

Student Handbook

Table of Contents

Department of Biostatistics Overview.....	2
Important Departmental Contacts.....	2
Programs and Degrees	3
Master of Science	3
Doctor of Philosophy	3
Statistical Genetics Training	3
Non-Degree Options	3
Program Governance	3
Costs and Funding.....	3
Tuition	3
Funding.....	4
Communication	5
Students.....	5
Department.....	5
Departmental Locations	5
Defining Academic Progress and Academic Misconduct.....	6
Academic Expectations Policy.....	6
Actions for Unsatisfactory Performance and Progress or Academic Misconduct.....	7
Academic Grievance Procedure.....	7
Tutoring Information.....	8
Applying for a Leave of Absence.....	9
Degree Requirements	9
MS Capstone	9
Master of Science Thesis Requirements.....	10
Doctor of Philosophy Requirements.....	11
Statistical Genetics Training	12
Advising and Committees	12
Academic Advising.....	12
Thesis	12

Dissertation	13
Student Travel Information	13
Pre - Authorization	13
Student Travel Award Funding	13
Travel Reimbursement	14

Department of Biostatistics Overview

The mission of the Department of Biostatistics is to serve as a source of expertise and a focus for training and research in the quantitative aspects of public health and medicine, and to promote the use of rigorous quantitative methods in the biomedical and public health sciences.

To fulfill this mission, the department has established the following goals:

- To maintain and further enhance a strong, internationally recognized graduate program for the training of biostatisticians who can play leadership roles in academia, government and industry;
- To maintain a vigorous program of independent biostatistical research as a means of developing new statistical methods for the biomedical and public health sciences and of providing research opportunities for students;
- To provide quality courses in biostatistics for students enrolled in other departments of the School and elsewhere in the University;
- To contribute to the advancement of knowledge in public health and medicine through participation in collaborative, interdisciplinary research;
- To maintain and further develop a program of biostatistical consultation by students and faculty that is responsive to the needs of researchers in the health sciences;
- To provide leadership in academic biostatistics and in formulating local and national public policy on quantitative aspects of public health and medicine through service on advisory boards and review committees and through other similar activities;
- To promote the use of rigorous quantitative methods in public health and biomedicine through educational outreach and consultation programs that serve the broader community.

Important Departmental Contacts

Departmental Chair	Dr. Lurdes Inoue	bchair@uw.edu
Graduate Director	Dr. Ken Rice	biogpd@uw.edu
Director of MS Capstone	Dr. Noah Simon	nrsimon@uw.edu
GPA, MS Capstone MS Thesis & PhD Program	Minh Vo	biostgp@uw.edu or biostcapgp@uw.edu
Curriculum Coordinator	Maggie Tarnawa	bcurric@uw.edu
Biost IT Team	Multiple members	bite@uw.edu
Payroll Coordinator	Terry Morris	tjmorris@uw.edu
Student Appointments & Tuition	Cindy Loudon	cloudon@uw.edu
Reimbursement/Travel	Ruth Levy	bprocure@uw.edu

Programs and Degrees

Our graduate degree programs offer a rigorous foundation in both statistical theory and state of the art methodology, preparing you for your career.

Master of Science

Earn a Master of Biostatistics in one of our two master's programs. We offer an accelerated 18-month [MS capstone](#) program, and a traditional [MS thesis](#) program.

Doctor of Philosophy

Earn a PhD in Biostatistics to prepare for careers such as an independent investigator, educator, or highly qualified practitioner of biostatistics. We offer a standard pathway and a statistical genetics pathway.

Statistical Genetics Training

The StatGen program draws students from four University of Washington PhD programs: Biostatistics, Statistics, Genome Sciences, and the Institute for Public Health Genetics.

Non-Degree Options

Take courses as a non-degree student or consider an online or on-campus certificate.

Program Governance

Department committees, Student Seminar Coordinators, and the Biostatistics Activities & Events Squad (BAES) work together to address various student, faculty, staff, Department, School of Public Health, and University of Washington activities and issues.

- Committees, coordinators, and BAES membership change on an annual basis (or as a student graduates, faculty retires, etc. - whichever comes first).

Costs and Funding

The Department of Biostatistics is committed to building a diverse student body. We partner with the UW to seek funding to highly qualified underrepresented minority students and students who have achieved academic merit despite significant social, economic, disability, and/or educational challenges.

Tuition

PhD Students

PhD students are supported by Research Assistantships (RA) and/or Teaching Assistantships (TA).

- Students with this type of support do not pay their tuition.
- Students are still responsible for certain student fees.

MS Students

All MS students are responsible for their own tuition and fees.

MS Thesis students:

- The tuition for MS Thesis students varies according to residency status.
- A snapshot of tuition and fees is on the [School of Public Health website](#).
- For more detailed information, see the [Current Tuition & Fees Dashboards](#) (Graduate Tuition & Fees). Select for the Graduate Program field "SPH Masters (excl MPH)."

MS Capstone students:

- The MS Capstone program is a self-sustaining, fee-based program offered in collaboration with [UW Professional & Continuing Education](#).
- Course fees are charged on a per-credit basis and are the same for Washington state resident and non-resident students. Fees must be paid at the start of each quarter.
- [Degree Costs and Financial Support for MS Capstone 2022-23 \(PDF\)](#)
- The MS Capstone program is not covered by the Washington State Tuition Exemption Program for Washington State employees and UW faculty/staff.

International MS students:

- International MS students must meet the [UW's financial ability requirement](#) to show adequate funding to cover living costs and tuition and campus fees for the first year of study.
- Students submit the financial ability statement after accepting the offer admission.

Funding

PhD Students

Students in the PhD program are offered up to five years of guaranteed funding, contingent upon satisfactory academic progress and job performance.

- This financial support is offered through [student employment](#) in the form of research assistantships (RA) and teaching assistantships (TA). Some Training Grant appointments may be available to US citizen/permanent residents; these appointments are paired with a RA or TA.
- If awarded an RA and TA appointments pay a monthly stipend as well as cover the student's tuition and health insurance. (Note: Student is responsible for certain [student fees](#).)
- Guaranteed funding covers all 12 months of the year and includes tuition and health insurance through the [Graduate Appointee Insurance Program \(GAIP\)](#).
- Funding offered will total 50% full time equivalent (FTE) - approximately 20 hours per week. Most appointments are composed of a single position at 50%, but there are appointments composed of two positions at 25% each or, as in the case of a Training Grant (TG) appointment, a TG plus 25% FTE RA or TA.
- See [types of available funding](#).
- Offer & Appointment Letters
 - The Offer Letter (sent in January) offers admission to the program and support. Job appointment details are provided later.
 - The Appointment Letter (sent in September) communicates the job appointment(s) for the coming year. New appointment letters could be issued before the next quarter when, for example, funding under a current RA is expected to end.

- The Appointment Letter will include the faculty supervisor/instructor name, project/course name, job duties, salary, benefits, [union information](#), and start/end dates.

MS Students

Students in both MS degree programs should be prepared to pay for the entire cost of their program.

- Occasionally masters' students find some limited short-term employment, but this does not cover the entire cost of the program.
- Students seeking support are encouraged to start their search early, ideally before and while applying to graduate programs.
- [Locating funding/employment](#) is the responsibility of the student.

Communication

Students

- [Student emails addresses](#): Available on the department website
- Department listserv:
 - b-students@uw.edu, all students are automatically added
 - b-cap1@uw.edu, for 1st year MS Capstone students
 - B-cap2@uw.edu, for 2nd year MS Capstone students
- Student-established communication
 - [Student Slack messaging](#): Student signs up; student-only space for discussing courses, research projects, possible concerns, opportunities, food, fun, etc.
 - Other options: Students may wish to organize their own list, where they can control membership and use it as a kind of discussion and announcement forum for students only. The UW offers free UW [Mailman lists](#) to any student in the furtherance of their education and research. (This can include social applications, which help students to build community and share information and advice.) These lists are not monitored, and they are simple to set up and administer.
- Graduate Program – main communication from the Graduate Program to students is through the student listserv b-students@uw.edu

Department

- Social media
 - [Facebook](#), [Twitter](#), [Flickr](#), and [LinkedIn](#)
 - Tag posts @UWBiostat and like/follow them!
- Weekly information & events newsletter: student email automatically added

Departmental Locations

[Hans Rosling Center for Population Health Building \(HRC\)](#)

3980 15th Ave NE, Third Floor

- Chair and dept administrative offices
- Graduate Program offices
- Faculty offices
- BITE Offices (primary location)

- Student Areas
 - Rm 348 All-student lounge / meeting room
 - Open area 350 desks: some assigned, some reservable/drop-in
 - Drop-in: various tables around the floor

[Health Sciences Building \(HSB\)](#)

1959 NE Pacific Street

- T-wing (T-329) student spaces
- BITE drop-in office
- Grad Staff / Faculty office (for drop-in meetings with Capstone students)

Defining Academic Progress and Academic Misconduct

Academic Expectations Policy

This policy is meant to clearly lay out academic expectations for students in the Biostatistics graduate programs. The below criteria should be used by students, faculty, and staff to determine parameters for academic performance and progress, and academic misconduct. This policy does not discuss degree requirements but rather the evaluation of student progress and performance in and outside coursework. In a situation where a student is struggling with academic progress and performance, or misconduct, the program will make every effort to provide early, appropriate, and consistent interventions to support student success.

The program follows the UW [Graduate School's guidelines for academic performance and progress](#) and [Student Conduct Code](#) addressing academic misconduct. Evaluation includes:

GPA Requirements: Grades will be monitored on a quarterly basis by the Graduate Program. Students who's cumulative or quarterly grade point average (GPA) falls below 3.0 are not considered to be making satisfactory performance and will be asked to meet with the Graduate Program Director and the faculty advisor (academic/thesis/dissertation). Cumulative and quarterly GPAs are computed on course, taken while the student is enrolled in the UW Graduate School. Computation is based only on courses numbered 400-599; courses graded S/NS, and CR/NC/N are excluded, as are the 600-800 series.

Performance in the fulfillment of degree program requirements: Students are expected to complete their coursework, exams, electives, and Capstone Project/Thesis/Dissertation in a professional manner and to positively represent the University of Washington, School of Public Health, and Biostatistics.

Any infraction of academic misconduct qualifies as failing to meet expectations for performance and progress. Academic misconduct includes plagiarism, multiple submissions of a single paper, cheating on an exam, illegal collaboration, and falsification of research.

For more information, see the UW [Student Conduct Code](#) and the Student Academic Responsibility Statement. We follow the [School of Public Health Academic Integrity Policies](#). In addition to the SPH's process, UW Biost asks faculty, students, and staff to inform the Graduate Program Director in cases of suspected misconduct.

Actions for Unsatisfactory Performance and Progress or Academic Misconduct

The below recommendations may be taken if determination of unsatisfactory performance and progress or misconduct is made in consideration of a student's progress relative to other students in the program or to an individually negotiated schedule. In each situation, students will be required to meet with program leadership to review a letter from the program director including:

1. The circumstances involved and evidence that the action requested is supported by program leadership,
2. necessary steps and a timeline articulating what a student must do to return to good standing, and
3. consequences if the plan is not acted on.

Warning:

A 'warning' is issued in the following circumstances:

1. Student's cumulative GPA drops below 3.0
2. Student has failed to meet expectations for performance and progress

Probation:

1. A "probation" is issued to students who have not corrected the deficiency that caused the warning action within the time limit specified or for students who depart suddenly and substantially from scholarly achievement.
2. Note: A previous warning is not necessary.

Final Probation:

1. Final probation is issued when students have not corrected the condition(s) that caused the probation recommendation within the time limit specified. Students who have corrected previous probation conditions but failed additional performance requirements and did not progress toward completion of the program. Final probation is only recommended for one quarter, though the Graduate School will consider an additional quarter in extenuating circumstances.
2. Note: The program must recommend one quarter of final probation before recommending a drop.

Drop:

1. A "drop" from the program is issued as a final action for students who have not corrected the condition(s) that caused the final probation recommendation within the time limit specified.
2. Recommendations for probation, final probation, and drop will be reviewed by the Dean of the Graduate School. Recommendations are noted on a student's unofficial transcript. In addition to notification from the program, students will receive final probation and drop status letters from the Dean of the Graduate School.
3. Note: No action will appear on the transcript for any subsequent quarter unless a new recommendation is made by the Dean.

Academic Grievance Procedure

Occasionally major difficulties arise during a student's tenure at the University. It is recommended that students first talk with program leadership within the Department to resolve such issues. If the situation cannot be resolved within the Department, specific grievance procedures are outlined in the [Graduate School Memo 33: Academic Grievance Procedure](#).

Tutoring Information

Biostatistics students who are experiencing difficulty in required courses for their degree may apply for the [SPH tutoring funds](#). Additionally, tutoring funds may be available through UWBiost.

- Step 1: It is expected that students will avail themselves of instructor and TA assistance prior to seeking tutoring support.
- Step 2: If additional tutoring support is needed, meet with the Graduate Program Advisor or biostgp@uw.edu (MS Thesis/PhD) or biostcapgp@uw.edu (MS Capstone). We will work with you to identify and address the next steps needed.

Finding a Tutor

- Students who are interested and eligible to receive these funds are responsible for selecting their own tutor and communicating the pay rate information to the tutor.
- Your Graduate Advisor will let you know how many funded tutor hours you are awarded prior to you selecting a tutor.
- Email biostgp@uw.edu (MS Thesis/PhD) or biostcapgp@uw.edu (MS Capstone) to receive a copy of the most up-to-date tutor list.
- The tutor will be paid directly through UW Payroll. Sharing the cost of a tutor by working in groups is encouraged. Tutors employed by the UW (e.g., the SPH or UWBiost) are not allowed to ask for additional compensation above the allowable hourly rate.

Applying for Tutoring Support

- Priority for tutoring funds is given to students from underrepresented populations but is available to all students. The maximum amount of funding allowable per student is 6 tutoring sessions, subject to appeal.
- When using SPH or UWBiost tutoring funds, the pay rate for tutoring a single student is \$25/hour and the rate for tutoring groups of 2-3 students is \$35/hour.
- Students who apply and are not granted tutoring funds, may pay out-of-pocket for tutoring services.
- To apply, submit the following information to biostgp@uw.edu (MS Thesis/PhD) or biostcapgp@uw.edu (MS Capstone), the approval process can take up to one week.
 - Student Name
 - Year of Entry
 - Expected Graduation (quarter/year)
 - Subject for Tutoring
 - Course Number and Instructor Name
 - E-mail approval from faculty advisor or instructor of course in support of you receiving funds for tutoring support
 - Short narrative outlining why tutoring is needed
 - Tutor Name
 - Estimated Hours/Duration of tutoring

Applying for a Leave of Absence

International students *must* contact the [International Student Services \(ISS\)](#) office for pre-approval **before** requesting on-leave status through MyGrad.

If students do not plan on registering for credits during any Autumn, Winter, or Spring Quarter, every quarter they will need to: **1)** obtain [ISS](#) pre-approval (if an international student) and **2)** submit an online Request for On-Leave Status through [MyGrad](#).

For any given quarter, they may submit the request as early as two weeks prior to the beginning of the quarter and no later than the last day of instruction for the quarter. Once it has been requested, please promptly email biostcapgp@uw.edu if you are an MS Capstone student or biostgp@uw.edu for all other degree programs to request graduate program approval. Students must also submit the \$25 on-leave fee by the last day of instruction for the quarter.

Non-international students need only to submit their request through MyGrad two weeks prior to the beginning of the quarter and no later than the last day of instruction for the quarter. Once it has been requested, please promptly email biostcapgp@uw.edu if you are an MS Capstone student or biostgp@uw.edu for all other degree programs to request graduate program approval. Students must also submit the \$25 on-leave fee by the last day of instruction for the quarter.

Degree Requirements

MS Capstone

The Master of Science in Biostatistics Capstone is a 50-credit degree and requires completion of the following:

Course Credits

- 24 credits of [core curriculum courses](#)
- 20 credits of [pathway-specific courses](#)
- 6 course credits for capstone project
- A minimum 3.0 grade in core and pathway courses
- Full-time enrollment of 10 credits per quarter is expected (summer optional)

Capstone Project

The culminating capstone project provides you with a marketable portfolio that demonstrates competency in:

- Data analysis
- Statistical programming
- Consulting experience with non-statisticians
- Written and oral communication
- Collaborative teamwork
- Project management

You will work on a real-world, health data analytics challenge with a small group of students in close collaboration with a course instructor and partner organization. The capstone project includes two courses:

Capstone Project I

Project Preparation (Autumn Quarter)

The partner organization introduces students to the health data analytics challenge. Students form collaborative teams, each of which writes, presents, and revises a project proposal that outlines the approach and methods the group plans to use.

Capstone Project II

Project Implementation (Winter Quarter)

Student teams implement their project proposals. At the end of the course, teams share their findings with the partner organization in oral and written form and prepare materials for individual portfolios.

Master of Science Thesis Requirements

The Master of Science in Biostatistics Thesis is a 63-credit degree and requires completion of the following:

Course credits

- 24 credits of [core curriculum courses](#)
- 12 credits of [elective courses](#)
- 6 research seminar credits
- 3 credits for consulting
- 18 credits for thesis
- Minimum 3.0 grade in each core course and 2.7 minimum in each elective course
- Full-time enrollment of 10 credits per quarter is expected (summer optional)

Exam

Students must pass the First Year (MS) Statistical Theory Examination after the end of spring quarter following completion of [STAT 512](#) and [STAT 513](#) (usually in the first year). If this examination is failed, it must be passed the following year. Learn [more about exams](#) in our Students section.

Thesis

The master's thesis is an opportunity to give insight into a research question or body of data. It also provides evidence of your ability to carry out independent biostatistical investigation and to present the results in clear and systematic form. Under the guidance of an advisor and second reader, MS Thesis students must perform biostatistics research and write a thesis.

- Students should consider potential thesis advisors and topics starting in the first year of the graduate program.
- Students typically begin work on their thesis in the autumn quarter of their second year.

Doctor of Philosophy Requirements

The Doctor of Philosophy in Biostatistics requires completion of the following:

Course Credits

- **Core curriculum courses:** 37 credits for Standard pathway; 45 credits for Statistical Genetics pathway
- **Elective courses:** 15 credits for Standard pathway; 7 credits for Statistical Genetics pathway
- 9 research seminar credits
- 3 credits for consulting
- 36 credits for dissertation
- Minimum 3.0 grade in each core course and 2.7 minimum in each elective course
- Full-time enrollment of 10 credits per quarter is required (2 credits in the summer).

Exams

- **First Year Theory Exam:** For advisory purposes, PhD students must take the First Year Statistical Theory Examination after the end of spring quarter following completion of [STAT 512](#) and [STAT 513](#) (usually in Year 1). (A new PhD student placement exam may be taken to waive these courses and the First Year Theory Exam.)
- **PhD Theory Exam:** PhD students must pass the PhD Statistical Theory Examination within two years following first time completion of [STAT 581](#), [STAT 582](#), [STAT 583](#) (usually the summer of Year 2). This comprehensive exam covers theory material learned in both the first and second years of the program.
- **PhD Applied Exam:** PhD students must pass the PhD Applied Examination within two years following first time completion of [BIOST 570](#) (usually the summer of Year 2). This exam covers Applied and Data Analysis coursework. In addition to courses, RA work and internships can provide opportunities to help prepare for the exam.

Learn [more about exams](#) in our Students section.

Dissertation

The purpose of writing a PhD dissertation is to make a substantive contribution to knowledge in biostatistics and to provide the student with training in undertaking biostatistical research. Under the guidance of a supervisory committee and the mentorship of the committee chair (the dissertation advisor), PhD students must perform biostatistics research and write a dissertation. The preliminary work for the dissertation is assessed in the General Examination, and the completed dissertation is assessed in the Final Examination. Students typically begin work on their dissertation after completing the PhD qualifying exams, although students should explore potential research topics early their graduate program.

- **General Exam:** The General Examination enables the Supervisory Committee to assess whether the student's background of study and preparation are sufficient to merit commencement of a dissertation. In the General Exam, the student presents preliminary work for the dissertation, outlines a proposal for the dissertation research, and answers questions from the Supervisory Committee. Passing the General Exam means the student is formally a PhD candidate. After achieving candidate status, the student ordinarily devotes their time primarily to writing the dissertation and preparing for the Final Examination.
- **Final Exam:** The Final Examination enables the Supervisory Committee to assess whether the student has produced a dissertation that is a significant contribution to biostatistical knowledge, and that the student has PhD-level training in biostatistical research. After a

successful Final Exam, the student must submit a final dissertation. This final version of the dissertation should address any issues raised in the Final Exam, to the satisfaction of the Supervisory Committee.

Other Requirements

PhD students must serve as a Teaching Assistant for at least one quarter.

Statistical Genetics Training

The Statistical Genetics (StatGen) program draws students from four PhD programs at the University of Washington: [Biostatistics](#), [Statistics](#), [Genome Sciences](#), and [Institute for Public Health Genetics](#).

The StatGen Training Program equips a new generation of researchers with the necessary skills to work at the interface of statistics and genetics for biomedical genetic research of today and the future. Technological advancements in genetics and genomics have led to a wealth of data, facilitating a fundamental change in the landscape of biomedical research. A new generation of scientists who have a strong foundation in statistics as well as interdisciplinary training in genetics is urgently needed to effectively analyze and interpret these data.

Deleted: a

Students enrolled in the program will:

- Complete the program curriculum that consists of four core courses: a two-course sequence in statistical genetics and two courses in genomics.
- Select and be paired with a world-class research mentor in the training program and conduct research in the lab of the mentor.
- Fully engage in the collaborative and multidisciplinary scientific environment for biomedical research in genetics at the University of Washington, providing them with extensive knowledge about cutting-edge biomedical research in genetics.

Advising and Committees

Academic Advising

- MS Thesis - Graduate Program Director, from entry until thesis advisor declared
- PhD - Faculty advisor, from entry until dissertation advisor declared
- MS Capstone - Faculty advisor, from entry throughout the program

Thesis

- [Thesis advisor](#)
- PhD students need to declare their dissertation advisor by the end of autumn quarter of the 3rd Year.
- Determine thesis topic and identify a "second reader" - the faculty member who, along with your thesis advisor, constitutes your [MS Supervisory Committee](#). This happens two quarters after you identify your thesis advisor.

Dissertation

- [Dissertation chair/advisor](#)
- [Dissertation \(Doctoral\) Committee](#)
- [Graduate School Representative \(GSR\)](#)
- [Members](#)
- [Reading Committee](#)

Student Travel Information

All student travel requests must be pre-authorized by departmental personnel, such as the Principal Investigator (PI), Faculty Advisor or Director.

Pre - Authorization

- a. Students who plan to travel to meetings, conferences, workshops, and trainings must first get authorization from the principal investigators (PI) paying for the travel AND the budget(s) to be charged. Additional authorizations may be required from the sponsor and the UW. Pls traveling on their own projects only need additional authorizations as they apply.
- b. Please request all authorizations by email. Copy bprocure@uw.edu on the email including what, when, why, and where of the trip, budget number(s) and project name(s) to be charged.
- c. Grant supported travel requires a benefit statement. See Biostatistics Intranet article "Before you travel, will your travel be reimbursable?" for more information on preparing your benefit statement.
- d. Note that necessary business justification when charging travel to a federal grant includes:
 - i. presenting research;
 - ii. serving as a panel chair or panel respondent when panel relates to grant's research;
 - iii. attending meeting of grant collaborators, must be mentioned in grant or allowed by grant;
 - iv. attending training workshops specific to accomplishing the grant's work.
It does not include general professional development such as attending a conference.

Student Travel Award Funding

Biostatistics Conference Travel Award supports students presenting applied or methodologic research papers or posters at major national or international conference.

- Student may receive this award once.
- Funding may be used for registration, lodging, meals, travel.
- No funding for short courses, job placement services, car rentals.
- Award decisions and amounts are made by the Graduate Program Director in consultation with the student's advisor(s).
- Award amounts vary depending on a range of factors, such as conference location, advisor recommendation, and stage in program (e.g., senior MS or PhD student, Third Year PhD student).

Reimbursement/Payment

- Students must follow departmental reimbursement policies.
- Reward points are not reimbursed.

- Contact bprocure@uw.edu before making arrangements to discuss registration payment options and required steps for reimbursement.

Travel Reimbursement

The fiscal team provides support for travel reimbursement, including travel advice, reimbursement forms and processing forms. Before you set your trip. Review "*information about allowability and allocability*" found on the Biost intranet.

After you travel, email your completed form & scanned receipts to bprocure@uw.edu. Please send scans as PDF. Reimbursement request forms are also found on the Biost intranet.