

Molecular Biophysics Training Program (MBTP) at Northwestern University

Participating Pre-Doctoral Graduate Programs

DGP, IBiS, Biomed Engg, Chemistry, Chem & Biol Engg, NUIN, Physics

Eligibility

Pre-doctoral students from participating graduate programs in their **2nd & 3rd** years of graduate training at the time of appointment conducting biomedically-relevant biophysics research are eligible. The traineeship will provide a stipend, tuition, and some funds for yearly travel to a scientific meeting.

Curricular Requirements

In addition to completing the requirements of their parent graduate program, trainees must take **three** core courses in Biophysics, an ethics course, a rigor & reproducibility course, a structural biology workshop, and an elective. These requirements are **mandatory**; no exceptions will be made.

Core Courses:

1. Choose either IBiS Molecular Biophysics (IBiS 401; **Sp22**) or DGP Structural Basis of Signal Transduction (DGP 466; **Su21**)
2. Biophysical Methods (IBiS 409; **F21**)
3. Quantitative Biology (IBiS 410; **F21**)

Ethics Course:

Choose one of Ethics in Biological Research (IBiS 423; **F21**), Colloquium on Integrity in Biomedical Research (DGP 494; **F20**), Responsible Conduct of Research Training (GEN ENG 519/CHEM 519; **F20, W21, Sp21**)

Rigor & Reproducibility course (IBiS 421; **Su21**)

Structural Biology Workshop: 3-day summer workshop covering NMR, crystallography, & cryoEM (**Su22**)

Elective Courses:

Visit the website <http://www.biophysics.northwestern.edu/> for the list of approved elective courses.

Program Activities

Molecular Biophysics Club – Monthly, Third Wednesdays, Noon, Cook 3118

Presentations by a graduate student or post-doc from participating preceptor labs

Evanston Molecular Biophysics Journal Club – Monthly, Fourth Tuesdays, Noon, Cook 3118A;

Chicago Incomplete Factorial Structure Function Journal Club – Monthly meetings

Student-run journal clubs with presentations by participating preceptor lab members

Molecular Biophysics Seminar Series – Monthly, First Thursdays, 12:30 PM, Pancoe Auditorium

Distinguished non-NU speakers hosted by preceptors followed by lunchtime meetings with speaker

Research-in-Progress Meetings – Monthly, Second Tuesdays, 12:30 PM, Pancoe 4103

Trainee meetings with the Steering Committee and Mentors describing their research progress

Annual Biophysics Symposium – Third Fridays of September, 9 AM-5 PM, Pancoe Auditorium

Trainee Nomination, Selection, & Expectations

Students are nominated by preceptors over the summer each year. Nominations are evaluated by an *ad hoc* committee comprising program preceptors. This year, **10 to 11** trainees will be appointed.

Specific Expectations of Supported Trainees; Trainees must -

- Complete MBTP curricular requirements and remain in good academic standing
- Participate in the MBTP-sponsored activities listed above, present poster at Biophysics Symposium every year and give a talk at least once at the Biophysics Club or the Biophysics Symposium during their tenure at Northwestern
- Present oral research updates (twice a year) at Research-in-Progress Meetings
- Provide yearly written research reports documenting progress
- Provide career plans or updates to career plans (aka Individual Development Plans or IDPs) every year

Please visit [biophysics.northwestern.edu](http://www.biophysics.northwestern.edu) for more information