

## Guidelines for Preparing a BMIT BM General User Proposal (05B1-1)

- Contact the beamline scientist:** Before submitting a proposal, you should discuss your research idea with Tomasz Wysokinski, BMIT Beamline Scientist  
[tomasz.wysokinski@lightsource.ca](mailto:tomasz.wysokinski@lightsource.ca)  
306-657-3710
- Become a CLS User:** If you haven't already, register as a CLS User by going to <https://user.lightsource.ca> and clicking "Complete New User Registration Now." You will then acquire a user account with which you can submit a proposal. If you have already submitted proposals to other beamlines at the CLS, you do not need to register again.
- Create an online proposal:** Login to <https://user.lightsource.ca> and click "My Proposals" tab. From the left-hand menu, choose "General User". You will then be prompted to fill out the proposal application form.
- Understand the review process:** User time obtained through General User Access is via competitive peer review two times per year emphasizing the excellence of science. Please consider the guidelines given at [http://www.lightsource.ca/uso/peer\\_reviews.php](http://www.lightsource.ca/uso/peer_reviews.php) when preparing your proposal.
- Provide experimental details** (include in the "Experimental Procedure" section within the "Scientific Research" tab):

When completing the form, please consider including the following details:

- Why is conventional imaging (MRI, CT, X-ray, ultrasound) not sufficient for your purposes? What improvements over conventional imaging are you hoping to achieve on BMIT?
  - High-resolution CT is a time-consuming modality. If you wish to perform CT imaging, please give a compelling reason for its use and make good estimate of time required to collect data.
  - How many samples do you wish to analyse? What is your method of keeping track of your samples.
  - How big is each sample?
  - How will your sample be mounted to the scanning stage? If your experiment requires special sample holder or setup at the endstations, the details have to be discussed and confirmed with the beamline scientist prior to submitting the proposal.
  - How are you planning to reconstruct data? Do you have required hardware, software and expertise to do it.
- Select appropriate priority area** (include in the "Suitability" section within the "Beamline" tab):  
The BMIT Beamteam have been working on establishing priority areas for research performed on the BMIT beamlines. This was established to help with the review of proposals. The priority areas are:
    - Projects that may:
      - lead to live human research,
      - impact human health or the practice of medicine.
    - Projects that may:
      - lead to live animal research,
      - impact animal health or the practice of veterinary medicine.
    - Instrumentation projects that may lead to new capabilities or capacity on the BMIT beamlines.
    - Other

For the proposal submission process, identify the area(s) that most fits the type of research or research direction of the proposal and provide a brief statement (~200 words or less) as to how the proposed experiment or project meets any or possibly all of the priority areas. Also, if the research is not part of a priority area (other), why this experiments needs to be performed on the BMIT beamlines (i.e. access to high energy, CT, etc...)

- Justify the number of shifts:** Shifts are scheduled in 8-hour time frames. One shift is equal to 8 hours of beamtime. Allocated beamtime per cycle is based on requests of new and active proposals with the beamtime awarded to the highest scored proposals. Shifts are scheduled in 1 or several batches for experiments. Ensure the team coming to the CLS is sufficient to cover all shifts. New users should discuss the number of shifts which are appropriate for your type of experiment with beamline staff

8. **Describe the capability of your team** (include in the “Past Productivity” section within the “Scientific Research” tab):

When describing your team’s experience and capability, consider commenting on the following:

- a. Size of the team of experimentalists compared to the proposed experiment: indicate clearly how many team members will be performing experiments on site at the CLS and describe your capability of running the experiment and processing the data. If live animals are involved ensure you have qualified animal handlers on site.
  - b. Experimental plan: provide enough details to convince the review committee that you have planned carefully your experiment and will make optimal use of beamtime.
  - c. Publication record, including articles that are currently in press.
9. **Attach required documentation:** Attach your BioSafety Permit, signed Ethics Application, and Ethics Approval Certificate. For more information, on obtaining this documentation, please refer to [Guide to use of Biological Material at the CLS](#) and [Ethics Review](#).