

9/4/2012 Meeting with Dr. Hall

- Parameters were commented all throughout the ppt
- Autoclave the scaffold – to prevent bacteria from forming
 - high temp, high pressure
 - prep and keep materials sterile.
 - Autoclave in Bio building

Dr. Hall – other ways to sterilize – radiation-however not because crosslinking will be involved

Radioactive cobalt – gamma? – no access to this process.

Safety considerations

- include: what is crosslinking, what is the impact/importance of it in this project
- Chemical – easier to control than IR
- Needs a fume hood.

Questions that were raised

Who is this device for? → To be used in house – To be available to be bought - Researchers and a lab

What is so different/special about the device? -----

Cost efficient - Centrifuging scaffold

- Affordable automated stage.
- Compare to a similar 3D BioPrinter: cost and differences in features
- Using Inject Printer could potentially work – consider disposable cartridges

-Testing of the project – mouse fibroblast

– immortal cell line - immortalized – continually live in culture as opp to other type of cells which die after a certain period of time.

- limited model – consider if they stick, if they are toxic, if they die, if they go on to the next process...etc

-Look for the medium to grow the mouse fibroblast for testing.

-List the parameters that need to be considered

-In order for cells to adhere to polymers need their receptors to bind to integrands- If the scaffold doesn't have something for the cell to attach/stick:

-Consider Use of Fetal calf serum

-Consider Addition of peptides to the polymer.

BOTTOM LINE:

- List/mention parameters even if they aren't defined.
- Who is this device for (targeting audience)?
- What is the special feature that sets this device apart from others that are already in the market?
- Define exactly what would make it cost efficient (comparing it to other similar products)
- Clarification of testing of product using mouse fibroblasts
- Polymer + cross linker and other considerations if optimal materials aren't found ie addition of peptides to polymer, or use of fetal calf serum.