



Northwestern | Molecular Biosciences

Student Handbook

Quantitative and Systems Biology (QSB)

Master of Science Degree Program



Student Handbook

Quantitative and Systems Biology M.S. Degree Program

Academic Year: 2020-2021 | Last Revised: 2020-09-016

The Quantitative and Systems Biology (QSB) Student Handbook supplements The Graduate School's (TGS's) policies and procedures. The following pages contain information about program-specific policies, procedures, and regulations. Students are subject to the regulations in effect at the time of matriculation. It is each student's responsibility to be aware of these and The Graduate School's regulations. Note that this information applies to the current academic year and is updated periodically. Northwestern University reserves the right to change without notice any statement contained on the TGS or QSB websites or this handbook concerning, but not limited to, rules, policies, tuition, fees, curricula, and courses. Archives of these policies and procedures for each academic year are retained in The Graduate School. Failure to read this information does not excuse a student from knowing and complying with its content. In addition to TGS and program policies, graduate students are subject to and should be aware of [University policies](#) pertaining to students.

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PERSONNEL

Director: Greg Beitel, Ph.D.

Advisory board:

Carole LaBonne (Chair of Molecular Biosciences (MBS))

Jiping Wang (Professor, Statistics)

Bill Miller (Director of Master of Science in Biotechnology Program; Professor, Chemical and Biological Engineering).

Admissions committee:

Greg J. Beitel (QSB Chair; Professor, MBS), Alec Wang (Associate Professor, MBS), Yuan He (Assistant Professor, MBS)

Curriculum committee:

Greg J. Beitel (QSB Chair; Professor, MBS)

Carole LaBonne (MBS Chair; Professor, MBS)

Erik Andersen (Associate Professor, MBS)

Rich Carthew (Professor, MBS)

Vinzenz Unger (Professor, MBS)

Jason Brickner (Professor, MBS)

Thesis committees: The QSB director will appoint thesis committees consisting of at least three members: the student's QSB mentor plus two additional faculty members, one of whom will be chair of the committee). Any faculty member with an appointment in MBS can serve as a member or chair of a thesis committee. At least two members of the committee, including the chair, must be members of the Northwestern University Graduate Faculty. The committee is required to confirm that all requirements for degree completion have been met.

Program Assistants:

For QSB student question about class registration and the program in general:

Thomas Bateman

Department of Molecular Biosciences

Hogan 2-100

Thomas.Bateman@northwestern.edu

Ph: 847-497-5085

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ADVISING

Research/Thesis Advisor

Students will be matched with a faculty advisor when a student is admitted to the program. The faculty advisor will serve as the student's advisor for thesis research and as the student's primary academic advisor who will help the student decide what classes would best prepare them for the area of research they are pursuing. However, prior to registering for their courses, students will discuss and confirm their choice of courses with the QSB Director. The QSB Director is also available to discuss course choices with students at any time. A research assistant professor or postdoctoral fellow may serve as the day-to-day mentor in cases where the faculty advisor runs a large lab along as prior approval of the QSB director and the student is obtained.

It is of particular importance that students contact the QSB Director if the student is experiencing problems with any of their courses. It is much easier to fix problems mid-quarter than late in the quarter, and quarters are very short. Thus, students with concerns should seek advice as soon as possible.

Changing Advisors

Since changing advisors will negatively impact the student's research experience, it is expected that students will only change advisors under highly unusual circumstances. Reasons for changing advisors could include, but are not limited to: the student's advisor being unable to continue in an advisory role due to unforeseen issues such as, but not limited to, medical issues or sudden departure from Northwestern; the student or the advisor finding the working arrangement unworkable. All requests for advisor change will be handled by the QSB Director and the student's thesis committee on a case-by-case basis.

THESIS COMMITTEE

Each student's thesis committee will be comprised of the student's advisor and two additional MBS faculty that will be assigned by the QSB Director. One of the committee members who is not the student's advisor will be assigned by the QSB Director to chair the committee. **Once a thesis committee has been assigned to the student, the student needs to enter the committee member information into The Graduate Student Tracking System (GSTS <http://gsts.northwestern.edu/>).** A guide for using GSTS can be found by [clicking here](#).

Students will meet with their committees in December to approve their proposed research plan, April-May for an assessment of progress and guidance on preparing the thesis, and in July-August for a final thesis examination. Each student will be responsible for scheduling meetings of the student and the committee. Note, these meetings should be scheduled two to three months in advance because faculty members can be hard to schedule, particularly in the summer. Students who do not meet their committees at the required time are required to make up these meetings as soon as possible after the normal time. Failure to have thesis committee meeting or examination will prevent students for completing the degree on the normal schedule.

If unforeseen circumstances arise and a committee member cannot perform their functions, if a committee member resigns, or if there is an unresolvable conflict between a student and their committee member, the QSB Director will appoint a replacement committee member.

LEARNING OBJECTIVES & ASSESSMENT

Graduate Program Goals/Mission Statement: The mission of the one-year QSB program is to train students in quantitative and systems biology approaches and techniques that will enable them to succeed in top Ph.D. and M.D. programs or to directly enter research careers in industry or academia.

Learning objective(s) <i>Students should be able to...</i>	Milestone/ Requirement/Capacity	Assessment Strategies and Criteria* <i>How do we know this objective has been achieved? What criteria do we have to measure success?</i>
... quantitatively analyze data	Pass the courses IBiS410 or ES_APPM 421, and IBiS 432 or equivalent	See syllabi of these courses
... write scripts and/or basic programs to analyze data sets using current computer languages/environments including R, Matlab, and Python	Pass the courses NICO 401, IBiS410 and/or ES_APPM 421, and IBiS 432 or equivalent	See syllabi of these courses
... contribute original research to scholarly community.	Master's thesis	Assessment Strategy: Committee assesses dissertation prospectus using collaboratively-constructed rubric, demonstrating levels of achievement. Criteria: Student submits an original thesis; defines appropriate methodology; generates original results; writes a clear presentation and analysis of data; suggests future directions; delineates sources
... articulate broader impacts of research	Pass the course QSB 401; thesis committee meetings; dissertation writing; public seminar presentation	Student receives feedback from advisor, and peers
... create and communicate professional development plan	Develop and present an individual development plan to program director and thesis committee	Student shares plan with QSB Director by the first day of classes of the fall quarter, and with their thesis committee at the first meeting in December; Student seeks appropriate resources in response to professional development plan, such as identifying career paths of program alumni

COURSE LOADS, CHARGES, & FULL-TIME STUDENT STATUS

Unless otherwise allowed by TGS, students must complete 9 credit units of letter-graded (ABC, not P/NP), graduate level courses by the end of spring quarter. Partial credit classes such as NICO 401 (0.67 credits) and NICO 402 (0.33 credits) can be summed as part of the 9 credit units. Thus, the NICO 401/402 sequence counts as the equivalent of a one-unit course for the fall quarter.

Required and a recommended selection of optional courses for the QSB program are shown in the section below. Additional courses offered at Northwestern can potentially be taken as electives if they are eligible for TGS graduate credit and approved by the QSB director.

To maintain visa status, international students must take 3 credits of classes per quarter, but do not need to maintain 3 credits at all times in the quarter. In particular, full time student status is achieved by the combination of NICO 401 which runs in the first two weeks of September, and NICO 402 (0.33 credits), which

runs in the usual academic quarter, despite the student having a course load of 2.33 units during the regular fall quarter class period.

Standard graduate tuition includes up to four credits of classes. A fifth class can be taken with the QSB Director's permission but **note that taking more than four units of courses in a quarter will increase the cost of tuition charged to the student by one unit, which in 2019 was an additional \$6,649.**

If a student enrolls in five classes with the anticipation of dropping one class, note that the fifth class must be dropped by 5:00 PM on the date listed in the academic calendar as the last day for tuition adjustment related to enrollment changes (to or from full-time). No reductions are made to bills for dropped or swapped classes after this date. In some cases, this drop date may occur prior to the first meeting of the class.

Zero credit classes, such as IBiS 423 Ethics, are not counted for assessing tuition charges and do not count towards enrollments, so in the fall quarter, students will take a total of five classes (NICO 401, QSB 401, two one-credit TGS courses, and IBiS 423 Ethics) for 3.67 credits and pay regular full-time Masters tuition rates.

REQUIRED & ELECTIVE COURSES

Students must complete 9 quality letter-graded (ABC, not P/NP), graduate level courses by the end of spring quarter. Required and recommended optional courses are shown below. Additional courses offered at Northwestern can potentially be taken as electives if they are eligible for TGS graduate credit and approved by the QSB director.

Students must also take the "Bioethics" and "Rigor and Reproducibility in Research" non-credit training course (IBiS 423 and 421, respectively), or if scheduling conflicts arise, equivalent activities as determined by the QSB Director.

QSB courses for 2020-2021: All courses are 1 credit unless otherwise noted

Fall Quarter (Register for at least three total credits): Two required credit courses and two electives selected from the list below or the electives document. All courses are 1 credit except if noted otherwise.

Required courses:

- NICO 401 – Introduction to Programming for Big Data (0.67 credits)
- QSB 401 – Research Techniques, Writing & Presentation
- IBIS 423 - Ethics in Biological Research (0 credit)
- One of IBiS 401 or ES_APPM 421

Recommend elective courses:

- NICO 402 – Project for Introduction to Programming for Big Data (0.33 credits)
- IBiS 402 - Eukaryotic Molecular Biology
- IBIS 410 – Quantitative Biology
- STAT 330– Applied statistics for Research 1
- ES_APPM 421 - Models in Applied Mathematics
- Biol_Sci 361 - Protein Structure and Function

Winter Quarter (Register for 3 courses): Two required courses and one elective selected from the list below or the electives document.

Required courses:

- QSB 499 – Independent study
- Biol_Sci 323 – Bioinformatics: Biological Sequence and Structure Analysis

Recommend elective courses:

- Stats 465 – Statistical Methods for Bioinformatics and Computational Biology (not offered in 2020 due to scheduling conflict)
- IBiS 406 – Cell Biology
- IBiS 407 – Genetics and Epigenetics
- Biol_Sci 378 – Functional Genomics

Spring Quarter (Register for 3 courses): Two required courses and one elective selected from the list below or the electives document.

Required courses:

- QSB 499 – Independent study
- IBIS 432 – Statistical methods for bioinformatics and computational biology (requirement also fulfilled by taking STAT 330 in Fall quarter or STAT 465 in the Winter Quarter)

Recommend elective courses:

- IBIS 404 – Principles and Methods in Systems Biology
- IBiS 401 – Molecular Biophysics

Summer Quarter (Register for 2 courses, both required)

Required course: QSB 590 – Independent study with thesis (3 units)

Required training course: IBIS 421 – Rigor and Reproducibility in experimental design

OTHER COURSEWORK & ACTIVITIES

- **Thesis committee meetings** – students must meet their thesis committees in December, April-May and July-August.
- **Approval of thesis** – students must write and defend their thesis to their committee.
- **Seminar presentation of research** – students must present their thesis research in a public seminar.
- **Research group seminars** – student must attend the group meetings and any required journal/data clubs of their research laboratories once the student arrives in September.
- **Pre-class activities in September** - students are required to participate in training activities as detailed in the schedule of pre-class activities.
- **Individual Development Plan (IDP)** – Before the start of classes in September, each student must complete, with their faculty advisor’s signature, an individual development plan that outlines the student’s goals for the Masters program and for their post-graduation plans.
- **Bioethics workshop** -Students must take the QSB Bioethics workshop during the summer quarter.
- **QSB recruitment** – current QSB students are expected to assist in the recruitment of future QSB students by being available to talk to prospective students and to serve as “buddies” to help newly admitted students get set up with the program.

Applying to Transfer to the IBiS Ph.D. Program

- Students who excel in the QSB program can be considered for admission to IBiS program.
- QSB-to-IBiS transfer applicants will be evaluated relative to the entire pool of IBiS applicants. Because IBiS admissions is highly competitive, it is possible that a minority of QSB students will qualify for admission to the IBiS Ph.D. program.
- QSB students wanting to transfer to IBiS do not need to apply before the IBiS December application deadline; **QSB students can apply to transfer via The Graduate School (TGS) CollegeNet system by March 31.**
- QSB students who are admitted to the IBiS program are expected to complete their master's degree in August and start the IBiS program at the beginning of September along with the rest of the incoming IBiS class.
- QSB transfer students will receive credit for IBiS courses taken through the QSB program (with grade of B or higher) and will be required to complete only those additional courses required by IBiS.
- As are IBiS students, QSB students will be required to complete three research rotations in Fall, Winter, and Spring quarters before joining a lab. Although transfer students may choose to join the lab in which they conducted their Master's thesis research, this arrangement is neither assumed nor guaranteed.

PROGRESSING THROUGH THE PROGRAM: TIMELINE OVERVIEW

Degree applications can be submitted two quarters in advance. Visit the TGS Site > [Academic Policies & Procedures](#) > [Graduation](#) to access instructions and the [Application for a Degree](#) form via the [GSTS](#) platform.

FALL 2020	
Early September	On campus students arrive to Evanston area
September 6	For on-campus students, begin Wildcat Wellness quarantine
September 8	First day of class for NICO 401
September 10	Fall tuition for statement 1 is available online
September 11	Registration for classes opens at 9am.
September 16	Regular Fall Classes Begin Students must submit IDP plans to QSB office
September 20	For on-campus students, Wildcat Wellness quarantine completes
September 22	Last day to ADD classes. Students must be registered for three graduate-level classes to fulfill degree completion and visa requirements. CPT/OPT students must be registered for QSB 595
September 29	Last day to DROP classes WITHOUT BEING CHARGED TUITION
October 1	Fall tuition for statement 1 is due Students begin scheduling first committee meeting
October 1-28	For CPT/OPT students completing training in December: file application for degree with TGS using GSTS.

October 10	Fall tuition statement 2 is available online
October 16	For CPT/OPT students completing training in December: Last day to submit “Application for Degree” form to TGS for graduation in Fall (use GSTS)
November 1	Fall tuition for statement 2 is due
November 9	Registration for Winter 2021 opens
November 28	WCAS Reading Period begins
November 30	For CPT/OPT students completing training in December: Last day to submit “Master’s completion form” with TGS graduation in Fall (use GSTS).
December	First meeting of student and thesis committee; research plan and IDP must be presented to committee one week prior to first committee meeting
December 2-8	Fall examinations
December 10	Winter tuition statement is available online
WINTER 2021	
January 1	Winter tuition is due
January 4	Winter Quarter classes start Winter Change of Registration (Drop/Add)/Late registration begins
January 1-29	CPT/OPT students: file application for degree with TGS using GSTS
January 8	Last day to ADD classes. Students must be registered for three graduate-level classes to fulfill degree completion and visa requirements. CPT/OPT students must be registered for QSB 595 Last day to DROP classes WITHOUT BEING CHARGED TUITION
January 29	QSB students must submit Spring Quarter thesis committee meeting date to QSB office For CPT/OPT students: Last day to file the “Application for Degree” form with TGS (use GSTS)
February 22	Registration for Spring classes opens
March 10	Spring tuition statement is available online
March 15	Students must submit the date for their spring quarter thesis committee meeting to the QSB office
Spring 2021	
March 30	Spring quarter classes start

	<p>(Optional): First day to submit Application for Degree (for August graduation) using GSTS to allow a student to participate in June commencement ceremonies.</p> <p>Note: Students planning to do a CPT/OPT internship and who want to participate in the June commencement should submit an Application for Degree with an August completion date. Note: If a student commits to the internship during the summer quarter, the student must withdraw their application for degree by contacting TGS after commencement ceremony, but before July 9.</p>
March 31	Last day to submit applications to transfer from QSB program to IBiS program
April 1	Spring tuition is due
April XX	<p>Last day to ADD classes. Students must be registered for three graduate-level classes to fulfill degree completion and visa requirements.</p> <p>Last day to DROP classes WITHOUT BEING CHARGED TUITION</p>
April 12	Summer Quarter registration opens
April 23	(Optional): Last day to submit Application for Degree for August graduation that allows a student to participate in June convocation ceremonies.
April – May	Spring-quarter thesis committee meeting. Meeting goals are to highlight progress to date on research and discuss outline for thesis
May 10	Summer tuition statement is available online
May 30	Students must submit thesis examination date to QSB office
June 1	<p>Summer tuition is due</p> <p>If not already filed and not doing an OPT/CPT internship, submit an Application for Degree for August graduation</p>
June 7 - 12	Spring examinations
June 13	Commencement (tentative)
June XX	Summer Quarter begins
June 21	Summer Quarter change of registration/drop/add late registration opens
SUMMER 2021	
July XX	Last day to DROP classes WITHOUT BEING CHARGED TUITION
July 9	Last day to submit “Application for Degree” form with TGS using GSTS to receive a degree at end of Summer Quarter. Note: QSB students participating in the optional internship (OPT/CPT) do NOT file for graduation in August, but instead file in the term that they will complete the CPT/OPT internship

July 9	For students doing an CPT/OPT internship and who filed an “Application for Degree” for August graduation, this is the last day to withdraw application.
July 15-August 15	Thesis examination and public presentation of research
August 20	Last day to submit “Master’s Degree Completion” form to TGS using GSTS for August graduation. CPT/OPT students: Register for QSB 595
August 28	Summer quarter ends
FALL 2021	
September 14 <i>Approximate</i>	CPT/OPT students: Last day for QSB 595 registration
December 6 <i>Approximate</i>	CPT/OPT students: Last day to submit “Master’s Degree Completion” form for December graduation (use GSTS)
SPRING 2022	
March 13 <i>Approximate</i>	Last day to submit the “Master’s Degree Completion” form for March graduation using GSTS

Students can view the full calendar by visiting the [Registrar’s website](#) and selecting the correct calendar year.

SATISFACTORY ACADEMIC PROGRESS

The Graduate School (TGS) sets the minimum standard for satisfactory academic progress (see <https://www.tgs.northwestern.edu/about/policies/satisfactory-academic-progress.html>). Students who are placed on academic probation by TGS and unable to remediate during TGS’s probationary period will be excluded at the end of the second quarter of probation by TGS. Read about the policy by [clicking here](#) for more details.

The QSB program has additional criteria for maintaining satisfactory academic progress: Students will receive written feedback from their committee at the end of each thesis committee meeting. Students must also be deemed by their thesis committees as making satisfactory progress at the time of the meeting. Students determined to have made unsatisfactory progress for one quarter will result in the student being considered on probation. Students having two consecutive quarters of unsatisfactory progress will be dismissed from the program. If a student feels that their committee has inappropriately decided that the student has not made sufficient progress and is dismissed from the program, the student may appeal to the QSB Director. If the QSB Director also finds that the student has not made sufficient progress, the student may appeal to TGS. [Click here](#) to read more about the process.

Student must complete the QSB program requirements, with the exception of submitting thesis revisions, in four consecutive quarters, unless they are granted an exception for particularly severe medical or personal circumstances.

Failure to maintain satisfactory standing in classes or to make satisfactory progress on the student's thesis research as detailed below will result in the student being dismissed from the program.

TEACHING REQUIREMENTS

There are no teaching requirements for the QSB program.

WRITING THE RESEARCH PLAN

At the student's first committee meeting December or January, the student will present a written plan of their research that will also serve as working draft of the final written thesis. The research plan will be prepared as part of the QSB 401 course and will be due three days before the date of the last day of the NU final exam period.

The Research Proposal is expected to be approximately 8 pages in length, not including preliminary data (if any) and references. The format of the document follows guidelines for an NIH pre-doctoral fellowship application. The proposal should be single-spaced, on standard-size (8½" x 11") paper with one-inch side, top and bottom margins and a font size not smaller than 12. All sections should be referenced appropriately. Good proposals are clear, precise, and succinct.

The Research Plan should contain the following sections:

Title Page:	List the title of the proposal, the student's name, and thesis lab. (Printed on separate page.)
Table of contents	Should be set up to auto-update as changes are made
Summary	The summary should be a brief synopsis of the proposed research. It should state the scientific background of the proposal, the specific aims and objectives, the methods or procedures to be used, and the potential significance of the research. (The summary and specific aims should fit on one page.)
Specific Aims	Provide a clear, concise point-by-point summary of the aims of the work proposed. (The summary and specific aims should fit on one page.)
Background and Significance	Outline the background of the present proposal, critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State the importance of the research described in this proposal by relating the specific aims to longer-term objectives. (Approximately three pages).
Experimental Design and Methods	Discuss in more detail the experimental design and the procedures to be used to accomplish the specific aims of the project. For each specific aim, include the following subsections (approximately three pages plus preliminary data): <ul style="list-style-type: none"> ○ Approach: Describe the protocols to be used and provide a tentative sequence or timetable for the investigation. Include the means by which the data will be analyzed and interpreted. Describe any new methodology and its advantage over existing methodologies. ○ Expected Results: Outline the results you expect to get for the aim ○ Preliminary data: If any preliminary data is available, include it here. ○ Potential difficulties and alternative approaches: Briefly discuss potential difficulties and limitations of the proposed procedures and provide alternative approaches to achieve the aims.

Expected impact	Expected impact of proposed research (Several sentences to 0.5 page)
References	For citing references, use the format of the journal Cell. In text citations are listed as (author, year) and in the References section, referenced items are listed alphabetically. Detailed formatting notes are shown below, but the citation program you use should allow you to select and use the "Cell" format. (No length limitations.)

CITATIONS

- In-text citations should be written in Harvard style and not numbered, e.g., "Smith et al., 2015; Smith and Jones, 2015."
- Use the style shown below for the reference section. "et al." should only be used after ten authors.
- Article in a periodical: Sondheimer, N., and Lindquist, S. (2000). Rnq1: an epigenetic modifier of protein function in yeast. *Mol. Cell* 5, 163–172.
- *Article in a book*: King, S.M. (2003). Dynein motors: Structure, mechanochemistry and regulation. In *Molecular Motors*, M. Schliwa, ed. (Weinheim, Germany: Wiley-VCH Verlag GmbH), pp. 45–78.
- *An entire book*: Cowan, W.M., Jessell, T.M., and Zipursky, S.L. (1997). *Molecular and Cellular Approaches to Neural Development* (New York: Oxford University Press).

THESIS & THESIS EXAMINATION

All QSB students must submit their Master's thesis and have a thesis examination by August 14. They must also present a public talk on their thesis by August 23 (scheduled by the QSB program). Thesis revisions must be completed by August 30.

For students participating the optional internship CPT/OPT program and thus graduating at the end of the Fall or Winter quarter must still submit their master's thesis and have a thesis examination per the above deadlines.

WRITING THE THESIS

The final written Thesis is expected to be approximately 40 pages in length and build from the Research Plan presented at the first committee meeting.

The document will consist of a summary of what was accomplished in the research, a table of contents, an introductory chapter that summarized the problem being investigated and the relevant background literature, one or more results chapters, a discussion chapter that puts the students results in context of the field and discusses future directions for the project, a chapter of references and one or more optional appendixes that contain results or analyses that were not included in the main text.

Students will present an outline of their thesis to their thesis committee at their second thesis committee meeting. The student is expected to prepare the outline and final thesis in a timely manner to allow the faculty member to review and provide comments on the documents prior to the documents being submitted to the thesis committee.

The thesis will be evaluated by the student's thesis committee during the thesis examination. It is expected that it will common for the committee will request minor revisions, even when the committee otherwise finds the thesis and examination successful. These revisions need to be completed prior to the student submitting a degree completion form in mid-August and must be approved by the student's thesis supervisor by obtaining their signature on the thesis examination form. If a student's thesis document is deemed inadequate, the student will be given opportunity to revise it. Revisions must be completed by 18 months following the student's admission to the program.

DEGREE COMPLETION & GRADUATION

Student must complete the QSB program requirements, with the exception of submitting thesis revisions, in four consecutive quarters, unless they are granted an exception by the QSB Director, who will consider requests on a case by case basis and only when there are extenuating circumstances.

The QSB program does not require any administrative steps in order to graduate beyond The Graduate School's filing requirements.

FINANCIAL SUPPORT

The QSB program does not provide any financial support for students in the program. Students are expected to bear the full cost of tuition and living expenses. More information can be found on the [TGS website](#).

Students are welcome to travel to conferences, with the approval of their advisors, however the QSB program does not provide funding for attending conferences, symposia, workshops or other forms of meetings or training programs. Students wishing to go to a meeting or workshop must arrange funding for the activity themselves. While a student's advisor may choose to pay for the student to attend a conference, such funding is at the discretion of the advisor, is not a program requirement and would be paid from the advisor's lab funding, not QSB funds. Students can also choose to pay the cost of a meeting themselves, or find alternative funding sources.

CONFLICT RESOLUTION

If there is a dispute between the student's thesis advisers or committee members, the student should discuss the situation with the QSB Director who will attempt to resolve the situation. If the QSB Director cannot resolve the situation, the student and/or QSB Director will bring the issue to TGS.

NON-DISCRIMINATION AND ANTI-HARASSMENT POLICY AND RESOURCES

Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship status, veteran status, genetic information, reproductive health decision making, or any other classification protected by law in matters of admissions, employment, housing, or services or in the educational programs or activities it operates. Harassment, whether verbal, physical, or visual, that is based on any of these characteristics is a form of discrimination. Further prohibited by law is discrimination against any employee and/or job applicant who chooses to inquire about, discuss, or disclose their own compensation or the compensation of another employee or applicant.

Northwestern University complies with federal and state laws that prohibit discrimination based on the protected categories listed above, including Title IX of the Education Amendments of 1972. Title IX requires educational institutions, such as Northwestern, to prohibit discrimination based on sex (including sexual harassment) in the University's educational programs and activities, including in matters of employment and admissions. In addition, Northwestern provides reasonable accommodations to qualified applicants, students, and employees with disabilities and to individuals who are pregnant.

Any alleged violations of this policy or questions with respect to nondiscrimination or reasonable accommodations should be directed to Northwestern's Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, equity@northwestern.edu.

Questions specific to sex discrimination (including sexual misconduct and sexual harassment) should be directed to Northwestern's Title IX Coordinator in the Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, TitleIXCoordinator@northwestern.edu.

A person may also file a complaint with the Department of Education's Office for Civil Rights regarding an alleged violation of Title IX by visiting www2.ed.gov/about/offices/list/ocr/complaintintro.html or calling 800-421-3481. Inquiries about the application of Title IX to Northwestern may be referred to Northwestern's Title IX Coordinator, the United States Department of Education's Assistant Secretary for Civil Rights, or both.