

## Human Integrations Survey

### Summary of Project and Goals:

The CSU international genetically engineered machine (iGEM) team is working this year on a project to combat antibiotic resistance in Staphylococcus aureus (MRSA). Our team hopes to create a biological treatment and delivery system so that antibiotic resistant infections can be treated and/or prevented altogether. We are currently building a sense and destroy mechanism into E. coli which would use the quorum sensing of the S. aureus population to release a Staph specific antibiotic agent called Lysostaphin. This system would be integrated into a “living bandage” which we could use in specialized wound care where antibiotic resistant infections would be more likely to occur. Given the scope and goals of our project we would really appreciate feedback on the viability and necessity of such a product in the form of this short survey.

### Disclaimer:

The purpose of this survey is to apply the responses received to improve upon the current project described above. Your participation in this research study is voluntary. You may choose not to participate. If you do choose to participate your responses will remain anonymous. These responses may be published on the CSU iGEM's website.

### Sample Questions:

1) How common are antibiotic resistant infections in your line of work or in that of clinicians you work closely with?

- Very Common
- Common
- Uncommon
- Very Uncommon
- Rarely to Never Dealt With

2) What are potential barriers in getting technology like our living therapeutic to people who might need it?

- Cost
- Regulations
- Stigma Surrounding
- Preparation and Upkeep
- Other. Please specify

3) Are there any similar products on the market now, and if so, how might they improved upon?

- Yes
- No
- Not Sure

4) Do you believe this technology would be beneficial for the populations you see on a daily basis? Elaborate if able.

- Yes
- No
- Not Sure

5) If we could deliver this system in a commercial product, what type of product would you most like to see? Elaborate if able.

- A topical cream or foam
- A bandage/wound dressing
- A pill
- A shot
- Other. Please specify

6) Would a direct implementation of a wound care system be more beneficial or a preventative measure such as a surface cleaner or sterilization method? Elaborate if able.

- Wound Treatment Device
- Surface Cleaner/Sterilization Product
- Both
- Neither

7) How common are “living” biological therapies used in your line of work, if at all?

- Very Commonly
- Commonly
- Uncommonly
- Very Uncommonly
- Not Used at All

8) What would be the easiest way for you to store the product until it was needed for use? Are there any precedents set for the storing of “living” therapeutics? Elaborate if able.

- Frozen Liquid

- Unfrozen Liquid
- Powdered Solid to be Resuspended
- None of the Above

9) If our product could be shown to be an effective agent against MRSA infections and was approved by the FDA for clinical use, how likely would you be to use it over the next best alternative? Elaborate if able.

- Very Likely
- Likely
- Unlikely
- Very Unlikely
- Would Not Use

10) Would you be willing to receive and respond to a follow up survey where we discussed the issues that had been raised by the participants of this survey as well as our potential solutions?

- Yes
- No

Thank you for your thoughts and time.