The Ohio State University Comprehensive Cancer Center
Cryo-Electron Microscopy (Cryo-EM) MicroAwards
Request for Application

PURPOSE:
The Ohio State University Comprehensive Cancer Center (OSUCCC) facilitates and supports cancer research that translates into innovative and highly targeted patient care. To help achieve this, the Cryo-EM MicroAwards will provide seed funding to support the ultimate goal of creating a cancer-free world, one person, one discovery at a time.

AWARD AMOUNT:
The OSUCCC will award up to $10,000 per investigator in core service vouchers at the Center for Electron Microscopy and Analysis (CEMAS) for the structure determination of a single particle.

ELIGIBILITY:
1) Investigator must be a current employee at The Ohio State University.
2) Vouchers may be redeemed through the CEMAS Microscopy Shared Resource core.
3) These awards are intended to be used on projects in which the biochemical details have been determined and in which the sample is relatively stable and highly pure. This is considered an ideal sample.
4) Applications for Cryo-EM MicroAward must be qualified as a Cryo-EM suitable project through the CEMAS Project Qualification process. To submit a project, go to: http://go.osu.edu/cryoemproject. Be sure to indicate that you intend to apply for a MicroAward when submitting your project details. For more information about CEMAS and the ‘Policies for the Cryo-EM Facility at CEMAS’ go to: https://cemas.osu.edu/capabilities/cryo-electron-microscopy.
5) Once a qualified project is approved, submit your CCC Cryo-EM MicroAward application for funding. Details below.
6) Grantee agrees that once the project is completed, the grantee must submit a summary of their results and how the award helped their project.
7) Grantee agrees that if a publication or grant results from the MicroAward, it is expected that the OSUCCC and CEMAS be cited correctly.

Cryo-EM Workflow for "Ideal Sample":

Typical workflow for single-particle Cryo-EM. The activities in red are services offered by OSUCCC Core Resources and are included in the MicroAward. The activities in gray are generally performed in investigator’s own laboratory in which costs are not included in the MicroAward.
APPLICATION INSTRUCTIONS:
The application period is open until the fiscal year’s allotted funding is exhausted. Applications must be received by the last day of the month (e.g. January 31) in order to be reviewed in the following review cycle. Applications must follow the established format (see Application Criteria and Format) and should be submitted by:

- emailing ccc-grants@osumc.edu and
- cc Faith Kline (faith.kline@osumc.edu) and
- cc CEMAS (cemas@osu.edu).
- Subject of email should be CCC CEMAS MICROAWARD.

Application Criteria and Format:

Font, Spacing, and Margin Requirements:
- Single space
- Font must be Arial 11-point type
- No more than six lines of type per vertical inch
- Margins should be at least .5” all around

Contents and Limits:
1) Project Title
2) Abstract – 500 words or less
3) Lay Language Abstract – 100 words or less
4) Include Introduction, need, overarching theme and/or hypothesis and/or research question – 1-page max
5) Address plan for data analysis (structure determination and computing resources)
6) Impact/Cancer Relevance/Innovation – 1-page max
7) Budget

REVIEW CRITERIA:
Applications will be reviewed by the OSUCCC and CEMAS. Each proposal will be scored by an ad hoc committee that consists of a panel of electron microscopy and cancer experts at Ohio State. At minimum, the committee will consist of the following members:
- (1) Research associate from CEMAS
- (1) Faculty member from the CCC.

Proposals will be reviewed on a rolling basis. The Comprehensive Cancer Center Shared Resource Leadership Team will make final funding recommendations based on the overall score and the availability of funds. Each applicant will receive a notification of the funding decision via email.

The proposals will be evaluated using five criterions (each criterion will be weighed equally):

1. Sample quality: The sample must be of high biochemical quality, which can be demonstrated using chromatography, native mass spectrometry, or any other methods selected by the PI. Quality will be determined using the information provided in the Cryo-EM Project Form.
2. Suitability and feasibility: The PI must clearly demonstrate that cryo-EM is the appropriate technique for the proposed project. In addition, the proposals must discuss the commitment of the PI to follow through with the project.
3. **Cancer relevance**: The project must address an important area of cancer research and show promise as related to the control, treatment, or understanding of cancer.

4. **Potential impact**: It is anticipated that the results from the MicroAward will work towards answering a fundamental question in the field. The PI must state how potential results will lead in new research directions.

5. **External funding**: The PI should explain how the MicroAward will be related to the submission of external proposals. This includes providing details about the external agencies, proposal deadlines, and specific programs targeted by the PI.

The scoring will be based upon the NIH system:
- Each review criterion will be assessed based on the strength of that criterion in the context of the work being proposed.
- A score of 5 is a good, medium-impact proposal.
- The entire scale (1-9) will always be considered.
- Each criterion will be weighed equally.

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<thead>
<tr>
<th>Criterion Strength</th>
<th>Score</th>
<th>Description</th>
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<tr>
<td>High</td>
<td>1</td>
<td>Exceptional</td>
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<td>2</td>
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<td>Medium</td>
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<td>9</td>
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**REPORTING REQUIREMENTS:**
- Grantee agrees that if a publication or grant results from the MicroAward, it is expected that the OSUCCC and cores be cited correctly.
- Grantee agrees that once the project is completed, the grantee must submit a final report:
  a. Project summary
  b. Project outcomes
  c. Next Steps for your program of research
  d. New knowledge gained
  e. Do you have plans to submit a research proposal for further funding?
     i. Yes or No
  f. Did the activities undertaken during this project lead to the development of a research proposal that was submitted for funding?
     i. Yes or No
  g. Was the proposal successful?
     i. Yes, No, or In Submission