

Supplementary Data files

drosophila_archetypes_genes.

A list of genes corresponding to each spatial archetype for the *Drosophila* embryo.

SI_brain.

The ranked list of predicted spatially informative genes based on novoSpaRc's reconstruction for the brain cerebellum.

SI_fly.

The ranked list of predicted spatially informative genes based on novoSpaRc's reconstruction for the *Drosophila* embryo.

SI_intestine.

The list of predicted zonated genes based on novoSpaRc's reconstruction for the mammalian intestine.

SI_liver.

The list of predicted zonated genes based on novoSpaRc's reconstruction for the mammalian liver.

SI_zebrafish.

The ranked list of predicted spatially informative genes based on novoSpaRc's reconstruction for the zebrafish embryo.

SI_Table_Intestine_GO_enrichment.

Gene Ontology enrichment analysis for genes predicted by novoSpaRc to be zonated towards the crypt, the tip of the villus and predicted to be spatially non-monotonic along the crypt-to-villus axis in the mammalian intestine.

SI_Table_Liver_GO_enrichment.

Gene Ontology enrichment analysis for genes predicted by novoSpaRc to be zonated and expressed as periportal or pericentral along the liver lobule axis.