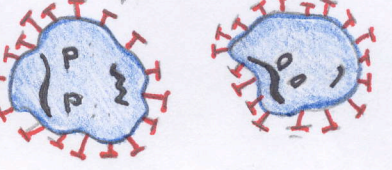


AIDS

Human Immunodeficiency Virus

is a retrovirus!

I attach CD4 T cells in the human body. Once your CD4 T cell drops you develop AIDS (acquired immunodeficiency syndrome)

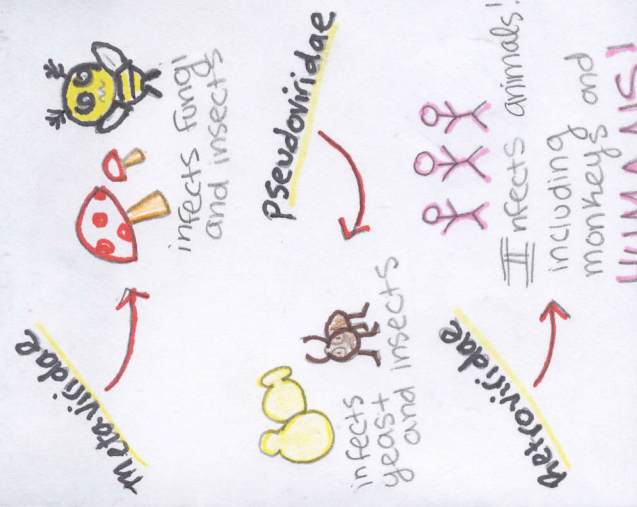


Prevention is the only way to avoid these deadly diseases.

For more information on HIV research visit:

www.oar.nih.gov

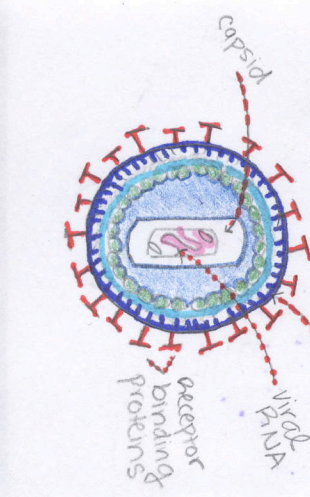
Classes of retroviruses



Retroviruses

Starting with HIV itself!
by Kalyani Kumar

five microscopic manual



Retroviruses are viruses that have a genome composed of RNA instead of DNA. The actual genome is enclosed in a protein capsid which is surrounded by a lipid envelope.

What is a Retrovirus?

But retroviruses are sneaky.

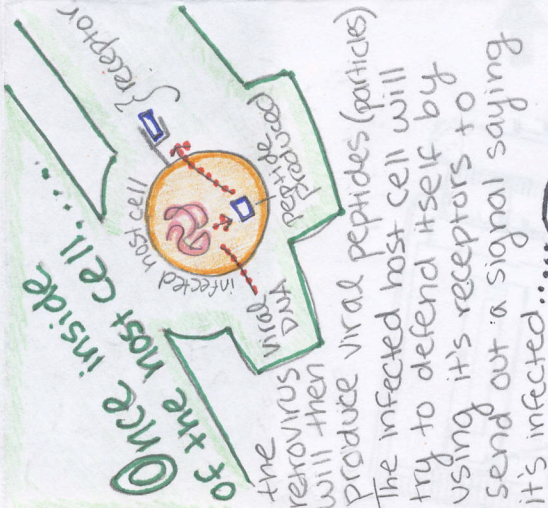
They can produce a large variety of peptides so sometimes a host cell may not be able to send out a signal and an infected cell can go undetected...



Infected!

The host cell is now infected! Retroviruses use the enzyme reverse transcriptase in order to convert their RNA into DNA. They are then able to insert their DNA into the genome of a nearby host cell using the enzyme integrase.

How does it replicate?



But as signals are sent out by its receptors to defend host cell it's infected... T-cells will attempt to destroy this infected cell before the virus spreads... HELP! I'm infected!