

Rice iGEM Meta-Analysis Questions

1. What university is your team associated with, location of university, project name, and project track?

Rose-Hulman Institute of Technology located in Terre-Haute, Indiana. We are called the Cobold Hunters, and are in the Environment track.

2. How many PIs, advisors, and undergraduate team members does your team have?

There is one primary PI, three additional advisors, and seven team members.

3. What were the primary reasons why you chose your project?

We had several reasons for choosing our project. It was a project that team members were interested in conducting, as it involved a wide variety of fields (agricultural science, genetics, inorganic chemistry, etc.). It was also a project that we believed was realistic for our knowledge and resources, with having the option to expand to new areas if we had the time. This project is something that, ideally, could be applied worldwide at industrial sites at risk for heavy metal leakage. Lastly, it was a project that we had realistic ways of carrying out and quantitatively analyzing without spending extra money.

4. What was the process you went through in choosing your project?

During our initial meetings, ideas for projects were proposed with no limits on what could be done. With a long list of projects available, we began to eliminate projects based on the reality of our time frame, resources, etc. When we had moved down to three or four final ideas, we began researching each project in sub-groups, and would present our ideas and research to each other. A final discussion, followed by a vote, determined what our final project would be.

5. Do you think your location or local environment influenced your project selection? If so, how might these influences be described? (For example, after flooding in the Houston area, teams in that region gravitated toward flood-related projects)

Our location, while not the primary reason we selected this project, did play a role in the decision process. Indiana has dealt with heavy metal spills in the past, and arsenic especially has been an issue for farms and industrial sites in the area.

Rice iGEM Meta-Analysis Questions

6. Were there any other projects you would have wanted to do, but were unable to do for any reason? Please explain.

Some projects were not an option based on resources and the time frame of the competition. One idea we had looked at was nitrogen fixation in agricultural interests, but after some research on the subject we saw several research projects had taken 4-5x the length of iGEM with little success. Another option we had looked at was a project centered around the white nose bat syndrome. This idea was eliminated because we were not confident that we could come up with a legitimate application of the project within our budget and work hours.