ONE LAST NUGGET FROM ANTI-INFLAMMATORY — ARACHADONIC ACID IS CLEAVED OFF OF PHOSPHATIDYL INOSITOL

VIRUS STUFF

PREVENTING SPREAD OF VIRUSES — IMMUNIZE, HYGIENE, SAFE SEX (SOMEONE SHOULD TELL THE GAYBOURS ABOUT THIS).

- VACCINES — LIVE ATTENUATED OR DEAD VIRUSES.
  - DOESN'T WORK FOR ALL VIRUSES... SO WE NEED ANTI-VIRAL MEDS!

*T — HIV IS NOT TRANSFERED BY CASUAL TOUCH (BUT CASUAL SEX IS DIFFERENT).

*T — NEEDLE STICK RESULTING IN HIV IS 0.3%. VERY LOW ODDS.

- HIV STARTS IN LANGERHANS CELLS → CD4 & MACS.
- CD4 COUNT LESS THAN 200 IS BAD.
- MEASURE VIRAL LOAD USING ELISA. SUBTYPING HIV IS IMPORTANT.
- BEST HIV TREATMENT IS HAART — HIGHLY ACTIVE ANTI-RETROVIRAL THERAPY.
  - THIS IS A COCKTAIL OF AZT, 3TC, SUSTIVA & CRIXIVAN.
- AIDS IS THE CURE.
- * — AZT — NUCLEOSIDE ANALOG. STOPS DNA REPLICATION. HUMAN DNA CAN PROOFREAD, SO NOT TOXIC. OUR MITOCHONDRIA DON'T PROOFREAD, SO THEY ARE AFFECTED.
- AZT IS COMPETITIVE INHIBITOR. NEVIRAPINE & EFAVIRENZ ARE NON-COMPETITIVE INHIBITORS.
- HIV PROTEASE — IS NECESSARY FOR HIV MATURATION.
  - NELFINAVIR & INDINAVIR — PROTEASE INHIBITORS. THEY LOOK LIKE AMINO ACIDS (PROTEINS) WITH REALLY BIG BULKY SIDE GROUPS. COMPETE WITH HIV PROTEINS FOR PROTEASE.
- SOME HIV VACCINES COMING. THEY ARE BASICALLY VIRAL ANTIGENS OR CAPSULE. CAPSID?
- HEP B — USES REVERSE TRANSCRIPTASE. EVERYONE PRACTICALLY HAS THIS DISEASE.
  - HIV MEDS USEFUL AGAINST THIS.
- HSV — TREATMENTS: ACYCLOVIR, GANCYCLOVIR
  - ACYCLOVIR — ONLY ACTIVE IN VIRALLY INFECTED CELLS. ACTION SAME AS AZT.
    - HSV THYMIDINE KINASE (MOSTLY) IS NECESSARY TO ACTIVATE DRUG.

*T — INFLUENZA VIRUS IS MOST DEADLY VIRUS EVER. NA & HA ARE ANTIGENS

- EPIDEMICS FROM HA SHIFT, NOT NA. HA FOR BINDING. NA FOR VIRAL RELEASE.
- AMANTADINE & RIMANTIDINE — STOP UNCOATING OF VIRUS. ← MORE ACTIVE.

NUGGETS (CHICKEN)

- RNA VIRUS MUTATION IS REALLY A LOT. (REMEMBER WHY, NO PROOFREADING IN RNA POLYMERASE).
- VIRAL RESISTANCE COMES FROM MUTATIONS. USUALLY DECREASED AFFINITY FOR A DRUG.

* DON'T WORRY TOO MUCH ABOUT STUFF AFTER HIV. MOSTLY AZT.