Yale CryoEM Resource

Krios Access Request [a]

		User and billing information
1	User name [b]	Jane Doe
2	E-mail	Jane.doe@yale.edu
3	PI name (the user's direct supervisor)	Joe Doe
4	E-mail	Joe.doe@yale.edu
5	Project PI name (if different from Line 3)	Joe Bloggs
6	E-mail	Joe.bloggs@yale.edu
7	Project name (use the same one for existing projects) [c]	Jb_jd_channelN_202507
8	COA code (**Each COA will count as an active session for its associated lab;** If splitting charges across multiple grants is needed, user should contact PPMS@yale.edu to generate a customized COA)	GR011111.CC0222.PG00032.PJ000001.jd12
		Scheduling preference
9	Length of the session (A. 2 or 3 days, please specify which is preferred); B. 2 days only; C. 3 days only; D. other, please specify and explain).	A.2 days preferred
10	List the dates that do not work for you in the next five weeks (**including holidays and weekends**) [d]; Unattended slots are subject to eligibility [e]	7/11-15, 7/21-25
	(Lines 12–21 can be skipped if users are collecting data themselves) **Sample & data information**	
11	**Sample biosafety level (BSL-1 or BSL-2)**	BSL-1
12	Experiment type: A. SPA only; B. CryoET only; C. Both SPA and CryoET (Lines 13–14 may be skipped for option B)	A. SPA only
13	MW of the complex	800 kD
14	Stoichiometry/symmetry	C4
15	Key Buffer components (concentration and type of cryoprotectant, detergent, etc.)	No cryoprotectant, detergent and other special additives
16	Grid arrival date (if not sure, indicate the earliest possible date)	7/7
17	Number of grids (typically no more than 8)	8
18	Grid Tube/Box Labels and Grid position (Make your labels LEGIBLY; Edit the numbers in the diagram as needed)	Tube-_Joe-Doe/Box1-Grid1, 2, 3
19	Are all grids pre-clipped (Yes/No; if No, indicate who will clip the grids)	No; Jane Doe
20	Will you bring C-clip rings and C-clips (Yes/No)	Yes
21	**Desired pixel size, total dose, and defocus range**	0.832Å, 40 e$^-$/ Å^2, -1 ~-2.5 μm
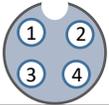
[a] **Refer to the YCR Policies for samples allowed on Krios and sign-up rules.**

[b] This person is responsible for the EM experiment, from sample transport to data transfer. For multi-collaborator projects, designate one user as the point of contact.
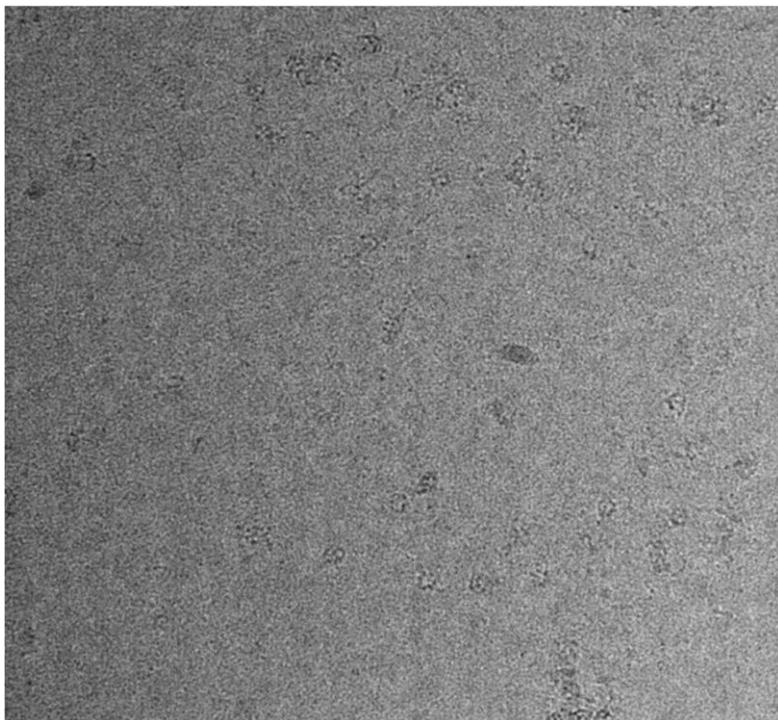
[c] The project name must be unique, but need not be descriptive if confidentiality is a concern. Examples: PI-initials_User-initials_ComplexY_StartDate. A project can include studies of the same complex with different mutations, different ligands, etc.

[d] List only the dates you are unavailable in the next five weeks (including holidays and weekends). This should be limited to times when you are absolutely unavailable, e.g., out of town or have a pre-scheduled appointment. In general, scope time should take priority over regular lab meetings, journal clubs, or non-mandatory classes.

[e] Unattended slots are available on holidays, weekends, and when staff are unavailable. Only authorized independent users may reserve these sessions and are expected to work independently.

Preliminary data (required for initial Scientific review, optional for exiting projects)

I. **Tomography**: Briefly describe your sample and target of interest, and indicate whether you plan to use subtomogram averaging. Attaching a raw CryoEM micrograph is recommended but not required.

II. **SPA**: <u>A raw CryoEM micrograph screenshot is required</u>. A raw CryoEM micrograph screenshot is required. Please include imaging conditions (e.g., microscope model, voltage, detector, dose, defocus). You may also include optional data such as 2D averages or 3D reconstructions from CryoEM or negative staining. For straightforward samples (e.g., virus, microtubule, proteasome), a raw micrograph is typically sufficient. For complex samples, if the micrograph quality is poor, additional preliminary data may support your application. An example is provided below.

Raw CryoEM micrograph: TF30, K2 detector counting mode, total dose = 50 $e^-/Å^2$, defocus= -2 μm.

CryoEM 2D averages: