

## **Evolution of endless fish forms most beautiful**

Representative Manuscript (pdf below as well): Price, S. A., Friedman, S. T., Corn, K. A., Martinez, C. M., Larouche, O., & Wainwright, P. C. (2019). Building a body shape morphospace of teleostean fishes. *Integrative and Comparative Biology*, 59(3), 716-730.

Abstract: Organismal biology is at the cusp of the big data generation and museum collections are at the heart of this revolution. Using fishes I illustrate how we can generate large trait datasets on museum specimens and use them to improve our understanding of phenotypic evolution, through the integration of undergraduate research and modern technology. I discuss how we can quantify fish shape diversity and body size and highlight the neglected issue of "*researcher degrees of freedom*" which are the multitude of decisions made when designing, running, analyzing, and reporting results its impact on our conclusions.