Remember how messy you got when you were a kid and got paint on your hand – well the same principle applies in cell cultures, but instead of paint there’s microbial contamination!

Cell cultures must be performed in sterile conditions as there is no immunity to protect the dividing cells from the microbes; this is why the correct equipment is essential!

- Mask – to stop you exhaling on the sample and contaminating it (there’s bacteria in your mouth too you know!)
- Gloves – To protect from microbial contamination transferred from your hands
- Overalls – to protect from microbial contamination from your clothing
- Air hood – to filter and circulate air to remove any contamination
- 70% Ethanol – to sterilise any equipment and environment

Finally:

You may be wondering why I’m using the word microbial rather than bacterial contamination, this is because few people realise more than bacteria can contaminate the sample.

Skin – *Staphylococcus aureus* (Bacteria),

Mouth – *Streptococcus pneumoniae* (Bacteria)

Mouth – *Streptococcus mutans*

**ALL THREE** – *Candida spp* (Fungal/yeast)