Effects of Copper in Sailfin mollies, *Poecilia latipinna*, Across Different Salinity Ranges

**Tiffany Yanez Zapata, Florida International University**
Research Mentor: Dr. Todd Crowl, Biology

---

**Importance**

1) Accumulation of Cu
   - Fertilizer on Cu deficient soils
   - Herbicide/Algaecide
   - Fungicide on citrus agriculture

1) Salt water intrusion

---

**Hypotheses**

1) Copper acute toxicity will decrease as salinity increases
2) An impairment in swimming performance ability will be apparent at 10% of their acute toxicity value

To test these hypotheses I will:
1) Acute toxicity experiments
2) Swim performance experiments

---

**Preliminary & Expected Results**

- Critical swimming speed ($U_{crit}$)

I expect to see differences in the mortality and swim performance response of Sailfin mollies at different salinities based on potential variation in the mode of action on fish physiology.