

DESCRIPTION FOR THE GENERAL PUBLIC (IN ENGLISH)

Histone and DNA modifications are important for cell function. Alterations in normal epigenetic marks can lead to deregulation of cell function by changes in genes expression. How homocysteine (Hcy) and homocysteine thiolactone (HTL) affect proteins in our cells has been a subject of intense studies by our group and other investigators. In this project, we will elucidate how these metabolites affect not only proteins involved in epigenetic mechanisms but also microRNAs which regulate these genes. Our results will provide better understanding of how Hcy and HTL can deregulate cellular function.