

Course: Virology

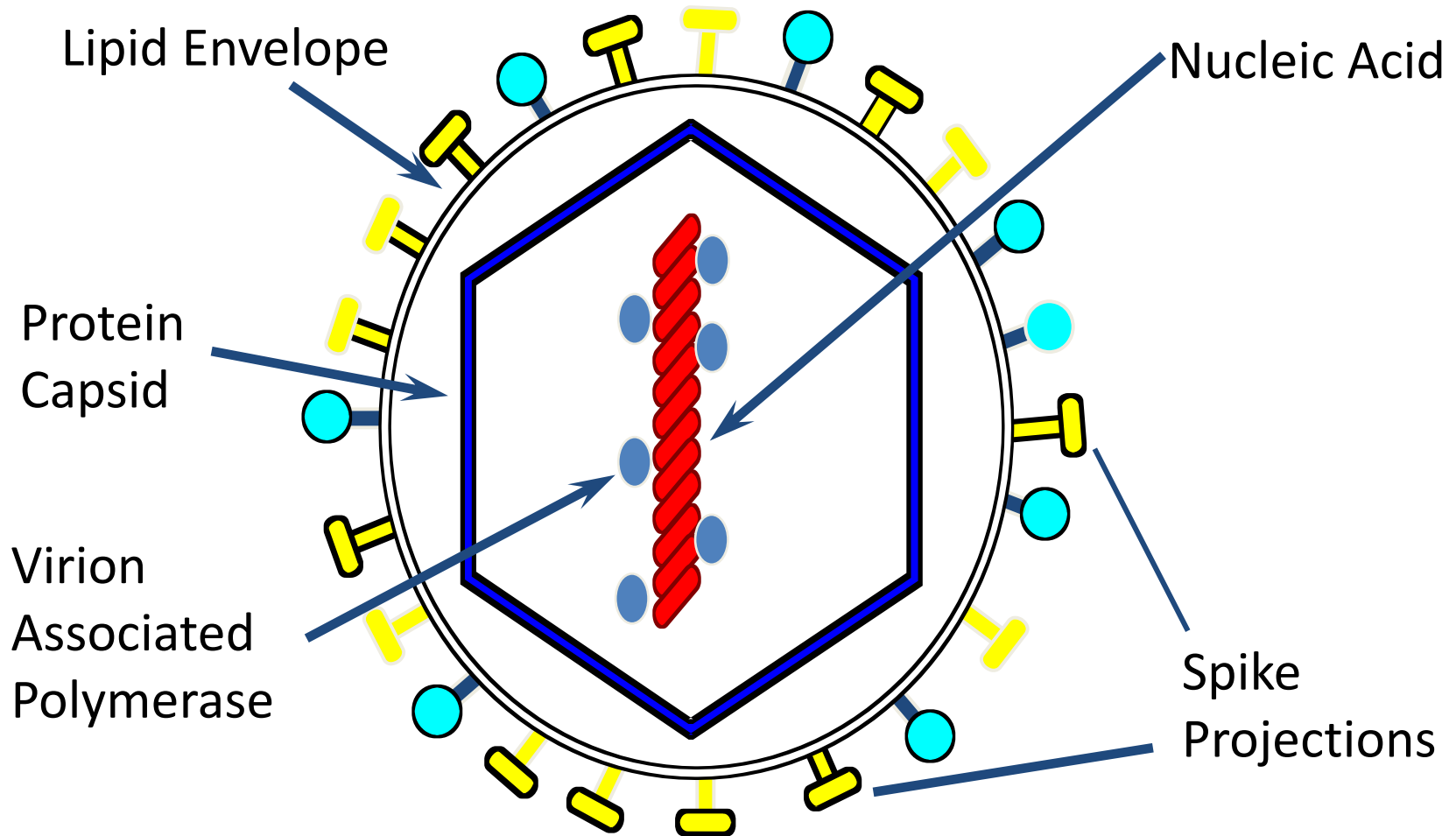
Structure of virus

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VIRAL STRUCTURE – SOME TERMINOLOGY

- **Virion = Virus particle**
- **Capsid = Protein which coats the
genome**
(capsid usually symmetrical)
- **Nucleocapsid = capsid + genome**
(may have an envelope)

Virion Structure



How are viruses named?

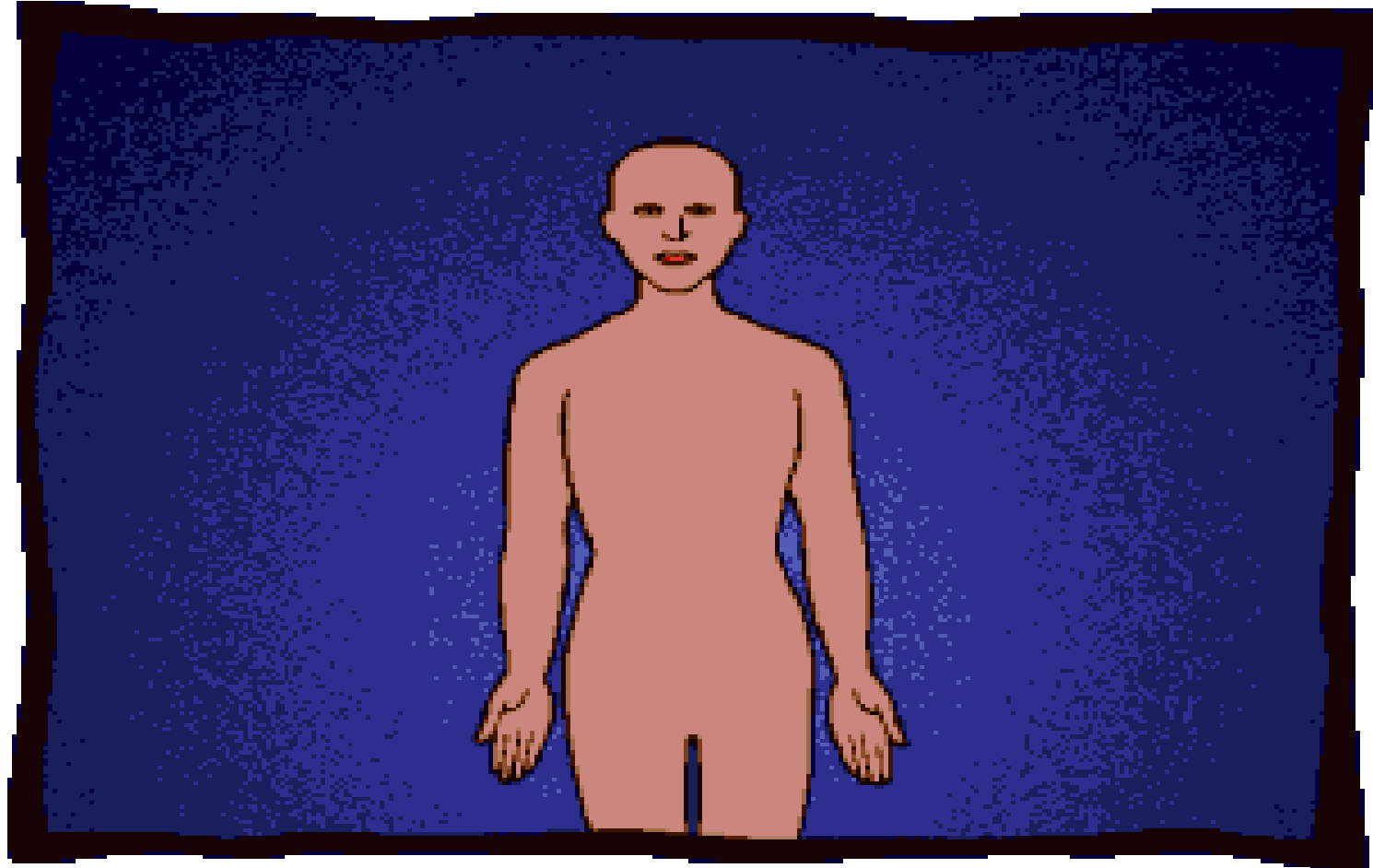
Based on:

- the disease they cause
E.g. **Poliovirus, Rabies virus**
- the type of disease
E.g. **Murine leukemia virus**
- geographic locations
E.g. **Sendai virus, Cocksackie virus**
- their discoverers
E.g. **Epstein-Barr virus**
- how they were originally thought to be contracted
E.g. **Dengue virus (“evil spirit”), Influenza virus (the “influence” of bad air)**
- combinations of the above
Rous Sarcoma virus

Transmission of Viruses

- **Respiratory transmission**
 - Influenza A virus
- **Faecal-oral transmission**
 - Enterovirus
- **Blood-borne transmission**
 - Hepatitis B virus
- **Sexual Transmission**
 - HIV
- **Animal or insect vectors**
 - Rabies virus or Dengue virus

**Viruses enter the body of the host
in a variety of ways, for example...**



The commonest forms of transmission are via...

INHALED DROPLETS
in sneezing or
coughing
for example the
COMMON COLD
or **INFLUENZA**
VIRUSES.



or by...

drinking water or
eating raw food,
for example,
**HEPATITIS A and
POLIOVIRUS.**



The commonest forms of transmission are also via...

**Sexual intercourse for example
HIV and HEPATITIS B and...**

**Vertical transmission -
from mother to baby for example
HIV, HEPATITIS B and RUBELLA...**

**Bites of vector arthropods such as
mosquitoes for example YELLOW FEVER,
RIFT VALLEY FEVER and DENGUE.**

Thank you