

Assembly Process for 3D-print rodent conditioning platform for imaging experiments according to Gironda et. al. 2023

Document prepared by: Griffin Henze March 28, 2023

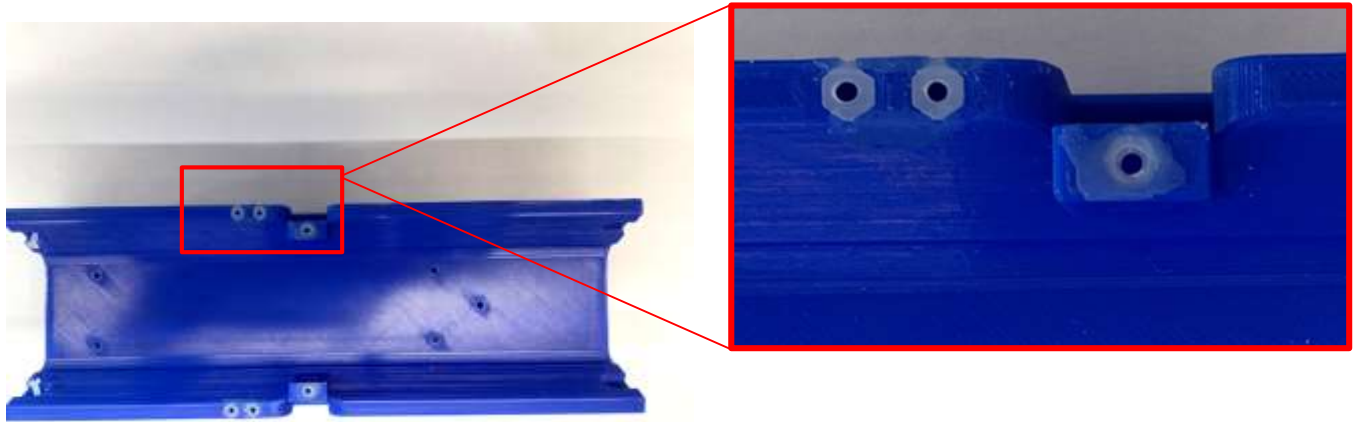


Parts list:

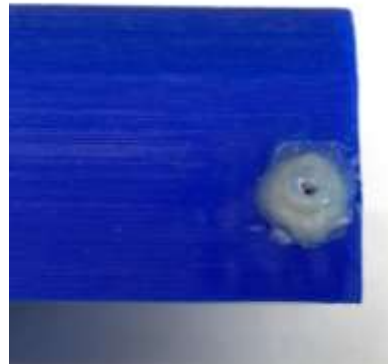
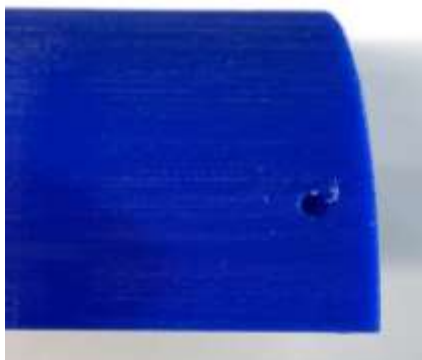
Name of item	Amount used/ Description	Part number
3d printed parts	As per the design	N/A
Plastic tubing	1 x 20 cm long/ 1/8 inch inside diameter	Tygon S3 E-3603
M-2 Nylon Screw	17x	McMaster-Carr 92929A238
M-2 Nylon Hex Nut	17x	McMaster-Carr 93800A300
Female Luer with 1/8 in. ID Brab	1x	FisherScientific 01000136

1. Preparing the base

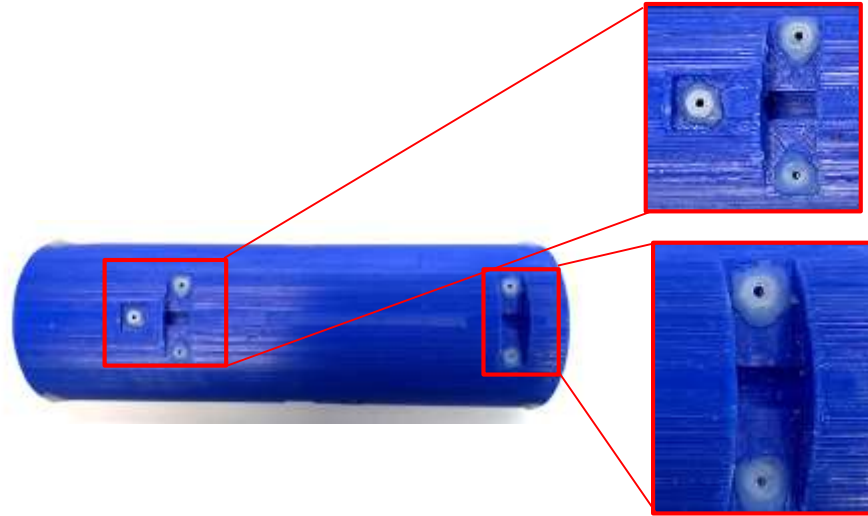
- a. Insert nuts into preformed holes and attach with glue.



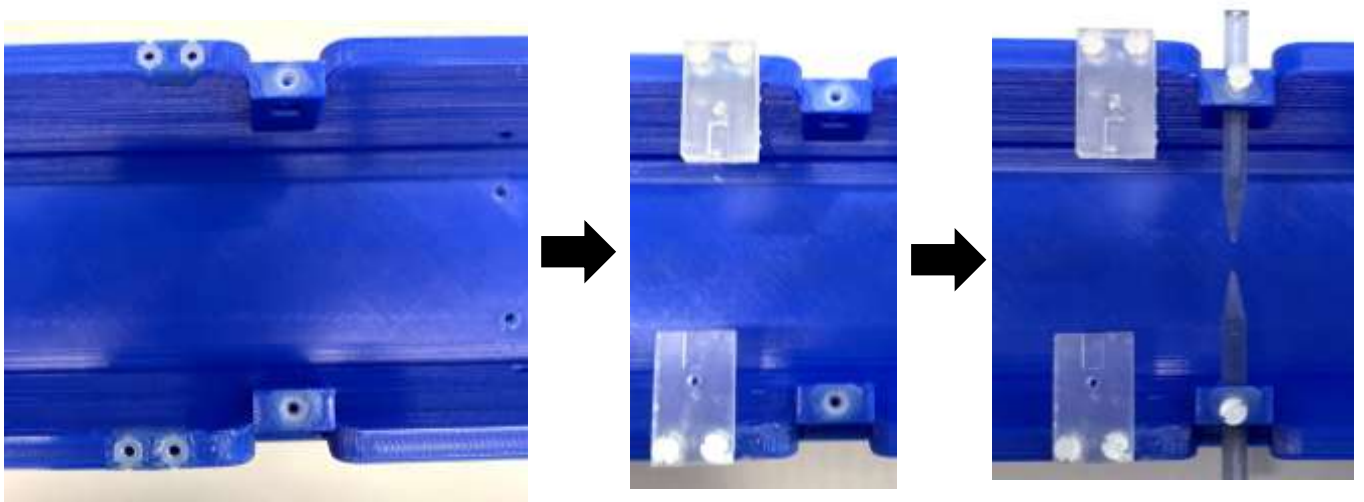
- b. For holes on the exterior of the bed, insert screw from inside then screw on nut and glue the nut to the bed, being careful not to glue the screw in the nut.



- c. On the bottom of the bed, insert nuts into pre drilled holes and glue to bed.



- d. Screw head fixation base onto the bed and insert ear bars into designated slots.



2. Nose cone assembly

- a. Slide the nose cap onto one end of the tubing and glue. Slide connector onto other end and glue.**



3. Sliding stand piece assembly

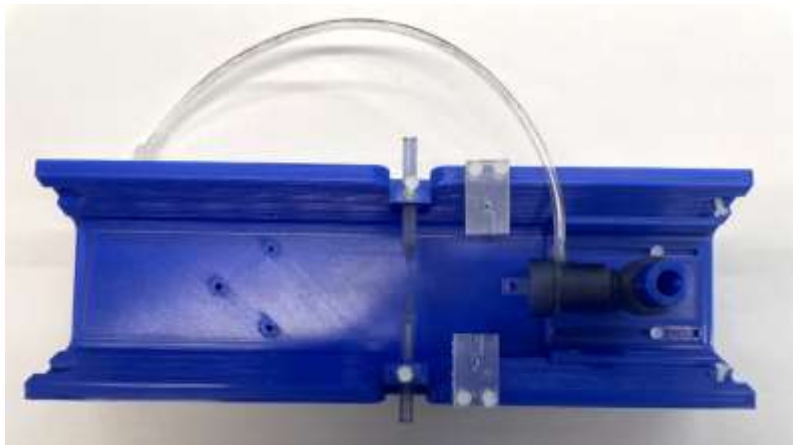
- a. Glue nuts to the rodent tooth holder and add screws.**



- b. Slide the rodent tooth holder onto the post and tighten screws, then slide the nose cap over the tooth holder.**



- c. Screw the sliding nose piece into the bed. Note that the screws can be loosened and tightened to move the sled back and forth.**



4. Attach connectors to each corner of the bed.



5. Extender (preamplifier holder) assembly

- a. Insert screw, and screw on nut. Glue nut to exterior being careful not to glue screw to nut.



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b. Attach bed extender to bed



c. Clip the cover into place.



6. Rat Adaptation

To prepare the platform for use with rats, follow the same procedure as above using rat-specific parts, i.e. the rat tooth holder, nose cone and ear bars. It is recommended to prepare and use separate set-ups for mice and rats.



References:

Gironda, et al., "Open-source versatile 3D-print animal conditioning platform design for invivo preclinical brain imaging in awake mice and anesthetized mice and rats", bioRxiv 2022.11.20.517296 (2022); doi: <https://doi.org/10.1101/2022.11.20.517296>