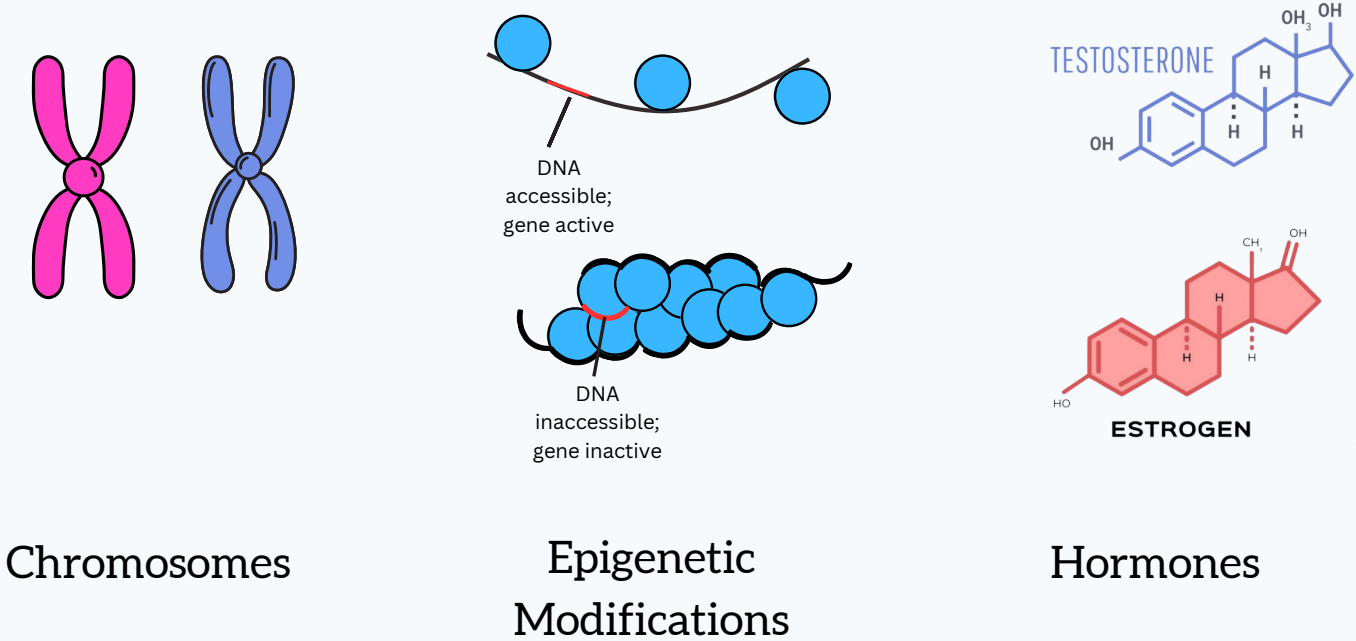


Sex & HIV Cure Research

What determines "sex"?

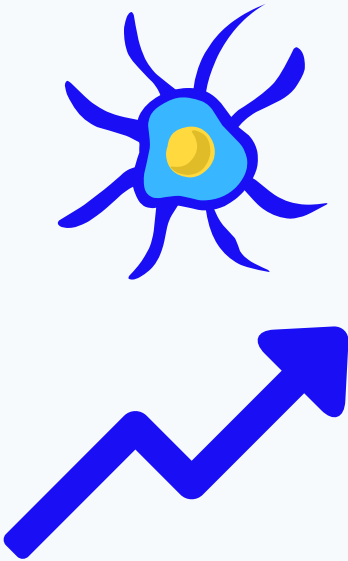


Clues that sex matters

Females have higher:

- CD4+ T cell counts
- CD4/CD8 ratios
- Macrophages phagocytic activity
- Markers of immune activation

Meier et al Nature 2009; Adapted from Addo et al. JID 2014

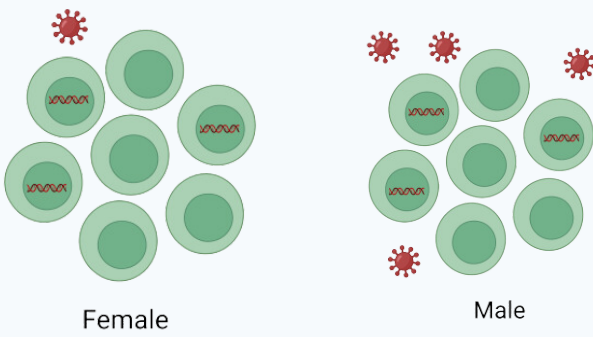


Immunology & Sex

Many immune genes are on X chromosome

Incomplete X chromosome inactivation (*because women only need one to code for genes*) as an embryo leads to increased expression of immune proteins

Impact on cure



Females have the **SIMILAR** frequency of cells harboring HIV DNA but **LESS** detectable ongoing HIV transcription

Reichelderfer AIDS 2000; Scully JID 2019

Estrogen may limit reactivation

