**Assignments and Activities - 11**

**Task 1: Test your understanding**

**Question 1:** What changes in emotion were observed following temporal lobectomy by Klüver and Bucy? Of the numerous anatomical structures they removed, which is thought to be closely

related to changes in temperament?

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**Question 2:** What procedures will produce an abnormal rage reaction in an experimental animal? Can we know that the animal feels angry?

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**Task 2: FraidyRat fear conditioning (behavioral neuroscience simulation)**

Anatomical and physiological basis of fear learning with FraidyRat

<https://mdcune.psych.ucla.edu/modules/fraidy-rat/>

- follow software instructions: <https://ucla.app.box.com/s/0656vyah85nl4wea54kysiszilkf380l>

- follow video (0:10-1:30): <https://ucla.app.box.com/s/hugw2pzsvnoid26ux77hrvweozs4ltj0>

- all materials can be downloaded from [course repository](https://google.com)

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| Use the following parameters for delayed conditioning:  1. ☑ Re-implant probes  2. **I. Conditioning**  Short  2.1. N Per1: 2  Cntxt Per1: A  CS/US Per1: 1+  N Per2: -20  Cntxt Per2: B  CS/US Per2: 1  ITI: 80  CSdurAcq: 15  USdur: 5  CSdurExt: 15  Rest of parameters: 0  Run/Continue  3. From: 1 To: 400  ☑ Animate Replot  4.Implant probe into Grisham's nucleus and dorsal PAG  Probe 1: X: -14 Y: 29 Implant  🔘 Record at Probe 1 Go Move  Probe 2: X: -6 Y: 20 Implant  🔘 Record at Probe 2 Go Move  5. Manual 🔘 CS1  🔘 Record at Probe 1 Go Move  🔘 Record at Probe 2 Go Move  6. **II. Extinction**  Run/Continue  🔘 Record at Probe 1 Go  7. Infuse 🔘 Syst Rate: 50  ☑ GABA-R agonist On/Off | Does conditioning occur in dorsal PAG? Paste a graph of PAGd cells in context B.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| What is the relationship between freezing/exploration behavior and Grisham's cells activity? Paste a graph of Grisham's cells in context B.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | What effect does GABA-R agonist infusion have on Grisham's cells?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Task 3: Draw me a Brain Ep. 11**

Draw this ([link to editable drawing here](https://github.com/ClaudiuPapasteri/DrawMeABrain/tree/main/DMAB-11)):

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| C:\Users\User\c\FACULTATE - CURSURI\NeuroScience\000 Main\MyCourse\11_Ch18 Brain Mechanisms of Emotion\DMAB-11\DMAB-11_fin_1.png |

Your turn:

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