

Advancing our Midterm 1

Delivery of an example of macroevolutionary model.

1. Search for primary literature. Journals that I suggest have mandatory requirements for data aggregation.
 - Systematic Biology- Bulletin for the society of systematic Biology
 - Evolution
 - New Phytologist
 - Journal of Evolutionary Biology
 - Evolution Letters
 - Molecular Phylogenetics and Evolution
 - Journal of Biogeography
 - Nature Ecology and Evolution
2. Acquire data
 - Dryad <https://datadryad.org/>
 - Zenodo <https://zenodo.org/>
 - Open Tree of Life <https://opentreeoflife.github.io/browse/>
 - Fish tree of Life <https://fishtreeoflife.org/>
 - Angiosperms <https://bien.nceas.ucsb.edu/bien/>
 - Plant trait-database <https://www.try-db.org/TryWeb/Home.php>

Activities for today

1. We learn how to use the the AI research assistant from InfoKat libraries
 - Go to https://saalck-uky.primo.exlibrisgroup.com/discovery/search?vid=01SAA_UKY:UKY
 - Use keywords that include an animal, plant, fungus that you like + a trait (phenotype) that you are interested in + macroevolution
 - Example of key words “anolis body size macroevolution”
2. Using the papers that AI gave us back, we want to choose a recent (2015- or later) article because most likely those have data.
3. In the journal website, we look within the article for “supplementary material” or “data availability” or “dryad” “zenodo”. Within the article we should be able to find where and how the phylogenetic tree and data are available.
4. Download said phylogenetic tree and data.

Start figuring out steps for your midterm:

1. Start reading the paper
2. You will be asked to match the tree to the data (especially if the paper you chose does not provide a matching phylogenetic tree to your data).