



Hypoxia in Mice

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Modeling Hypoxia

Chronic Intermittent Hypoxia (CIH)



Sleep Apnea

Behavioral

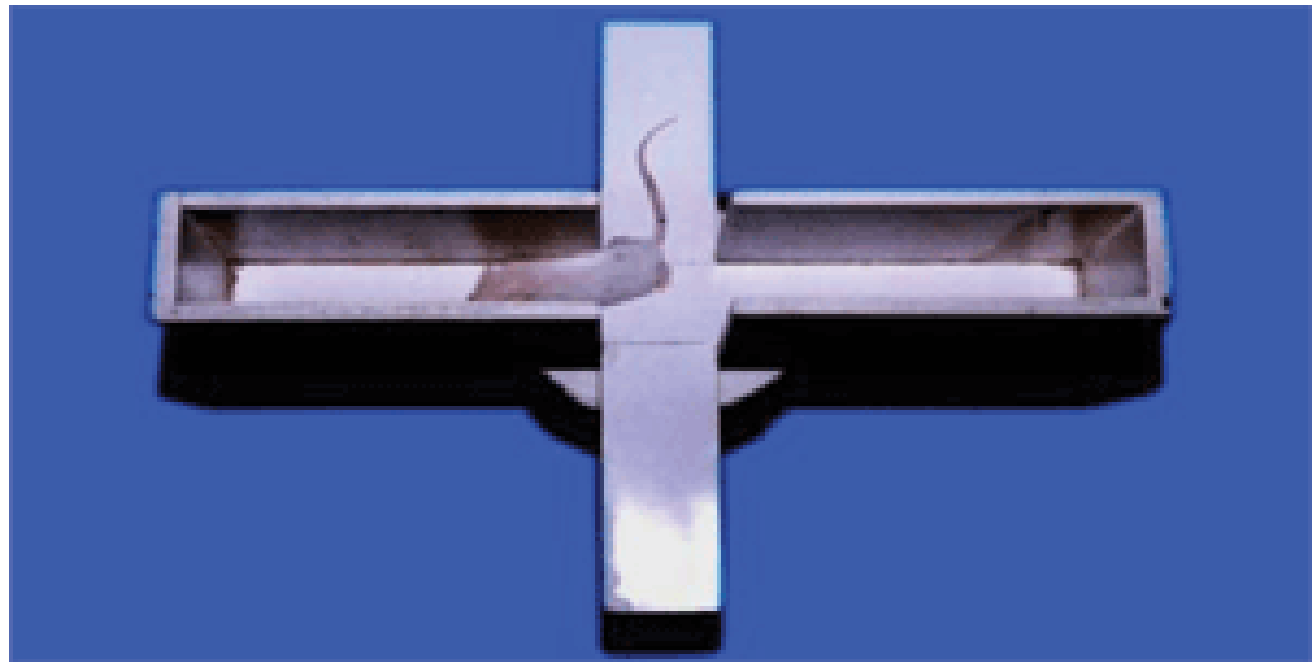
- Elevated Plus
- Barnes Maze
- Object Recognition Test

Electrophysiology

- Slicing
- Extracellular recording

Experiments

Elevated Plus Maze



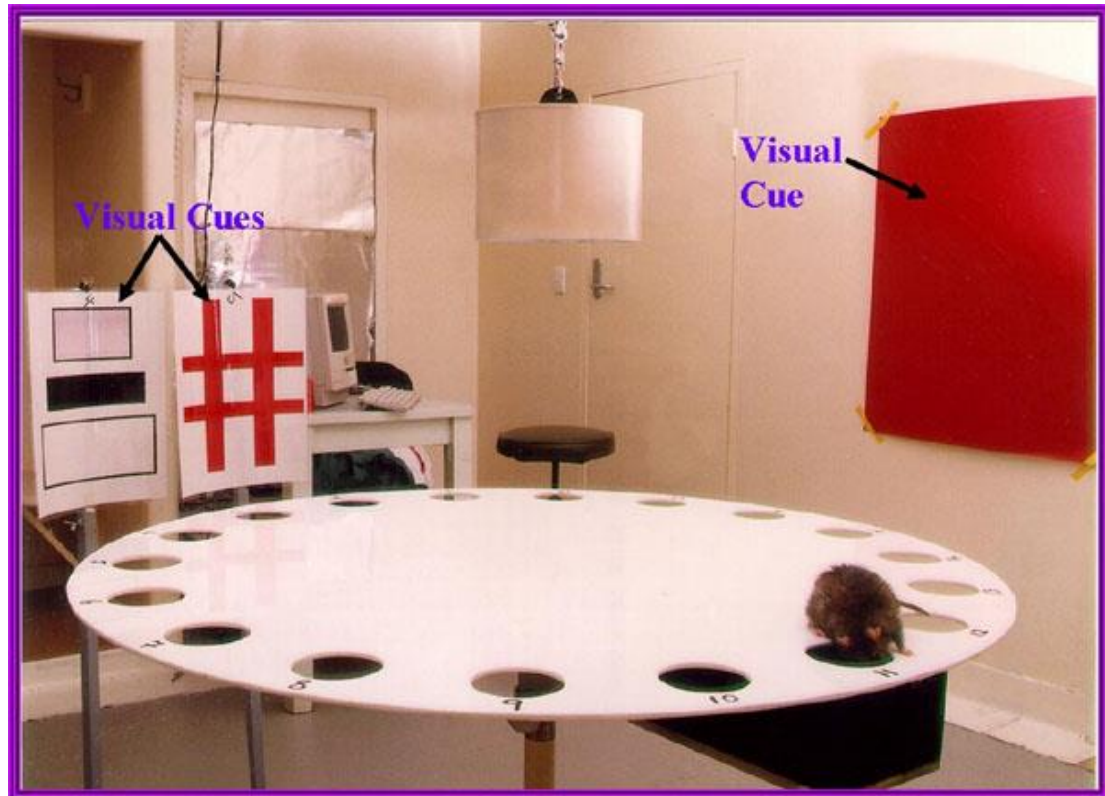
In Vivo Work



In Vitro Work

Experiments

Barnes Maze Test



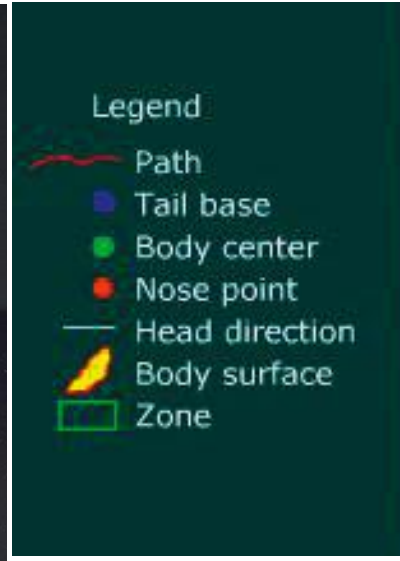
In Vivo Work



In Vitro Work

Experiments

Object Recognition Test

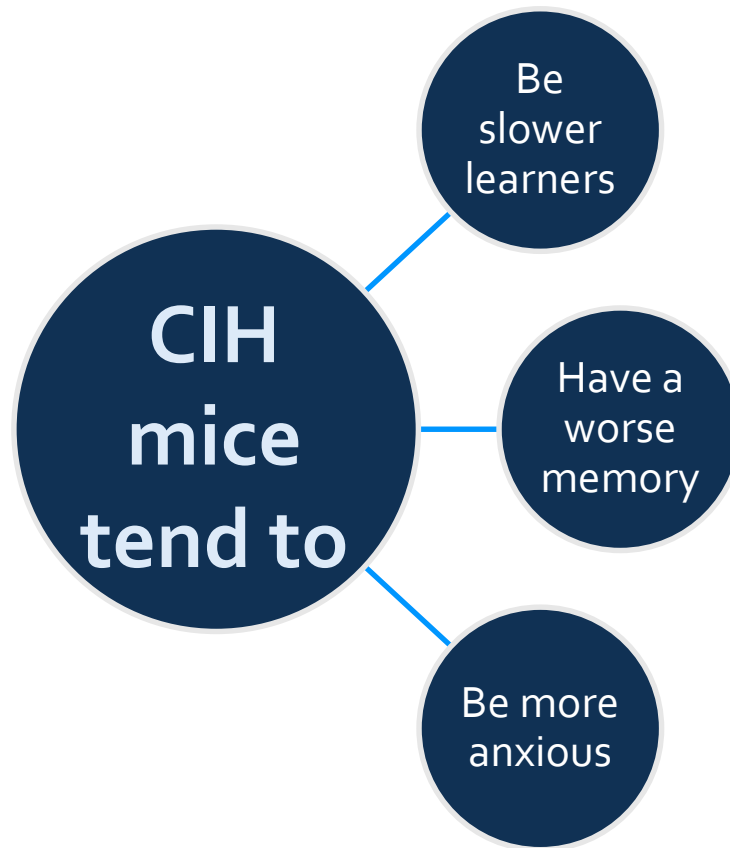


In Vivo Work



In Vitro Work

Hypotheses

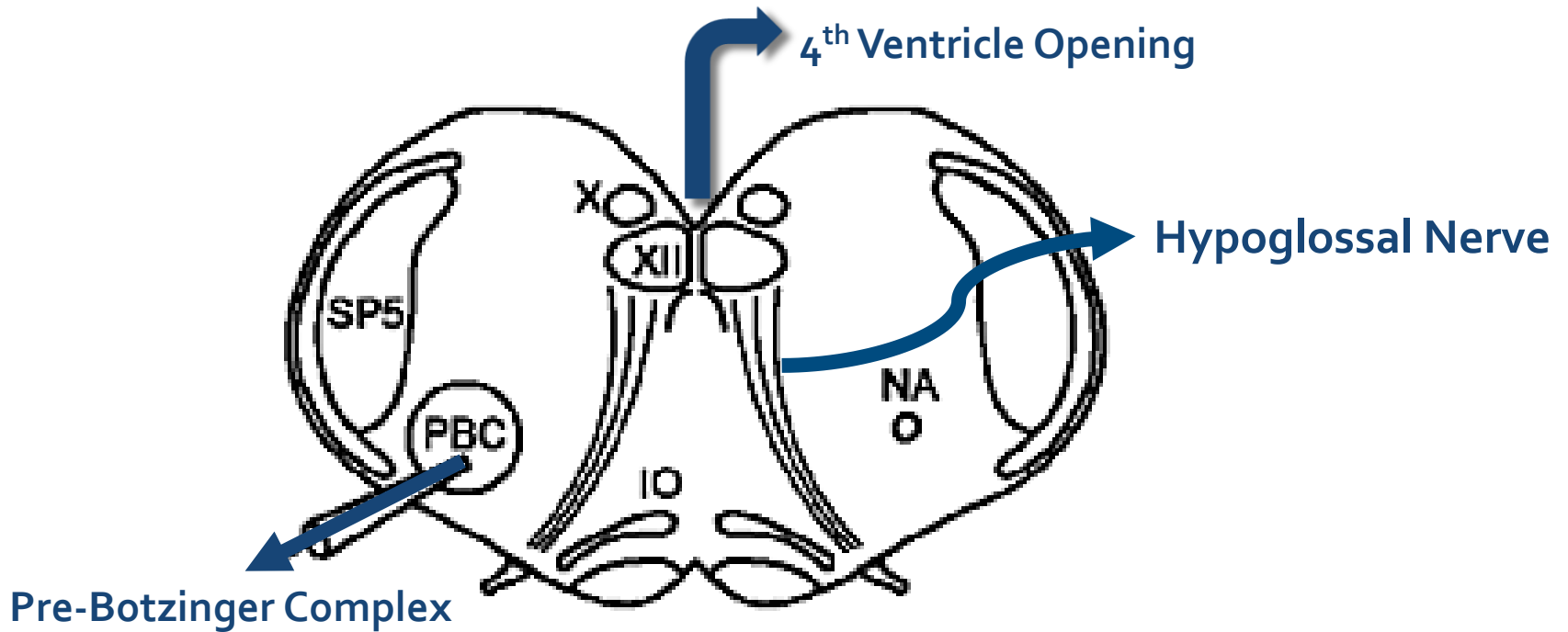


In Vivo Work



In Vitro Work

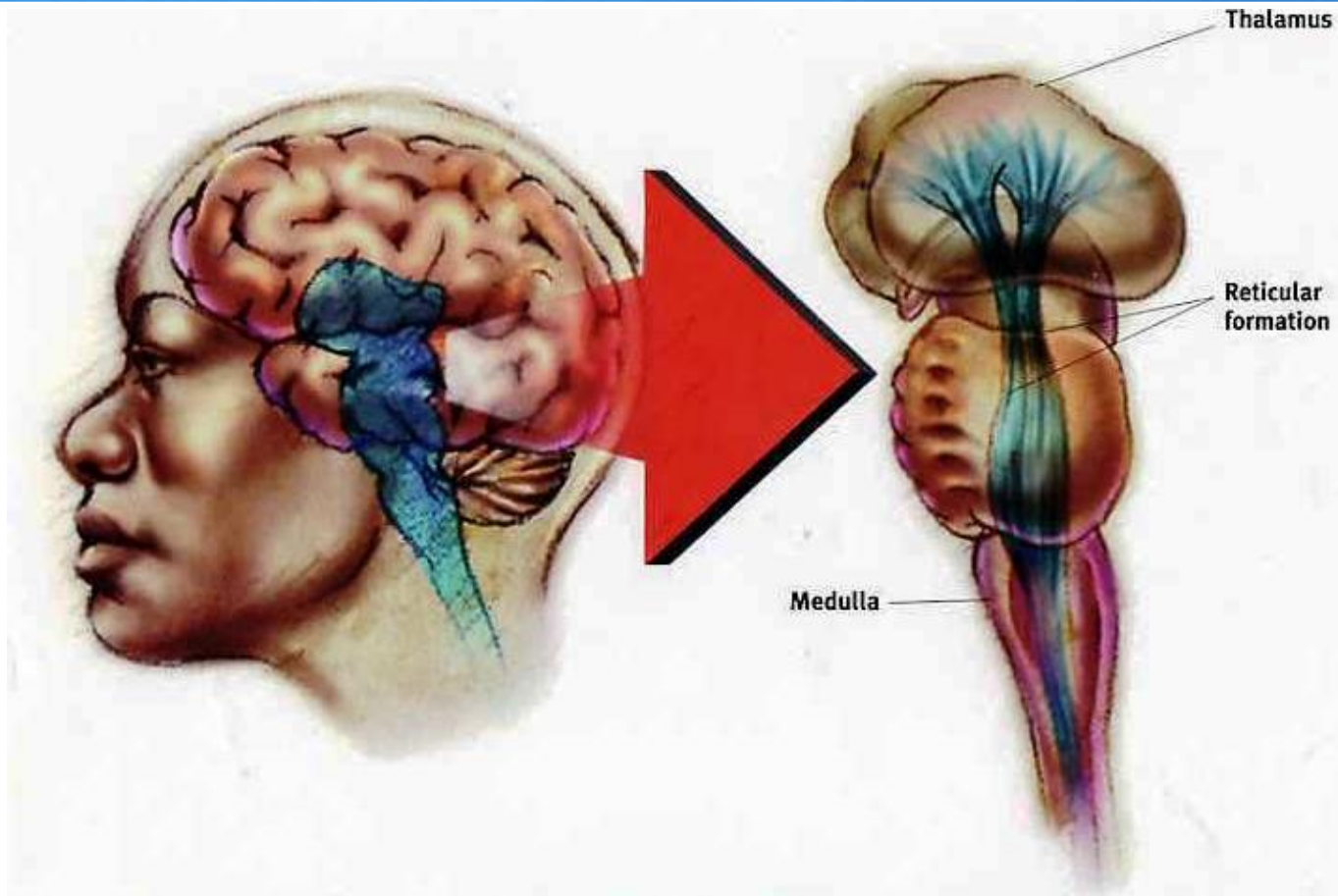
Slicing



In Vivo Work

In Vitro Work

Slicing

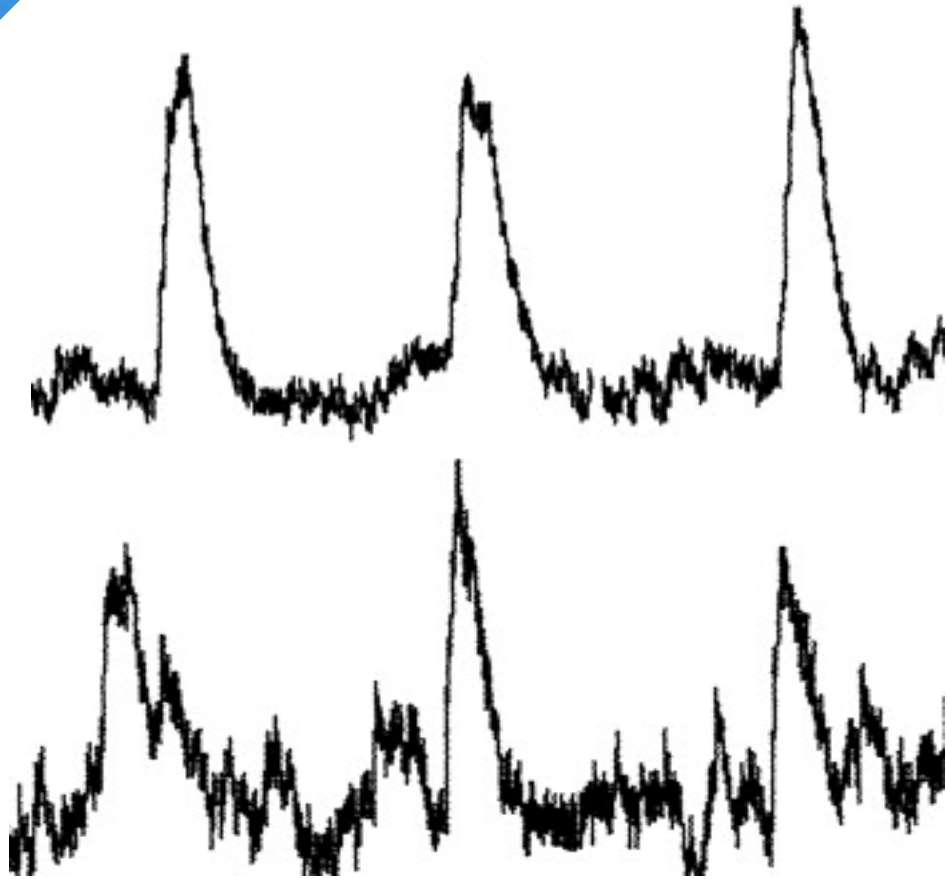


In Vivo Work



In Vitro Work

Extracellular Recording



- Eupnea: normal breathing
- Sighs: clusters of neurons firing at the same time
- Gasps: small fast breaths

In Vivo Work



In Vitro Work

The Vision

Understand respiratory networks



Understand how neurotransmitters, infections, and environments effect respiration



Cure sleep apnea

In Vivo Work



In Vitro Work