

4DN OMICS working group call on Mar 24, 2020

Attendees:

- Bing Ren
- Andy Schroeder @dcic
- Irene X. Fan, Riccardo Calandrelli, Sheng Zhong @oh
- Andrea @dcic
- Iddil Bekirov
- Ian Fingerman
- Judy Mietz
- Koray Kirli @dcic
- Luisa Mercado @dcic
- Erez Lieberman-Aiden
- Sarah @dcic
- Sean Hanlon
- Burak Alver

1. Review protocols that are in the pipeline for recommendation to the 4DN SC:
 1. [PLAC-seq/HiChIP/in situ ChIA-PET](#).
 2. [iMARGI](#). Note: This [iMARGI protocol](#) (see also Wu *et al.*, 2019) is approved by 4DN to analyze the cumulative characteristics of RNA-chromatin interactions. This approval does not include the application of iMARGI to the identification of a specific RNA to a specific genomic sequence, which remains in the investigative research domain of each individual lab.
 3. [Methyl-HiC](#)/HiCulfite (bulk)
 4. Single cell Methyl-HiC
 5. [sci-Hi-C](#)
 - i. <https://data.4dnucleome.org/protocols/14a85428-382c-4487-b8cd-d4c49fd7cfea/>
 - ii.
2. Planning for future meeting agendas. Please note that the current protocols recommended to 4DN and in various stages of discussion can be found [here](#).
 - a. SPRITE
 - b. Micro-C
 - c. COLA
 - d. Updates from previously approved protocols, by users or inventors.
 - e.

Discussion:

1. iMARGI: presentation on the protocol was made, experimental parts were excellent, questions on data analysis aspect. Consensus is emerging on what exactly this method is designed to do.

Action item -

1. Reach out to Yijun's lab to discuss this on the next Omics WG call.
2. Erez and Sheng will discuss potential revision to iMARGI write up, for discussion in next session.
3. Erez and Bing will discuss Methyl-HiC/HiCultite protocols.
4. Update correct combinatorial HiC protocol

References

Wu, W. *et al.* Mapping RNA-chromatin interactions by sequencing with iMARGI. *Nat Protoc* **14**, 3243-3272, doi:10.1038/s41596-019-0229-4 (2019).