10/10/67 2nd

Idea:

Do research on comparative biochem of neurons. Very good & can't lose

1) Evolution of basic mech.

1) Polarity

2) Kinds of synapses (Neurosecretion OK)

1) Norep.

1442 In Tetrahymena 2) Ac Chol. Presyn. Inhib.

In Lower Coelenterates 3) Serotonin Postsyn. Inhib.

Tryptamine most effective in Coelenterates 4) Tryptamine

1486 Coelenterates 4) γ AB A

5) Electrical

6) Vesicles

3) Speed of conduction

4) Kinds of Codes & logic

1) Kinds of cell cell interaction (organization)

477 Coelenterates Evolution of Logical Circuits

Aurelia larvae have 4 types of neurons - Circuits

2) Freq. code.

3) Inhib.

4) Phase shift

5) Polarity

6) Simple circuits

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6) Kinds of neurons.

a) Individually recognizing kind of cells.

7) # of cells.

~~8) Vee~~

Symmetry

1) Coelenterates

1) A | A only (No Dentistes)

Vesicles both sides (No Polarity)

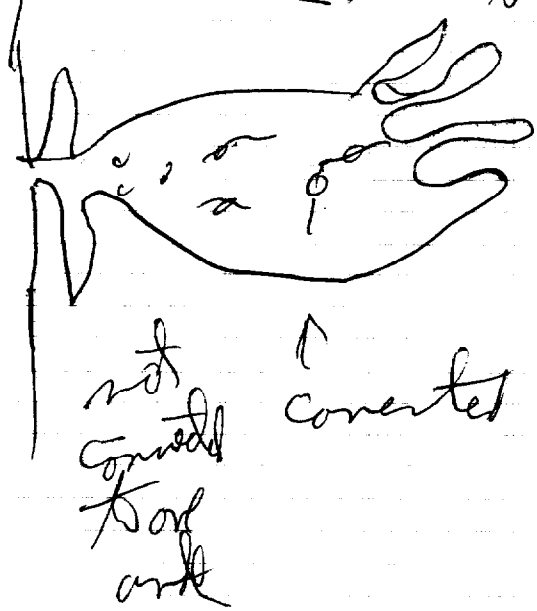
1) send receive.

Question: Only 1 type of cell (or neuron)?

Chemicals? Could be 1 kind of vesicle release but specificity in regard to chemical transmitter.

Aurelia — separate pathways
Correlated with separate function
Reflex modulation of frequency

Idea p508 Hydra buds. Can get
neurons in diff. stages of
differentiation. ± Synapses



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1) Organs of sense - Coelenterals

486 1) Eyes

~~Statocyts~~

Sensory epithelial

Direct organization of neurons

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