Bio 210A
Epigenetics Important Concepts

- The difference between genetic and epigenetic factors affecting phenotypes. Not which are determined by the genotype and which is(are) affected by environmental factors.
- Understand the dynamic interaction between experience and gene expression and the molecular mechanism involved.
- Explain the role of epigenetic factors in modulating gene expression over time, between identical twins, adult disease conditions including cancer.
- Define “imprinting” and the role of epigenetic factors.
- Explain the trans-generational effect of environmental factors and its correlation with exposure during specific sensitive periods coinciding with onset of gamete formation in males and females.