

4DN Steering Committee Meeting
February 19th, 2019
8am - 9:30am PT, 10am-11:30am CT. 11am-12:30pm, ET

[Play recording](#)

Discussion Leader: Andrew Belmont

APPROVED: 1/19/2019 MEETING MINUTES [TIMESTAMP – 00:00:12]

Reminders:

1. If you are a member of another consortium and you are struggling where to store data sets, contact Peter at DCIC.
2. Imaging WG changed schedule to once a month, David to send the email about the new schedule.

Last SC meeting (Andrew Belmont) [TIMESTAMP – 00:00:29]

1. Energizing 4DN outreach activities.
NIH reached out to OH for enhanced coordination of outreach activities. Sheng Zhong (OH PI) and Zhen Chen (OH Adjunct PI) have agreed to contribute to the coordination of the renewed 4DN outreach working group together with Peter Fraser and Ting Wang.
2. Email OH at oh@4dnucleome.org if interested in becoming a member of the 2019 Annual Planning Committee and Outreach WG.
3. DCIC will implement a badge of any publications that had previous 4DN pre-print release in the Data Portal. Sheng will provide the data.
4. JAWG and revamped Outreach WG should schedule one phone call together.

Announcements from NIH (Ananda Roy/Judy Mietz) [TIMESTAMP – 00:01:20]

1. No new announcements.

OH update (Sheng/Kate/Xiaoyi) [TIMESTAMP – 00:01:50]

1. Outreach WG update (new members, meeting times)
 - a. [WG member list](#) = total 41 members
 - i. 7 new members from NOFIC team
 - ii. 34 original members from Education & Outreach
 - iii. SC meeting and JA discussed proposed to have a meeting with Outreach together at least once a month. Currently, JA meetings are every Thursday. One of the Thursday will have an item about Outreach discussion. Outreach members are welcomed to call in at the same meeting.
 - b. A doodle poll was sent by Lucie Hebert to schedule the Outreach meeting time.
 - i. Doodle Poll [link](#)
 - ii. Poll result: 1st Thursday of every month
 - c. NIH working group has made a [YouTube video for introducing 4DN](#) to lay audience available on the web portal.
2. Update from the [annual meeting planning committee](#).

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- a. First meeting was Feb. 13th. Planning Committee would like to invite more 4DN investigators including junior investigators. Email oh@4dnucleome.org if you want to join.
- b. Defined goals and milestones based on the original goals set at the beginning of the consortium, that is to deliver the next generation of technologies and computational tools to provide 3-D genome maps, to biologically validate 3-D models, to establish community standards, to have greater understanding of the rules of nuclear compartment and nuclear organization. In the forthcoming 2019 annual meeting, it is time to come back to those goals.
- c. Currently, the draft goal is that in the 2019 annual meeting, the consortium will summarize the major progresses toward reviewing the 3D nucleome organization, and their changes with respect to time. This meeting is intended to showcase the best approximation of the goals of the 4DN, through both imaging and omics readouts, including the frontiers of *in vivo* mapping of nuclear structures and dynamic changes in genome organization.
- d. Decide on format of the meeting. The planning committee expressed a general sentiment to further open the 2019 annual meeting to general public, welcoming researchers at large to participate. Three options have been proposed and we would like to hear inputs from all 4DN investigators:
 - i. Make entire 3-day meeting open to public.
 - ii. Make the first day consortium only.
 - iii. Make 2-day ASCB-4DN joint (satellite) meeting but also make day 1 (consortium day) open to journal editors and invited speakers.
 - *Question from Andrew Belmont:* What are the major goals of the annual meeting? It sounds like the major goal is to present the work that's been accomplished towards the goals of 4DN. It sounds like most of the presentation would be about work completed. The question though seems to be about whether to reserve some time for a closed session to foster conversation about work in progress. Is this right? *Sheng:* To showcase the progress made towards the original goals that we set at the beginning. At this moment, the sentiment was more towards showcasing and involving the general public. Partially, keeping the discussion among us and expanding the communication and partly demonstrating to the entire research community.
 - Ian: We are focusing on the Outreach and this will benefit the open meeting format.
 - Bing: May want to think about when to start advertising for this work, and planning for the size of the conference and appropriately housed in the venue that can accommodate the meeting.
- d. Decide on meeting venue
 - i. Location: Washington DC, Dec. 4-6, 2019
 - ii. Planning Committee discussed getting a close access to the DC exhibition center where the the ASCB is being held.
 - iii. Previous attendance is about 300 attendees.

- iv. *Andrew Belmont*: Is there any reason to make the first day a closed? What would be covered in the first day in the closing session that would make sense for it to be closed? *Sheng*: The 2 options are: to make the entire meeting closed. It was also discussed that some of the working groups may want to report and discuss and make progress on their own. It's also recognized that are working quite well based on panel conferences. Therefore, whether there is actual need for this closed day is up for Discussion. *Bing*: I think we should cap it at 400, it would be less of an uncertainty in meeting planning. The other issue is how much do you the speakers and posters to come from the public and if it's all 3 day open we have to start accepting abstract submission and oral presentation early on. Is there going to be a consideration for 4DN members to be selected preferentially? *Sheng*: Indeed, it is a good idea to make the decisions early to not only make people aware of this exciting event but also in terms of people who wanted to contribute (abstract submission) to have sufficient time to provide this and for invited speakers. I recall last year, you started this process a year before. This worked out very nicely. *Thor*: It seems possible that there might be another cycle of funding through the common fund, and it would be against our own self-interest to encourage a larger community but in the interest of science, it would be a very good thing at our 2019 meeting an additional community of people become aware of the 4DN and what it has accomplished so far, particularly in this theme of elevating us into whole embryos, organs and tissues.

- e. Timeline has been decided:
- Registration opens on June 1st.
 - Abstract submission date is October 15th.

3. Introduction of protocols.io

- a. Web-based tool for sharing protocols, an alternative to the PDF files. 4DN has already announced a number of approved protocols (Omics and Imaging). Biorx also recommended protocols.io for protocols oriented papers.

4. [Update on 4DN wiki \(Xiaoyi\)](#)

- 4DN wiki is now hosted on a dedicated server with an open-source wiki solution instead of Google Sites Classic.
- Log in to new wiki to access using previous username and password.
- Almost all contents on the old 4DN Wiki have been converted and migrated.
- OH is asking all to examine the contents. Staff migrated content manually. From now on, all edits and new contributions are now done in the new Wiki. Navigation is still under maintenance and is on the left hand side of the page. Working groups are on the bottom of the navigation page.
- Contact OH if you are unable to log in.

DCIC update (Burak Alver) [TIMESTAMP – 00:36:52]

1. [Slide](#)

- a. 4 new experiments since January 15th.
- b. Reminders:
 - i. Which data should you submit? - all the data generated with 4DN funding or 4DN publication.
 - ii. When should you submit? - as soon as data is generated. We can release it when you choose.
 - iii. If you are presenting any data in a scientific webinar or JAWG call, the data should be in the portal.
 - iv. Usage statistics: consistent portal visits and data downloads continue.
 - v. WG interactions:
 1. JAWG: push labs to submit data, supporting JA WG.
 2. Microscopy metadata collection: collaboration with Caterina Strambio and David Grunwald.
 3. Biosample metadata: Finalizing badges for commendations and warnings.
 4. Outreach and Collaborations:
 - a. ENCODE4: ChIP-seq and ATAC-seq pipelines at 4DN. ENCODE has recently gone through reimplementation of their pipelines. Good news is that makes their pipelines much more portable, bad news is documentation and specifications were not completed when we started. It took us some time to figure out what these parameters are.
 - b. IHEC: participating in IHEC calls. We are involved in the ATAC-seq pipeline review and Hi-C standards discussions.
 - c. Keystone meeting on 3D Genome: Organized by 4DN members. We will present on the 4DN portal as part of the 4DN session.

NOFIC (Bing Ren) [TIMESTAMP - 0:44:22]

1. NOFIC-Allen Institute collaboration project update:
 - a. Weekly meetings since last November.
 - b. Project has been managed through these working group meetings. Part of the WG meetings is devoted to planning and coordination of the data generation efforts. We have discussed selection of the control cell line. Two weeks ago, we

had 2 scientists from the Allen Institute give a webinar of the cell culturing and maintenance of the control cell lines. Webinar was recorded and link is in the NOFIC SC Wiki page.

- c. We also had discussions and presentations with Data Analysis groups participating in this collaborative effort. These discussions are pointing to a possible integrative analysis when the data are generated from Omics and Imaging data.
2. Bing endorsed the application for Associate Membership for Susanne Rafelski and Ru Gunawardane of the Allen Institute for Cell Science. ([Applications link](#))
 - a. Susanne Rafelski - Director of the assay development. Ru Gunawardane is the director their stem cell resource development group. Both are actively involved in this NOFIC-Allen Institute collaboration project. Contributions they could bring to the consortium: they are already participating as collaborators to the collaborative project, their tools and stem cell resources, interested in working with us in developing nuclear space maps, and learn the relationship between gene expression and nuclear structure.
 - b. There have been several presentations to the JA group. This is just formalizing today their membership to 4DN as Associate members. Judy Mietz asked the committee for any concerns or enthusiasm. We now have 5 Associate members since we started this initiative. Ananda Roy enthusiastically endorsed this membership. Andrew Belmont moved to approve it. Judy: wait 2 weeks for any other emails with concerns or comments, otherwise, we will invite them to become members of the consortium.

Education & Outreach (Peter Fraser) [TIMESTAMP – 00:54:12]

1. Both Ting, Lucie and I are delighted to be a part of the Outreach WG and will join the joint JA WG call.
2. Reminder if any of the members have not yet nominated someone to be a volunteer for the Outreach WG. We really need everybody's input to make an impact for 4DN.

JAWG/DAWG (Feng Yue) [TIMESTAMP – 00:55:15]

1. Since the last SC meeting, we've had a total 5 meetings (weekly meeting). Major achievement that we have made in the past month are the potential publications. We have a google doc that we shared previously. If you have not found it, Feng will send again. As of today, we have 16 potential publications.
2. If you have any paper that are related or if you want to be a part of the JAWG, you are welcome to go to the google doc and put your work there.
3. We also began to move on to a new format of a presentation. Instead of one comprehensive presentation, now according to the proposed manuscript of the collective project, we will begin to have 2 or 3 groups giving short presentations. The idea is this more like a group meeting style and people are more encouraged to share their data. All the presentation slides are available in the portal.

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4. We've had presentations from Jian Ma, Andrew Belmont, Bas van Steensel and David Gilbert, to compare TSA seq, damID, hi-C. Other presentations include Alber's group, and Sheng Zhong's group comparing Margi with other data type as well. Presentations from Ana Pombo's group in collaboration with Bing Ren, Nicodemi and Ming Hu's group and they began to look at comparisons between hi-C and PLAC-seq. They are also comparing TAD calling and loop calling between the three technologies. We have made the full presentation list until the end of March.
5. All 16 publications are coordinated. One of the major thing is we need to know what each group is working on and what data type they are using in their papers so that we can do it in a coordinated fashion and be able to avoid overlaps. This is in the early stage and will be further discussed in the agenda in the next months.

Policy (Nils Gehlenborg) [TIMESTAMP – 01:00:25]

1. 140 preprints posted in the biorx channel. 1 preprint added this year.
2. On the manuscript tracker side, 127 manuscripts (or work in progress) registered there. There is a bit of a mismatch which means it seems that not everything that comes out as a preprint was ever registered as a manuscript or project in progress. I want to encourage everyone to revisit the manuscript tracker in Wiki and to make sure that your ongoing work is listed there so that collaborators can find you.
3. Reminder: We are going to review our existing policies on a regular basis and you will receive a link to a very short survey.

New/Other Business (Andrew Belmont) [TIMESTAMP - 01:02:26]

1. None.

Action items [TIMESTAMP – 01:02:45]

1. Annual meeting planning committee would like to ask anyone who would like to participate to email oh@4dnucleome.org. There is also a draft agenda (google document) of the goals for 2019 Annual meeting that is linked to the Wiki page under 2019 Planning Committee. We would like to hear your input (no matter if you are involved in the planning committee or not).
2. All are encouraged to get into the new Wiki.
3. Reminder to contact Peter Park at DCIC if you'd like our data coordinating center to host data from other consortiums that you're wondering where you should put. Also, submit your data early before submitting your preprint.