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IN DEVELOPMENT

## Eggs injections

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COMMENTS 0

### ABSTRACT

Protocol for microinjections of 0-dpf eggs @FishFloorUCL.

### PROTOCOL CITATION

FishFloorUCL 2022. Eggs injections. **protocols.io**  
<https://protocols.io/view/eggs-injections-ckbgusjw>

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### PROTOCOL INTEGER ID

73800

## Set-up breeding pairs

- 1 Set up the breeding pairs the night before or order them from the fish facility. Arrive early in the morning, 9AM for single cell, 9:30 for fish facility injections.

Make sure to book the injector in advance.

## Calibrate the needle

- 2 Open the red valve for your injector, you should see the dial turn to ~40

- 3 Power on switch
- 4 Set the time to 14-15ms
- 5 Take a needle from the large Petri dish on the side and stick in the blue tack above the microscope
- 6 Add what you want to inject (less is better, eg: 1-3 nL)
- 7 Place the black measuring slide under the microscope, add a drop or two of mineral oil and focus on the little ruler.
- 8 When tilting the whole needle base use both hands. When not using make sure it is tilted up
- 9 Tilt the needle into the oil
- 10 Break the needle with forceps and press the pedal until the correct amount is coming out of your needle (using the table on the wall to calibrate)

## Collect eggs

- 11 Take the dividers out of the fish boxes

- 12 wait 6-7 minutes
- 13 Transfer the fish to new boxes and replace the dividers for another round of eggs
- 14 Collect the eggs by pouring the water through a small sieve and transferring this to a Petri dish, clearly labelled

### Inject the eggs

- 15 Use a Pasteur pipette to transfer eggs to a new pipette
- 16 Use a thin ended pipette to remove all the water and then line them up along the edge of a glass slide placed in the Petri dish
- 17 Go down the line of cells and inject one at a time
- 18 Collect a new clutch and repeat.

### Turn everything off/clean after yourself

- 19 Turn off the red tap.

- 20 Turn time to minutes, press pedal until the dial has run completely down, flick it back to ms
- 21 Turn off the power switch
- 22 Wipe down everything with ethanol.