“Should evolution be taught in schools?”

*Miss Alabama:*
“...I do not believe in evolution, I do not think it should be taught in schools…”

*Miss Georgia:*
“...I think evolution should be taught but I also think maybe the biblical stuff should be taught as well…”

*Miss New Mexico:*
“I think evolution should be taught in schools because evolution is based off of science…”
Does Miss USA represent USA?

- American opposition to evolution:
  - Ranked second to last, only surpassing Turkey, in an examination of 34 prominent countries (Miller et al., 2006)
  - Decrease in public acceptance in past 20 years (Miller et al., 2006)
  - 44% find creationist view closest to personal views (Newport, 2008)

- Current Study:
  - Examine Miss USA responses to create a visual representation of the women’s pedagogical attitudes towards evolutionary theory
Mapping Miss USA

- Transcribed contestants’ verbal responses
- Four raters coded each response on a 7 pt. scale
  - 1 = “Evolution should not be taught”
  - 4 = “Evolution should be taught alongside creationism”
  - 7 = “Evolution should be taught, without creationism”
- Ratings showed high inter-rater reliability
- Mean ratings were used to produce a thematic map
5.8% Evolution should not be taught (<3)
49.0% Both Evolutionary theory and creationist beliefs taught (3-5)
45.2% Evolution should be taught, at least to some degree (>5)
Predicting Attitudes toward Evolution

- **Past research with KS college sample (Hawley et al. 2011):**
  - Demographic variables are not strong predictors
    - Gender, high school size, number of siblings, parents’ education, rurality of hometown
  - Openness to experience (personality), accounts for the most variability
    - Intellectual curiosity and preference for variety

- **Future Research Questions:**
  - How do attitudes toward evolution vary across the U. S.?
  - Are there significant predictors of evolutionary attitudes after controlling for potential dependency within states?
Future research: Methods

Procedure
- Survey 30-50 participants in each of the 50 states and Washington, D.C. via Amazon M-Turk and Qualtrics

Measures
- Demographic information, including state and zip codes
- Evolution Attitudes and Literacy Survey (EALS)

Analyses
- Using ArcGIS create a layered thematic map for each of the EALS constructs:
  - Political Activity
  - Religious Conservatism
  - Creationist Reasoning
  - Evolutionary Knowledge
  - Evolutionary Misconceptions
  - Exposure to Evolution
- Examine potential demographic and personality predictors using ArcGIS spatial statistics tools
Miss USA 2011

“Well, I was taught evolution in my high school growing up, and I do believe in it, I mean I'm a huge science geek, so I like to believe in like the big bang theory, and you know, the evolution of humans you know, throughout, you know, time” – Miss California