

## **MEMORANDUM**

TO: BioDesign Instructors

FROM: Team 3 (Robin Cross, Aimee Lam, Patrick Stevenson, Rachelle Walter)

DATE: April 20, 2016

SUBJECT: Milestone 7

As of April 20, 2016, Team 3 has completed milestone 7 of the 3D Bioprinter. The main task to accomplish was to assemble all of the components on the fritzing diagram discussed in class. The overall components included Mosfets, stepper motor drivers, heaters, sensors, and resistors. The tasks involved making the wire harnesses and soldering them so that they would become solid ends for implementation on the circuit. Furthermore, the 3D printed part was added to the 3D printer with the appropriate nuts, bolts, and screws.

We worked together as a crew by dividing the larger milestone into smaller tasks and assigning tasks to individual crew members. With the assistance and guidance of the instructors, further modifications of the parts were made for assembly on the circuit. The main problem, however, were the wires became tangled together. Eight hands were required to untangle the wires, and consequently we fully separated the wires and braided them with the black cable cover.

After getting all the separate parts together, the most difficult part was wiring into the breadboard according to the fritzing diagram. There was a lot of intricacy involved and so it required one of the crew members to arrive early to plug in these parts as necessary. On 4/21, we will test the breadboard to ensure all the parts have a proper connection.

No build instructions were required for this Milestone, so this memo is the only submission component you will receive. Regardless, we look forward to hearing from you about any suggestions you have for us to implement on future assignments.

Sincerely,  
Team 3 (Green Crew)