**Guidance for Block Allocation Group (BAG) Access Proposals**

Block Allocation Group (BAG) proposals are for a group of PIs to access both screening and high-end EMs at LBMS over the 2-year lifetime. These proposals are peer-reviewed by the LBMS Proposal Review Panel. Before requesting access to high-end EMs, please include a cryo-EM micrograph and class averages to show the sample’s readiness.

Further instructions for online proposal submission can be found in the [LBMS User Guide](https://www.bnl.gov/cryo-em/userguide/getting-started.php).

*Use this template to write your LBMS Block Allocation Group Access Proposal and then copy/paste the information into the online PASS system. Please do not upload this document as a MS Word or PDF file.*

**TITLE TAB**

**Title**:

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*Indicate the primary field of research for this proposal and the funding source(s).*

**EXPERIMENTERS TAB**

*To associate someone with this proposal (including the PI, Co-PI, collaborators, etc.) first search for the person using the search bar below. If they are not found, click the "Add New Person" button below and you will be prompted to enter their name and email. Once the person is found (or entered), click the radio-button next to their name and then click the "Add Experimenter" button at the bottom of the search results list.*

*Important:*

* *Be sure to include yourself on the experimenters list (if applicable).*
* *Be sure to set the user access type for all experimenters.*
* *The PI or co-PI should be the lead individual responsible for the research performed. This is normally the holder of the grant that funds this work. Except in exceptional circumstances reflecting independent work, a student or postdoc should not be identified as the PI on a proposal.*

*Definitions of User Access type:*

* *On Site: a user physically present at a user facility during experiment*
* *Remote Access: a user actively participating in the experiments via video conferencing, beamline remote control, etc.*
* *Mail-In: a user that sent samples but will not be participating in data collection on site or remotely*
* *Off Site: A collaborator that is not participating in experiments onsite or remotely*

**RESEARCH TAB**

**Is this proposal a continuation of a prior BAG proposal(s) that has expired? If yes, please provide the proposal number, PI, and affiliation for the expired proposal. Note that a progress report is required and will be requested as a separate PDF document.** *(limit: 1000 characters including spaces)*

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**Executive Summary:**

*Provide a concise summary of the research program emphasizing the scientific impact. This section may be used for funding agency reporting purposes; this information and the proposal title may become public information. (limit 1000 characters including spaces)*

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**Indirect Societal Impact:**

Describe the broader indirect societal impact in such areas as economic competitiveness, workforce development, education and outreach, and/or engagement with user communities new to synchrotron research? For examples please see: <https://www.bnl.gov/cryo-em/userguide/files/indirect-societal-impact-examples.pdf>. *(limit 1500 characters including spaces)*

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**Projects:**

Briefly describe the projects of each Principal Investigator involved in this BAG: List the Principal Investigators that are a part of this BAG and their affiliations. For each Principal Investigator, provide (1) a short description of the project(s) that will be executed as part of this BAG, (2) an estimate of the number of samples and 8-hour shifts for both high-end EMS and screening EMs needed to complete each project over the 2-year lifetime of the proposal, and (3) the source of funding for the project(s) including grant number(s). *(limit 20000 characters including spaces)*

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**Scientific Importance and Synergy of this BAG project:** Describe how the Principal Investigators contribute synergistically to this BAG proposal. *(limit 1000 characters including spaces)*

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**Research Plan:** List the EM(s) that are needed for the proposed experiments and provide an overview how each requested EM is needed for this project. *(limit 1000 characters including spaces)*

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**LBMS Staff Consulted:** Prior to submitting a BAG proposal, LBMS staff must be consulted. List staff member name and EM (repeat for each EM requested in the proposal.) *(limit 1000 characters including spaces)*

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**Research Screening Questions:**The Proposal Principal Investigator (PI), the person who is responsible for setting the direction for the funding, is required to answer the following research screening questions. These questions apply to the research in the upcoming proposal time or instrument experiment time at the Laboratory for BioMolecular Structure (LBMS) at Brookhaven National Laboratory, including all samples to be measured and ancillary equipment brought to LBMS.

By answering these research screening questions, you certify that your answers are complete and accurate, and that you understand that Brookhaven Science Associates will rely on the answers you provide to screen the research. If you are unsure how to answer the questions, you should contact your home institution’s Export Control Office.

Each time experiment conditions are modified (e.g., new samples/specimens not measured previously or new equipment / software), you are required to resubmit these Research Screening Questions.

The following points-of-contact for the proposal research screening questions are Lacy Jones ([ljones2@bnl.gov](mailto:ljones2@bnl.gov)) or Teresa Daniels ([teresa@bnl.gov](mailto:teresa@bnl.gov)).

**Research Screening Question #1**

Are there any restrictions, contractually or otherwise, on public dissemination of the work (e.g., research, experiment) described in this proposal? Public dissemination includes presenting at conferences or open meetings, publications, or web source information.

* Yes
* No

**Research Screening Question #2**

Are you bringing any items (including specimens/samples), technical data, software, or services owned or funded by a nuclear, defense, military, space, intelligence agency, or a defense contractor of the United States or of another country?

* Yes
* No

**Research Screening Question #3**

For work (e.g., research, experiment) conducted at the user facility, are any items, technical data, software or services designed, developed, or modified exclusively for military applications, military training, spacecraft, launch vehicles, or national security or intelligence collection and analysis?

* Yes
* No

**Research Screening Question #4**

Would the research results be directly useful for- or would the research involve- a nuclear reactor application (e.g., commercial nuclear fuel, molten salts or other nuclear reactors, nuclear grade graphite, uranium enrichment)?

* Yes
* No

**Research Screening Question #5**

Are you bringing any items (including specimens/samples), technical data, or software to the user facility that requires access controls?

* Yes
* No

**Research Screening Question #6**

If the PI or co-PI (grant holder) of this beam time proposal is an employee of a DOE national laboratory, please affirm that your research has been screened by your National Lab against the DOE “Science and Technology Risk Matrix" critical and emerging research areas and technologies. The User Facility must be consulted if any research restrictions are required so that it can be determined if research restrictions can be accommodated.

**Note:** If you answered "No" or are unsure, you should contact your home institution's office responsible for screening research for the DOE S&T Risk Matrix.

**Reference:** Memorandum for Heads of Departmental Elements, Dan Brouillette, Science and Technology Risk Matrix Guidance, 12/13/2019.

* Yes
* No
* PI/co-PI is not a DOE National Lab employee

If you answered "Yes" to the previous question, please indicate the name of the person that screened your proposal and the date that it was screened.

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**Research Screening Question #7**

If you answered "Yes" to any of the research screening questions, but the "Yes" only applies to certain projects in this BAG proposal, please list those specific projects here (PI, Project Title).

* Yes
* No

**REQUIRED INFORMATION TAB**

*Indicate the primary field of research for this proposal and the funding source(s).*

**ATTACHMENTS TAB**

PLEASE NOTE: Attachment files should only be figures with captions, images, tables, or sample lists. Do not attach a copy of the proposal, publications, presentations, CVs, or a thesis. These attachments will be deleted prior to PRP review. For General User and Rapid Access proposals, attachments should be a maximum of 2 pages in a single file and contain only figures, images or table. File uploads cannot exceed 5MB each and must be either PDF or CSV/Excel. Please note, only PDF attachments will be included in the proposal PDF. Uploaded files will not be available for viewing until they have been verified to be appropriate. Once this has been confirmed, you will be notified, and you will be able to view the file listed in the table below. You can still submit your proposal even if your attachment(s) have not been verified yet.

**TIME REQUEST TAB**

*In this section, please list all EMs needed for the lifetime of the proposal. Once the proposal is submitted, you may not add EMs in future time requests.*

*Notes:*

* *You may request up to 3 EMs.*
* *The need for each EM must be justified separately.*
* *Hours* ***Requested (Lifetime)****: For each EM requested, enter the number of hours required for the 2-year lifetime of the proposal (multiples of 8 hours).*
* ***Hours Requested (This Cycle)****: For each EM requested, enter the number of hours needed for this cycle. If you do not want EM time this cycle, enter 0 (zero).*
* High-end EM: Empire high-end EM (Krios G3i).
* Screening EM: Powell screening EM (Talos L120C), Stonewall screening EM (Jeol 2100).

Instructions:

To select an EM or lab, click "Add Resource" and a pop-up window will open where you will enter:

**EM 1 (multiples of 8 hrs)**

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| Resource name (e.g. Empire high-end EM): |  |
| Technique (SPA or cryo-ET) |  |
| Hours Requested (Lifetime): |  |
| Hours Requested (This Cycle):  *(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this EM, including sample preparation, data collection, and analysis.** *(limit 2500 characters including spaces)*

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*Be sure to click "Save" in the pop-up window.*

**EM 2 (if applicable)**

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| Resource name (e.g. Powell screening EM): |  |
| Technique (SPA, or cryo-ET): |  |
| Hours Requested (Lifetime): |  |
| Hours Requested (This Cycle):  *(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this EM, including sample preparation, data collection, and analysis.** *(limit 2500 characters including spaces)*

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*Be sure to click "Save" in the pop-up window.*

**EM 3 (if applicable)**

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| Resource name (e.g. Powell screening EM): |  |
| Technique (SPA, or cryo-ET): |  |
| Hours Requested (Lifetime): |  |
| Hours Requested (This Cycle):  *(enter 0 if no shifts requested this cycle)* |  |

**Describe the experiments you will perform on this EM, including sample preparation, data collection, and analysis.** *(limit 2500 characters including spaces)*

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**Justify the need for this EM's capabilities, including justifying why you need the time requested.** *(limit 1500 characters including spaces)*

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*Be sure to click "Save" in the pop-up window.*

**PROGRESS REPORT TAB**

*All 2-year BAG proposals require mid-term Progress Report. If you are uncertain whether a Progress Report is due for your proposal, please email:* [*lbms-em@bnl.gov*](mailto:lbms-em@bnl.gov)*.*

**Comments on time** (too many/few? productive/unproductive? If time allocated is different from times used, please explain.)

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**BAG Principal Investigators**

Current members that had EM time *(name, affiliation)*

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Current members that did not have EM time *(name, affiliation)*

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New members since the original proposal submission that had EM time *(name, affiliation)*

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New members since the original proposal submission that did not have EM time *(name, affiliation)*

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No longer active members *(name, affiliation)*

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**From data collected at LBMS**

List PI grants supported (funding agency, grant number, PI)

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PDB deposits involving research done at LBMS

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Publications involving research done at LBMS

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**Summary of results during the past cycle (~ 1 paragraph per project)**

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**Comment on the EM performance during the past cycle**

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