

# Wen-Juan Ma

Assistant Professor  
Biology Department | Vrije Universiteit Brussel

Pleinlaan 2  
1050 Brussels, Belgium  
wen-juan.ma@vub.be  
wenjuanma84@gmail.com  
ORCID: 0000-0003-2585-6406  
www.wmalab.com  
+32 2 629 3416

## 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

2023	€2,500	<b>Global Minds Staff Mobility grant</b>
2023	€575,000	<b>COST European Cooperation in Science &amp; Technology grant</b> (partner PI)
2023	€541,476	<b>FWO junior research grant</b> (leading PI)
2023	€999,460	<b>FWO medium-scale research infrastructure grant</b> (partner PI)

### Grant/Fellowship/Honors (in total: €1,682,450; \$25,500; ¥12,000)

2023	€500	<b>FWO travel grant</b>
2023-2027	€100,000	<b>VUB startup funding</b> , Vrije Universiteit Brussel, Belgium
2023-2028	€1,499,950	<b>ERC (European Research Council) Starting Grant</b>
05.2022	€500	<b>ESEB2022 conference aid grant</b>
02.2022	\$25,000	<b>K-INBRE Postdoc Awards Year 2022</b>
08.2021	€1,000	<b>ESEB satellite symposium fund</b> , 'The remarkable diversity in the rate and mechanisms of sex chromosome evolution'
05.2018	\$500	<b>Travel grant</b> , Society for the Study of Evolution
06.2016	¥1,000	<b>Team award</b> to fig-fig wasp coevolution, Chinese Academy of Sciences, China
2013	€500	<b>Travel grant</b> , Dutch Uyttenboogaart-Eliassen Foundation

2009-2014	€80,000	<b>PhD Ubbo Emmius faculty fellowship</b> , University of Groningen, The Netherlands
2009	¥2,000	<b>Best master thesis award of DiAo</b> , Chinese Academy of Sciences, China
2009	Top 4%	<b>Outstanding Graduate</b> in Xishuangbanna Tropical Botanical Garden, CAS, Chinese Academy of Sciences, China
2002-2006	¥4,000	<b>First-Class Departmental Scholarship</b> for 4 years, Nanyang Normal University, China
2006	Top 1%	<b>Outstanding Graduate</b> , Nanyang Normal University, China
2004	¥5,000	<b>National Scholarship for Excellent Study</b> (Top 0.1%), Nanyang Normal University, China

### Grant/fellowship passed interview stage but not funded

09.2019	£725,397	<b>*Royal Society University Research Fellowship</b> , shortlisted. I wrote the proposal <b>by myself</b> .
03.2018	€195,455	<b>**Maire-Curie Postdoc fellowship</b> ‘Guppy Young Y’ was awarded the ‘Marie Skłodowska-Curie Actions Seal of Excellence’. I wrote the proposal <b>by myself</b> .

\*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 11.2023: 654, h-index: 13, 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](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<sup>##</sup>, MM. Schoaib<sup>##</sup>, 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<sup>#</sup>, 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<sup>#</sup>, 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<sup>#</sup>, T Studer<sup>##</sup>, **W-J Ma**, S Sermier<sup>\*\*</sup>, 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<sup>\*\*</sup>, 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<sup>##</sup>, R Sermier<sup>\*\*</sup>, 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<sup>#</sup>, AG Nicieza, RP O'Donnell, N Rodrigues<sup>#</sup>, 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<sup>#</sup>, R Sermier<sup>\*\*</sup>, 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<sup>#</sup>, T Studer<sup>##</sup>, 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<sup>#</sup>, R Sermier<sup>\*\*</sup>, 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 25 departmental seminars, 6 symposiums and 1 workshop.

- |         |                                                                                                                                                           |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.2023 | <b>Current Topics in Zoology and Evolution Seminar.</b> University of Basel, CH                                                                           |
| 10.2023 | <b>IB2 Research Day 2023.</b> Interuniversity Institute of Bioinformatics in Brussels, Belgium                                                            |
| 05.2023 | <b>Evolution &amp; Ecology Seminar.</b> University of Lille, Lille, France                                                                                |
| 03.3023 | <b>Departmental Seminar.</b> Université Libre de Bruxelles, Brussels, Belgium                                                                             |
| 12.2022 | <b>Institute seminar.</b> KU Center for Genomics early career researcher seminar. University of Kansas, Lawrence KS, USA                                  |
| 07.2022 | <b>Departmental seminar.</b> University of Groningen, Groningen, The Netherlands                                                                          |
| 06.2022 | <b>Departmental seminar.</b> University of East Anglia, Norwich, UK                                                                                       |
| 05.2022 | <b>Departmental seminar.</b> University of Dublin, Dublin, Ireland                                                                                        |
| 04.2022 | <b>Departmental seminar.</b> Vrije Universiteit Brussel, Brussels, Belgium                                                                                |
| 02.2022 | <b>Institute seminar.</b> Earlham Institute, Norwich, UK                                                                                                  |
| 02.2022 | <b>Institute seminar.</b> The Institute of Functional Genomics of Lyon, Lyon, France                                                                      |
| 07.2021 | <b>Departmental seminar.</b> School of Life Sciences, University of Essex, Colchester, UK                                                                 |
| 02.2021 | <b>Departmental seminar.</b> Department of Biology, Southeast Missouri State University, Cape Girardeau, MO, USA                                          |
| 09.2020 | <b>EEB Genetics seminar.</b> Department of Ecology & Evolutionary Biology and Department of Molecular Bioscience, University of Kansas, Lawrence, KS, USA |
| 06.2020 | <b>Evolutionary Biology Group seminar.</b> 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’, 9<sup>th</sup> 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 20 international conferences, and presented a poster at 11 conferences.

- 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** 55<sup>th</sup> 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 54<sup>th</sup> 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 21x)

- 06.2023 **Tree of Sex 2.0 workshop**, Sanger Institute, Cambridge, UK  
 05.2023 **Supervisor Training**, Vrije Universiteit Brussel, Brussels, Belgium  
 05.2022 **1<sup>st</sup> 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 11.2023, total = 49)

- 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
- Peer Community IN (PCI) EvolBiol
- Evolution
- Journal of Evolutionary Biology

- Heredity
- Genes
- Journal of Heredity
- Axios
- Entomologia Experimentalis et Applicata
- Biological Journal of the Linnean Society
- General and Comparative Endocrinology
- 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

**Guest lecturer (Evolution)**

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

**Co-Titular (Integrative Practical Biology)**

Fall 2023 Titular for course ‘Integrative Practical Biology’ (2<sup>nd</sup> year bachelor course), Vrije Universiteit Brussel, Brussels, Belgium

**Titular** (Evolutionary Genetics and Genomics of Sex)

Fall 2023 Titular for course ‘Evolutionary Genetics and Genomics’ (1<sup>st</sup> year Master course), Vrije Universiteit Brussel, Brussels, Belgium

**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	<b>Teaching assistant, ‘Molecular Genetics’, Master course,</b> University of Lausanne, Switzerland
09-10.2016	<b>Teaching assistant, ‘Molecular Genetics’, Master course,</b> University of Lausanne, Switzerland
02-06.2016	<b>Teaching assistant, ‘Zoology’, Undergraduate course,</b> University of Lausanne, Switzerland
09-10.2015	<b>Teaching assistant, ‘Molecular Genetics’, Master course,</b> University of Lausanne, Switzerland
02-06.2015	<b>Teaching assistant, ‘Zoology’, Undergraduate course,</b> University of Lausanne, Switzerland
09-10.2014	<b>Teaching assistant, “Molecular Genetics”, Master course,</b> University of Lausanne, Switzerland

## Mentoring activities

**Postdoc advisor**

02.2024- (schedule to start) **Fantin Carpentier**, Biology Department, VUB, Brussels, Belgium  
 01.2024- (schedule to start) **Barbora Augstenová**, Biology Department, VUB, Brussels, Belgium  
 11.2023- **Meriç Erdolu**, Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

10.2023- **Sagar Shinde**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

01.2023- **Paris Veltsos**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

### **PhD student supervision**

12.2023- **Promoter of PhD candidate Zoë De Corte**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

12.2023- **Promoter of PhD candidate Hatice Ezgi Unal**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

01.2024 (schedule to start) **Promoter of PhD candidate Hatice Ezgi Unal**. Biology Department, Vrije Universiteit Brussel, Brussels, Belgium

### **Supervising/mentoring experience (5 technicians, 12 undergraduates, 5 master students)**

10.2023- **Supervisor of an undergraduate project**, Ezel Hahar Balci, Vrije Universiteit Brussel, BL

10.2023- **Supervisor of an undergraduate project**, Benjamin Aime Allaer, Vrije Universiteit Brussel, BL

08-09.2023 **Summer internship Master student**, Fanny Kratz, Vrije Universiteit Brussel, BL

08-09.2023 **Summer internship undergraduate student**, Tristan Cornells, Vrije Universiteit Brussel, BL

06-11.2023 **Supervisor of animal lab technician**, Marzie Bagheri, Vrije Universiteit Brussel, BL

04.2023- **Supervisor of an undergraduate project**, Marie Aerts, Vrije Universiteit Brussel, BL

04.-06.2023 **Supervisor of a first-step Master project**, Marzie Bagheri, Vrije Universiteit Brussel, BL

04.2023- **Supervisor of lab technician**, Evert Bruyninckx, Vrije Universiteit Brussel, BL

01.2023- **Supervisor of lab technician**, Ann Pauwels, Vrije Universiteit Brussel, BL

09.2021-02.2022 **Supervisor of an undergraduate project**, Jordanne Paxton, University of Kansas, KS, USA

06.2021-08.2022 **Supervisor of an undergraduate project**, Murtaza Shoaib, University of Kansas, KS, 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, Switzerland

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** during the course '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**

01.2023 - Jie Wang, Max Planck Institute for plant breeding research

04.2023 - Sophie Smith, Leibniz Institute for the Analysis of Biodiversity Change (LIB)

### **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**

06.2023 - Phebe Arnauts Bachelor thesis ‘From fungi to leather-like materials: how do mycelium materials differ depending on the fungal species’, VUB, Brussels, BL

06.2023 - Nathan van Dam, Bachelor thesis ‘Model reduction of neural induction in ascidian embryo’, VUB, Brussels, BL

## **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 1<sup>st</sup> 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 **Active discussion on DEIB issues** in undergraduate researchers working in the lab during lab journal club discussion
- 11.2020
- 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 –  
Royal Belgian Zoological Society (**RBZS**): 2023-

## References (for research and teaching)

### **Prof. Dr. Robert Unckless**

Relationship: current postdoc advisor

Associate professor, group leader

Department of Molecular Biosciences

University of Kansas,

Lawrence, Kansas 66045, USA

Phone: +1 785 864 1679

Email: unckless@ku.edu

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

### **Prof. Dr. Michael E. Hood**

Relationship: previous postdoc advisor

Professor, group leader

Department of Biology, Amherst College

Amherst, MA 01002-5000, USA

Phone: +1 413 542-8538

Email: MHood@amherst.edu

Webpage: <https://www.amherst.edu/people/facstaff/mhood>

### **Prof. Dr. John Pannell**

Relationship: previous postdoc advisor

Professor, group leader

Department of Ecology and Evolution

University of Lausanne,

CH-1005, Lausanne, Switzerland

Phone: +4121 692 41 70

Email: John.Pannell@unil.ch

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

Groningen Institute for Evolutionary Life Sciences (GELIFES)

University of Groningen

P.O Box 11103

9700 CC Groningen, The Netherlands

CV

Wen-Juan Ma

Phone: +31 50 363 8448

Email: [l.w.beukeboom@rug.nl](mailto:l.w.beukeboom@rug.nl)

Webpage: <http://www.rug.nl/staff/l.w.beukeboom/>