

1. Invernizzi, P., Pasini, S., Selmi, C., Eric Gershwin, M. & Podda, M. Female predominance and X chromosome defects in autoimmune diseases. *Journal of Autoimmunity* vol. 33 12–16 (2009).
2. Angum, F., Khan, T., Kaler, J., Siddiqui, L. & Hussain, A. The Prevalence of Autoimmune Disorders in Women: A Narrative Review. *Cureus* 12, e8094 (2020).
3. Sauteraud, R. *et al.* Inferring genes that escape X-Chromosome inactivation reveals important contribution of variable escape genes to sex-biased diseases. *Genome Res.* 31, 1629–1637 (2021).
4. Carrel, L. & Willard, H. F. X-inactivation profile reveals extensive variability in X-linked gene expression in females. *Nature* vol. 434 400–404 (2005).
5. Youness, A., Miquel, C.-H. & Guéry, J.-C. Escape from X Chromosome Inactivation and the Female Predominance in Autoimmune Diseases. *Int. J. Mol. Sci.* 22, (2021).
6. Fish, E. N. The X-files in immunity: sex-based differences predispose immune responses. *Nat. Rev. Immunol.* 8, 737–744 (2008).
7. Brooks, W. H. & Renaudineau, Y. Epigenetics and autoimmune diseases: the X chromosome-nucleolus nexus. *Front. Genet.* 6, 22 (2015).
8. Sierra, I. & Anguera, M. C. Enjoy the silence: X-chromosome inactivation diversity in somatic cells. *Curr. Opin. Genet. Dev.* 55, 26–31 (2019).
9. Tukiainen, T. *et al.* Landscape of X chromosome inactivation across human tissues. *Nature* 550, 244–248 (2017).
10. Panning, B. X-chromosome inactivation: the molecular basis of silencing. *J. Biol.* 7, 30 (2008).
11. Clerc, P. & Avner, P. Random X-chromosome inactivation: skewing lessons for mice and men. *Curr. Opin. Genet. Dev.* 16, 246–253 (2006).

12. Garieri, M. *et al.* Extensive cellular heterogeneity of X inactivation revealed by single-cell allele-specific expression in human fibroblasts. *Proc. Natl. Acad. Sci. U. S. A.* 115, 13015–13020 (2018).
13. Shvetsova, E. *et al.* Skewed X-inactivation is common in the general female population. *Eur. J. Hum. Genet.* 27, 455–465 (2019).
14. Accounting for sex in the genome. *Nature Medicine* vol. 23 1243–1243 (2017).
15. Bustamante, C. D., De La Vega, F. M. & Burchard, E. G. Genomics for the world. *Nature* vol. 475 163–165 (2011).
16. Popejoy, A. B. & Fullerton, S. M. Genomics is failing on diversity. *Nature* vol. 538 161–164 (2016).
17. Kaul, A. *et al.* Systemic lupus erythematosus. *Nature Reviews Disease Primers* vol. 2 (2016).
18. Atisha-Fregoso, Y., Jakez-Ocampo, J. & Llorente, L. Systemic lupus erythematosus in Hispanics. *Autoimmunity* vol. 44 555–561 (2011).
19. Langefeld, C. D. *et al.* Transancestral mapping and genetic load in systemic lupus erythematosus. *Nat. Commun.* 8, 16021 (2017).
20. Lin, I. *et al.* Central 22q11.2 deletion (LCR22 B-D) in a fetus with severe fetal growth restriction and a mother with severe systemic lupus erythematosus: Further evidence of *CRKL* haploinsufficiency in the pathogenesis of 22q11.2 deletion syndrome. *American Journal of Medical Genetics Part A* vol. 185 3042–3047 (2021).
21. Perez, R. K. *et al.* Single-cell RNA-seq reveals cell type-specific molecular and genetic associations to lupus. *Science* vol. 376 (2022).
22. Need, A. C. & Goldstein, D. B. Next generation disparities in human genomics: concerns and remedies. *Trends in Genetics* vol. 25 489–494 (2009).

23. Guglielmi, G. Facing up to injustice in genome science. *Nature* 568, 290–293 (2019).
24. Liao, Y. *et al.* Surveillance of health status in minority communities - Racial and Ethnic Approaches to Community Health Across the U.S. (REACH U.S.) Risk Factor Survey, United States, 2009. *MMWR Surveill. Summ.* 60, 1–44 (2011).