

Supplementary Data 8. Up, *Hox* gene cluster evolution in all species included in our dataset. Rectangular boxes represent *Hox* genes, while chromosomes or scaffolds (in the case of the draft genome of the enchytraeid) are symbolised as distinct horizontal lines. Tandem duplications are depicted by duplicated rectangles and are named with consecutive letters. Genes not classified as a *Hox* gene are represented by triangles, with the number of such genes depicted inside the triangle. Separations greater than 300kb between two non-consecutive *Hox* genes are represented by two vertical lines (||). Chromosomes are split in different lines when there are multiple copies of several genes of the *Hox* cluster in the same chromosome. Down, phylogeny of genes with homeodomains inferred in our dataset to delimit *Hox* genes.



