Acute DSS colitis in C57Bl/6 mice

**Material:**

5% W/V* of DSS (Dextran Sodium Sulfate), MW 36-50 KDa (MP biomedical #160110).

* Note: prepare with animal facility water (because it is normal autoclaved water). Animals don’t drink distilled water!

**Method:**

Day -1 (D-1): Separate animals for the experiment (no more than 5 per cage). Males are more susceptible than females. Therefore, comparisons have to be gender matched. Identify very well the cages under treatment and inform animal facility staff about your experiment, to avoid water bottles changes.

D 0: Prepare DSS water (10 g in 200 ml of animal facility water). Bring it to the animal facility inside a closed bottle. Bring also an extra-bottle to empty one drinking water bottle. Use this empty drinking bottle to add your DSS water solution into your cage. Weight all animals for further analysis. Mark the DSS water level in the bottle for further check.

D 1: Check whether the animals are drinking the DSS water.

D 2: Check mice weights. Replace DSS water.

D 3: Nothing to check.

D4: Check mice weights. Replace DSS water.

D 5: Nothing to check.

D 6: Check mice weights. Replace DSS water. Some animals may start to develop colitis. Look for rectal bleeding and diarrhea. Take notes of these symptoms because they will be used to score the disease. From this day on, pay attention to these symptoms.

D 7 Check mouse weights.

D 8: Check mice weights. Replace DSS water.

D 9: Some animals may look very sick and may lose more than 25% of their initial body weight. In this case, euthanize them and save the intestines (small and large) for histology.

D10: Euthanize the animals and harvest all the organs you need.