

Name: _____ Date: _____ Period: _____

WPHS Science Research Program

Vertebrate Animal Testing & “Backstage” Lab Tour

SWBAT: Discuss pros and cons of animal testing in research. Prepare for a “Backstage” Lab tour with Francisca Martinez Traub (PhD student) at Rockefeller University.

Watch the following videos on YouTube:

1) Why Animals Are Needed in Research (4:27):

https://www.youtube.com/watch?v=iA_FfVuTfoM

2) Why mice are the best candidates for research (2:59):

<https://www.youtube.com/watch?v=8uGyRRszMUA>

Both videos’ present arguments for why vertebrate animals should be used in research. What arguments did they present that you thought were especially strong? What arguments were not as strong? If you were to debate on the side against animal testing, what would you say to these scientists to counter their argument?

Look at the website for the Vaziri Lab at Rockefeller University:

<https://www.rockefeller.edu/our-scientists/heads-of-laboratories/1132-alipasha-vaziri/>

What is the general goal of the research being conducted at this lab?

The webpage mentions three types of animals they have used in their experiments.

What are they?

Further reading:

C. elegans: <https://www.yourgenome.org/facts/why-use-the-worm-in-research>

Zebrafish: <https://www.yourgenome.org/facts/why-use-the-zebrafish-in-research>

Special Opportunity! Monday December 14th, 11-12 (lunch & period 5). Francisca Martinez Traub, a PhD student at Rockefeller University, will be presenting her research to us via zoom. She will be explaining and demonstrating the work she is conducting at the Vaziri Lab using rodent models. Comment from Francisca:

“My project’s aim is to understand how interval timing is encoded in the mouse brain. Therefore, the first step of my research is to design and build a behavioral paradigm to assess interval time perception. My plan is to show the behavioral set up, the mouse procedures and how I train my mice. Hopefully they can see how I use python to run microcontrollers and electronics to execute the behavioral paradigm.”

Please review the pdf file of the review article “The Neural Basis of Timing: Distributed Mechanisms for Diverse Functions” to get more information about how to measure interval timing perception.

Please note that this presentation will be recorded. If you do not wish to appear on camera, you may turn your camera off for the entirety of the presentation.

5th period students: Please plan on reporting to the event early, 11am instead of 11:30 (right after period 4). You can eat your lunch while you are watching the presentation. In-person students can report directly to G114.

**If you are interested in attending this event, but have a 5th period class, please feel free to copy & paste the information below into an email to your 5th period teacher:*

To _____,

My Science Research Teacher, Mrs. Kimberly Fleming, has arranged for a researcher from Rockefeller University to speak to us, via zoom, about her research. She will be demonstrating laboratory techniques and giving us a virtual tour of her lab. I would like to attend this event, but it occurs during our 5th period class (11-12) on Monday December 14th. May I have permission to miss your class for this one day? I will be sure to complete any assignments I will be missing. Thank you!

Please contact Mrs. Fleming at kimberlyfleming@wpcsd.k12.ny.us if you have any questions about this event.

Exit Ticket: Please complete this survey so we can prepare for Monday's zoom session with Francisca. It will be counted as a grade in Infinite Campus

<https://forms.office.com/Pages/ResponsePage.aspx?id=NWR-cSJJaV0ed1Mnbi38ADoAypMiUiyZNoULRGXSSQsdUNEIKSjdXUURGhZTzNISVJVNkNIMjA3US4u>