**Introduction:**

- The Epithelial Sodium Channel (ENaC) is a trimeric protein found on the apical membrane of a variety of epithelia throughout the body.
- ENaC plays a role in regulating blood volume, by maintaining homeostatic Na+ balance in the kidneys.
- ENaC is activated by proteolytic cleavage of the α and γ subunits at the extracellular loop[1].

**Hypotheses:**

- Rats that are fed a high salt diet will show decreased ENaC expression in the heart.
- Rats fed a high salt diet will show decreased cleavage and therefore ENaC activity.

**Methods:**

- Dahl Salt-Sensitive Male Rats
  - Half were given salt water (1% NaCl)
  - Other half given normal water
  - After 2 weeks their hearts were harvested, homogenized and a Bicinchoninic Acid Assay was performed.
  - Western blots were performed.
  - Each blot was probed with:
    - Rabbit Anti-Alpha antibody
    - Rabbit Anti-Beta antibody
    - Rabbit Anti-Gamma antibody

**References:**
