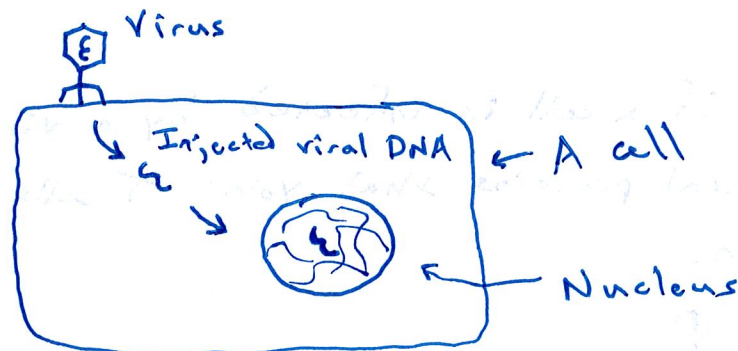


# T Cell Function

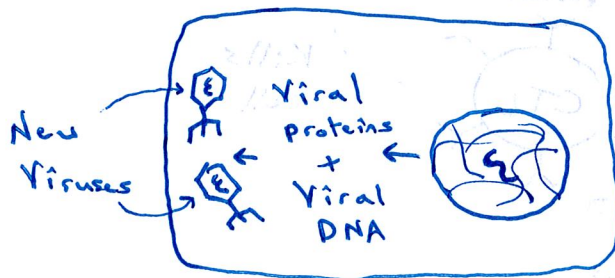
Dr. Kelly

1. A virus attaches to and infects a cell.

[Note: which cell type the virus infects depends on the type of virus.]

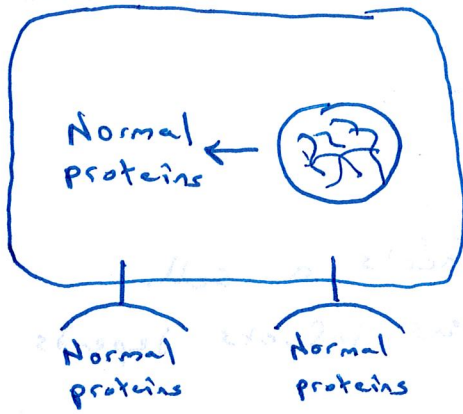


2. The viral DNA hijacks the cell. The cell begins producing viral proteins and copies of the viral genetic material in order to make many new virus particles.



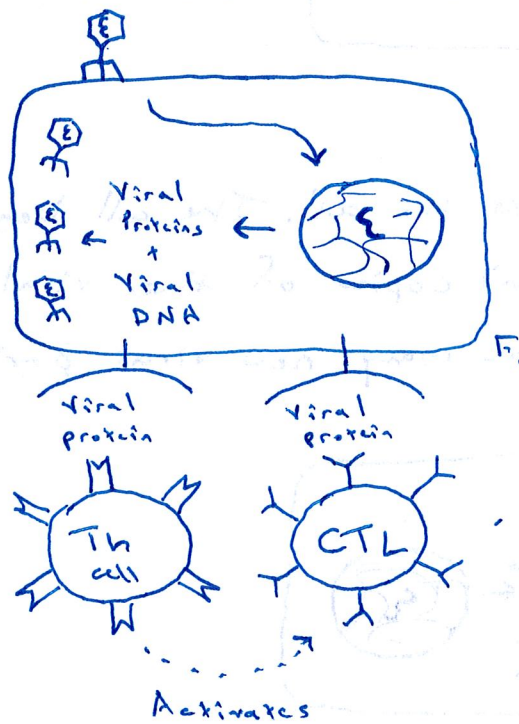
3. To protect themselves against intracellular pathogens, your cells continuously present samples of the proteins being produced inside them.

(over)



Under normal circumstances, your cells produce and present no foreign antigens that would activate your T cells.

4. However, if a cell is infected by a virus, it will present viral proteins that your T cells will recognize as foreign.



Th: Helper T cell

CTL: Cytotoxic T lymphocyte  
"Killer T cell"

5. If both a CTL and a Th cell recognize foreign antigen, the Th cell will activate the CTL. The CTL multiplies and begins to kill any cells presenting the foreign viral antigen.

6. Memory T cells. When the pathogen is defeated most of the multiplied T cells die off, but some remain to serve as memory T cells.