

RESEARCH ARTICLE

Development of an affordable extrusion 3D bioprinter equipped with a temperature-controlled printhead

Supplementary File

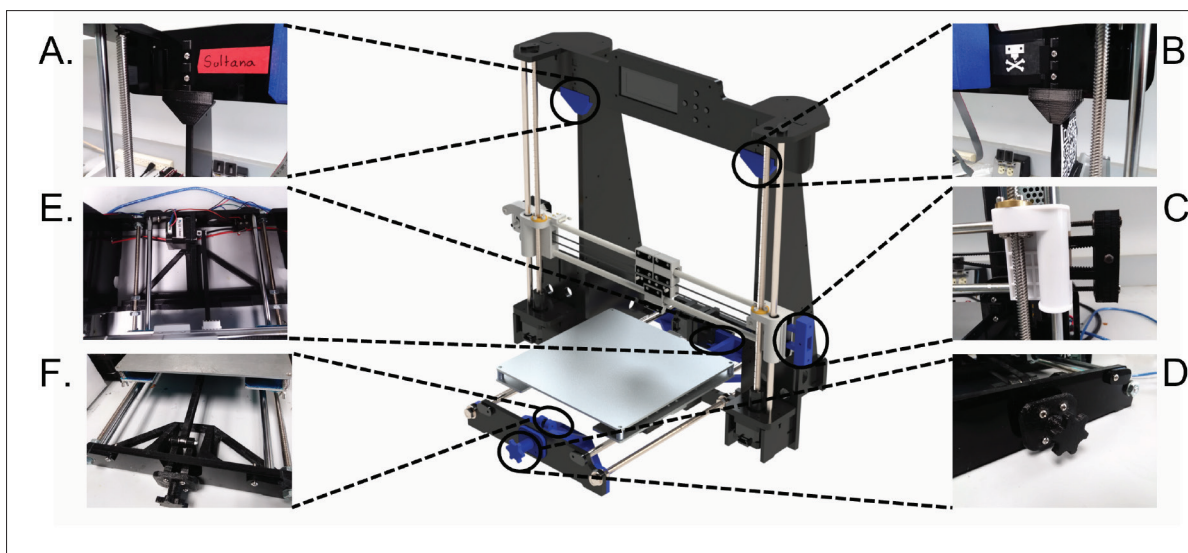


Figure S1. 3D printer modifications needed for increasing the stability of the bioprinter. (A, B) T-corner supports. (C, D) Y- and X-axis belt tensioners. (E, F). Rear and front braces required for the lower frame.

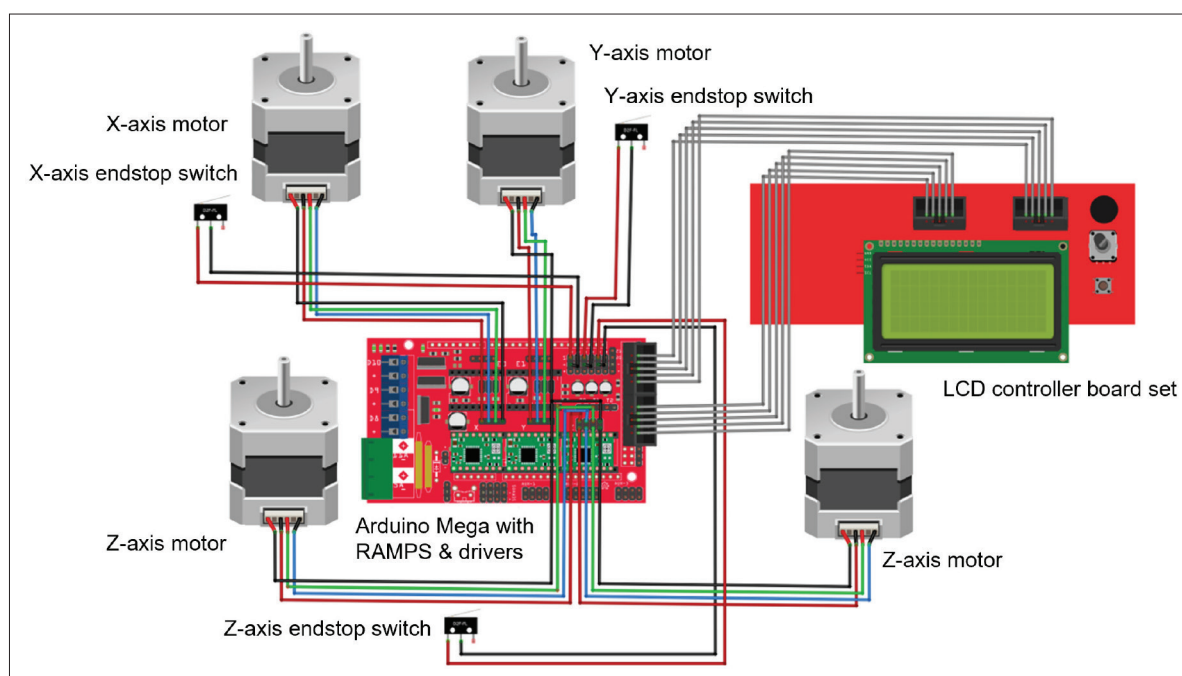


Figure S2. Scheme of the connections required for the upgraded electronics.

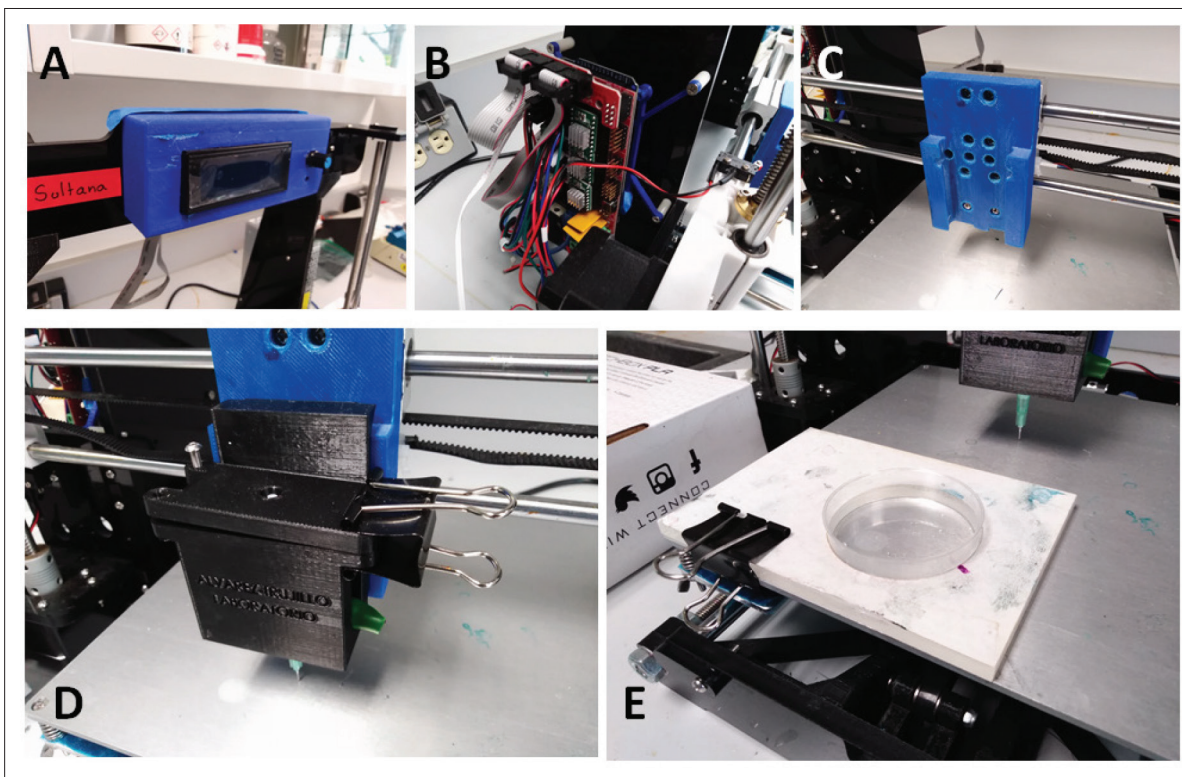


Figure S3. Modifications needed for the conversion of the 3D printer to a bioprinter. (A, B) 3D-printed modifications needed for holding the new electronics. (C, D) X-axis carriage and printhead mount with Japanese joinery to hold the cooling printhead. (E) Laser-cut acrylic piece and binder clips to hold the Petri dish in place.

Other supplementary information

	Description	Link
STL files	STL files for the modifications/ additions needed to convert a 3D printer into a bioprinter	https://doi.org/10.6084/m9.figshare.21368901
G-Code files	G-Code for all figures printed	https://doi.org/10.6084/m9.figshare.21369120
Illustrative videos	Movie S1; Movie S2	https://doi.org/10.6084/m9.figshare.21368889
	Grid; ITESM logo	https://doi.org/10.6084/m9.figshare.21688721