Cryo-EM Summer Workshop

**Description:**

Cryo-Electron Microscopy workshop at the University of Michigan

“I have my data set – now what?”

**Course Dates:** Sunday June 24 - Thursday June 28

**Course focus:** Single-particle cryo-EM is a rapidly evolving structural technique that allows for the calculation of 3D structures of purified biological specimens. Recent technological developments in microscopes, cameras, and computation have led to a “resolution revolution” in the field and it is now possible to determine 3D structures under 3Å resolution. The focus of this four-day class is to introduce participants to common image processing packages used to analyze cryo-EM data. This is a hands on class where participants will work with instructors to learn how to independently use three common software packages (RELION, cisTEM, and cryoSPARC), in addition to the modeling software Rosetta. A key feature of the course will be the opportunity for participants to bring their own data for analysis so that they can get practical processing advice from leading experts in the field.

**Participant Requirements:**

Laptop computer
Bring your own cryo-EM dataset for analysis (strongly recommended)
Watch Dr. Jensen's Caltech online cryo-EM course before arriving
Experience collecting cryo-EM data would be helpful

**Participant Costs:**

Academic
Without housing: $900  
Shared (Double) Room: $1,200  
Single Room: $1,700

Industry

Without housing: $1,200  
Shared (Double) Room: $1,500  
Single Room: $2,000

Housing costs (if needed) and meals are included in the program fee. Travel arrangements must be made by the participant.

Instructors:

Dr. Michael Cianfrocco, University of Michigan

Dr. Melanie Ohi, University of Michigan

Guest Lecturers:

Dr. Xiaochen Bai (UT Southwestern) – RELION

Dr. Alexis Rohou (Genentech) - cisTEM

Zev Ripstein (Rubinstein Lab, University of Toronto) - cryoSPARC

Dr. Frank Dimaio (University of Washington) - Rosetta for cryo-EM
Application Instructions:

Eligibility
Doctoral students, graduate students, Post-docs, fellows, faculty, staff, and non-academics (such as industry)

Costs

Academic
- No housing needed: $900
- Shared Double Room: $1,200
- Single Room: $1,700

Industry
- No housing needed: $1,200
- Shared Double Room: $1,500
- Single Room: $2,000

Housing costs (if needed) and meals are included in the program fee. Travel arrangements must be made by the participant.

How to apply

The application period for the 2018 workshop is open through Friday April 27th at 5pm. Both your application and reference letters are due on Friday April 27th at 5pm. To submit your application, please click here. Additional materials required are the following:
- CV
- One-paragraph statement of interest including area of study
- Reference letter from PI and/or head of Lab (see instructions below)

Reference Letters
You are required to have one (1) reference letter from your PI and/or head of your lab for this application. You will not be able to view the letter once it is submitted. The reference letter requests will be sent upon submitting your application or clicking 'Send Letter Request' from a saved draft. Please note that reference letters are due on Friday April 20, along with you application. Please either submit your application to send the reference letter request, or click 'send letter request' prior to April 20 to allow your reference sufficient time to submit their letter.

If you plan on applying, we recommend that you start and save a draft application and send a reference letter request to your reference as soon as possible to give them sufficient time to provide a reference for you.
If you would like to be notified when your letter writer has submitted their letter to the system, check the box next to the following statement under the "Reference Letters" section:
“Would you like to have an e-mail notification letting you know when Reference Letter(s) have been completed?”

Application Review
Materials will be reviewed by the workshop committee, which will select applicants for admission into the program. Students will be notified in late April.

Please contact CryoEM-admin@umich.edu with questions.