BIO-221 Hydra regeneration experiments **28 November 2024**

We will be performing regeneration experiments, very much like Trembley did them in the 1740's. In essence, we will follow the procedure that you can find in Bossert and Galliot, 2012 (page 646, Protocol 10), cutting the animals at approximately 50% body length.

In addition to doing the experiment with wild-type Hydra (*Hydra viridissima*: greenish, because of the symbiotic unicellular alga *Chlorella*), you can also test the impact of impairing microtubules or F-actin using small molecule inhibitors.

All in all, there will be 12 experiments, in each case with 3 animals to start with, as follows:

1) Uncut (controls)
2) Cuts + 0.01% DMSO
3) Cuts + 1 μM nocodazole (to depolymerize microtubules)
4) Cuts + 1 μM Latrunculin B (to depolymerize F-actin)

The animals will be left in a 16°C incubator and analyzed on Monday.