Mentor: Atsushi Doi, Ph.D
Project: Effects of Acute Intermittent Hypoxia (AIH) in Swiss CD-1 Wild Mice

**Hypoxia:** A deficiency of Oxygen reaching the tissues of the body
(Miriam Webster)

**Why AIH?**
By observing and analyzing the effects AIH in CD-1 Mice, we can learn more about Sudden Infant Death Syndrome (SIDS). In particular, postnatal age influence on AIH induced apnea.

**Apnea:** Transient cessation of respiration
(Miriam Webster)
“A sudden death of an infant or young child, which is unexpected by history, and in which a thorough post mortem examination fails to demonstrate an adequate cause of death” – National Institute of Health (NIH), 1969

- Occurs usually between 2-4 months of age
- Male predominance, excess risk in US for boys is a constant 50% (Ratio of boys to girls, 3:2)
TRIPLE-RISK MODEL (1994)

- SIDS occur when three factors are present simultaneously

- Underlying Vulnerability
- Exogenous Stressor
- Critical Development Period
Setup

1. Anesthetize CD-1 Mouse according to weight and age with Urethane
2. Place CD-1 Mouse in supine position
3. Insert recording Electrodes
Female: p262, p160, p25, p9
Male: p230, p21, p9
CD-1 Female Mice

Control CD-1 Female

Hypoxia 1 Female

Recovery 1 Female
CD-1 Male Mice

Control CD-1 Male

Hypoxia 1 Male

Recovery 1 Male
Thank You to:

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