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Describe in a few sentences or bullet-point where the project is at.

Break it into i) writing and ii) data work/analyses.

a) What has we accomplished so far?

i) writing

ii) data work/analyses

b) For each category (writing/analyses), what needs to be done next? Is there anything holding things up? How have we tried to solve this issue? What options are left?

i) writing

ii) data work/analyses

**Writing 🡪**

* **Finished second draft of Introduction, awaiting Calen’s feedback on new structure and information**
* **Feeling a bit stuck on the methods section, not exactly sure how to proceed**

**Analysis 🡪**

* **Finished script for using LMP to determine gestational age, still have 2 that are being weird Yes we knew this. We will exclude them.**
* **Finished quick EDA (including new imputed GA code), used na\_if to remove -8 from phenotypic values, still some measurement dates that were 30+ days after birth which seems weird (There should only be 2, as per my email/slack with code)**
* **Need to figure out the precise model and potential visualizations (Yes – take notes on our call about this)**
* **Need to also take residuals from models that take phenotypic data (We think so yeah. Read this chapter (https://r4ds.had.co.nz/model-building.html) to get a better sense about what this means and how to do it (I can help too). If you need or want to, read the chapters 22 and 23 too (they’re not long).**

Outline the predictors and outcomes we’re thinking through for the models we will build. Try to rationalize what and why

|  |  |  |
| --- | --- | --- |
| Variable | Type | Reason |
| Mom’s BMI | Predictor | BMI may affect our measure of maternal DNAmAge in adulthood |
| Smoking |  | Smoking mom could affect her DNAmAge and babies fetal outcomes |
| SES? | Predictor | SES should be something we control for here, (could) affect our measures of the phenotypic variables |
| Epigenetic Age of Mom | Predictor | Well, this is the main predictor |
| Gestational Age | Predictor | We need to control for this because there may be a difference between a baby born at 30 weeks vs. 40 weeks |
| Post Gest Age | Predictor | Again, we need to control for this because there may be a difference between a baby measured at 5 days old vs. 25 days old |
| Relative Measurement of Mom’s Epi Age | Predictor | Not sure about this, but what if a mom’s epigenetic age was measured at a different relative time point to the pregnancy compared to another mom? Wouldn’t this also need to be controlled for? |
| Any Phenotypic Variables (Birthweight, Measured Length, Measured Weight, Arm circumference, Head circumference, Abdominal circumference, Total Skin fold thickness) | Outcomes | These are what we are using for outcomes |

Any other thoughts, comments, ideas?

**Biggest thing I’m worried about here are the visualizations, there was a paper you had showed me during our last 1 on 1 call 🡪 we can discuss that again**

**Yeah don’t worry about that too much. We could have a series of scatter plots with a line going through and the equation. What you end up wanting to do is put the dense and boring (usually) information in tables, and the exciting and main message information in the figures.**