

Transcript: Rinsing the objectives of the 3i Lattice LightSheet after dye alignment or during imaging

Note, closed captions are available on the video
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After dye alignment or during imaging, we do not want to disrupt the objectives to preserve the alignment. This video will show you how rinse them without removing the objective covers as well as how to exchange media.

You will need a beaker, a drip tray, lens tissue, Kimwipe tissue and deionised water in a wash bottle.

Begin by having the bath in the escape position. Remove any sample you have in place and store the screws somewhere safe.

Place the piezo cover over the piezo stage.

Carefully insert the drip tray, taking care not to touch the objectives.

Place the nozzle of the washbottle near to the collection objective from the side. Carefully direct water so that it runs across the two objectives.

As always take care to direct the water only into the drip tray keeping well clear of any mirrors or electronics.

After at least 30s and 100 mL or more, carefully dab the large drips from the objective bodies using a Kimwipe tissue. Do not touch the optical surfaces!

Carefully remove the drip tray taking care not to touch the objectives.

Take a small piece of lens tissue and wick the water from between the optical surfaces.

The following section describes how to wash the bath and exchange the media.

Undo the grub screws on the bath, these only need to be backed off one quarter of a turn, do not remove them.

Carefully lift out the bath and tip the media into a beaker. Rinse the bath with deionised water. If impatient, remove the lid of the water bottle and just drench into the beaker. If completing this after dye alignment, it's important to wash thoroughly. Remove any drops of water with a Kimwipe tissue taking care not to touch the glass coverslip. Only wick from the edges and corners.

Return the bath and tighten the grub screws.

Refill with 10 mils of prewarmed media.

I hope that this video has been useful, please email CAMDU@warwick.ac.uk if you have any questions or comments.

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