



Name: _____

BEEP Virtual Content: 3D Bioprinting

Content Overview

The Magin Lab on the CU Anschutz medical campus studies biomaterials and microfabrication to develop innovative pulmonary medical treatments. The lab is investigating tunable hydrogel biomaterials that allow the researchers to replicate healthy and diseased tissue in vitro (within the laboratory research setting).

1. What is Duncan's PhD project based around?

2. List the ingredients that Duncan weighed out and prepared.

- _____
- _____
- _____
- _____
- _____

3. _____ is the support material that will hold the 3D printed hydrogel while printing is happening.

4. What type of cells does Duncan show on the computer monitor?

5. **True / False:** Trypsin allows cells to detach from the plastic media they are growing on.

6. **True / False:** A very small needle allows the bio-ink to be printed according to the size Duncan wants.

7. What do you think was the most interesting part of Duncan's walkthrough of 3D bioprinting? Explain below.

Want to learn more about this super cool research? Send us an email to BEEP@ucdenver.edu