

Wen-Juan Ma

Assistant Professor
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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 experiences

Pending grants

2023	\$707,823	Australian Discovery Grant (partner PI)
2023	€541,476	FWO junior research grant (leading PI)

Honors/awards/fellowship funded

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 award , 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 award , 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

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.

In preparation (available upon request)

29. S Li^{##}, **W-J Ma**, ME Hood. Sterility and meiotic segregation across hybrid generations of the automictic *Microbotryum* pathogens.
28. **W-J Ma**^{*}, RC Rodríguez de la Vega^{*}, F Carpentier, ME Hood, FE Hartmann, T Giraud, ME Hood. Hemizygous genes in the non-recombining regions of sex-related chromosomes arose mostly by gene gains rather than allelic copy loss.
27. **W-J Ma**, P Veltsos, R Sermier, M Toups, N Rodrigues, N Perrin. Y chromosome differentiation masculinizes gene expression on sex chromosomes and correlates with faster male development.

Peer-reviewed publications

Total citations until 05.2023: 600, h-index: 12, i10-index: 16

I have published **24 articles** in peer-reviewed, international journals (*Genome Biology*, *Nature Communications*, *Molecular Biology and Evolution*, *Molecular Ecology*, *Genome Biology and Evolution*) (3 more are in preparation ready for submission soon), and **20 of them are first-author** publications. 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>

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=0**)
25. **W-J Ma**, K. Brunzell^{**}, 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=0**)
24. **W-J Ma**, P Veltsos (2021). The diversity and evolution of sex chromosomes in frogs.
- **Genes** 12: 483. (**IF=4.096, citation=17**)
- <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=7**)
- 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=8)
- 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=11)
 - 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=16)
 - 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=4)
 - 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=27)
 - 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=133)
 - doi : <https://doi.org/10.1038/s41467-018-06517-2>
- 15. W-J Ma, P Veltsos, MA Toups, 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=25)
 - 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=30)
 - 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=84)
 - 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=24)
 - doi : <https://doi.org/10.1002/ece3.2209>
- 11. W-J Ma, JR Pannell. (2016). Seks determination: separate sexes are a double turnoff in melons.
 - **Current Biology** 26: R171-R174. (IF=9.193, citation=11)
 - 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=45)
 - 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=16)
 - 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=53)
 - 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=21)
 - 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=10)
 - 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=4)
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.

* Equal contribution.

** Publications include contribution from supervised technicians.

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=2)

Invited talks

In total, I have been invited to give a talk for 24 departmental seminars, 5 conference symposiums and 1 workshop.

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| 10.2023 | (Scheduled) Current Topics in Zoology and Evolution Seminar. University of Basel, CH |
| 05.2023 | (Scheduled) 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, Normal, IL, 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: I have presented my work to give a talk at 19 international conferences, and presented a poster at 11 conferences.

- 08.2022 **Talk** “The evolution and genetic mechanism of sex-ratio meiotic drive in *Drosophila affinis*”, ESEB 2022, Prague, Czech Republic
- 04.2022 **Talk** “The evolution and genetic mechanism of sex-ratio meiotic drive in *Drosophila affinis*”, 63rd Annual *Drosophila* Research Conference, San Diego, CA, USA
- 01.2022 **Talk** “The evolution and genetic mechanism of sex-ratio meiotic drive in *Drosophila affinis*”, 55th PopGroup meeting, the Earlham Institute, John Innes Centre, University of East Anglia, UK
- 06.2021 **Talk** “A single QTL with large effect is associated with female functional virginity in an asexual wasp”, virtual Evolution meeting 2021
- 06.2021 **Talk** “A single QTL with large effect is associated with female functional virginity in an asexual parasitoid wasp”, ESEB satellite symposium 2021, ‘Genomic signatures and consequences of sex and asexuality’
- 01.2021 **Talk** “A single QTL with large effect is associated with female functional virginity in an asexual parasitoid wasp”, the virtual 54th PopGroup meeting, University of Liverpool, Liverpool, UK
- 01.2020 **Talk** “Differential gene expression between fungal mating types is associated with sequence degeneration”, PAG XVIII, San Diego, CA, USA
- 08.2019 **Poster** “Differential gene expression between mating types is associated with sequence

- degeneration in the absence of sexual antagonism”, ESEB, Turku, Finland
- 06.2019 **Poster** “Differential gene expression is associated with degeneration of mating-type chromosomes in the absence of sexual antagonism”, Evolution, Providence, USA
- 06.2019 **Talk** “Y-chromosome differentiation is associated with developmental transcriptome masculinization and earlier male gonad completion in common frogs”, Evolution 2019, Providence, Rhode Island, USA
- 08.2018 **Poster** “Y chromosome differentiation masculinises gene expression on sex chromosomes and correlates with faster male development”, Joint meeting of ESEB and Evolution, Montpellier, France
- 08.2017 **Poster** “Evolution and temporal dynamics of sex-biased gene expressions in the common frog with a proto-sex chromosome”, European Society for Evolutionary Biology, Groningen, The Netherlands
- 01.2017 **Talk** “Is a novel reproductive trait conferring high siring success associated with postzygotic isolation in an annual plant”, PoPGroup meeting, Cambridge, UK
- 06.2016 **Talk** “Characterization of Y chromosomes of varying differentiation levels by haploid genome sequencing in the common frog”, Evolution of sex det. Workshop, La Sage, Switzerland
- 02.2016 **Poster** “Sex-chromosome differentiation covaries with polymorphism at the candidate sex-determination gene *Dmrt1* in common frogs”, Swiss Biology Meeting, Lausanne, Switzerland
- 12.2015 **Talk** “*Dmrt1* polymorphism covaries with sex-differentiation patterns in the common frog”, PopGroup 49 meeting, University of Edinburgh, Edinburgh, Scotland
- 08.2015 **Poster** “Polymorphism in the candidate sex determination gene *Dmrt1* covaries with sex-chromosome differentiation patterns in the common frog”, European Society for Evolutionary Biology, Lausanne, Switzerland
- 07.2014 **Talk** “Evolutionary and genetic consequences of *Wolbachia*-induced parthenogenesis in the parasitoid wasp *Asobara*, ‘Evolution of asexual genome’ workshop, University of Lausanne, Lausanne, Switzerland
- 08.2013 **Poster** “Genetic basis of sexual traits decay in a parasitoid wasp with endosymbiont-induced parthenogenesis”, European Society for Evolutionary Biology, Lisbon, Portugal
- 06.2013 **Talk** “Genetics of decayed sexual traits in a parasitoid wasp with endosymbiont-induced parthenogenesis”, Insect sex determination workshop, Gif-sur-Yvette, Paris, France
- 02.2013 **Talk** “Genetics of vestigialized sexual traits in an asexual wasp”, Netherlands Annual Ecology meeting, Lunteren, The Netherlands
- 12.2012 **Talk** “Genetics of decayed sexual traits in an asexual wasp”, Entomologen Dag, Ede, The Netherlands
- 12.2011 **Talk** “How is sex determined in the parasitoid wasp genus *Asobara*”, Entomologen Dag, Ede, the Netherlands
- 11.2011 **Talk** “Experimental test of sex determination in solitary parasitoid genus *Asobara*”, NEV herfstvergadering, Groningen, The Netherlands
- 10.2011 **Poster** “Absence of complementary sex determination in the parasitoid wasp genus *Asobara*”, Sixth International Symposium on Molecular Insect Science, Amsterdam, The Netherlands
- 10.2011 **Poster** “No Complementary Sex Determination in the parasitoid wasp genus *Asobara* (Hymenoptera: Braconidae)”, European workshop on sex determination in insects, Amsterdam, The Netherlands
- 06.2011 **Poster** “Sex determining mechanisms in the *Asobara* genus”, Genetics, Epigenetics and Evolution of Sex Chromosomes, Paris, France
- 11.2010 **Talk** “Sex determining mechanisms in the *Asobara* genus (Hymenoptera: Braconidae)”, Meeting of the Insect Parasitoid Special Interest Group of the Royal Entomological Society, University of York, York, UK
- 11.2010 **Poster** “Sex determining mechanisms in the *Asobara* genus (Hymenoptera: Braconidae)”, Plant-Insect interaction workshop, Wageningen, The Netherlands
- 11.2007 **Talk** “Strategy of female flower resource consumption in dioecious fig species by fig wasps”, conference of “Biodiversity—Challenges to the New Century”, Jinghong, China

Additional training (workshops/conferences, in total 21x)

- 05.2023 **Supervisor Training**, 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”** (training program to be the 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,
 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, 2)

French National Research Agency (ANR, 1)

Scientific Journals: (until 05.2023, total = 44)

- Genome Biology
- PLoS Biology
- PLoS Genetics
- Molecular Biology and Evolution
- Molecular Ecology
- New Phytologist
- Proceedings of the Royal Society B
- Genome Biology and Evolution
- Axios
- Entomologia Experimentalis et Applicata
- Biological Journal of the Linnean Society
- General and Comparative Endocrinology
- 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 -

Teaching activities

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

Fall 2021 **Instructor of record** for ‘**Genetics and Genomics of Sex**’ course (**BIOL599**), University of Kansas, Lawrence, KS, USA

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

09-10.2017 **Teaching assistant**, ‘**Molecular Genetics**’, **Master course**, University of Lausanne, Switzerland
 09-10.2016 **Teaching assistant**, ‘**Molecular Genetics**’, **Master course**, University of Lausanne, Switzerland
 02-06.2016 **Teaching assistant**, ‘**Zoology**’, **Undergraduate course**, University of Lausanne, Switzerland
 09-10.2015 **Teaching assistant**, ‘**Molecular Genetics**’, **Master course**, University of Lausanne, Switzerland
 02-06.2015 **Teaching assistant**, ‘**Zoology**’, **Undergraduate course**, University of Lausanne, Switzerland
 09-10.2014 **Teaching assistant**, ‘**Molecular Genetics**’, **Master course**, University of Lausanne, Switzerland

Mentoring activities

Postdoc advisor

01.2023- **Paris Veltsos**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium
 06.2023- **Meriç Erdolu** (start soon). Biology Department, Vrije Universiteit Brussel, Brussels, Belgium
 07.2023- **Sagar Shinde** (start soon). Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

PhD student supervision

03.2023- **Promoter of PhD candidate Era-Alexandra Decuyper**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

Supervising/mentoring experience (2 technicians, 11 undergraduates, 4 master students)

04.2023 **Supervisor of an undergraduate student project**, Marie Aerts, Vrije Universiteit Brussel, BL
 04.2023 **Supervisor of a first-step Master project**, Marzie Bagheri, Vrije Universiteit Brussel, BL
 09.2021- **Supervisor of an undergraduate student project**, Jordanne Paxton, University of Kansas, KS, USA
 06.2021- **Supervisor of an undergraduate student project**, Murtaza Shoaib, University of Kansas, KS, USA
 06.2021- **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- **Co-supervisor of master project, 1.5 year**, Guillaume Lavanchy, University of Lausanne, Switzerland
 03.2016
 09.2014- **Supervisor of a lab technician**, Roberto Sermier, University of Lausanne, Switzerland
 01.2018
 02-06.2014 **Supervisor of undergraduate student from NHL Hogeschool**, Kevin Noorman, 4 months,
 02.2014 **Supervisor of two Masters students** during the course ‘**Animals meet Microbes**’, The Netherlands
 09.2013- **Supervisor of one Undergraduate student** from NHL Hogeschool, Mathijs Nas, 5 months,
 01.2014 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, 6 weeks, University of Groningen, The Netherlands

PhD thesis committee service

- 01.2023 - Jie Wang, Max Planck Institute for plant breeding research
 04.2023 - Sophie Smith, Leibniz Institute for the Analysis of Biodiversity Change (LIB)

Academic organization/leadership services**Symposium organization:** (total 7x)

- 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 Netherland

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 **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 - present
Society for the Study of Evolution (**SSE**): 2017 - present
American Society of Naturalists (**ASN**): 2017 – present
Genetics Society of America (**GSA**): 2021 –
American Genetic Association (**AGA**): 2021 -

References (for research and teaching)

Prof. Dr. Robert Unckless

Relationship: current postdoc advisor

Associate professor, group leader

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Email: unckless@ku.edu

Webpage: <https://molecularbiosciences.ku.edu/people/robert-unckless>

Prof. Dr. Michael E. Hood

Relationship: previous postdoc advisor

Professor, group leader

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Prof. Dr. John Pannell

Relationship: previous postdoc advisor

Professor, group leader

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Webpage: <https://www.unil.ch/dee/en/home/menuinst/people/group-leaders/prof-john-pannell.html>

Prof. Dr. Leo W. Beukeboom

Relationship: PhD advisor

Professor, group leader in Evolutionary Genetics group

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