**Notes from the December 9 meeting and PLAN of action for the next few days**

I am now re-organizing the entire protocol for testing the CBDA-SL in combination with the knockoff filter. Right now the protocol design works but it is a little messy and prone to chaos (both in the interpretation and in the implementation). This is how I am planning the next few days.

1. I will push to github the protocol as it is right now (with minor clean up steps to add now).
2. I am eliminating 3 specs for the missing value %. Only 2 options are left: none or 0% and 20%. This leads to a combined set of experiments of 12 (instead of 30).
3. I am re-designing the workflow to accommodate the following specs:
   1. 9000 jobs (3 groups of 3000, with flow control between them)
   2. Passing inputs through the module rather than having all the modules connected to the nodes with the inputs (a mess, but got things done faster).
   3. Grouping modules (ctrl+g) to represent single experiments (we are limited by a max of 3000 jobs that can be submitted simultaneously on Cranium). Flow controls are set between different groups.
   4. Clean up modules now located between each experiments (so that once an experiment is over, the current directory is cleaned by consolidating all the 9000 workspaces into 1)
   5. Add a second-tier of result synthesizer at the end that essentially summarizes the findings of all experiments into a 1-page (1/2 graphs and some bullets text/tables).
4. Generate a new NULL dataset using the script that Ivo sent.
5. Once point 2 is completed and tested, I will push the new workflow design with the R scripts on github. Maybe just push a template with 2 or 3 experiments (not 12).
6. By then, Jiachen can run the new workflow design either on the Binomial dataset again (but with 9000 iterations now) or on the new NULL dataset (still 9000 iterations) 🡪 hoping for flatter histogram landscapes for the NULL dataset experiments
7. The new workflow design can also be run on the ABIDE and ADNI dataset. **One thing to do for point 7 is to adjust the data cleaning/harmonization steps before we run the SL and the Knockoff. Jiachen, this is something that you could do right now on the ABIDE and ADNI datasets.**