Test Plan for AutoFeed

- Optimaus -

Prepared for

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AutoFeed Test Plan		
Tester's Name: **Test Date:**		
Test Items	**Pass/Fail**	**Comments**
A. Feeder Reliability		
A.1 Test that the dispensing apparatus does not injure the animals in any way		
A.2 Test that when the slider door is open, the animals can reach the food, and not be blocked by the width of the bars		
A.3 Test that the hopper is of the correct size to hold enough food for one fully grown rat for 1 week (roughly 300g)		
A.4 Test the functionality of the Hall effect sensors		
A.5 Ensure that the gears don`t skip while moving the sliding door		
A.6 Ensure that the leftover food particles don't get stuck in the mechanical system		
B. Modularity		
B.1 Feeders have interchangeable parts		
B.2 All parts can be cleaned or autoclaved		
B.3 Cages are independent of their ports		
C. Software		
C.1 Cages can be opened concurrently		
C.3 Event on Google calendar opens corresponding cage door at event start time		
C.4 Event on Google calendar closes corresponding cage door at event end time		
C.5 Only a single email notification will be sent in the event of a failure		
C.6 Poll Google every 20 seconds		
C.7 Cage will attempt to open/close 3 times for every event start time and end time		
C.8 The email will only be sent after 3 consecutive failures.		
C.9 Email will contain which cage failed and if it failed during open/close		
D. Controller Box Reliability		
D.1 Fuse is easily replaced if necessary		
D.2 All hardware is fastened to the base plate (i.e. No floating components)		
D.3 Easily plug and unplug all the exterior wires on the controller box. For example RJ-45 ports and HDMI port		
D.4 RPi and Servo Driver each share a single AC adapter with no loss of power		