

From this project I learned a lot about Animal use in Biomedicine research in terms of how animals are used, what happens to them when they are done with the study, and ways that people are pushing for more technological experiments rather than animal experiments. I was shocked to learn of the ways they purposely induce stress into lab mice, and further surprised that it is a procedure used to develop anxiety medication. It broke my heart to learn that people work with these animals thinking they are okay with humans poking and prodding at them simply because they cannot speak up for themselves. From my own personal experience with my rabbit, I know they hate being picked up, and many rabbit pet websites will tell you not to handle them because it is in their nature to be stressed out and afraid of big animals picking them up. Yet since they only show this stress through a lack of a nose twitch, it goes unnoticed by their handlers. I also had no idea that the animals were being killed after the research ended. I thought they went up for adoption all the time. My cousin worked in a cosmetics lab and when one of the dogs was done with the research, she adopted him, so I thought that was standard procedure. Lastly, I felt much more uplifted by the end of my project to know that there are technological advancements going towards replacing animal experimentation with technological testing. It is nice to know that if I work hard to refrain from buying animal tested products and support legislation to end animal research, that there is a chance it could be replaced entirely. It also is somewhat uplifting to think that all the technology that we are developing, that is causing so much damage to the environment, has the protentional to do some good as well in the name of anti-animal experimentation.

During this project the biggest challenge I faced was encountering many researchers defending the use of animals as a necessary evil. I had to look a little deeper to find articles and journals looking to disprove that notion. However, I think finding the pro animal research journals first was helpful for developing my argument. I was able to get a good understanding of both arguments before deciding my own stance. After reading about all the ways that technology will be able to replace animals in the future, I agree that there is no need to continue animal testing as a “necessary” evil. The reason this became such a challenge is because at first, many of the pro- animal research articles did not seem to be supporting it until about halfway through. This became difficult because I would take notes on things and begin to formulate ideas and then realize they came from a different stance than I intended. However rather than just “throw it out the window” I looked to use it in my news article to explain what the justifications are for animal research and why they are quickly being dispelled.

The only thing I think I could have done better was use more pictures. I did not want to have an eight- or nine-page document so I kept one page without pictures, but I think it

could potentially have added a little more to the story. Overall, I think I was very successful in this project. I really enjoyed the research, and I was able to take a bunch of different articles and put them all in conversation with each other from varying stances on the subject. I believe I was able to write the information in an organized manner with what I hope are images that further get the point across. I actually am really proud of how I did on this project and I had a lot of fun researching it.

Bibliography

- BBC. Animal Experimentation: A Difficult Issue. 2014.
https://www.bbc.co.uk/ethics/animals/using/experiments_1.shtml
- Beata, B. K., Wojciech, J., Johannes, K. et al. (2023). Alzheimer's Disease-Biochemical and Psychological Background for Diagnosis and Treatment. *International journal of molecular sciences*, 24(2), 1059. <https://doi.org/10.3390/ijms24021059>
- Bracken M. B. (2009). Why Animal Studies are Often Poor Predictors of Human Reactions to Exposure. *Journal of the Royal Society of Medicine*, 102(3), 120–122.
<https://doi.org/10.1258/jrsm.2008.08k033>
- EBSCO. Animal Experimentation (Psychological Methodologies). (2025).
<https://www.ebsco.com/research-starters/health-and-medicine/animal-experimentation-psychological-methodologies>
- Gray, Lindsay. In the Future, Lab Mice Will Live in Computer Chips, Not Cages. 2020.
<https://undark.org/2020/07/02/future-lab-mice-computer-chips/>
- Kiani, A. K., Pheby, D., Henahan, G., et al. INTERNATIONAL BIOETHICS STUDY GROUP (2022). Ethical Considerations Regarding Animal Experimentation. *Journal of preventive medicine and hygiene*, 63(2 Suppl 3), E255–E266.
<https://doi.org/10.15167/2421-4248/jpmh2022.63.2S3.2768>
- Lewis and Clark Law School. Take Action for Animals Used in Research. 2024.
<https://law.lclark.edu/live/news/53453-take-action-for-animals-used-in-research>.
- Peta. Animals Used for Experimentation. 2025. <https://www.peta.org/issues/animals-used-for-experimentation/>
- Physicians Committee. Research on Animals: Harmful to Animals, Damaging to Laboratory Workers' Mental Health. 2021. <https://www.pcrm.org/news/innovative-science/research-animals-harmful-animals-damaging-laboratory-workers-mental-health>
- Pomeroy, Ross. Scientists Kill 192 Million Lab Mice Each Year. Is There a Better Way? 2024.
<https://bigthink.com/life/scientists-kill-192-million-lab-mice-each-year-is-there-a-better-way/>
- Staddon, John. Animal Research: Does it Help People? Is it any use Otherwise?. 2017.
<https://www.psychologytoday.com/us/blog/adaptive-behavior/201711/animal-research>

