

Immersive Teaching Experience: Biological Security

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Why Immersive?

People learn better from being immersed. Hands-on activities or skits are examples of ways someone can be immersed in learning.

Being immersed activate different areas of the brain during the learning process. Having these different areas activated cause the brain to be more engaged the brain has different ways to make sense of what is being told to it.



Image 1: Drafting and testing our immersive experiences with each other

CPSS220: What Up

In CPSS220, we worked collaboratively on developing immersive learning experiences based on graduate research. After learning about the importance of communication and applications of metaphors, we applied our education and new skills in order to develop these experiences.

We went out to interview a graduate student and learned what their topic of research was centered on. In order to create a meaningful experience we needed to transform that research into a metaphor that most people would understand.

We bounced ideas around and spent most of the Fall-2020 semester developing these metaphors to integrate them into an immersive experience. After finishing, we would present at the Academic Showcase.

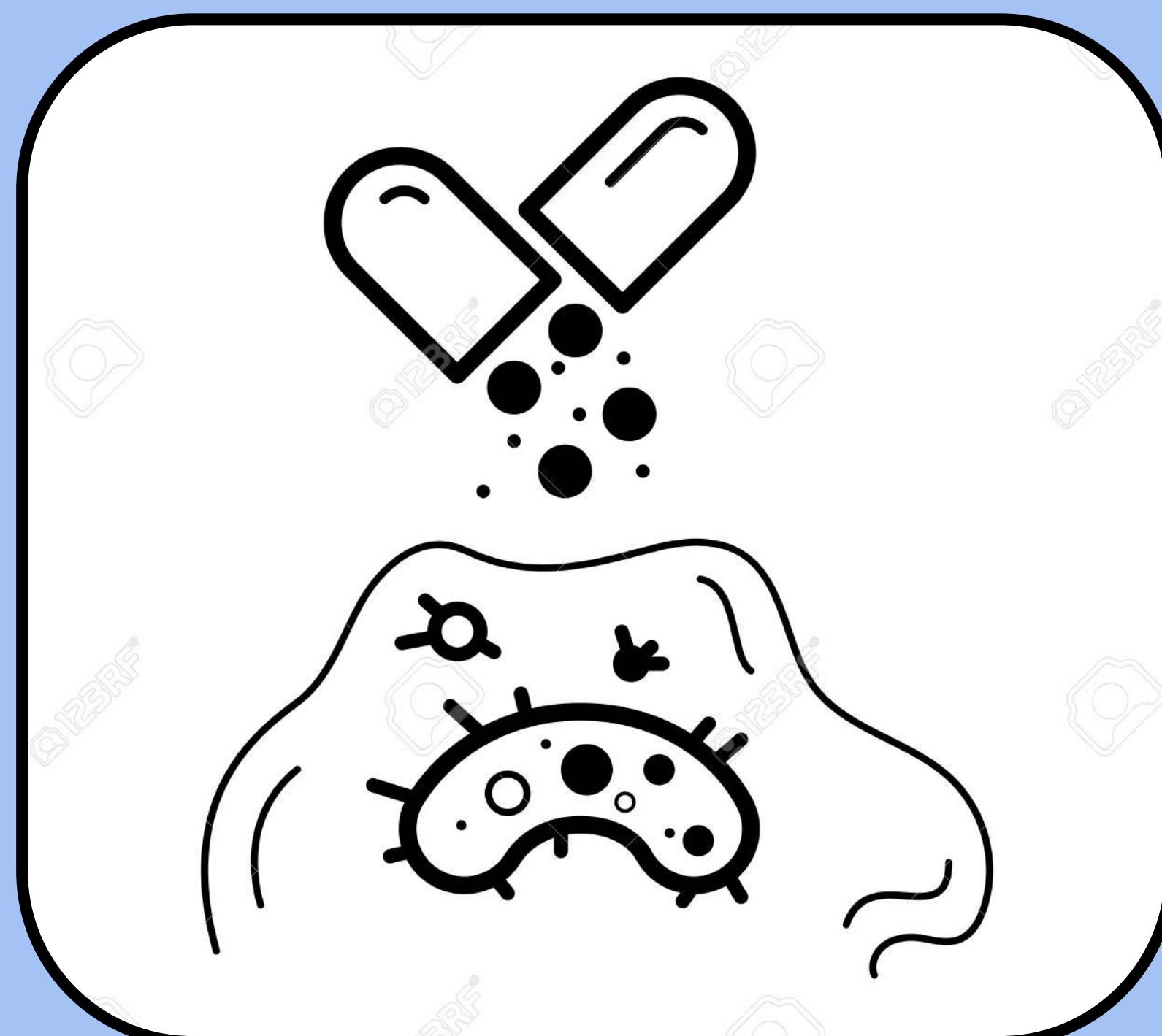


Image 2: Depiction of a Cell resisting antibiotics due to a Biofilm.

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Main Experience developed

Jason and Everest worked together to develop an experience based on the research of Graduate Student Kayla Best. Kayla's research is about trying to develop an enzyme to keep PGACD from being able to bond to it's cellular substrate. This would inhibit the bacteria's ability to produce a biofilm, making it susceptible to antibiotics.

The biology of the research would be lost to most, so we focused on exposing a bad thing, as that is the core of what Kayla is trying to do. We used an x-ray at an airport to represent exposing the bad thing so authority of police could remove it, like antibiotics removing bacteria. We used a relatable moment of airport security to be an immersive experience to explain Kayla's research.

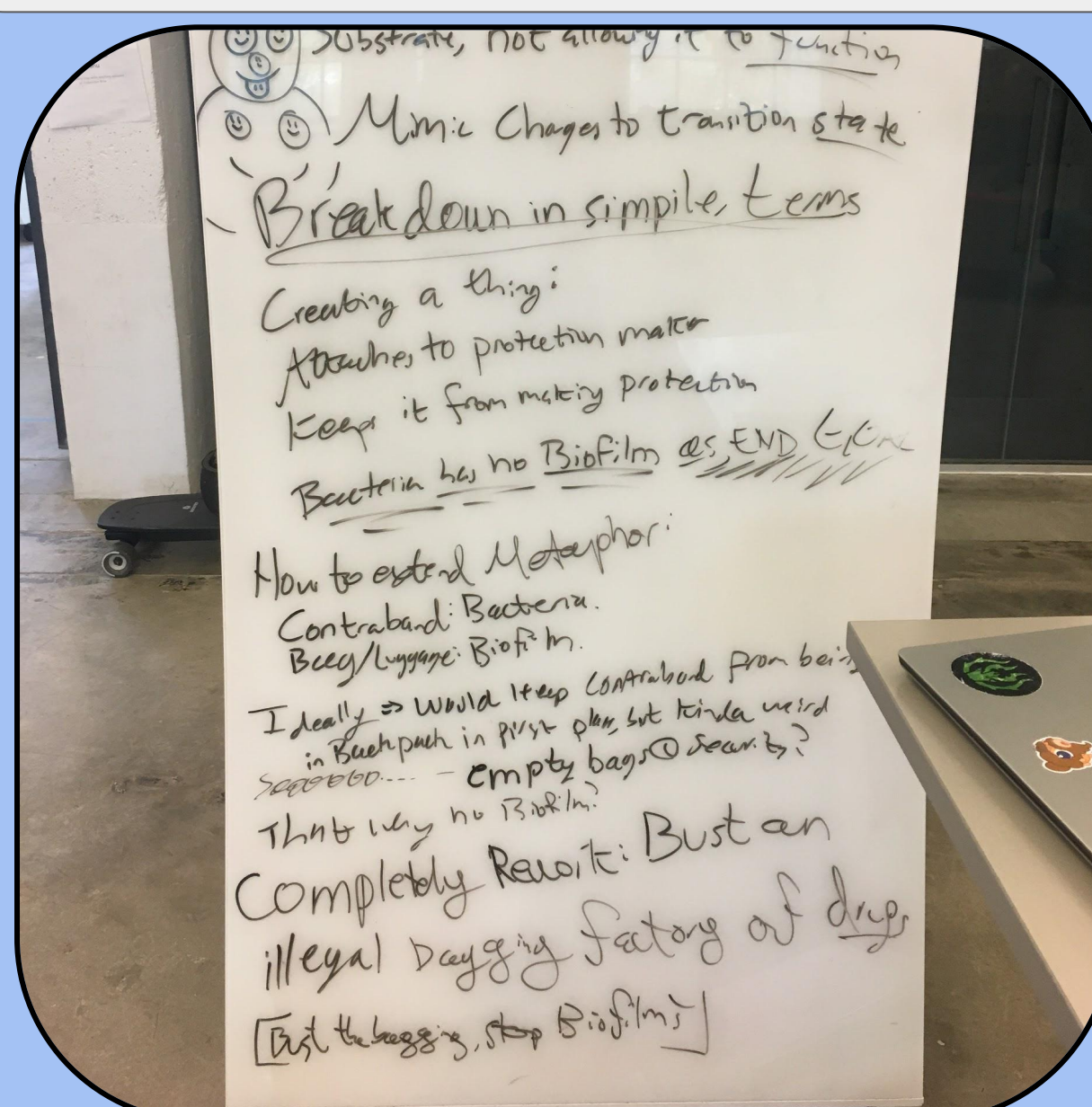


Image 3: Picture of our brainstorming on a whiteboard our Immersive experience

Baltimore Underground Trip

In addition to developing our immersive learning experience, we went to the Baltimore Underground Science Lab to help their presenters practice communicating their project in a more effective way. We developed a teaching experience for them to undergo in order to grow and specialize their communication, making their project easier for the average listener.

Our teaching experience included improve, metaphor practice, and sentence continuation exercises. They had a positive experience as well as having a lot of good takeaways.



Image 4: Everest explaining the improve exercise at the Baltimore Underground Science Center

Future and Takeaways

The skills I have learned about communication and metaphors have been very helpful in the long term. Explaining ideas and concepts to people become a lot easier after studying communication itself.

Acknowledgements

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