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Washing petri dishes for re-use in the lab and Fish Facility

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External link: <https://zebrafishucl.org/plastic>

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Protocol status: Working

We use this protocol and it's working

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Abstract

In zebrafish labs, we go through TONS of plastic petri dishes. Instead of discarding them after a single use, follow this simple washing protocol to CLEAN AND REUSE your dishes over and over again. Saving money and reducing plastic consumption.

Materials

Used petri dishes

70% ETOH

Mesh laundry bag

Large Bucket

Hot Water

Safety warnings

 We **DO NOT** reuse petri dishes that have been used for drug treatments. For those experiments, consider switching to glass petri dishes, which are autoclavable and reusable.

Before start

We **DO NOT** reuse petri dishes that have been used for drug treatments. For those experiments, consider switching to glass petri dishes, which are autoclavable and reusable.

1



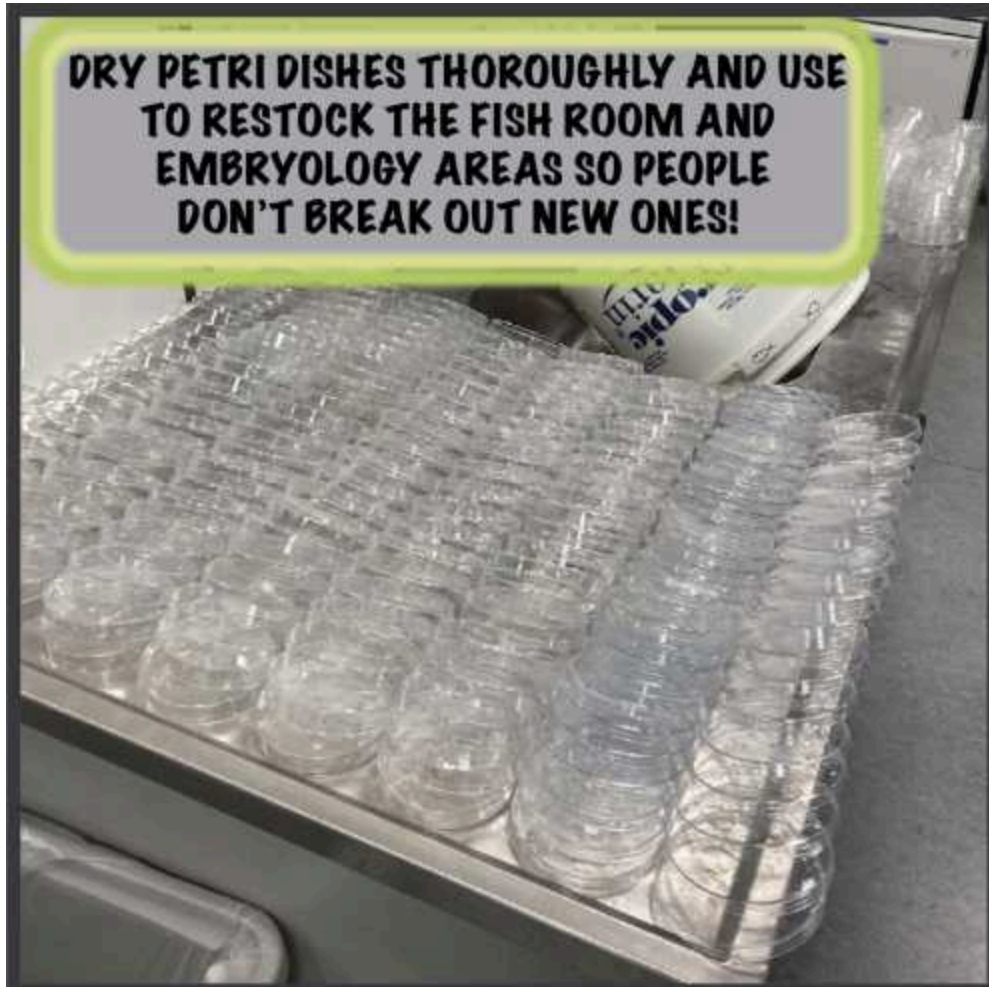
- 1.1 Collect used petri dishes. Remove all tape. Use 70% ETOH to remove the marker pen label.

2



- 2.1 Soak petri dishes in hot water for 20' or for best results O/N.
- 2.2 Drain petri dishes. Using a laundry bag makes the soaking and draining steps easier.

3



Dry plates thoroughly and restock fish room and embryology areas.

- 4 The only downside we've noticed with washing and reusing petri dishes is that they tend to be less sticky afterward. This is an issue when mounting embryos in agarose droplets for procedures like OKR, imaging, or electroporation. To restore stickiness, simply: 1) Wipe the dish with a tissue soaked in ethanol; 2) Rinse thoroughly with RO water and soak overnight; 3) Finish with a rinse in fish water. This quick prep makes the reused dishes behave just like new!

See Methods section: <https://www.nature.com/articles/s41586-024-07367-3>

- 5 There are alternative cleaning protocols. Cecelia Moens Lab use dilute bleach to soak their petri dishes.

**Cecilia Moens**

@CeciliaMoens



Zebrafish embryos don't need sterile dishes! Soak them overnight in a bucket of dilute bleach, air dry and reuse! Over and over

[#zebrafishchallenge2022](#) [@IZFSenvironment](#) [@Infolzfs](#) [#IZFC2022](#)





Protocol references

Suppermpool, A., Lyons, D.G., Broom, E. *et al.* Sleep pressure modulates single-neuron synapse number in zebrafish. *Nature* **629**, 639–645 (2024). <https://doi.org/10.1038/s41586-024-07367-3>

Acknowledgements

<https://zebrafishucl.org/#zebrafish-green-lab>

We would like to thank everyone who washes and restocks our petri dishes in the Fish Floor at UCL!