Hackathon 8/21 goals

1. ~~Make sure we have a shared github repo to work on, that we can both push and pull to~~
2. ~~Load in data~~, ~~visualize data~~ and ~~uncertainty~~
3. ~~Define the model~~
4. ~~Define priors~~
   1. ~~Init file added with strain specific values (strain and org column in init file)~~
5. ~~Find ‘initial’ parameter guesses~~
6. ~~Fit with ODElib and look at posterior distributions, comparing to priors~~

Hackathon sept 5th goals

Katie TODO

Ordering and formatting - priority

*Applies only to abiotic*

1. ~~Structure and comment all code that is being used~~
2. Remove all code that is not being used into a ‘dump’ folder or similar
3. Decide which figs and formats will be either in paper or supplement. Format these figs and finalize, and delete ALL OTHER figs
   1. Figure 2a. abiotic\_histograms.png
4. For main paper or supplement figs, label all axes, properly format in general

Items 1,3,4 to David by Friday 15th (in the form of an updated github)

1. Add in plots of:
   1. Random walk trace plots from different initial conditions
   2. Scatter plots of random walks from different initial conditions, with x and y axes being random walks of the same parameter from different initial conditions. Could do regressions (OLS type II, ask Eric Carr) increasing burnin from a very low value to close to what we currently use (half the iterations)
   3. Sensitivity of modeled dynamics to step size (no need to use MCMC for this)

Aim to have done by Thursday Sept 28th

1. Finalize these in the github (comment, organize, structure code)

Stats stuff (least priority)

1. Visualize residuals

Rest of paper

1. HEPES dynamics
2. Biotic HOOH spike assays