



<b>Title</b>	<b>EpiRegNet: constructing epigenetic regulatory networks from high throughput gene expression data for humans</b>
<b>Author(s)</b>	<b>Wang, Y; Wang, P; Li, J; Qin, J; Wang, XW; Zhang, MQ; Wang, JJ</b>
<b>Citation</b>	<b>The 2011 Hong Kong Inter-University Biochemistry Postgraduate Symposium, Hong Kong, 11 June 2011.</b>
<b>Issued Date</b>	<b>2011</b>
<b>URL</b>	<b><a href="http://hdl.handle.net/10722/140075">http://hdl.handle.net/10722/140075</a></b>
<b>Rights</b>	<b>Creative Commons: Attribution 3.0 Hong Kong License</b>

**P-H010**

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

**Yan Wang**

**Department of Biochemistry, The University of Hong Kong**

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.