

## Procedure for using oil lenses on the FV1000

1: Before using the system , check the log book , and the system itself, if there is anything wrong, send an email to [cmi@nuigalway.ie](mailto:cmi@nuigalway.ie) immediately.

2: Set the lens required , check visually that is the right one. You should all know the difference between air and oil objectives, what the NA is and what it means, how to add oil a lens, and clean an oil lens.

3: It is vital that oil does not get onto the glass of an air lens (the 10 and 20x lenses on the FV1000) – it may seep into the inner mechanism and destroy the lens completely. If you do inadvertently get oil onto an air lens , it should be cleaned immediately.

4: When using an immersion lens (this is the 40 and 60x lenses on the FV1000), place one drop of oil onto the lens when it is in the 'escape' position. Do not apply too much pressure to the oil bottle; if you do oil may seep from the edge of the bottle and then drop onto the stage/other parts of microscope.

5: Replace your slide and press 'escape' to bring the lens and oil in contact with the slide coverslip.

6: When finished imaging with the slide, hit escape and clean oil off the slide. If using the lens again, a small drop more of oil may be needed. If moving to an air lens, it is vital that you wipe the excess oil from the lens before moving to a different objective.

7: When finished imaging , the oil lens that you have used needs to be fully cleaned. This step needs particular attention. The surface of each objective is made up of many thin coatings which are easily scratched. Incorrect cleaning will damage a lens.

**Never use Kimwipes or other similar tissue to clean oil off immersion lenses, only lens grade tissue may be used .**

**You can use kimwipes to wipe the excess oil off the cover slip on the slide. If you are not sure about using oil immersion lenses or any part of the steps outlined above please contact the CMI and we can arrange a training session.**