1-24-2019 4DN Cells MINUTES

Next meeting March 28th 2019

Agenda

1) **Biosamples metadata policy (Burak)** –Andy provided a document (February 19th email google link below) outlining the current standing of dataset labels, including gold standard for those who have obtained the cells from the correct source and grown them according to the 4DN SOP. Discussion revolved around the following issues – **note that the only decision made was that the focus should be on the needs of user**:

- Tiered lines from the common 4DN source following 4DN SOP and with appropriate metadata should be designated somehow for the user as the best possible datasets to compare (assuming they fit the data standards QC set by other WGs).
- Non Tiered lines – these are cell lines of any kind not on the Tier1 or Tier2 lists. They have not been discussed by the Cells WG and so concerns / standards are unknown. It seems that they are in a separate category and the user should be able to quickly distinguish "Tier1 or Tier2" from any other cell line.
- Engineered sub-clones – it seems they need to be tied to the parent somehow, but they could different significantly from their parent. Certainly the passage is different but for some cell lines there could be genetic variability, particularly for cells that were never clonal to begin with (GM12878; U2OS) or for unstable cancer lines. The user needs to know whether or not they are derived from a 4DN stock.
- Grandfathered datasets – clearly not from the 4DN population or having been passaged under 4DN conditions these need a separate label. The user can know these are the same cell line – more convenient than getting data from some other database.
- Datasets generated recently but from people who did not get their cells from the right source and/or did not use the 4DN SOP. Suggestion – these are more or less identical to "Grandfathered" datasets. Why not put them in that category? Lots of people may have started datasets while we were establishing the standards or banking the cell lines. For the user, there is no difference.

https://docs.google.com/document/d/1s9FjsUSGRXTFLrs0m1d_xhIuXPC0KIBgPUGrcuw0iIY/edit?usp=sharing

2) **Discussion of the number of remaining vials. (Kathia) -** Many PIs have not received the vials they requested. 3 points of view: a) we should try to reduce the number because it looks bad that we have so many unused vials (albeit reducing the number for the sake of reducing the number seems wasteful); b) not to worry as we hope to have another cycle of 4DN; c) it is great to have extra vials so that we can share them with the scientific community as a whole as a service to collect data that can be contributed to the 4DN database! A discussion ensued as to why some people are not using them or using the wrong cell lines or conditions and how to reach these people. In the end, I think we agreed to point "c" – emphasize the positive – and as to how to handle datasets from those who are not following the rules, they are essentially identical to "Grandfathered" sets to the user, so why not catalog them as such. .

3) **WTC-11 (Dave) –** NOFIC-AICS is going ahead with analysis of subclones and we made our decision last month to not micromanage individual projects. We decided to leave WTC-11 as a Tier1 cell line for now and treat the NOFIC-AICS data exactly the way we decide to treat engineered subclones for any other Tier1 line – as soon as we do decide how we will handle them. As for Takayo's proposal that we post a supplement to our Cells WG wiki and refer everyone to the webinar, we may need more discussion on that given our decision to keep the WTC-11 parental line as Tier1.