**Methods**

1. Defining the scope/ variables of interest
   1. Scope
      1. Trees—any type, anywhere in the world
   2. Independent variables of interest:
      1. Exposure
         1. Definition:
            1. Exposure to direct solar radiation, wind, etc.
            2. Leaves are at the same/ similar height, but in different light environments (e.g., sampled by a person standing on the ground, perhaps with a pruning pole)
         2. includes
            1. Sun/shade leaves (categorical comparison)
            2. Canopy permeability, or related (e.g., canopy openness, leaf area index above)
            3. Time-integrated metric of solar radiation
      2. Height
         1. Definition
            1. Height (on a tree) measured relative to the ground or the top of the canopy
            2. Leaves at different heights, with sampling standardized for light environment (e.g., all sun leaves)
      3. Undifferentiated height/exposure gradient
         1. Definition
            1. Measurements made within context of forest, where height and exposure covary (e.g., sampling at different heights, regardless of whether leaves are sun or shade)
         2. Includes
            1. Height within canopy
            2. Canopy position (when not standardized by height)
            3. Tree height
            4. DBH
   3. Dependent variables of interest (so far these are just categories)
      1. Biophysical environment
      2. Leaf traits (thermally-relevant)
      3. Leaf temperature
      4. Leaf metabolism, thermal responses, and thermal stress (include plasticity)
      5. Ecology
2. Selecting references
   1. References to be identified through systematic searches
      1. [define keywords, criteria of how many hits to scan for each]
   2. References also identified through personal knowledge/ citations in papers read
3. Processing references
   1. When first acquired, stick in `references` folder, or straight into one of the subsidiary folders, if determined
   2. Studies selected for potential inclusion in the systematic review go in the appropriate folder under `systematic\_review`:
      1. `1\_to evaluate`- studies that have potential for inclusion, but have not yet been carefully read.
      2. `2\_to add`- studies that definitely qualify for inclusion in the review, but have not yet been added to the spreadsheet
      3. `3\_included`- studies that have been carefully read/ entered in spreadsheet
      4. not\_appropriate- studies that have been reviewed and determined to be appropriate
   3. References that are not relevant to the systematic review but should be cited in the review go in the `other references` folder.
4. Entering studies in review spreadsheet
   1. Enter all relevant measurements from study into spreadsheet, carefully following metadata guidelines (see metadata tab)
   2. Highlight text in manuscript that is used as basis for what’s entered in the spreadsheet