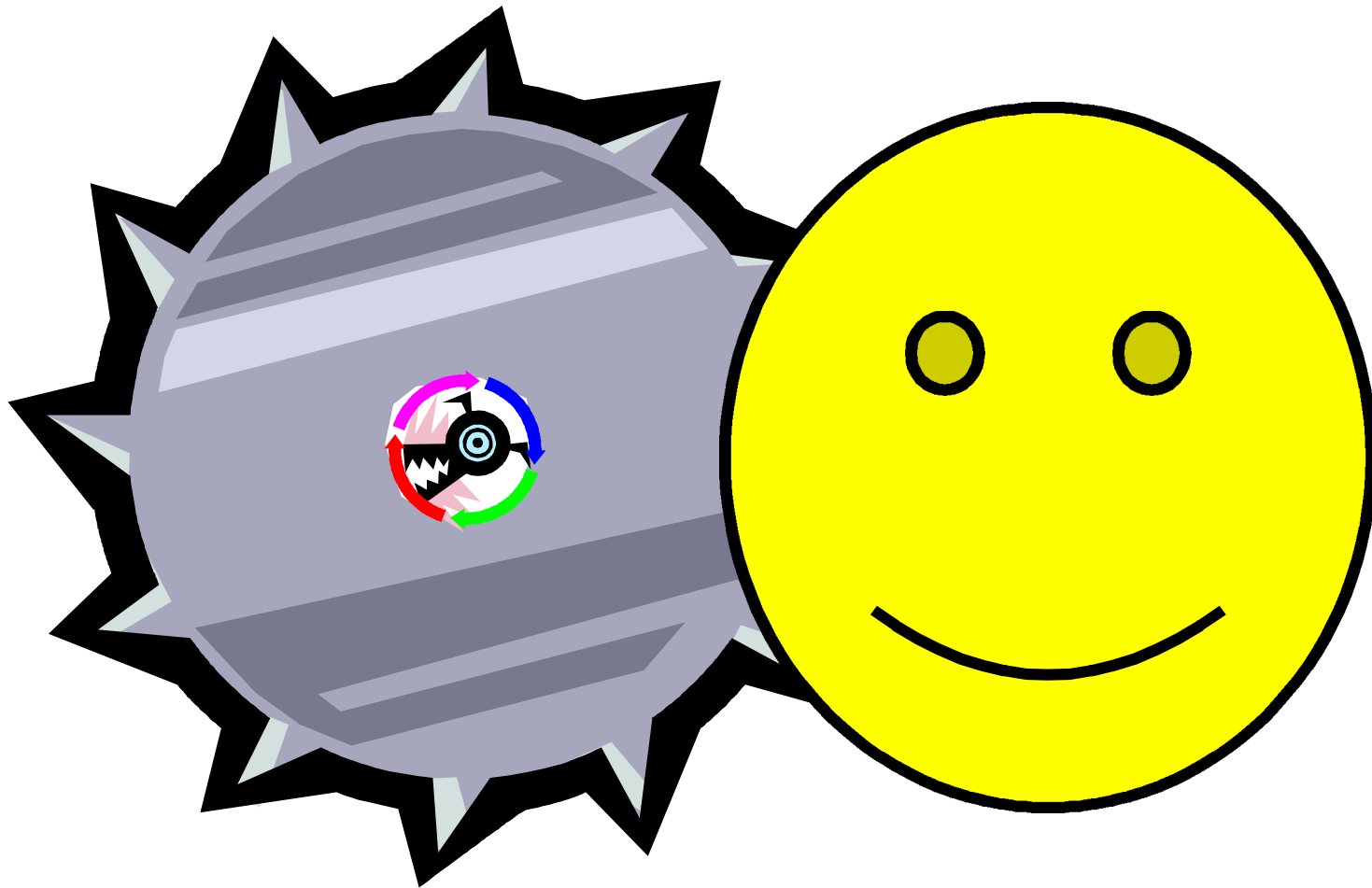


Child Care Training and Resource Kit

HIV/AIDS

Overheads

The Story of HIV Infection



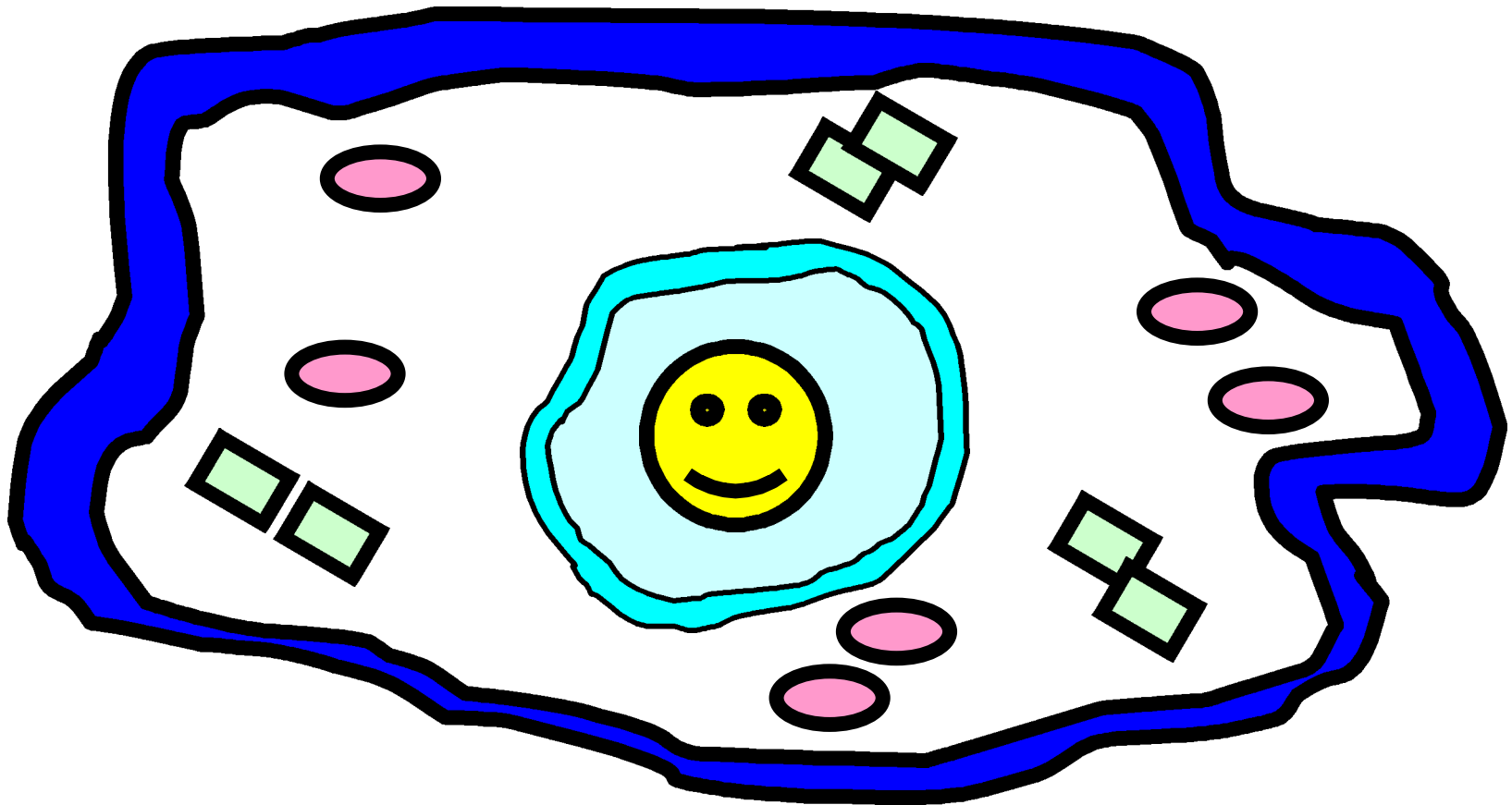
OBJECTIVES:

You will know:

- **The difference between HIV and AIDS**
- **About the infection**
- **How HIV is transmitted**
- **Testing information**
- **Treatment options**
- **Risky behaviors**
- **Prevention**
- **HIV infected children**
- **Universal precautions**

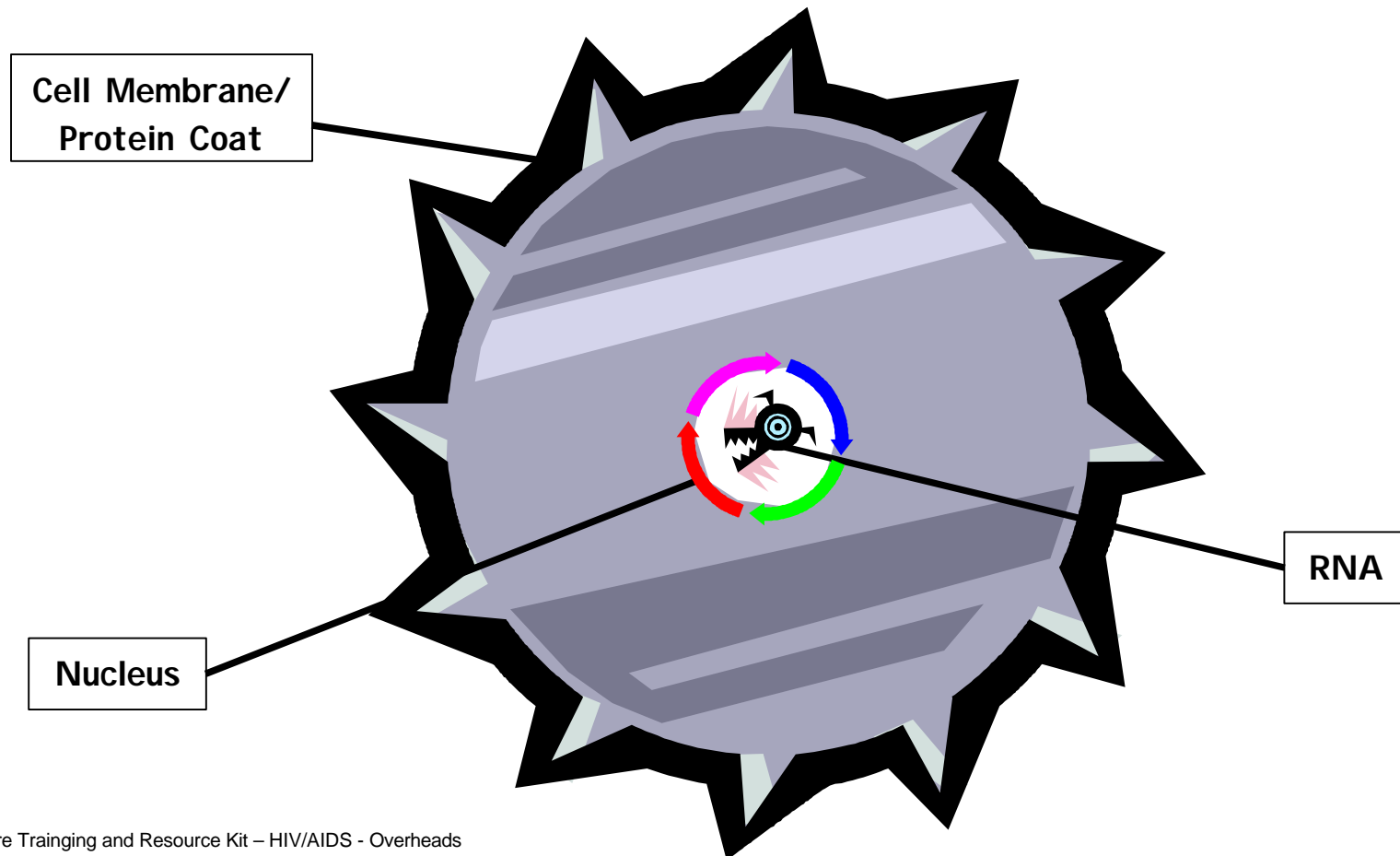
T4 Cell

The T4 cell is one of the main characters in this story. The T4 is one of several white blood cells in the body that act as part of the immune system. There are three main types of T-Cells; the helper, the killer, and the suppresser. The T4 is one of the helper cells.



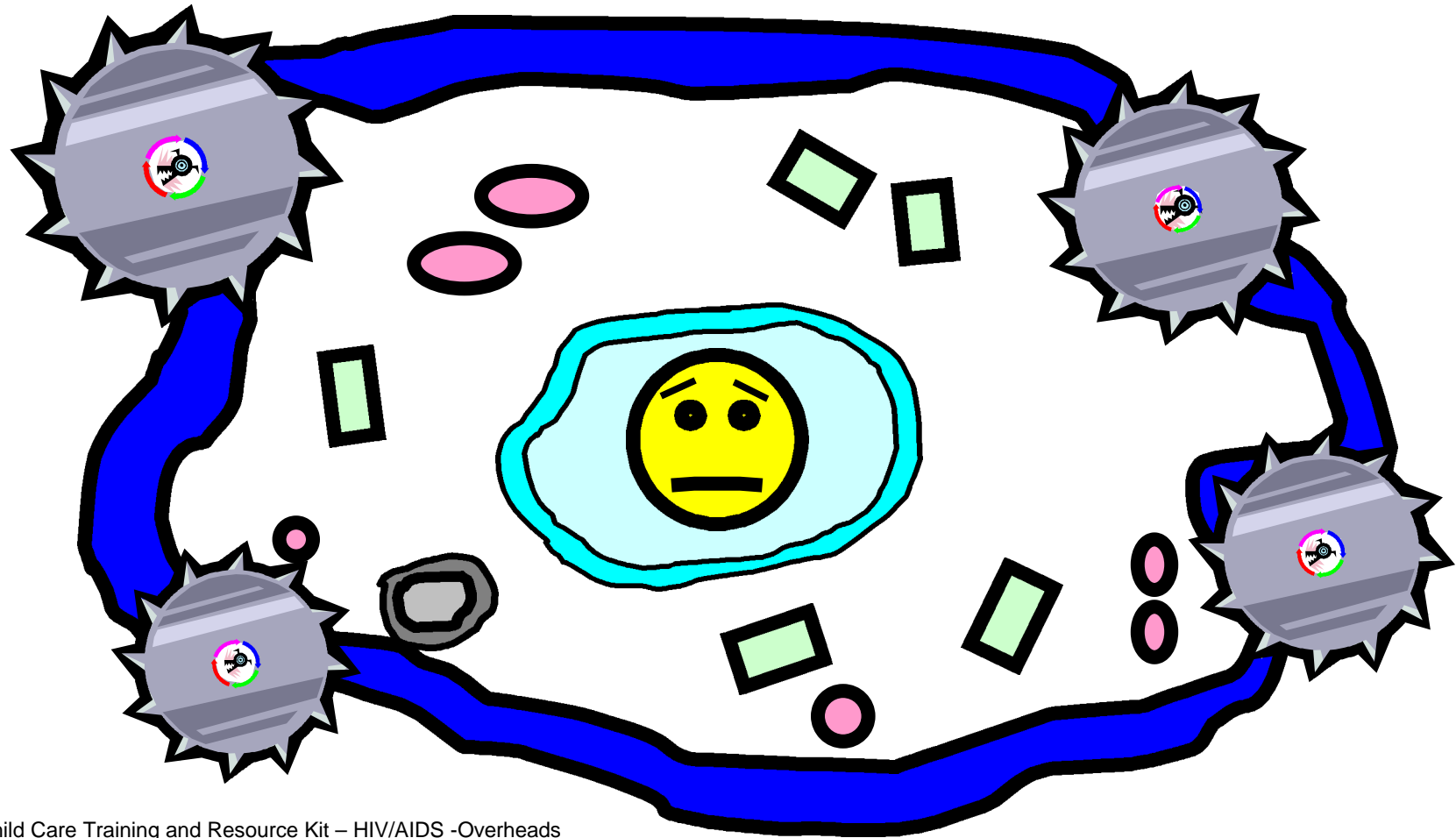
HIV

The Human Immuno-Deficiency virus is the bad guy. HIV is a virus that carries genetic material in the form of RNA and contains an enzyme, reverse transcriptase. Like all viruses, HIV can only replicate inside a cell by taking over the cell's machinery to reproduce itself.



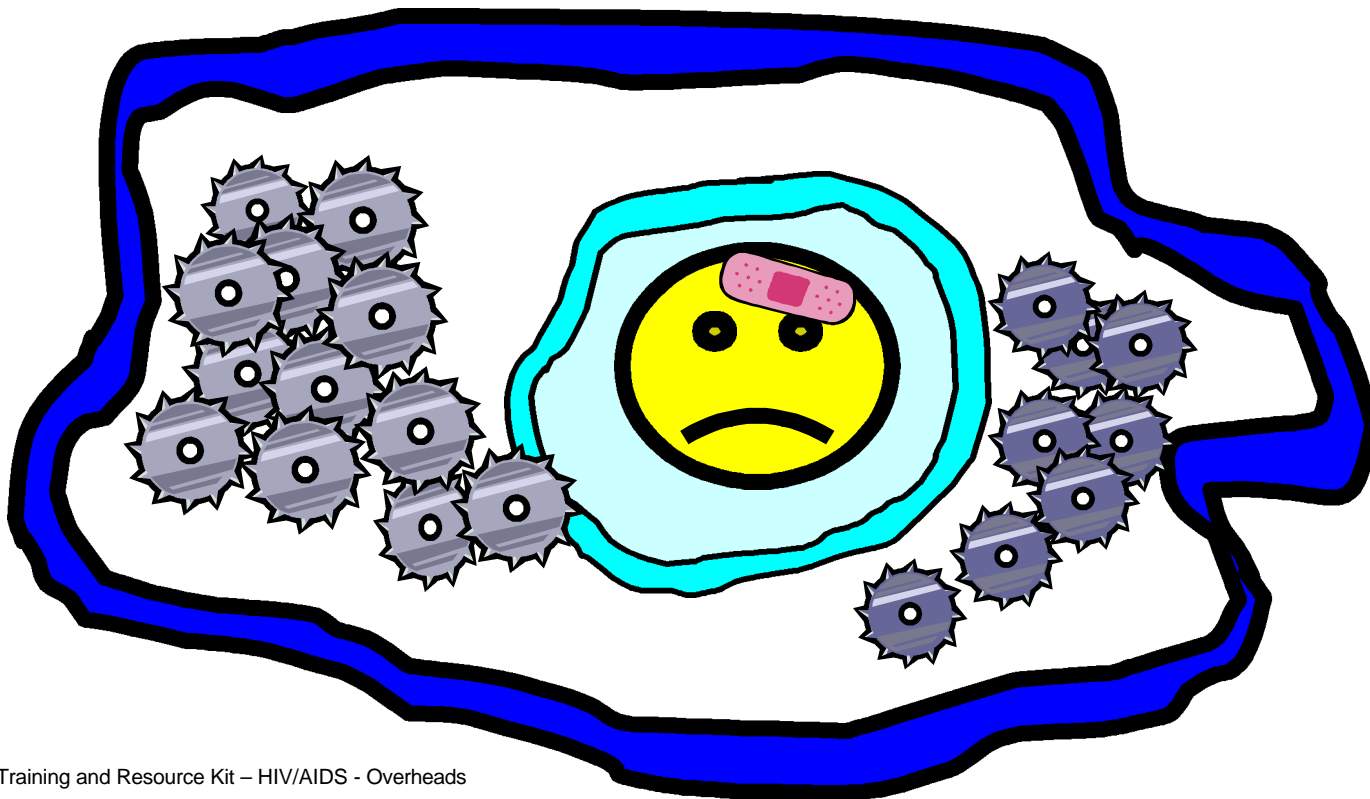
Attacking the T4 Cell

Upon entering the bloodstream HIV identifies a suitable host, the T4 cell. Due to the compatibility of the structure of the protein coats of both the HIV virus and the T4 cell, HIV is able to link with and gain access to the interior of the T4 cell.



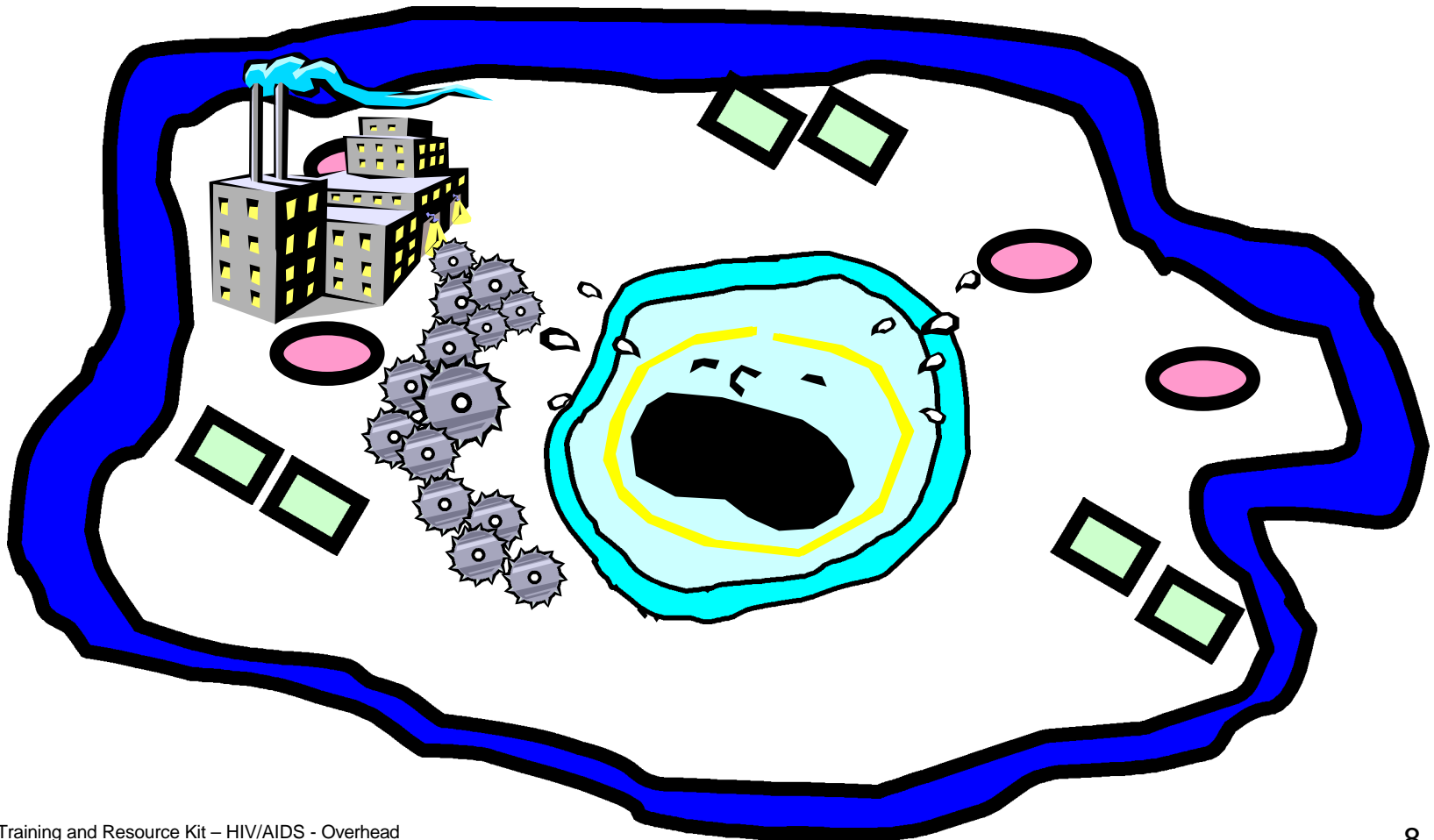
Conversion

Once the T4 has been stripped of all of its resources another enzyme, protease, begins the process of breaking down the T4's altered DNA and converts the individual pieces into viral RNA. This newly produced RNA is then injected into the new HIV protein shells.



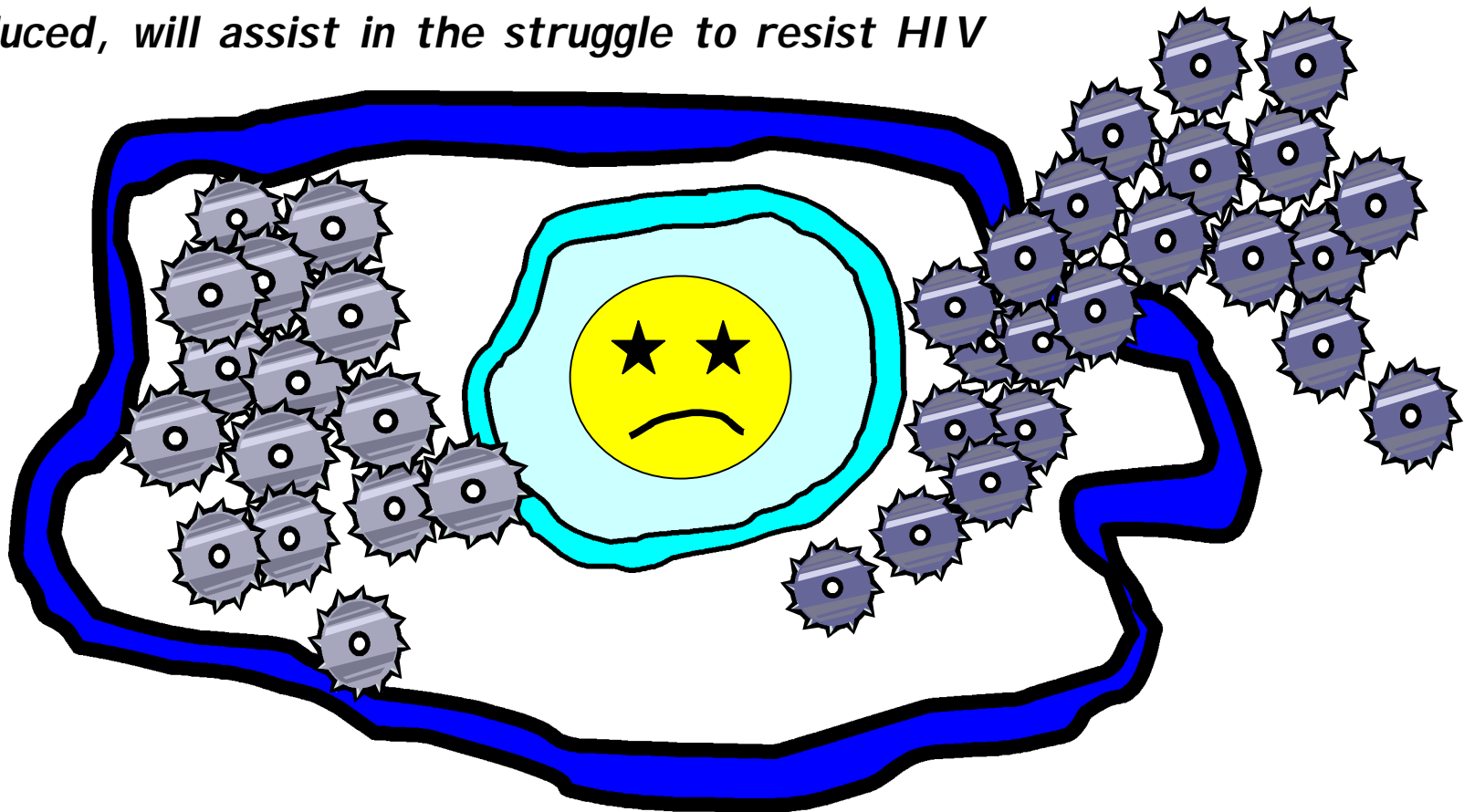
HIV Reproduces

The altered T4 cell changes functions and instead of acting as part of the immune system it becomes a viral factory. The T4 begins using its own resources to produce new protein shells for HIV.



Rebirth

The T4, finally depleted, bursts open releasing the newly produced HIV to then continue the process of infection. The newly released virus then enters the blood system to infect additional T4 cells and begin the whole process over again. The battle is now engaged, antibodies, when produced, will assist in the struggle to resist HIV



TRANSMISSION

The four fluids that transmit HIV:







Blood

Semen

Vaginal Fluid

Breast Milk

What Have You Learned?

-  HIV is the infection
-  AIDS is the disease
-  Transmission is through four fluids:
blood, semen, vaginal fluid & breast milk
-  Spread of HIV can be prevented
-  The blood supply in the U.S. is very safe
-  Drug treatments are available that can prolong life



There is no cure

