Dear CryoEM User Group,

Recognizing the changes in instrumentation in our facility, as well as the substantial advances in knowledge and experience among the UTSW CryoEM user group over the past several years, the CryoEM Facility (CEMF) Internal Advisory Committee has been meeting over the past several months to draft a new set of signup/usage policies for our microscopes. Our focus to date has been on the two Titan Krios instruments, the original one on north campus and the new one on south campus, which should be operational in late December.

The goals of these rule changes are:

-Increase and ease access to the two Titan Krios microscopes to enable science broadly on campus
-Shorten the waiting time for Krios sessions
-Give PIs greater flexibility in booking time
-Promote data collection through the SBL for labs without trained users, as well as labs with trained users should they so choose
-Ensure a fair distribution of time among the UTSW labs—large and small, across the spectrum of expertise

After much constructive feedback from our PIs, the Internal advisory committee has settled on the following policies, User/PI feedback is still welcome moving forward:

1. There will no longer be a tiered system of user groups (i.e. novice, expert 1,2); all groups performing single particle cryoEM will be governed by the same policies.
2. It will no longer be necessary to write a proposal to obtain Krios time.
3. Each lab will be able to sign up for 48 hours of total Krios time, as either one 48 hour session or two 24 hour sessions. Only one such 48 hour slot can be booked by any group at any time. There is no cap on the total amount of Krios time any group can use per year through this queue.
4. To make up for session losses due to equipment failure, the facility manager will be able to book sessions (up to 48 hours total) for the lab that lost time. This booking does not count against the total amount of time (48hrs) that the lab can book. These bookings will be transparent and will have notation showing the lab that it is for, the reason, and the date of their original session.
5. Independent of the Krios sign-up, each lab can also sign up for 2 Arctica/Glacios sessions, (screening or data collection) at any time. Arctica/Glacios data collection sessions will typically be overnight, allowing for more grid screening during the day. The maximum time for Arctica/Glacios data acquisition will be 24 hours. Screening can be done on any week day. There is no grid screening on the weekends.
6. The SBL will no longer be a client of the CEMF for data collection sessions. All time will be allocated and accounted to individual groups based on the queues described above.

The SBL will collect data for any lab that desires it. The booking will be made by the client lab and billed directly to that lab. The SBL will then invoice the client lab for its services. For SBL-assisted screening, the SBL will be billed by CEMF and the SBL will invoice their users for these charges.

7. Tomography/subtomogram averaging typically requires multiple sessions to acquire enough usable data for publication. The Nicastro Lab would be allocated up to 3 total Krios days during the week, much in keeping with their current level of usage. The policy can be amended at the discretion of the IAC for any lab that decides to pursue a lengthy tomography project.
8. For those who do not wish to have their data collected by the SBL there will be no limit to the number of trained users any group may have. Training will consist broadly of three tiers. Tier 1 will involve basic operation, safety, and data screening/sample evaluation; we anticipate it will require 3 days of training. Tier 2 will extend to high resolution data collection, and will require an additional 4-5 days of training. Users will start on Tier 1, and when their sample is good enough for data collection, they will have the opportunity to progress to Tier 2. Users who have not had a session for several months (at the facility manager's discretion) may need additional training before using instruments again. Tier 3 will be Superusers that will be trained to load samples and perform other high-level tasks. Only superusers will be allowed to load/unload grids from the instruments. This training system will allow tier 1 users to be on the scopes quicker and more frequently, giving users greater familiarity with the instruments and important feedback about their sample that will allow users to make good judgements about the potential for high resolution data collection with that sample. This three tiered training system will allow users to start screening their samples faster and ensure that most preliminary training is done on the Arctica/Glacios thereby freeing up the Krios(s) for data collection.
9. Cancellation of any session must be done at least 48 hours prior to the start of the session. If the session is canceled less than 48 hours beforehand, the lab will be responsible for paying the cost of the session. If another lab books the canceled timeslot, the lab that originally booked/canceled will not be charged for that time. Any cancelations due to mechanical issues will not be charged regardless of when the session is canceled.
10. There is a 24 hour grab rule. Groups may book any unused time within 24 hours of the start of that session. This time does not count against the 48hrs total that a lab may book.
11. These policies will be frequently adapted as technology changes. There will be a community meeting several months after the initial adoption of these policies to assess them and make changes where necessary.

These policies are written with the expectation that UTSW cryoEM labs will work together considerately and book only the Krios time they require. There will be meetings of the CEMF

and SBL members described going forward to ensure that Krios time is indeed being allocated fairly. We note that according to our recent poll of anticipated cryoEM time needs in the community for the next 6 months, the two Krios instruments should provide more than enough total time to accommodate everyone's needs.

Here is a table of what the Krios schedule may look like with Krios 1 on top, and Krios 2 below. Cryocycling (CC) would be every other Monday and alternate between Krios 1 and Krios 2.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Training/CC or Training/ Regular Data collection	Regular Data collection	Regular Data collection	Regular Data collection	Regular Data collection	Regular Data collection	Regular Data collection
Regular Data collection or Regular Data collection/CC	Regular Data collection	Regular Data collection	Regular Data collection	Regular Data Collection	Regular Data collection	Regular Data collection

We believe that this new policy framework can achieve the goals stated above, following revisions based on community feedback and suggestions, and with additional details filled in. These policies will not take effect until after the committee has reviewed and revised based on your feedback.

Best,

-Daniel (on behalf of the entire IAC)