

## 2<sup>nd</sup> International Conference on **Genomics & Pharmacogenomics**

September 08-10, 2014 DoubleTree by Hilton Hotel Raleigh-Brownstone-University, USA

### Using nascent RNAs to study the transcriptional regulation in adipocytes

**Kyoung-Jae Won**

University of Pennsylvania, USA

**R**osiglitazone (Rosi) is an insulin sensitizing drug that functions as a ligand for PPAR $\gamma$  and remodels the transcriptome of mature adipocytes. However, the direct effects of Rosi on genomic transcription have not been evaluated. Here, using global run-on followed by deep sequencing (GRO-seq), we demonstrate that Rosi has dramatic effects on RNA transcription in mature adipocytes.

#### Biography

Kyoung-Jae Won has completed his PhD from University of Southampton, UK in 2006 and Postdoctoral studies from University of Copenhagen, Denmark and University of California, San Diego. He is a Research Assistant Professor of Genetics at the University of Pennsylvania. He has published more than 20 papers in reputed journals. His research interest is in developing integrative and comparative methods using genomic and epigenomic data to study cell-type specific gene regulation. He performed a large-scale analysis using various types of datasets including ChIP-seq, DNase-seq, GRO-seq and RNA-seq. Using integrative approaches, he studied regulatory mechanisms in various tissue- or cell-types including adipocytes, liver, embryonic stem cells (ESCs) and cancer cells.

[wonk@mail.med.upenn.edu](mailto:wonk@mail.med.upenn.edu)