

bio.maker.lab

choose a cell type:



BIOLOGO



BIOSENSOR



BIOCAKES

You have chosen the biologo project! Let's get started.

BEGIN



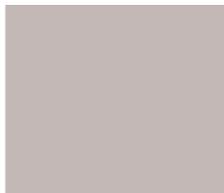
- step 1 -

TRANSFORM

In this section, we will explore the process of bacterial transformation. Follow along as we go through the steps of how bacteria is transformed.

1. Place

First, the cuvette must be placed into a cooler to stabilize the solution. Enter a low temperature for a long amount of time.



Enter Temperature: °C

Enter Countdown:

2. Transform

Next, it is time for heat shock by creating a high temperature environment. Select the proper settings for this short burst of heat.

Enter Temperature: °C

Enter Countdown:

3. Remove

Finally, it is time to move the transformed solution to be incubated. This creates ideal conditions for cell multiplication.

PLACE CUVETTE

-

(see graphic)

BEGIN TRANSFORM

-

(see graphic)

REMOVE CUVETTE

-

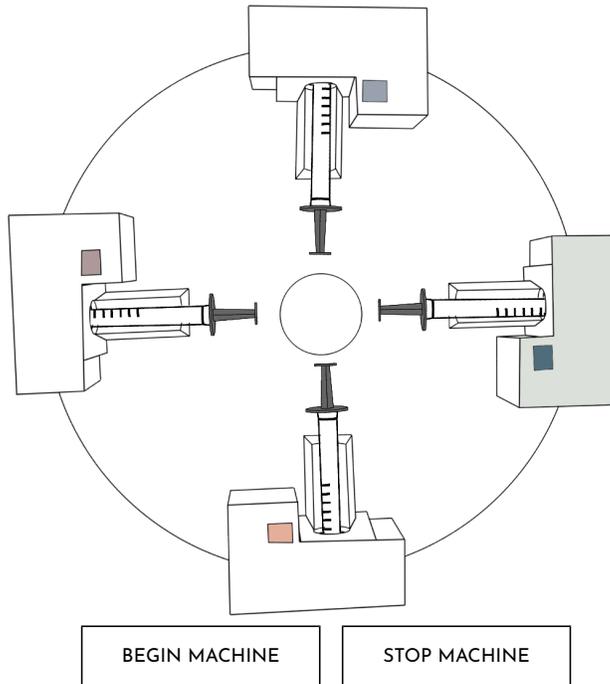
(see graphic)



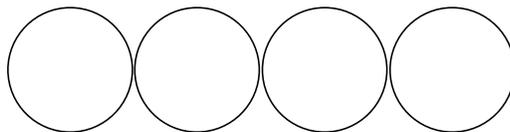
- step 2 -

INCUBATE

Once the bacteria has been transformed, it is time to incubate. The Bio.Maker.Lab machine runs this process, and this page controls the machine. Once the machine starts, the digital incubator below follows the rotation of the actual machine. Additionally, there are real time readings of temperature, time and optical density.



OPTICAL DENSITY (OD) READINGS:



SYRINGE SYRINGE SYRINGE SYRINGE
1 2 3 4

NEXT
▼

- step 3 -

DATA ANALYSIS

Now that the machine has started running, it is time to analyze the data. Below, each syringe being incubated has a graph of its optical density history. Additionally, the raw spectrum reading can be viewed.

CLICK TO UPDATE READING

DISPLAY
SYRINGE 1

DISPLAY
SYRINGE 2

DISPLAY
SYRINGE 3

DISPLAY
SYRINGE 4

(DOWNLOAD GRAPH)

CLICK FOR RAW SPECTRUM RESULTS:

RAW
SPECTRUM
READING

- notes -

RECORD

Fill out and download this form to remember your project details!

Name:

Date:

Project:

Notes about the project:

Questions I still have:

File Name (must end in .txt):

[DOWNLOAD NOTES](#)

[\(BACK TO TOP \)](#)
