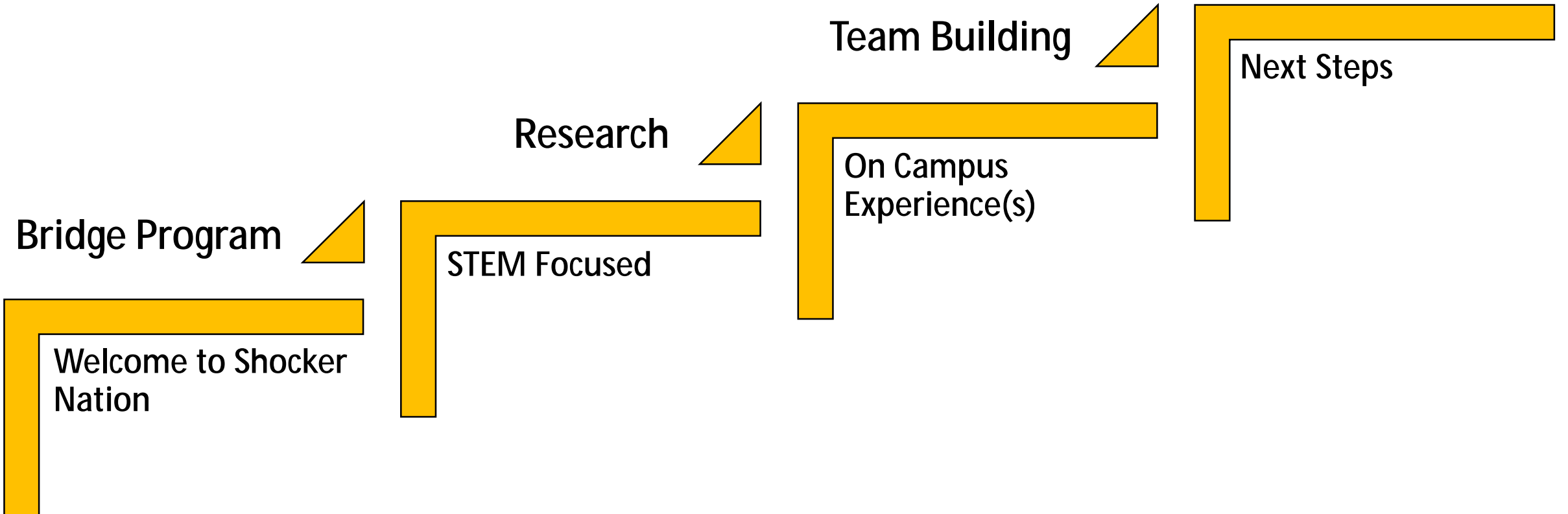
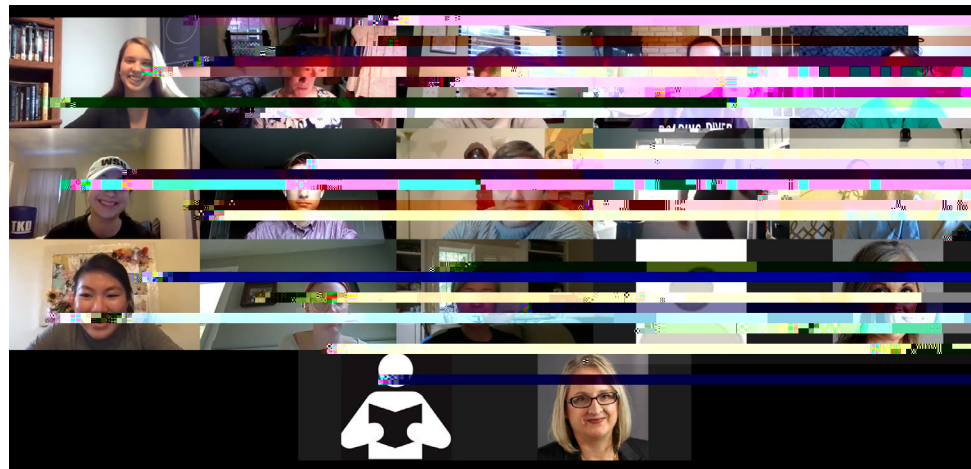
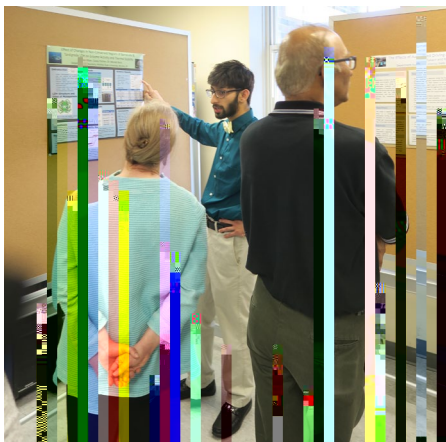


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What is fetal bovine serum?
Fetal bovine serum (FBS) is a natural source of growth factors and hormones that promote cell growth and proliferation. It is commonly used in cell culture to maintain cells in a favorable growth environment.

What are Endothelial Cells?
Endothelial cells form the inner lining of blood vessels. They act as an intermediary between blood and other tissues. Endothelial cells are unique due to their location in the body.

Background & Introduction
Endothelial cells grow quickly and are found in the lining of blood vessels. They are essential for maintaining the integrity of the vascular system. Fetal bovine serum (FBS) provides essential nutrients and other factors needed to maintain a favorable growth environment.

Results
Our study focused on 4 experimental groups with 10% FBS. The results concluded that the cells cultured with higher concentrations of FBS had more cells and essential nutrients.

Discussion & Conclusion
By understanding what amount of fetal bovine growth and proliferation, researchers are able to regenerate medicine. With further studies, using more endothelial cells, we can support with regenerative medicine.

Acknowledgements
I would like to thank Dr. Long for his help and support with this project.

Figure 1: Endothelial cells lining the blood vessel (reference 2).
Figure 2: The endothelial cells that we used were initially from 3 to 6 weeks old fetal bovine serum. We tested different concentrations of fetal bovine serum (10%, 20%, and 30%) and found that 10% was the best concentration for cell growth and proliferation.

Figure 3: Endothelial cells grown on 24-well culture plates to serve as a control. The cells were grown on 24-well culture plates for 24 hours. The cells were then counted and the back circles indicate the wells that were used for each FBS concentration and the back circles indicate the wells that were used for each FBS concentration.

Figure 4: Endothelial cells maintained in 10% cell growth factor (10% FBS) endothelial cells after 24 hours were 10% and 20% cell serum reference 6).

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