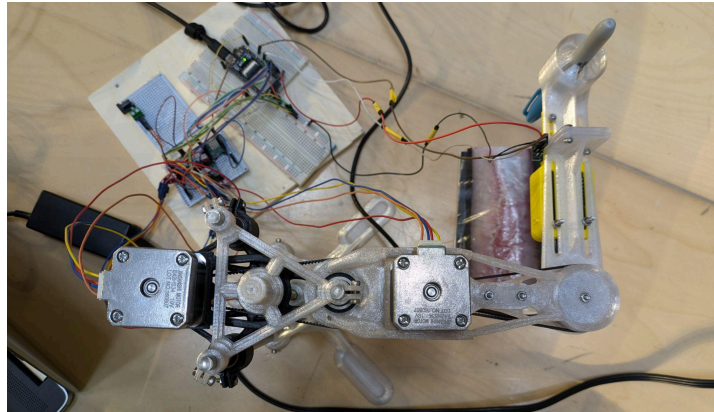
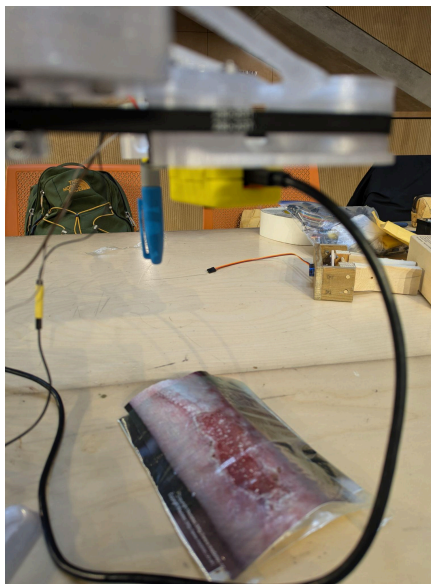


## Bioprinter user manual

1. Before plugging in the bioprinter, ensure the first arm is pointing straight forward, with the second arm making a 90° angle clockwise from the first arm.



2. **Plug** the 12 V power supply into the barrel connector on the wooden board.
3. Place the wound “patient” **directly under the camera** in the yellow box.



4. Ensure the port selection on the user interface is correct, “COM9” and “COM3”, then click “Connect”.

ESP32 Serial Communication

1st Arm Angle -----	0.0		Select Port:	COM9	Refresh	Connect
2nd Arm Angle -----	0.0		Select Camera Port:	COM3	Refresh	
Z -----	0.0		Message:			
mm/pix -----	5.0		Response:			
1st joint degree error -----	0.0					
2nd joint degree error -----	0.0					
test time -----	1					
x_compensation -----	5					
y_compensation -----	-15					

Update Variables  
Image Capture  
Start

5. Click **“Start”** on the bottom left to capture a photo, and wait for image transmission.
6. In the pop-up window, click to **select a point on the wound**, then click submit.



7. Wait for image segmentation, then either confirm the selection if it is good, or click **“Clear”** and draw your own wound area that you would like to print on.



8. Click **“Submit”** for the printer to begin scanning and printing.