

Figure 1 : The DNA sequence of the human X chromosome : Nature

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FIGURE 1. Features of the X chromosome sequence.

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[The DNA sequence of the human X chromosome](#)

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Nature **434**, 325-337(17 March 2005)

doi:10.1038/nature03440

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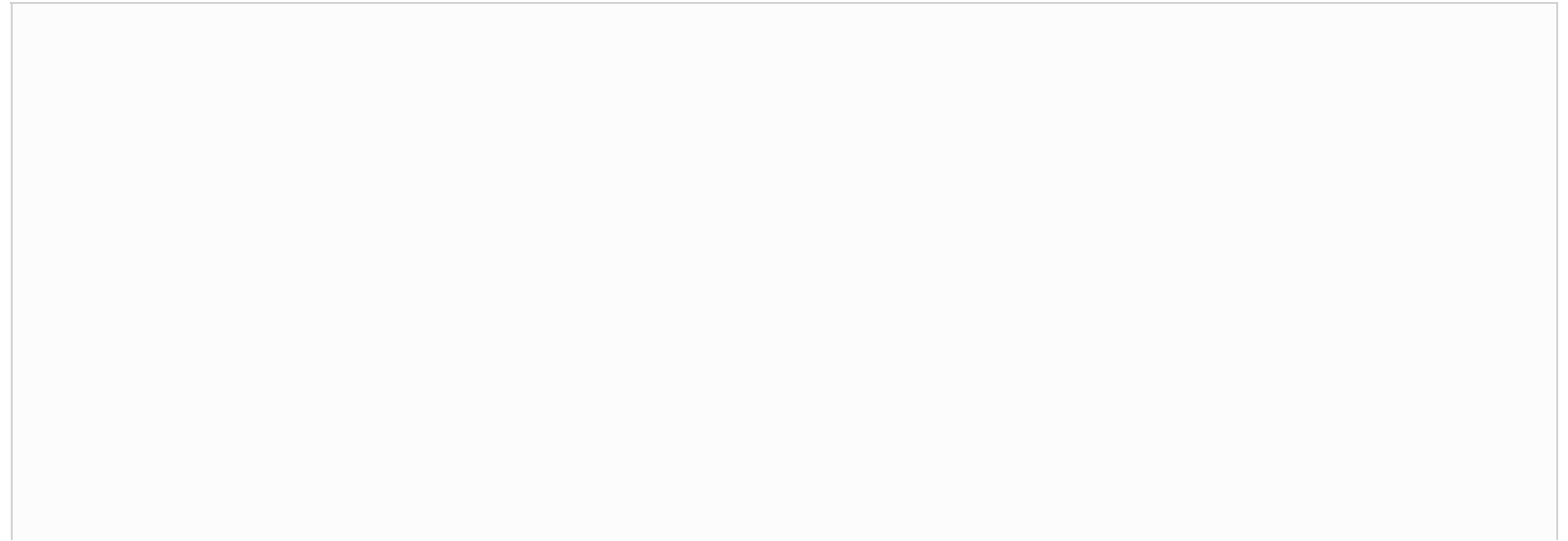
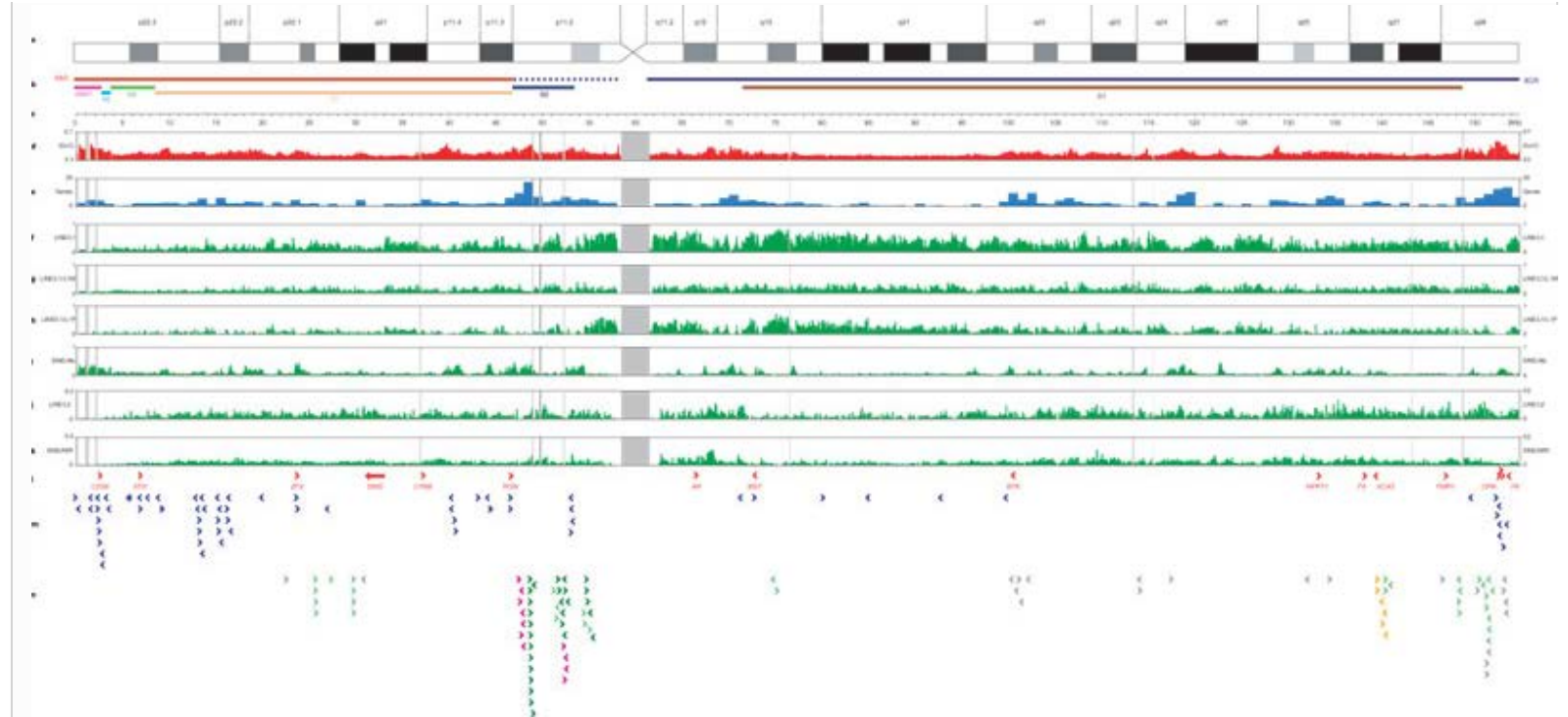


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a, X chromosome ideogram according to Francke⁶⁵. **b**, Evolutionary domains of the X chromosome: the X-added region (XAR), the X-conserved region (XCR; dotted region in proximal Xp does not appear to be part of the XCR), the pseudoautosomal region PAR1, and evolutionary strata S5–S1. **c**, Sequence scale in intervals of 1 Mb. Note that correlation between cytogenetic band positions and physical distance is imprecise, owing to varying levels of condensation of different Giemsa bands. **d**, (G + C) content of 100-kb sequence windows. **e**, Number of genes in 1-Mb sequence windows (pseudogenes not included). **f–k**, Fractional coverage of 100-kb sequence windows by interspersed repeats: L1 repeats (**f**), L1M subfamilies of L1 repeats (**g**), L1P subfamilies of L1 repeats (**h**), *Alu* repeats (**i**), L2 repeats (**j**), MIR repeats (**k**). Vertical grey lines in **d–k** represent gaps in the euchromatic sequence of the chromosome. Grey bar centred at approximately 60 Mb shows the position of the centromere. **l**, A selection of landmark genes on the chromosome. *OPN* refers to the three opsin genes in the reference sequence, which are organized as follows: cen-*OPN1LW-OPN1MW-OPN1MW*-tel. **m**, Genes that escape from X-chromosome inactivation as previously identified⁴⁸. **n**, Cancer-testis antigen genes, belonging to the *MAGE* (light green), *GAGE* (dark green), *SSX* (magenta), *SPANX* (orange) or other (grey) CT gene families. For the genes in **l–n**, arrows indicate the direction of transcription.

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