

Senior Project - Informal Minutes

9/17/2012

Advances

- Kyle has made advances on physical drawings/sketches.
 - o Sleeve-Bearing Carriages and Guide Rails – Nylon.
- Metals to be used : Aluminum 661
- Plastic: Delrin – Polyoxymethylene
- To order and look up pieces we are using
 - o <http://www.makershed.com>
 - Arduino Mega ADK
 - o <http://www.omega.com>
 - AD590 Series : Solid State Temperature Sensor
 - o <http://www.mpja.com/>
 - Step Motor Driver, 3A Max, CW230
 - o <http://www.mcmaster.com>
 - Sleeve-Bearing Carriages and Guide Rails – Nylon
- Fused deposition model – feed the correct diameter and extrude in correct diameter
- Extrude into an agarose gel
- Fetal calf serum and cells will be added before cells are deposited

To Do For Tomorrow's Meeting

- Dana: Polymer cost information: Collagen vs. PCL
- Kendra: Cross Linker options for collagen
 - o Cross linker options for PCL
- Hayin: Heating of Extruder head
- Budget
 - o Sleeve-Bearing Carriages and Guide Rails – Nylon. – \$47.28
 - o Step Motor Driver, 3A Max, CW230 - \$48.50
 - o Arduino Mega ADK - \$86
 - o AD590 Series : Solid State Temperature Sensor - \$22