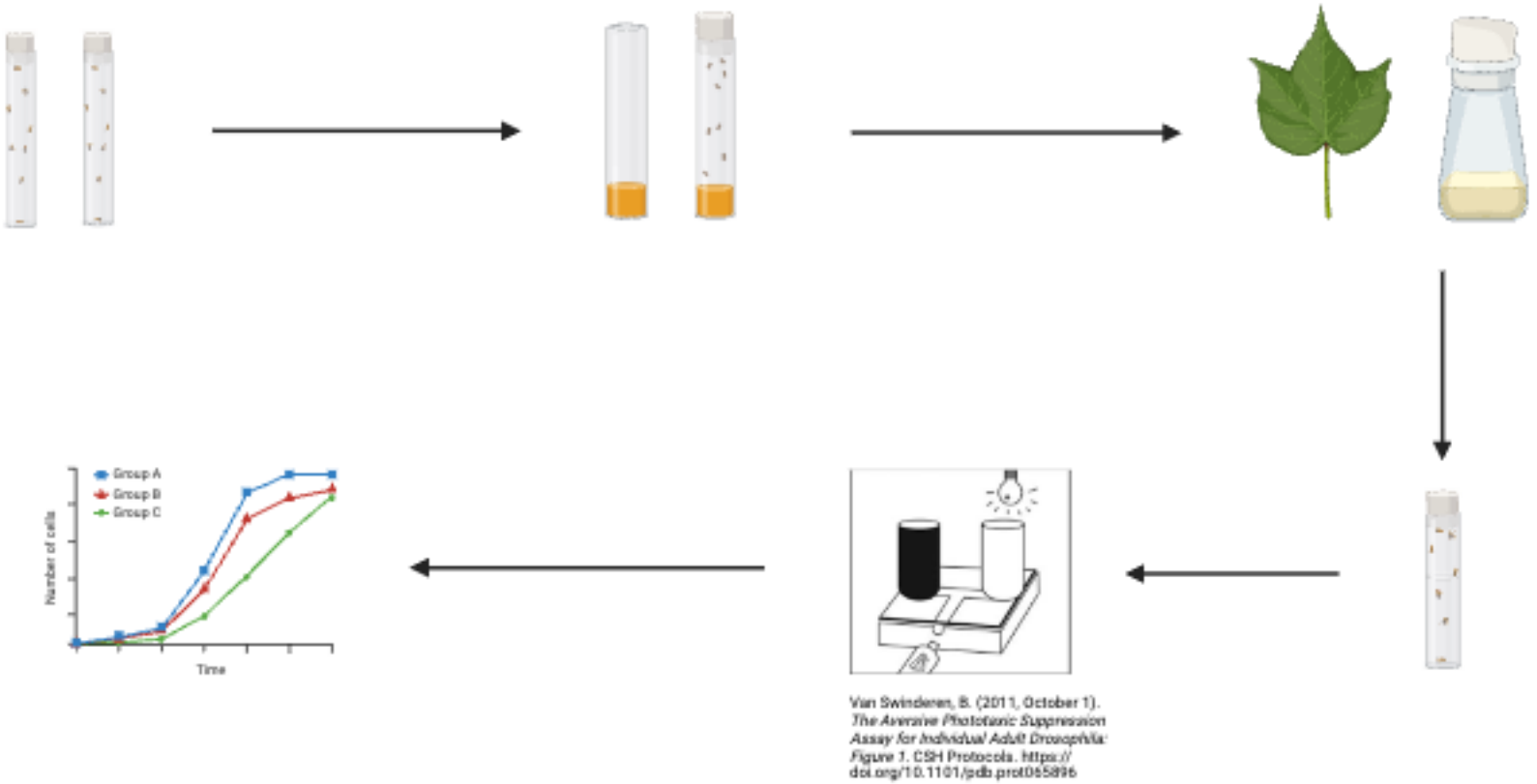


Van Swinderen, B. (2011, October 1). *The Aversive Phototaxic Suppression Assay for Individual Adult Drosophila: Figure 1.* CSH Protocols. https://doi.org/10.1101/pdb.prot065896

1. Receive UAS and GAL-4 drosophilae
2. Make fly food for drosophilae and tap consistently to reproduce population
3. Conduct toxicity assay on wild type drosophila to determine the healthy dosage to administer
4. Conduct climbing assay on GAL-4 female drosophilae for all groups
5. conduct an APS assay on GAL-4 female drosophilae for all groups
6. Conduct a 2 way Mann-Whitney test test to analyze data

The first step of the experimental design is to acquire the UAS and GAL-4 drosophila. This allows for expanding the stock. To expand stock at a constant rate, fly food is made and the drosophila are tapped consistently. Following this, wild type drosophila were put through a toxicity assay to determine the healthy dosage of the herb. 8 different herb concentrations were used and results indicated that the 0.5mL concentration was the healthiest for flies. Next, the stocks were expanded and once all 4 control groups have been achieved, the climbing assay will be conducted. This is done to test the locomotive abilities of the drosophila. Following this, an APS assay will be performed to assess the cognitive abilities of the drosophilae on all 4 groups. After this, all data will be analyzed with multiple 2 way Mann-Whitney Tests.