

## **Selected MBE & GBE papers for the virtual issue on sex chromosome evolution**

Baird RB, Urban JM, Mongue AJ, Jaron KS, Hodson CN, Grewoldt M, Martin SH, Ross L. 2023. Recent Evolution of a Maternally Acting Sex-Determining Supergene in a Fly with Single-Sex Broods. *Mol Biol Evol* 40:msad148.

Bechsgaard J, Schou MF, Vanthournout B, Hendrickx F, Knudsen B, Settepani V, Schierup MH, Bilde T. 2019. Evidence for Faster X Chromosome Evolution in Spiders. *Mol Biol Evol* 36:1281–1293.

Brown EJ, Nguyen AH, Bachtrog D. 2020. The *Drosophila* Y Chromosome Affects Heterochromatin Integrity Genome-Wide. *Mol Biol Evol* 37:2808–2824.

Chen X, Zhang J. 2015. No X-Chromosome Dosage Compensation in Human Proteomes. *Mol. Biol. Evol.*

Decroly T, Vila R, Lohse K, Mackintosh A. 2024. Rewinding the Ratchet: Rare Recombination Locally Rescues Neo-W Degeneration and Generates Plateaus of Sex-Chromosome Divergence. *Mol Biol Evol* 41:msae124.

Dufresnes C, Brelsford A, Baier F, Perrin N. 2021. When Sex Chromosomes Recombine Only in the Heterogametic Sex: Heterochiasmy and Heterogamety in *Hyla* Tree Frogs. *Mol Biol Evol* 38:192–200.

Furman BLS, Evans BJ. 2018. Divergent Evolutionary Trajectories of Two Young, Homomorphic, and Closely Related Sex Chromosome Systems. *Genome Biol Evol* 10:742–755.

Furman BLS, Metzger DCH, Darolti I, Wright AE, Sandkam BA, Almeida P, Shu JJ, Mank JE. 2020. Sex Chromosome Evolution: So Many Exceptions to the Rules. *Genome Biol Evol* 12:750–763.

Gu L, Walters JR. 2017. Evolution of Sex Chromosome Dosage Compensation in Animals: A Beautiful Theory, Undermined by Facts and Bedeviled by Details. *Genome Biol Evol* 9:2461–2476.

Kaufmann P, Wiberg RAW, Papachristos K, Scofield DG, Tellgren-Roth C, Immonen E. 2023. Y-Linked Copy Number Polymorphism of Target of Rapamycin Is Associated with Sexual Size Dimorphism in Seed Beetles. *Mol Biol Evol* 40:msad167.

Kazama Y, Kitoh M, Kobayashi T, Ishii K, Krasovec M, Yasui Y, Abe T, Kawano S, Filatov DA. 2022. A CLAVATA3-like Gene Acts as a Gynoecium Suppression Function in White Campion. *Mol Biol Evol* 39:msac195.

Lemaitre C, Braga MDV, Gautier C, Sagot M-F, Tannier E, Marais GAB. 2009. Footprints of Inversions at Present and Past Pseudoautosomal Boundaries in Human Sex Chromosomes. *Genome Biol Evol* 1:56–66.

Martin H, Carpentier F, Gallina S, Godé C, Schmitt E, Muyle A, Marais GA, Touzet P. 2019. Evolution of young sex chromosomes in two dioecious sister plant species with distinct sex determination systems. *Genome Biol Evol*.

Muyle A, Käfer J, Zemp N, Mousset S, Picard F, Marais GA. 2016. SEX-DETECTOR: A Probabilistic Approach to Study Sex Chromosomes in Non-Model Organisms. *Genome Biol Evol* 8:2530–2543.

Muyle A, Shearn R, Marais GA. 2017. The Evolution of Sex Chromosomes and Dosage Compensation in Plants. *Genome Biol Evol* 9:627–645.

Rifkin JL, Beaudry FEG, Humphries Z, Choudhury BI, Barrett SCH, Wright SI. 2021. Widespread Recombination Suppression Facilitates Plant Sex Chromosome Evolution. *Mol Biol Evol* 38:1018–1030.

Rodrigues N, Studer T, Dufresnes C, Perrin N. 2018. Sex-Chromosome Recombination in Common Frogs Brings Water to the Fountain-of-Youth. *Mol Biol Evol* 35:942–948.

Sacchi B, Humphries Z, Kružlicová J, BodlÁková M, Pyne C, Choudhury BI, Gong Y, Bačovský V, Hobza R, Barrett SCH, et al. 2024. Phased Assembly of Neo-Sex Chromosomes Reveals Extensive Y Degeneration and Rapid Genome Evolution in *Rumex hastatulus*. *Mol Biol Evol* 41:msae074.

Sardell JM, Josephson MP, Dalziel AC, Peichel CL, Kirkpatrick M. 2021. Heterogeneous Histories of Recombination Suppression on Stickleback Sex Chromosomes. *Mol Biol Evol* 38:4403–4418.

Saunders PA, Ferre-Ortega C, Hill PL, Simakov O, Ezaz T, Burrige CP, Wapstra E. 2024. Using a Handful of Transcriptomes to Detect Sex-Linked Markers and Develop Molecular Sexing Assays in a Species with Homomorphic Sex Chromosomes. *Genome Biol Evol* 16:evae060.

Shaw DE, Naftaly AS, White MA. 2024. Positive Selection Drives cis-regulatory Evolution Across the Threespine Stickleback Y Chromosome. *Mol Biol Evol* 41:msae020.

Wilson Sayres MA. 2018. Genetic Diversity on the Sex Chromosomes. *Genome Biol Evol* 10:1064–1078.

Yang W, Wang D, Li Y, Zhang Z, Tong S, Li M, Zhang X, Zhang L, Ren L, Ma X, et al. 2021. A General Model to Explain Repeated Turnovers of Sex Determination in the Salicaceae. *Mol Biol Evol* 38:968–980.