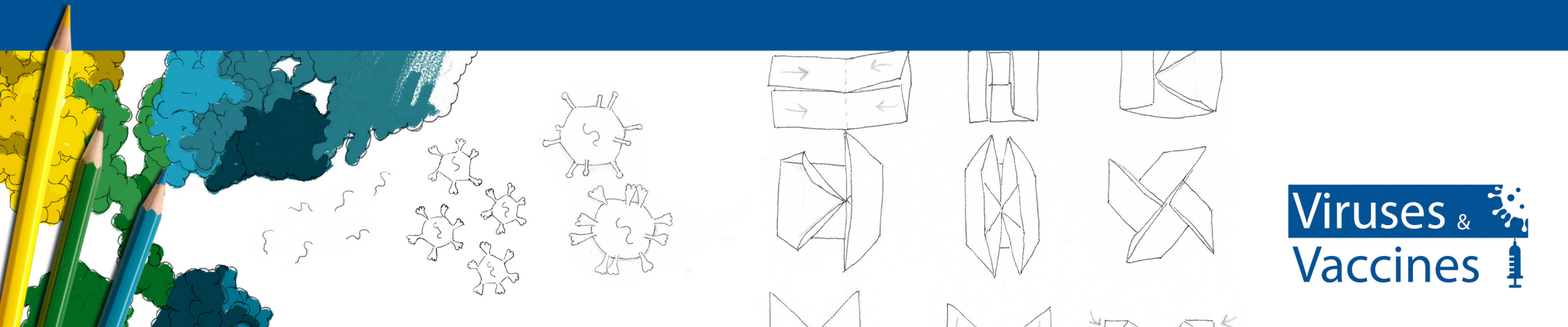
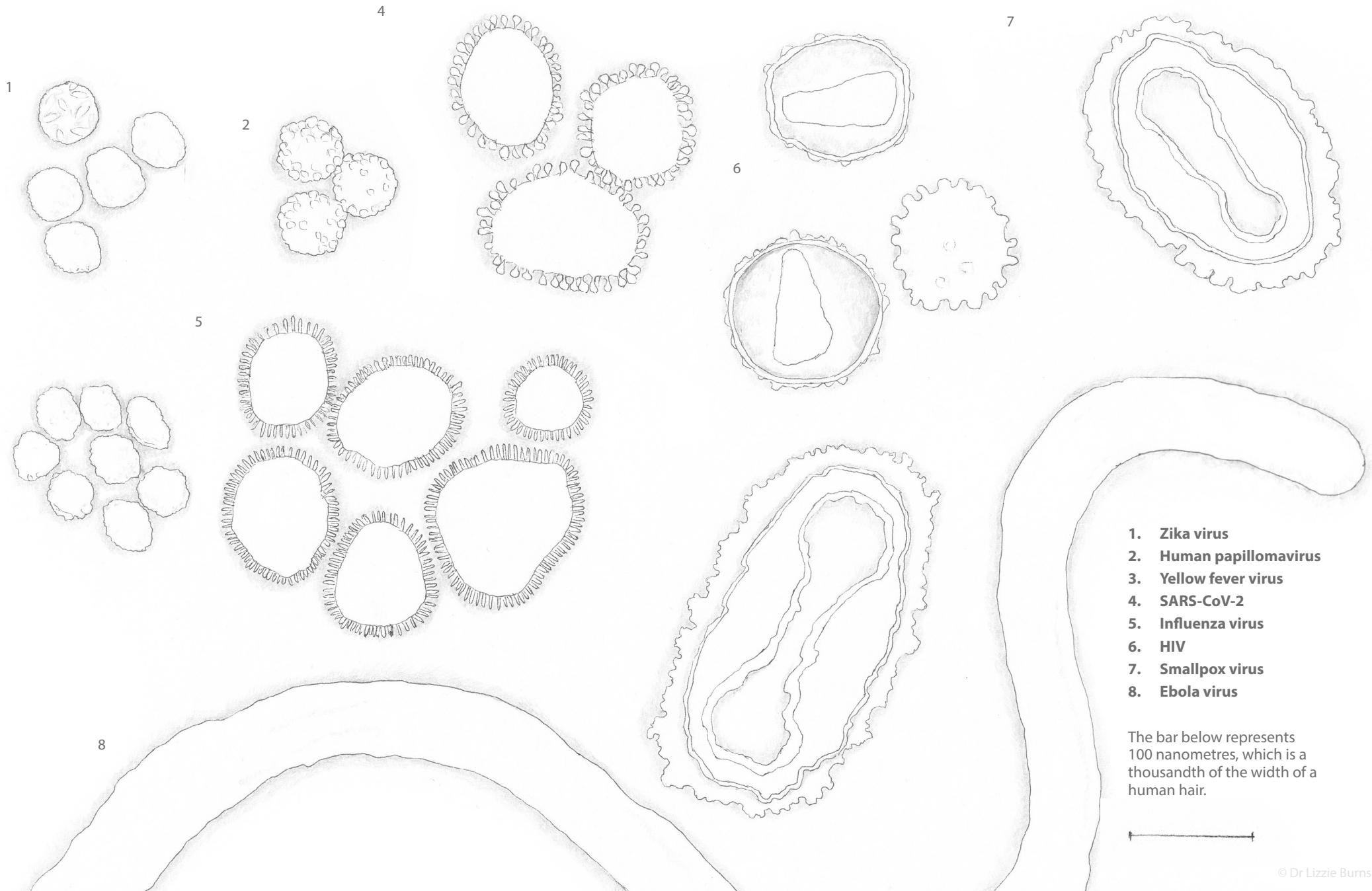


# Virus collection



# Virus collection



1. **Zika virus**
2. **Human papillomavirus**
3. **Yellow fever virus**
4. **SARS-CoV-2**
5. **Influenza virus**
6. **HIV**
7. **Smallpox virus**
8. **Ebola virus**

The bar below represents 100 nanometres, which is a thousandth of the width of a human hair.





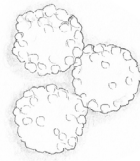
## Zika virus

**Caught:** from mosquito bites

**Where:** South East Asia, Africa, Americas, Pacific Islands, Caribbean

**Symptoms:** can be without symptoms; or a skin rash and raised temperature; can be harmful to developing babies in pregnant women

**Vaccine:** None – but clinical trials are taking place for a possible vaccine



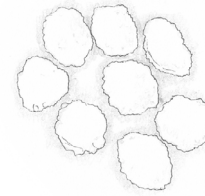
## Human papillomavirus (HPV) Types 16 and 18

**Caught:** from sexual contact

**Where:** across the world

**Symptoms:** there are many types of HPV (some cause warts/verruccas); types 16 and 18 can cause development of cervical cancer and some types of head and neck cancer

**Vaccine:** Yes – for the virus that can cause cervical cancer



## Yellow fever virus

**Caught:** from mosquito bites

**Where:** tropical areas of Africa, Central and South Americas

**Symptoms:** can be without symptoms; or fever, muscle pains, nausea; may feel better for 48 hours then unwell again. Approximately 5% can become very ill and develop liver damage (jaundice), bleeding or kidney damage

**Vaccine:** Yes



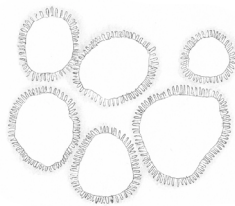
## SARS-CoV-2

**Caught:** from air droplets and touch

**Where:** across the world

**Symptoms:** can be without symptoms; or mild with fever, continuous cough and change/loss of smell and taste; or severe leading to breathing difficulty, blood clots, organ damage and death. Some may experience long COVID with symptoms including fatigue

**Vaccine:** Yes



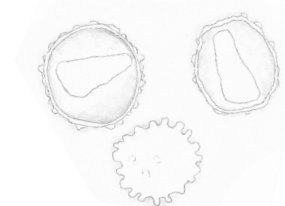
## Influenza virus

**Caught:** from air droplets and touch

**Where:** across the world

**Symptoms:** can be without symptoms; or fever, muscle aches, fatigue, headache; or severe leading to death

**Vaccine:** Yes – as the virus changes, vaccines need updating



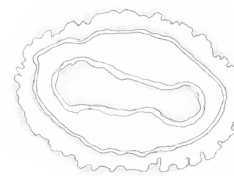
## HIV

**Caught:** from contact with infected fluids such as blood; including through sexual contact (not sweat, urine or saliva)

**Where:** across the world

**Symptoms:** initial infection can be without symptoms or with sore throat, fever and rash. Without treatment infection severely weakens the immune system and leads to death

**Vaccine:** None – but effective treatments allow a near-normal life



## Smallpox virus

**Caught:** from air droplets and contact with infected fluids

**Where:** nowhere anymore

**Symptoms:** caused pustules across the body and killed around 30% of those who caught it; those who survived were scarred and could lose their sight

**Vaccine:** Yes – thanks to vaccines, it has been made extinct



## Ebola virus

**Caught:** from contact with blood or body fluids from an infected person

**Where:** West and Central Africa

**Symptoms:** causing fever, fatigue and bleeding; severe disease causing death

**Vaccine:** Yes – two vaccines and thanks to quickly isolating areas, epidemics were brought under control