**GI Transit Time by Carmine Gavage**

Materials needed:

1. 0.9% NaCl
2. 0.5% Methylcellulose (1 mL per mouse)
3. 6% Carmine Red
4. Gavage needle
5. 1 mL syringe

Procedure:

**Start this procedure as early as possible because the experiment can potentially last as long as 10 hours.**

1. Label a cage without bedding for each of the mice.
2. For each mouse you will need 0.5 mL of 6% carmine in the 0.5% methylcellulose.
3. Vortex the mixture for a few minutes.
4. Transfer each mouse into the appropriate empty cage.
5. Use a 1 mL syringe to draw in the carmine red solution and attach the gavage needle.
6. Flick the syringe to get rid of any bubbles.
7. Holding the mouse with its head as straight as possible, gavage 0.3 mL of the carmine solution.
8. Once complete, immediately mark the time on the mouse’s cage.
9. Repeat steps for each mouse.
10. Once complete, check the stool after the first hour. After the first hour, check stool every 10 minutes until a red color is observed.
11. This procedure should be repeated 2 additional times if the variation in your groups is too large.

**The animals should be allowed to recover 5-6 days before you attempt to repeat this procedure.**