyan, S Zumbach, A Bresfold, N Perrin. (2018). A rapid rate of sex-chromosome turnover and non-random transitions in true frogs.
- **Nature Communications** 9 : 4088. (**IF=14.920, citation=196**)
- doi : <https://doi.org/10.1038/s41467-018-06517-2>
15. **W-J Ma**, P Veltsos, MA Touns, N Rodrigues[#], R Sermier^{**}, DL Jeffries, N Perrin. (2018). Tissue specificity and dynamics of sex-biased gene expression in a common frog population with differentiated, yet homomorphic, sex chromosomes.
- **Genes** 9: 294. (**IF=4.096, citation=28**)
- doi : <https://doi.org/10.3390/genes9060294>
14. N Rodrigues[#], T Studer^{##}, C Dufresnes, **W-J Ma**, P Veltsos, N Perrin. (2017). *Dmrt1* polymorphism and seks chromosome differentiation in *Rana temporaria*.
- **Molecular Ecology** 26: 4897-4905. (**IF=6.131, citation=36**)
- doi: <https://doi.org/10.1111/mec.14222>
13. **W-J Ma**, T Schwander. (2017). Patterns and mechanisms in instances of endosymbiont-induced parthenogenesis.
- **Journal of Evolutionary Biology** 30: 868-888. (**IF=2.792, citation=132**)
- doi : <https://doi.org/10.1111/jeb.13069>
12. **W-J Ma**, N Rodrigues[#], R Sermier^{**}, A Brelsford, N Perrin. (2016) *Dmrt1* polymorphism covaries with sex-determination patterns in *Rana temporaria*.
- **Ecology and Evolution** 6: 5107-5117. (**IF=2.537, citation=29**)

- doi : <https://doi.org/10.1002/ece3.2209>
- 11. **W-J Ma**, JR Pannell. (2016). Sex determination: separate sexes are a double turnoff in melons.
 - **Current Biology** 26: R171-R174. (IF=9.193, citation=15)
 - doi: <https://doi.org/10.1016/j.cub.2015.12.026>
- 10. **W-J Ma**, BA Pannebakker, L van de Zande, T Schwander, B Wertheim, LW Beukeboom. (2015). Diploid males support a two-step mechanism for endosymbiont-induced thelytoky in a parasitoid wasp.
 - **BMC Evolutionary Biology** 15: 84. (IF=3.027, citation=56)
 - doi: <https://doi.org/10.1186/s12862-015-0370-9>
- 9. **W-J Ma**, BA Pannebakker, LW Beukeboom, T Schwander, L van de Zande (2014). Genetics of decayed sexual traits in a parasitoid wasp with endosymbiont-induced parthenogenesis.
 - **Heredity** 113: 424-431. (IF=3.801, citation=20)
 - doi: <https://doi.org/10.1038/hdy.2014.43>
- 8. **W-J Ma**, F Vavre, LW Beukeboom (2014). Manipulation of arthropod sex determination by endosymbionts: diversity and molecular mechanisms.
 - **Sexual Development** 8: 59-73. (IF=2.250, citation=70)
 - doi: <https://doi.org/10.1159/000357024>
- 7. **W-J Ma**, B Kuijper, JG de Boer, L van de Zande, LW Beukeboom, B Wertheim, BA Pannebakker (2013). Absence of complementary sex determination in the parasitoid wasp genus *Asobara* (Hymenoptera: Braconidae).
 - **PloS ONE** 8: e60458. (IF=2.776, citation=24)
 - doi: <https://doi.org/10.1371/journal.pone.0060459>
- 6. **W-J Ma**, D-R Yang, Y-Q Peng (2009). Disturbance effects on community structure of *Ficus tinctoria* fig wasp in Xishuangbanna, China: implication for the fig/fig wasp mutualism.
 - **Insect Science** 16: 417-424. (IF=2.71, citation=8)
 - doi: <https://doi.org/10.1111/j.1744-7917.2009.01265.x>
- 5. **W-J Ma**, Y-Q Peng, D-R Yang, J-M Guan (2009). Coevolution of reproductive characteristics in three dioecious fig species and their pollinator wasps.
 - **Symbiosis** 49 : 87-94. (IF=2.009, citation=14)
 - doi: <https://doi.org/10.1007/s13199-009-0018-x>
- 4. **W-J Ma**, F-P Zhang, Y-Q Peng, D-R Yang (2009). Comparison of style length and reproduction success in *Ficus* of different breeding systems.
 - **Chinese Journal of Plant Ecology** 33: 911-918. (IF=2.541, citation=5)
- 3. **W-J Ma**, Y-Q Peng, D-R Yang (2009). Variation of reproduction success in *Ficus tinctoria* and the implication in fig evolution.
 - **Zoological Research Suppl.**: 139-145.

⁺ member of Tree of Sex consortium.

^{*} Equal contribution.

^{**} Publications include contribution from supervised technicians.

[†] Publications include contribution from supervised postdocs.

[#] Publications include contribution from informally supervised PhD students.

^{##} Publications include contribution from supervised master/undergraduate students.

PhD thesis and thesis chapter

2. E Geuverink, M van Leussen, **W-J Ma**, LW Beukeboom, L van de Zande. (2017). Identification, seks-specific splicing and maternal provision of *transformer* and *transformer-2* in arrhenotokous and *Wolbachia*-infected thelytokous *Asobara japonica*. Chapter 6. *Parental and Endosymbiont Effects on Seks Determination in Haplodiploid Wasps-Who is in Control?* **PhD thesis** of E. Geuverink. University of Groningen, The Netherlands.

1. **W-J Ma**. 2014. Evolutionary genetics of *Wolbachia*-induced parthenogenesis in the parasitoid *Asobara japonica*: seks determination and sexual decay. **PhD thesis**, University of Groningen, The Netherlands (citation=3)

Invited talks

In total, I have been invited to give talks for 29 departmental seminars, 5 conferences and 1 workshop.

- 04.2025 **Departmental seminar.** Institute of Science and Technology Austria, Austria
- 04.2025 **PopGen Vienna seminar.** Vienna Grad. School of Population Genetics, Austria
- 12.2024 **Departmental seminar.** KU Leuven, Belgium
- 10.2023 **Current Topics in Zoology and Evolution Seminar.** University of Basel, CH
- 10.2023 **IB2 Research Day 2023.** Interuniversity Institute of Bioinformatics in Brussels, Belgium
- 05.2023 **Evolution & Ecology Seminar.** University of Lille, Lille, France
- 03.3023 **Departmental seminar.** Université Libre de Bruxelles, Brussels, Belgium
- 12.2022 **Institute seminar.** KU Center for Genomics early career researcher seminar. University of Kansas, Lawrence KS, USA
- 07.2022 **Departmental seminar.** University of Groningen, Groningen, The Netherlands
- 06.2022 **Departmental seminar.** University of East Anglia, Norwich, UK
- 05.2022 **Departmental seminar.** University of Dublin, Dublin, Ireland
- 04.2022 **Departmental seminar.** Vrije Universiteit Brussel, Brussels, Belgium
- 02.2022 **Institute seminar.** Earlham Institute, Norwich, UK
- 02.2022 **Institute seminar.** The Institute of Functional Genomics of Lyon, Lyon, France
- 07.2021 **Departmental seminar.** School of Life Sciences, University of Essex, Colchester, UK
- 02.2021 **Departmental seminar.** Department of Biology, Southeast Missouri State University, Cape Girardeau, MO, USA
- 09.2020 **EEB Genetics seminar.** Department of Ecology & Evolutionary Biology and Department of Molecular Bioscience, University of Kansas, Lawrence, KS, USA
- 06.2020 **Evolutionary Biology Group seminar.** Department of Biology, University of Konstanz, Konstanz, Germany
- 02.2020 **Departmental seminar.** Department of Biology, George Mason University, Fairfax, VA, USA
- 02.2020 **Departmental seminar.** Department of Biological Sciences, University of Arkansas, USA
- 01.2020 **Departmental seminar.** School of Biological Sciences, Illinois State University, USA
- 01.2020 **Conference speaker.** Invited but declined. Symposium ‘Emerging frontiers in sex chromosome evolution’, 9th World Congress of Herpetology, Dunedin, New Zealand.
- 01.2020 **Conference speaker.** ‘The International Plant and Animal Genome (PAG) conference’, ‘Sex Chromosome and Sex Determination’ workshop, San Diego, CA, USA.
- 08.2019 **Departmental seminar.** School of Biological Sciences, University of Aberdeen, UK
- 06.2019 **Conference speaker.** ‘Evolution 2019, Providence, Rhode Island
- 05.2019 **Departmental seminar.** Institute of Integrative Biology, University of Liverpool, UK
- 04.2019 **Departmental seminar.** Milner Center for Evolution, University of Bath, UK
- 01.2019 **Conference speaker.** Invited but declined. ‘The International Plant and Animal Genome (PAG) Conference’, San Diego, CA, USA.
- 12.2018 **Departmental seminar.** Seminar for Department of Biology, Amherst College, MA, USA
- 09.2018 **Departmental seminar.** Seminar for Department of Genetic and Ecology Evolution, Université Paris-Sud, Orsay, France
- 06.2016 **Departmental seminar.** Institutional external seminar, Chinese Academy of Sciences, Xishuangbanna, China
- 08.2015 **Conference speaker.** ‘Nöthiger insect sex determination’ workshop, University of Lausanne, Lausanne, Switzerland
- 07.2014 **Workshop speaker.** ‘Evolution of asexual genome’ workshop, University of Lausanne, Lausanne, Switzerland
- 10.2013 **Departmental seminar.** Laboratory of Genetics seminar, Wageningen University, NL
- 02.2010 **Departmental seminar.** Lab seminar, Leiden, The Netherlands

Conference presentations

All as first author presentations: talk at 20 international conferences and poster at 11 conferences.

- 08.2025 Scheduled **Talk** ESEB 2025, Prague, Czech Republic
- 07.2025 Scheduled **Talk** SMBE 2025, Prague, Czech Republic
- 09.2023 **Talk** Conferences Jacques-Monod, Sex unfolded: sex, asex, sexes, Roscoff, France

- 08.2022 **Talk** ESEB 2022, Prague, Czech Republic
- 04.2022 **Talk** 63rd Annual *Drosophila* Research Conference, San Diego, CA, USA
- 01.2022 **Talk** 55th PopGroup meeting, the Earlham Institute, John Innes Centre, University of East Anglia, UK
- 06.2021 **Talk** virtual Evolution meeting, 2021
- 06.2021 **Talk** ESEB satellite symposium 2021, ‘Genomic signatures and consequences of sex and asexuality’
- 01.2021 **Talk** the virtual 54th PopGroup meeting, University of Liverpool, Liverpool, UK
- 01.2020 **Talk** PAG XVIII, San Diego, CA, USA
- 08.2019 **Poster** ESEB, Turku, Finland
- 06.2019 **Poster** Evolution, Providence, USA
- 06.2019 **Talk** Evolution 2019, Providence, Rhode Island, USA
- 08.2018 **Poster** Joint meeting of ESEB and Evolution, Montpellier, France
- 08.2017 **Poster** European Society for Evolutionary Biology, Groningen, The Netherlands
- 01.2017 **Talk** PoPGroup meeting, Cambridge, UK
- 06.2016 **Talk** Evolution of sex det. Workshop, La Sage, Switzerland
- 02.2016 **Poster** Swiss Biology Meeting, Lausanne, Switzerland
- 12.2015 **Talk** PopGroup 49 meeting, University of Edinburgh, Edinburgh, Scotland
- 08.2015 **Poster** European Society for Evolutionary Biology, Lausanne, Switzerland
- 07.2014 **Talk** ‘Evolution of asexual genome’ workshop, University of Lausanne, Lausanne, Switzerland
- 08.2013 **Poster** European Society for Evolutionary Biology, Lisbon, Portugal
- 06.2013 **Talk** Insect sex determination workshop, Gif-sur-Yvette, Paris, France
- 02.2013 **Talk** Netherlands Annual Ecology meeting, Lunteren, The Netherlands
- 12.2012 **Talk** Entomologen Dag, Ede, The Netherlands
- 12.2011 **Talk** Entomologen Dag, Ede, the Netherlands
- 11.2011 **Talk** NEV herfstvergadering, Groningen, The Netherlands
- 10.2011 **Poster** Sixth International Symposium on Molecular Insect Science, Amsterdam, The Netherlands
- 10.2011 **Poster** European workshop on sex determination in insects, Amsterdam, The Netherlands
- 06.2011 **Poster** Genetics, Epigenetics and Evolution of Sex Chromosomes, Paris, France
- 11.2010 **Talk** Meeting of the Insect Parasitoid Special Interest Group of the Royal Entomological Society, University of York, York, UK
- 11.2010 **Poster** Plant-Insect interaction workshop, Wageningen, The Netherlands
- 11.2007 **Talk** Conference of “Biodiversity—Challenges to the New Century”, Jinghong, China

Additional training (workshops/conferences, in total 27x)

- 02.2025 **‘How AI helps with ERC grant writing’**, Vrije Universiteit Brussel, Brussels, Belgium
- 07.2024 **Tree of Sex 2.0 workshop**, Charles University, Prague, Czech Republic
- 06.2023 **Tree of Sex 2.0 workshop**, Sanger Institute, Cambridge, UK
- 06.2023 **PhD Supervisor workshop2**, Vrije Universiteit Brussel, Brussels, Belgium
- 04.2023 **PhD Supervisor workshop1**, Vrije Universiteit Brussel, Brussels, Belgium
- 05.2022 **1st KU Centre for Genomics Symposium 2022**, University of Kansas, USA
- 12.2021 **ADVANCEGeo “DEI” workshop**, University of Kansas, USA
- 09.2021 **“SafeZone Training”** (allies to the LGBTQ+ students), University of Kansas, KS, USA
- 06.2021 **“Plant Sex Chromosome Evolution”** workshop, virtue, organized by University of Munich
- 06.2018 **“Scientific Programming with Python”**, Amherst College, Amherst, MA, USA
- 04.2018 **“De novo transcriptome assembly”**, University of Indiana, USA
- 02.2018 **“Lausanne Genomic Days”**, University of Lausanne, Switzerland
- 03.2017 **“Python for Life Scientists”**, University of Basel, Basel, Switzerland
- 02.2017 **“Lausanne Genomic Days”**, University of Lausanne, Switzerland
- 10.2016 **“De novo Transcriptome assembly”**, University of Bern, Bern, Switzerland
- 06.2016 **“Evolution of sex determination”**, La Sage, Switzerland
- 02.2016 **“Lausanne Genomic Days”**, University of Lausanne, Switzerland
- 08.2015 **“Nöthiger insect sex determination”**, University of Lausanne, Lausanne, Switzerland
- 01.2015 **“Introductory Course in Laboratory Animal Science”**, University of Lausanne, Switzerland
- 12.2014 **“Learning Python for life sciences”**, University of Basel, Basel, Switzerland

- 07.2014 “**Evolution of asexual genome**”, University of Lausanne, Lausanne, Switzerland
- 06.2014 “**NGS genome & transcriptome assembly and analysis**”, University of Fribourg, Switzerland
- 11.2013 “**Writing a Grant Proposal**”, University of Groningen, Groningen, The Netherlands
- 10.2013 “**RNAseq data analysis workshop**”, University of Groningen, Groningen, The Netherlands
- 08.2013 “**MGC Next Generation Sequencing data analysis**”, Medical Genetics Centre South-West Netherlands, Leiden, The Netherlands
- 06.2013 “**Nöthiger Insect sex determination**”, Gif-sur-Yvette, Paris, France
- 10.2011 “**Nöthiger Insect sex determination**”, Amsterdam, The Netherlands

Service as reviewer and editor

Grant Agencies:

Czech Science Foundation (CSF, 3)

French National Research Agency (ANR, 1)

Scientific Journals: (until 06.2025, total = 54)

- Nature
- Genome Biology
- PLoS Biology
- PLoS Genetics
- Molecular Biology and Evolution
- Molecular Ecology
- New Phytologist
- Proceedings of the Royal Society B
- Nature Communications
- Genome Biology and Evolution
- Axios
- Entomologia Experimentalis et Applicata
- Biological Journal of the Linnean Society
- General and Comparative Endocrinology
- Peer Community IN (PCI) EvolBiol
- Evolution
- Journal of Evolutionary Biology
- Heredity
- Genes
- Journal of Heredity
- Ecology and Evolution
- Sexual Development
- Cells
- Current Opinion in Genetics & Development
- Frontier in Zoology
- International Journal of Molecular Sciences
- PLoS ONE

Guest editor for *Journal of Evolutionary Biology*:

Special issue on “Sex Chromosome Evolution” (2022)

Associate Editor at *Journal of Evolutionary Biology*:

02.2023 - Current

Teaching activities

Titular (Molecular Biology of the Cell)

Spring 2025 Bachelor course, Vrije Universiteit Brussel, Belgium

Spring 2024 Bachelor course, Vrije Universiteit Brussel, Belgium

Co-Titular (Integrative Practical Biology)

Fall 2023 Bachelor course, Vrije Universiteit Brussel, Belgium

Fall 2024 Bachelor course, Vrije Universiteit Brussel, Belgium

Titular (Evolutionary Genetics and Genomics of Sex)

Fall 2023 Master course, Vrije Universiteit Brussel, Belgium

Fall 2024 Master course, Vrije Universiteit Brussel, Belgium

Guest lecturer (Evolution)

Fall 2023 Giving guest lecture for ‘Evolution’ course (2nd year bachelor course), Universite Libre Brussel, Brussels, Belgium

Instructor of record (Genetics and Genomics of Sex course, 1x)

Fall 2021 Bachelor course, University of Kansas, Lawrence, KS, USA

Teaching assistant experience (Mol. Genetics course 4x; Zoology course 2x)

09-10.2017 TA, 'Molecular Genetics', master course, University of Lausanne, Switzerland
 09-10.2016 TA, 'Molecular Genetics', master course, University of Lausanne, Switzerland
 02-06.2016 TA, 'Zoology', bachelor course, University of Lausanne, Switzerland
 09-10.2015 TA, 'Molecular Genetics', master course, University of Lausanne, Switzerland
 02-06.2015 TA, 'Zoology', bachelor course, University of Lausanne, Switzerland
 09-10.2014 TA, 'Molecular Genetics', master course, University of Lausanne, Switzerland

Mentoring activities

Postdoc advisor

02.2024- Fantin Carpentier, Biology Department, VUB, Brussels, Belgium
 01.2024- Barbora Augstenová, Biology Department, VUB, Brussels, Belgium
 10.2023- Sagar Shinde, Biology Department, VUB, Brussels, Belgium
 2023-2024 Meriç Erdolu, Biology Department, VUB, Brussels, Belgium
 01.2023- Paris Veltsos, Biology Department, VUB, Brussels, Belgium

PhD student supervision

09.2025- (scheduled) Peng Zhang, Joint PhD program, Zhejiang University - VUB, Belgium
 10.2024- Ramses Moortgat, Biology Department, VUB, Brussels, Belgium
 02.2024- Ricard Fontseré, Biology Department, VUB, Brussels, Belgium
 12.2023 Hatice Ezgi Unal, Biology Department, VUB, Brussels, Belgium

Supervising/mentoring experience (5 technicians, 17 undergraduates, 5 master students)

11.2024 Co-supervisor of an undergraduate project, Rosalie Van Eeckhaute, VUB, BL
 11.2024- Co-supervisor of undergraduate project, Rehani Allan Ndeze Ndabishoboye, VUB, BL
 11.2024- Co-supervisor of an undergraduate project, Rafaël Kana, VUB, BL
 10.2023-2024 Supervisor of an undergraduate project, Ezel Hahar Balci, VUB, BL
 10.2023- Supervisor of an undergraduate project, Benjamin Aime Allaer, VUB, BL
 08-09.2023 Summer internship Master student, Fanny Kratz, VUB, BL
 08-09.2023 Summer internship undergraduate student, Tristan Cornells, VUB, BL
 06-11.2023 Supervisor of animal lab technician, Marzie Bagheri, VUB, BL
 04.2023-2024 Supervisor of an undergraduate project, Marie Aerts, VUB, BL
 04.-06.2023 Supervisor of a first-step Master project, Marzie Bagheri, VUB, BL
 04.-09.2023 Supervisor of lab technician, Evert Bruyninckx, VUB, BL
 01.2023- Supervisor of lab technician, Ann Pauwels, VUB, BL
 09.2021-02.2022 Supervisor of an undergraduate project, Jordanne Paxton, University of Kansas, USA
 06.2021-08.2022 Supervisor of an undergraduate project, Murtaza Shoaib, University of Kansas, USA
 06.2021-02.2022 Supervisor of a lab technician, Hunter Duke, University of Kansas, KS, USA
 09.2018 PhD mid-thesis evaluation, 'Evolution of mating-type chromosomes in the anther-smut fungi', Fantin Carpentier, University of Paris-Sud, Orsay, France
 08-09.2015 Supervisor of internship undergraduate student, 6 weeks, Anthony Sonrel, University of Lausanne, Switzerland
 07-08.2015 Supervisor of internship undergraduate student, 8 weeks, Sarah Beuvier, University of Lausanne, Switzerland
 10.2014-03.2016 Co-supervisor of master project, Guillaume Lavanchy, University of Lausanne, CH
 09.2014-01.2018 Supervisor of lab technician, Roberto Sermier, University of Lausanne, Switzerland
 02-06.2014 Supervisor of undergraduate from NHL Hogeschool, Kevin Noorman, 4 months,
 02.2014 Supervisor of two Master students, 'Animals meet Microbes', The Netherlands
 09.2013-01.2014 Supervisor of one undergraduate student from NHL Hogeschool, Mathijs Nas, 5 months, Leeuwarden, The Netherlands
 02-03.2013 Supervisor of two Undergraduate students, Maarten Doornkamp, Heleen Fakkert, 'Evolutionary Genetic research' course, 6 weeks, University of Groningen, The Netherlands

02-03.2011 **Supervisor of two Undergraduate students**, ‘Evolutionary Genetic research’ course,
University of Groningen, The Netherlands

PhD thesis committee service

12.2024 - Shabnam Zaman, Vrije Universiteit Brussel, Belgium
11.2024 - Edward Mayila, Vrije Universiteit Brussel, Belgium
11.2024 - Chenyao Li, Vrije Universiteit Brussel, Belgium
04.2023 - Sophie Smith, Leibniz Institute for the Analysis of Biodiversity Change (LIB)
01.2023 - Jie Wang, Max Planck Institute for plant breeding research

Master thesis committee service

10.2023 Erwan Denné, Master thesis ‘Diving into genome size variation in Batoidea: from habitat interactions to methodological challenges’, VUB, Brussels, BL
09.2023 Zoë De Corte, Master thesis ‘Genome annotation and transcriptomic underpinning of a genetic wing dimorphism in *Bembidion properans*’, ULB, Brussels, BL

Bachelor thesis committee service

06.2024 Arielle Ikirezi, ‘Unraveling the evolution of Antimicrobial Peptides of the fire bellied toad, *Bombina bombina*: a phylogenomic approach’, VUB, Brussels, BL
06.2023 Phebe Arnauts, ‘From fungi to leather-like materials: how do mycelium materials differ depending on the fungal species’, VUB, Brussels, BL
06.2023 Nathan van Dam, ‘Model reduction of neural induction in ascidian embryo’, VUB, Brussels, BL

Academic organization/leadership services

Symposium organization: (total 9x)

07.2025 **(scheduled) Main organizer for SMBE symposium** ‘Evolution and regulation of sex chromosomes and sex determination’, SMBE 2025, Beijing, China
08.2022 **Main organizer for ESEB symposium** ‘Sex chromosome evolution: the canonical model and so much beyond’, ESEB 2022, Charles University, Czech Republic
05.2022 **Organizing member** for the 1st KU Centre for Genomics Symposium 2022, University of Kansas, KS, USA
08.2021 **Main organizer for ESEB satellite symposium** ‘The remarkable diversity in the rate and mechanisms of sex chromosome evolution’, ESEB satellite symposia 2021
08.2021 **Main organizer for AsiaEvo Symposium** “Evolutionary genetics and genomics of sex determination and sex chromosomes”, AsiaEvo conference 2021
08.2019 **Main organizer for ESEB Open Symposium** sub-theme ‘Genome Evolution’, ESEB 2019, University of Turku, Turku, Finland
08.2015 **ESEB 2015 organizing staff**, ESEB 2015, University of Lausanne, Switzerland
02.2013 **Main organizer for symposium**, “Evolutionary Ecology: Genetics of Adaptation to Environmental Shift & Species interactions”, Netherlands Annual Ecology meeting (NAEM), Lunteren, The Netherlands
07.2006 **Symposium organizing member** for ‘the 7th international fig-fig wasp symposium’, Chinese Academy of Sciences, Xishuangbanna, China

Departmental seminar/journal club organization: (total 4x)

01.2023- **Departmental seminar organizer**, Biology Department, Vrije Universiteit Brussel, Belgium
09.2020-2021 **Journal club discussion founder and organizer**, University of Kansas, KS, USA
10.2014-2016 **Journal club discussion founder and organizer**, University of Lausanne, Switzerland
10.2014-2016 **Topic group seminar organizer**, ‘*Reproductive System Dynamics*’, University of Lausanne, Switzerland
10.2012-2013 **Institute PhD colloquia committee member**, organizing monthly-based institute colloquia in Evolution and Ecology, University of Groningen, The Netherlands

Service on faculty search as postdoc representative: (total 1x)

03.2017 **Member of PhD-Postdoc search committee** for an Assistant/Associate Professor hire, University of Lausanne, Department of Ecology and Evolution, Switzerland

Contribution to DEIB service and leadership: (total 8x)

12.2021 **ADVANCEGeo “DEI” workshop**, University of Kansas, KS, USA
 09.2021 **Participating and active engaging in the “SafeZone Training”** (training program to be the allies to the LGBTQ+ students), University of Kansas, KS, USA
 08.2021- **Written DEIB statement in my course ‘Genetics and Genomics of Sex’, led DEIB discussion** in class and implementing the statement throughout my teaching
 06.2020- **Member of Journal of Evolutionary Biology Advisory Group**, including discussion on DEI issues within ESEB society, European Society of Evolutionary Biology
 2021
 11.2020 **Active discussion on DEIB issues** in undergraduate researchers working in the lab during lab journal club discussion
 2018-2020 **Participating in promoting campus-wide minority cultural events**, Indiana University, USA
 2007-2009 **Organizing bi-monthly cultural diversity events**, Chinese Academy of Sciences, China
 2002-2006 **Summer internship to help minority girl students** (secondary and high school levels) with study, Nanyang Normal University, China

Professional membership

European Society for Evolutionary Biology (**ESEB**): 2013 -
 Society for the Study of Evolution (**SSE**): 2017 -
 American Society of Naturalists (**ASN**): 2017 –
 Genetics Society of America (**GSA**): 2021 –
 American Genetic Association (**AGA**): 2021 –
 Royal Belgian Zoological Society (**RBZS**): 2023 -
 Society for Molecular Biology and Evolution (**SMBE**): 2024 -