

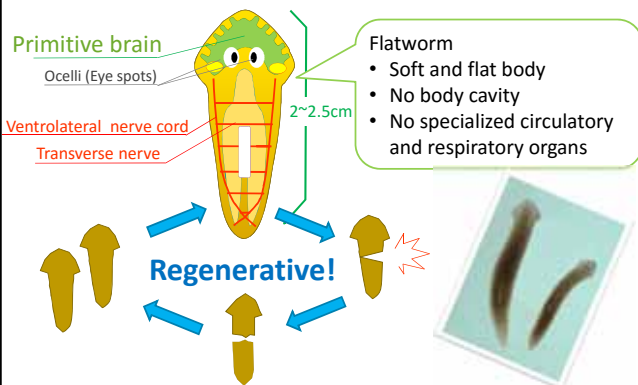
Memory Regeneration

Shinnzaki Kota
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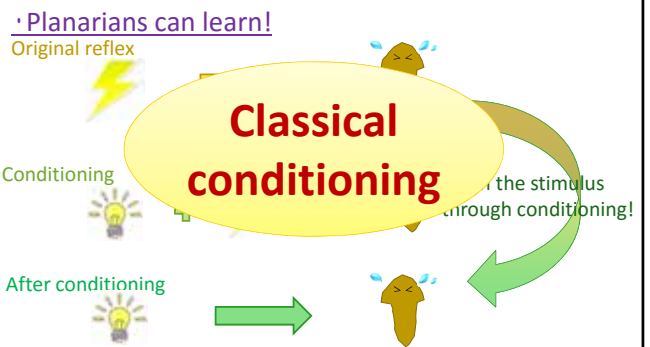
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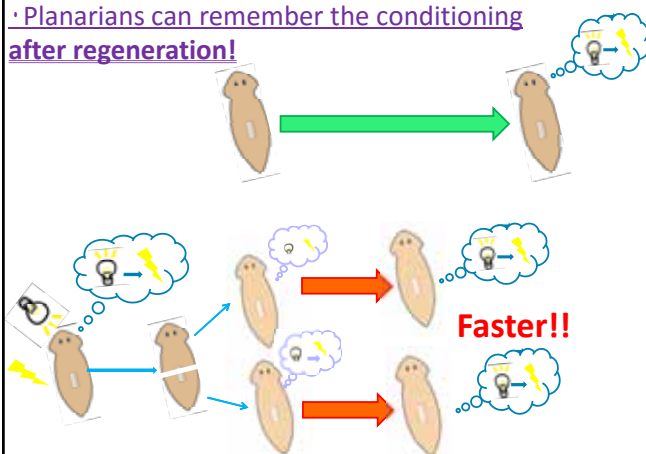
1. What is planarian?



2. Previous researches



· Planarians can remember the conditioning after regeneration!



3. Our purpose

Previous researches...

don't mention the amount of nerves!

don't show enough data!

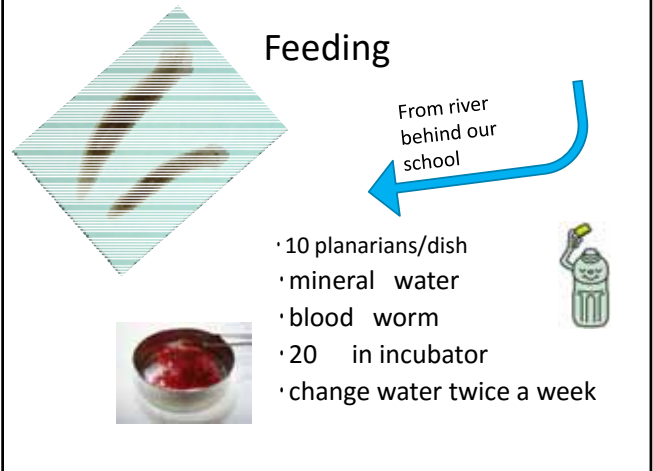
Research the relationship between the amount of nerves and the memory!

- Establish new way to research the memory of planarians
- Change the amount of nerves by changing the way to cut planarians

4 . Our research plan

- Catch and feed planarians
- Observe the response to stimuli
- Check the regeneration ability ← Now
- Check the learning ability ~8/31
- Check the remembering ability ~10/21
- Research the nerve and the memory ~12/31
- Discuss and conclude

Feeding



From river behind our school

- 10 planarians/dish
- mineral water
- blood worm
- 20 in incubator
- change water twice a week

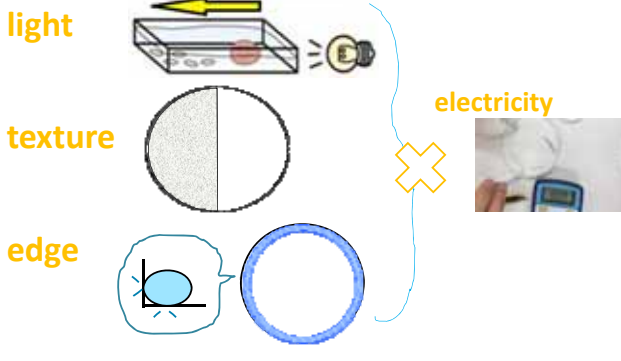
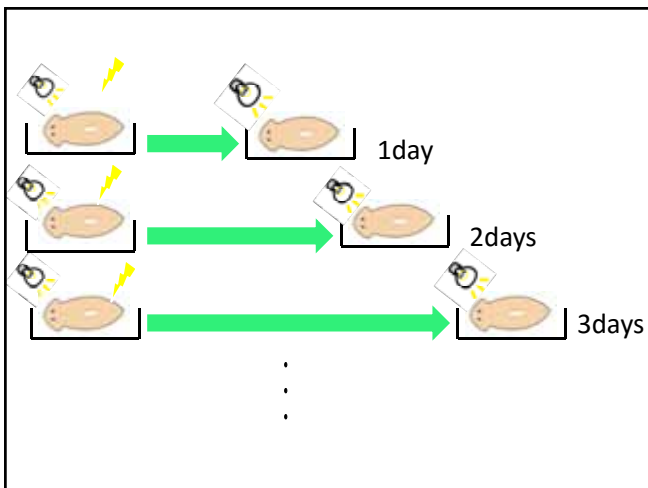
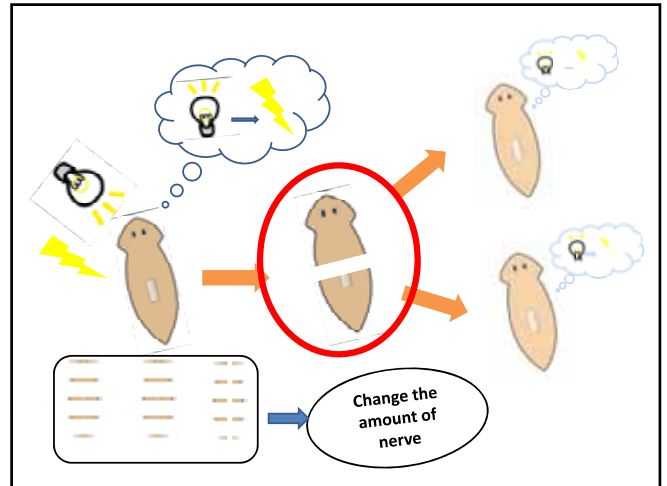
Stimuli

light

texture

edge

electricity

References

- CONDITIONED REFLEXES IN PLANARIANS AND REGENERATION EXPERIMENTS
- An Automated Training Paradigm Reveals Long-term Memory in Planarian

Members

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Thank you for listening!