# **Molecular Biophysics Training Program at Northwestern University**

## **Participating Pre-Doctoral Graduate Programs**

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

## **Eligibility**

Pre-doctoral students from participating graduate programs in their **2**<sup>nd</sup> **& 3**<sup>rd</sup> years of graduate training at the time of appointment conducting biomedically-relevant biophysics research are eligible.

Appointment will provide 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, a **mandatory** ethics course, a **mandatory** rigor & reproducibility course, a structural biology workshop, and an elective.

#### **Core Courses:**

- 1. Choose one of: IBiS Molecular Biophysics (IBiS 401; **Sp19**), DGP Macromolecular Structure and Function (DGP 465; **Sp19**), DGP Structural Basis of Signal Transduction (DGP 466; **W20**, max 6 seats),
- 2. Biophysical Methods (IBiS 409; F19)
- 3. Quantitative Biology (IBiS 410; F18)

#### **Ethics Course:**

Choose one of: Ethics in Biological Research (IBiS 423; **F18**), Colloquium on Integrity in Biomedical Research (DGP 494; **F18**), Responsible Conduct of Research Training (GEN ENG 519; **F18**, **W19**, **Sp19**)

## **Elective Courses:**

Visit the website for the <u>list of approved elective courses</u>.

Rigor & Reproducibility course (IBiS 421; Su18)

Structural Biology Workshop: 3-day summer workshop covering NMR, crystallography, & cryoEM (Su19)

#### **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

Biophysics Trainee 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 Wednesdays in June, 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. Presently, **8 to 9** trainees are appointed each year.

#### Specific Expectations of Supported Trainees; Trainees must -

- Complete curricular requirements and remain in good academic standing
- Participate in the training program-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 Biophysics Trainee 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 our website for more information and contact Abby Mattson with any questions