Cho Lab Technical Exam

2023-01-10

Instructions

- This is an open-book assessment that may take few hours to complete.
- All tools, languages, and resources are fair game.
- **Upload all files for your submission here** with titles that include your name (e.g. `chris-tastad-output.pdf`)

Questions

1. **Project Proposal - Consider an unanswered research question of interest to you:**
   - Construct a *high level* outline of a project to address this question detailing specific aim(s), method(s), statistical design, and predicted results to the extent you are able.
   - Feel free to use the template given here or write in a typical proposal format.
   - *Note of emphasis:* This is not an endurance exercise, and being excessively verbose is not required. Instead, we are hoping to get a sense of what is interesting to you and how you would execute your approach. Realistically shoot for less than a few hundred words.
2. **Consider the unknown sequencing data given here.**
   - Perform a QC process on this data, and aggregate your results into a single output.
     - a suggested approach would be to use a tool combo like fastQC/MultiQC
   - Provide a detailed assessment of the nature and quality of this data given your QC output.
   - Speculate on the type of sequencing used to generate this data.