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EpiRegNet: constructing epigenetic regulatory networks from high throughput gene expression data for humans

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Summary: EpiRegNet, an interactive web server, is able to construct an epigenetic regulatory network (ERN) from gene expression data, including microarray and RNA-seq data for human ESC, IMR90 and CD4+ T cells. Given a set of categorized genes, the system will find the epigenetic factors that contribute most to the differences in the gene expression and construct an ERN around these factors. Furthermore, the web server can demonstrate cooperative/competitive relationships among these factors in activating or repressing their target genes.
Availability and Implementation: EpiRegNet is freely available on the web at http://wanglab.hku.hk/EpiRegNet/. It is implemented in perl, PHP and MySQL with all major browsers supported.