Logbook 2024-2025

By: Mika Kawai & Chloe Leung

Nov 5 - Decided to make the problem “How do jellyfish function without brains, hearts, or lungs?”, other ideas were a jellyfishes’ nervous system or regeneration, decided to do a research project and add a model, picked this topic since jellyfish looked pretty, then found interesting facts about jellyfish - <https://www.mcsuk.org/news/fascinating-facts-about-jellyfish/>

Nov 12 - Attended science fair meeting, worked on planning sheet, filled out problem and hypothesis

Nov 19 - Filled out rest of the planning sheet

Nov 26 - Checked in with Mr. Hagen, got approved (yay!) for science fair, filled out Basic Project Info

Dec 3 - Chloe joined Mika’s Project, started Ethics Due Care 2A

Dec 17 - Started slideshow for our project, slide 1, 2, worked on Ethics Due Care 2A, Significant Risk Form 2B

Jan 4 - Worked on slide 3,4 and citations.

 *Researched and browsed:*

 [https://oceanservice.noaa.gov/facts/jellyfish.html](https://oceanservice.noaa.gov/facts/jellyfish.html#:~:text=They%20are%20composed%20of%20three,inner%20layer%2C%20called%20the%20gastrodermis)

Jan 7 - Science fair meeting, added slides 5,6

Jan 14 - Submitted Ethics due care 2A, changed slide 5, added slide 7

Jan 21 - Discussed a model for the trifold, worked on significant risk form 2B, CYSF platform “problem” and worked on slide 5.

 *Researched and browsed:*

<https://oceanconservancy.org/blog/2023/08/03/do-jellyfish-have-brains/>

Jan 28 - Worked on slide 6, 7, 8

Feb 1 - Worked on slides 5, 6, 8.

 *Researched and browsed:*

<https://www.iflscience.com/theres-a-jellyfish-in-the-ocean-that-looks-just-like-a-fried-egg-68137>

<https://exotic-aqua.com/black-sea-nettle-2/>, <https://www.worldatlas.com/is-the-irukandji-jellyfish-deadly.html>, <https://www.worldatlas.com/what-do-immortal-jellyfish-eat.html>

Feb 3 - Worked on slide 7, added and worked on a new slide 8. Filled in CYSF “acknowledgement” and “method”.

*Researched and browsed:*

<https://www.cbc.ca/kids/articles/10-cool-things-you-didnt-know-about-jellyfish>, <https://www.oneearth.org/five-jaw-dropping-facts-about-jellyfish/> <https://today.ucsd.edu/story/first_jellyfish_genome_reveals_ancient_beginnings_of_complex_body_plan>

<https://www.vims.edu/bayinfo/jellyfish/lifecycle/>

Feb 4 - Attended Science fair meeting, learned of important dates

Feb 9 - Added 6 new slides, worked on slide 9,13. Proofread with Chloe’s dad. Came up with the idea of healing properties of jellyfish, and resemblance to AI.

 *Researched and watched:*

<https://www.youtube.com/watch?v=rUogIRH2XwQ>

Feb 10 - Reviewed slideshow.

 *Researched and browsed:*

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/anatomy-of-the-brain>

<https://my.clevelandclinic.org/health/body/21704-heart>

<https://my.clevelandclinic.org/health/body/8960-lungs>

<https://my.clevelandclinic.org/health/body/21758-stomach>

Feb 11 - Discussed with Mika about the the thoughts of the healing properties of jellyfish, and resemblance to AI. Mika thinks this idea maybe hard and extra. We also asked about getting a trifold

Feb 13 - Worked on slide 12, 14

Feb 15 - Worked on slide 4, 11, deleted slide 8, 9.

*Researched and browsed:*

[https://www.sciencedirect.com/science/article/pii/S2950311624000302](https://www.sciencedirect.com/science/article/pii/S2950311624000302#:~:text=Overall%2C%20Jellyfish%2C%20similar%20to%20other,like%20hemolytic%20proteins%20for%20defense), <https://www.mbl.edu/news/jellyfish-model-wound-healing>, <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/immune-system>

Feb 17 - Proofread with Chloe’s dad, added new slide 3, edited whole slideshow

Feb 18 - Reviewed updated slideshow with Mika

Feb 20 - Proofread slide 1-8 with Mika, combined info on slide 7 and 2.

 *Researched and browsed:*

<https://www.britannica.com/science/survival-of-the-fittest>

Feb 22 - Started jellyfish model, went through slides 1-5, moved up slide 20.

Feb 23 - Went through and simplified slides 3, 6-13, took out slide 14, 16.

Feb 24 - No work was done on presentation. Discussed jellyfish model with Mika.

*Researched and browsed:*

[https://www.neurology.org/doi/10.1212/WNL.0000000000203841](https://www.neurology.org/doi/10.1212/WNL.0000000000203841#:~:text=It%20is%20known%20as%20the,their%20possible%20applications%20in%20humans), <https://www.smithsonianmag.com/smart-news/immortal-jellyfish-could-spur-discoveries-about-human-aging-180980702/>

<https://www.amnh.org/explore/news-blogs/immortal-jellyfish>, <https://pmc.ncbi.nlm.nih.gov/articles/PMC7954621/> <https://www.caltech.edu/about/news/building-bionic-jellyfish-for-ocean-exploration>,

Feb 25 - Worked on slide 14, 15, 16.

 *Researched and browsed:*

<https://www.national-aquarium.co.uk/blog/five-things-you-didnt-know-about-jellyfish/>

Feb 26 - Looked through “flow” of slideshow, got trifold.

Feb 28 - Went through slideshow, simplified our ideas, added pictures.

 *Researched and browsed:*

<https://www.osc.org/are-jellyfish-older-than-dinosaurs/> [https://www.merriam-webster.com/dictionary/metamorphosis](https://www.merriam-webster.com/dictionary/metamorphosis#:~:text=%3A%20the%20process%20of%20basic%20and,compare%20complete%20metamorphosis%2C%20incomplete%20metamorphosis) [https://ocean.si.edu/ocean-life/invertebrates/jellyfish-and-comb-jellies](https://ocean.si.edu/ocean-life/invertebrates/jellyfish-and-comb-jellies#:~:text=Until%202015%20scientists%20believed%20that,rear%20end%20of%20the%20animal) [https://medlineplus.gov/ency/article/004012.htm](https://medlineplus.gov/ency/article/004012.htm#:~:text=Some%20theories%20claim%20that%20aging,all%20the%20changes%20of%20aging)

Mar 1 - Proofread slideshow for flow, added pictures, made it look pretty, continued jellyfish model.

Mar 4 - Worked on CYSF website, worked on slide 20.

 *Researched and browsed:*

[https://www.chesapeakebay.net/discover/field-guide/entry/comb-jellies](https://www.chesapeakebay.net/discover/field-guide/entry/comb-jellies#:~:text=Unlike%20jellyfish%2C%20comb%20jellies%20do,taken%20out%20of%20the%20water)

Mar 7 - Finished making slideshow pretty, did citations, proofread one more time, decided to add back “regeneration”.

 *Researched and browsed:*

<https://www.jellyfishart.com/blogs/news/jellyfish-evolution>

Mar 8 - Worked on trifold, printed slides, did online project, printed slides

Mar 9 - Reprinted slides 4, 8, 9, taped printed slides to trifold, did CYSF website, worked on citations

Mar 10 - Finished painting jellyfish, went through finished trifold

Mar 13 - In-school science fair

Mar 18 - Science fair meeting, Mr. Hagen confirmed we could go

Mar 20 - Uploaded slideshow and logbook to CYSF website, wrote in logbook which links we didn’t use

Some links we researched were not used for our presentation. The links that we used for our presentation were included on our citations page.