Welcome

Points of contact

Brian Giebel: bgiebel@uw.edu

Faculty directors of GS Graduate Program:
Doug Fowler (dfowler@uw.edu), Christine Queitsch (queitsch@uw.edu)

Faculty and student mentors

Thesis committee

A great source of information: the student handbook

https://www.gs.washington.edu/academics/gradprogram/handbook/index.htm

	Year 1	Year 2	Year 3	Year 4	Year 5 and beyond
Autumn	**COURSES** Genome 501 Genome 550 Genome 552 Genome 555 Genome events (520, 522, 523) Optional: Genome 559 (for those with little or no programming experience) **OTHER** safety training establish WA residency rotation talk	**COURSES** Genome 599 (grant writing) Genome 600 Genome events (520, 522, 523) elective if desired* **OTHER** select supervisory committee establish WA residency	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER** serve as teaching assistant (specific quarter varies; MSTP students may be asked to teach in year 2, depending on total number of teaching assistants needed) research reports presentation (any quarter) journal club presentation (any quarter) ***	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER** serve as teaching assistant (specific quarter varies) research reports presentation (any quarter) journal club presentation (any quarter) ***	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER** Schedule committee meeting (any quarter – min once per year normally, twice per year during pandemic) research reports presentation (any quarter) journal club presentation (any quarter) ***
Winter	**COURSES** Genome 501 Genome 551 Genome 561 Genome events (520, 522, 523) elective if desired* **OTHER** rotation talk	**COURSES** Genome 599 (sci speaking)** Genome 600 Genome events (520, 522, 523) elective if desired* **OTHER** research reports presentation** journal club presentation***	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER** Schedule committee meeting (any quarter – min once per year normally, twice per year during pandemic)	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER** Schedule committee meeting (any quarter – min once per year normally, twice per year during pandemic)	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER**
Spring	**COURSES** Genome 501 Genome 553 Genome 560 Genome events (520, 522, 523) elective if desired* **OTHER** select dissertation lab rotation talk	**COURSES** Genome 580 Genome 600 Genome events (520, 522, 523) **OTHER** general exam (end of spring / early summer)	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER**	**COURSES** Genome 800 Genome events (520, 522, 523) **OTHER**	**COURSES** Genome 800 Genome events (520, 522, 523) **DEFEND** students typically defend in year 5 or early in year 6
Sum	**COURSES** Genome 600	**COURSES** Genome 600	**COURSES** Genome 800	**COURSES** Genome 800	**COURSES** Genome 800
Notes	* 18 graded credits needed to take general exam at the end of year 2. Required courses will provide most of this, but most students end up needing to take an elective or two (not everyone takes the exact same set of required courses) ** typically held fall quarter, moved to winter during pandemic; MSTP students will give research report during year one (taking the accompanying presentation course at the same time) *** journal club presentations not required of grads during the pandemic				

Your first year: rotations, coursework, selecting a lab

- What is the purpose of rotations?
- find a scientific 'home'
- assess level of comfort with PI's management style and lab environment
- assure PI and lab members that you will be a productive lab citizen

- How to select labs for rotations?
- approach PIs with research interests similar to yours
- use the retreat to get to know PIs and their work
- take advantage of the faculty talks in the Fall quarter
- as your interests may change, do not organize all your rotations in the first quarter
- consult older students

Rotation structure and expectations

- 3 rotations follow quarters (4 rotations are possible)
- quarters end with short rotation talks (10 min)
- rotation and thesis labs: choose a core or joint faculty member as PI or anyone listed in "other training faculty" section: https://www.gs.washington.edu/faculty/index.htm

What you can/should expect of your rotation mentors:

- PI will outline one (or more) possible projects and expected outcomes
- PI will provide a work plan and identify lab members (or PI) for day-to-day guidance
- PI will be available for regular meetings during the rotation and advise on rotation talk
- PI will give you verbal feed-back about your rotation
- PI will generate a rotation evaluation available to all faculty
  at the annual student evaluation in April
- **Please note decision on lab choices are made at the end of Spring quarter!**

Rotation structure and expectations

What we expect of you:

- have fun
- be actively engaged both in pursuing your research and in communicating with PI and lab members
- produce a draft of your rotation talk for input by your mentors
- be actively engaged in the lab's and the department's activities

Rotation talks:

- 10 minutes, background and motivation, some data

- rotation projects are often exploratory – data is secondary to your experience in the lab

Departmental Events – Science is a social activity

- Virtual Annual Retreat

- Journal Club on Tuesdays (optional)

- Genome Sciences Seminars on Wednesdays

- Combi Seminars on Wednesdays

- Research Reports on Fridays

- Thesis defenses

Events are posted here: https://www.gs.washington.edu/news/calendar.htm

AND in the Lobby

Make time for social events and get to know everyone

- Beer hour after Research Reports every Friday

- Student mentors for Zoom check-ins

- Remote Lab parties

Course work

Goals:
- provide a sound foundation in concepts relevant to genome sciences
- ensure a 'common language' among all students and faculty
- prepare you for conducting your thesis work and pursue your career beyond GS

Fall quarter:

Genome 520: Seminar
Genome 522: Journal Club
Genome 523: Research Reports

Genome 501: Lab rotation
Genome 550: Methods & Logic in Genetics (10 weeks) – Jay Shendure and Christine Queitsch
Genome 555: Proteomics (5 weeks, first half of quarter) – Judit Villen
Genome 552: Genomics (5 weeks, second half of quarter) – Debbie Nickerson
Genome 559: Intro to Statistical and Computational Genomics (10 weeks) – Bill Noble and Brian Beliveau

Year 1	
Autumn	**COURSES** Genome 501 Genome 550 Genome 552 Genome 555 Genome events (520, 522, 523) Optional: Genome 559 (for those with little or no programming experience) **OTHER** safety training establish WA residency rotation talk

Rotation and Course work balance

Common concern – where to put the most effort?

- communication is key

- seek support from your cohort unless discouraged (*etc.* for take-home exams)

- course instructors have policies for making up for a missed class or assignment

- accepted reasons for missing class/assignments/rotation activities: illness and instructor/PI-approved scientific meetings or family obligations

Remember that rotations are about finding your scientific home.

How to choose a thesis lab

- Do not agonize over your decision – there is good science in all GS labs

- Trust your gut feeling:
  Are you excited about the research?
  Do you feel welcome and supported in the lab? By the PI?
  Does it feel right?

- Do NOT decide based on a lab's current funding or perceived "hot" science – these things can change! Decide based on YOUR research interests and personal chemistry with the lab

- Consult with older students

First year and beyond – a time line

- choose a thesis lab at the end of Spring quarter
- thesis advisor must be core, joint or training faculty
- you and your advisor will sign the 'Summary of Mentor Responsibilities' form and submit to Brian Giebel

- 2. year, end of Fall quarter
- Select thesis committee (minimum of 4 faculty members, including your PI), inform Brian Giebel
- One of your committee members will be the Graduate School Representative, they are unaffiliated with GS and serve as your advocate
- committee meetings are annual

- 2. year, Spring or early Summer quarter
- General Exam, includes written and oral components
- thesis proposal similar to federal grant proposals, guidance by PI

Expectations for PhD degree

- published original research

- time to degree – anywhere between 3.5 years to 6.5 years, average time to graduation over the past 10 years 5.12 years

- decision between you, your advisor and your committee

- 94% graduation rate in past 10 years

Conference participation

- Conference participation is an essential part of your training

- Identify conferences that may facilitate your research and discuss with your PI

- Identify funding sources

- Conference participation implies that you submit an abstract to present a poster or short talk on your research

- Smaller, more targeted conferences allow better access to speakers and other researchers in the field

A common concern – funding

- all eligible GS grads receive $38,784 per year (as of 7/1/2020), plus a tuition waiver and health insurance (annual increase 2-4% anticipated)
- funding is provided by the department during the 1. year and by your lab thereafter

- Applications for outside funding are encouraged
    - NSF
    - NIH F31 grants
    - various training grants on campus (GTG, Aging TG, CMB)
    - Ford Foundation

GS is committed to building an inclusive community

https://www.gs.washington.edu/about/dei/index.htm

The Department of Genome Sciences is committed to creating an environment that is welcoming and inclusive. Our goal is to foster a place of learning and working where all members can thrive and where diversity is recognized and celebrated. At Genome Sciences, we aim to create supportive spaces for those who are marginalized in higher education or society. To achieve this, we recognize that it is our ongoing responsibility to understand, acknowledge, and challenge systems of privilege and disadvantage in higher education such as those based on race, color, creed, caste, religion, national origin, citizenship, sex, age, marital status, sexual orientation, gender identity or expression, disability, veteran status, or socioeconomic status.
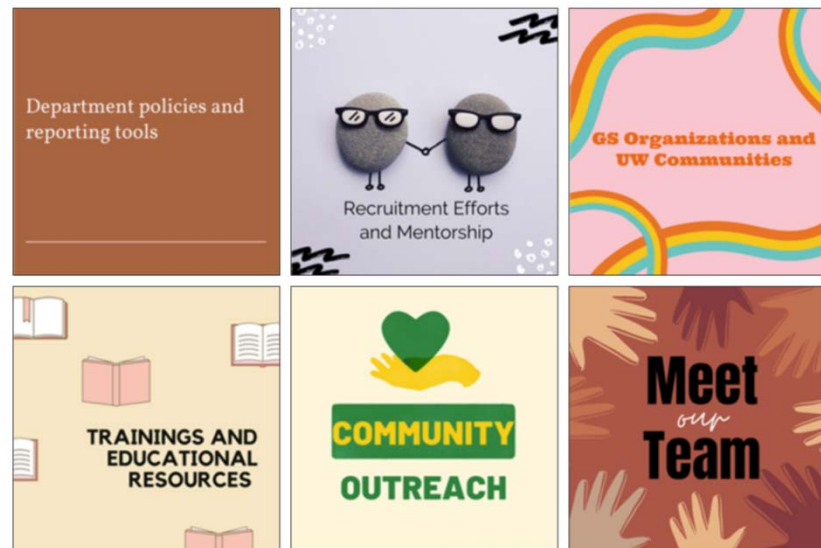
GS is committed to building an inclusive community

Policies & Reporting

Members of the Genome Sciences community may report incidents of harassment, discrimination, incivility or aggression to any of the following individuals:

Doug Fowler, Associate Professor, dfowler [a t] uw.edu

Brian Giebel, Graduate Program Coordinator, bgiebel [a t] uw.edu

Atom Lesiak, Lecturer, alesiak [a t] uw.edu

Serena Newhall, Human Resources Manager, serenn2 [a t] uw.edu

Christine Queitsch, Professor, queitsch [a t] uw.edu

Alternatively, the following tools are available for reporting such incidents:

Reporting tools

GS Anonymous Incident Report (GS AIR)

This is an anonymous reporting tool for the Department of Genome Sciences (GS) at the University of Washington's School of Medicine. GS AIR is for use by all members of Genome Sciences: faculty, staff, students, postdocs, and volunteers. You may report any incidents related to race, color, religion, sex, gender identity, gender expression, national origin, age, genetic information, protected veteran or disabled status. You may also report any category of discrimination, bias, microaggressions, macroaggressions, unfairness, bullying, harm, neglect, crime, harassment, etc. No incident is too big or too small.

This anonymous reporting tool is for non-emergencies only. If this is an emergency, please dial 911. To report criminal activity to the UW Police, there are two numbers: Non-Emergency - 206-685-UWPD (8973) and Anonymous Tips at 206-685-TIPS (8477)

The goal of this anonymous reporting tool is to better address and respond to non-emergency incidents in-house, soon after they occur. Anything submitted through this tool will go to our HR Manager, Serena Newhall, for review and follow-up.

Campus resources and hot lines

- UW SAFE CAMPUS: catch-all resource hotline for violence prevention

- UW Sexual Assault Resources: counseling, medical care, and community resources

- UW Counseling Center: a variety of mental health resources at UW

- UW Title IX Resources : resource for navigating and filing a Title IX report

- UW Office of the Ombud: confidential advocates for students

- UW Non-Discrimination and Sexual Harassment Policy: toward a diverse workforce and a workplace that is free from discrimination and harassment.

- UW Race & Equity Initiative: headed by the UW Office of Minority Affairs and Diversity

- GO-MAP : the Graduate Opportunities and Minority Achievement Program offers networking and educational, professional and personal development opportunities

Participation in departmental activities

- Retreat organization (2nd year)

- Graduate student recruitment (2nd year)

- Summer program for underrepresented minority students
- mentors
- speakers
- course instructors

- Student government

student council (current Ken Jean-Baptiste, Sophie Moggridge, Taylor Wang), representative at faculty meetings, 1st year orientations, student mentors

Building supportive networks in graduate school

Student groups at Genome Sciences:

- Women in Genome Sciences

- Genome Sciences Association for the Inclusion of Minority Students

- Genomics salon

Thinking about careers outside of academic research:

- Bioscience career seminar series with monthly talks
  facebook: https://www.facebook.com/groups/BiosciCareers/
  website: http://courses.washington.edu/phd/
  contacts at GS: Andy Lin, Ashley Hall, Taylor Wang, and Dani Faivre
- GS Alumni meetings (Andy Lin)
- eScience Institute – a central hub for all things data science, offers career fairs
  contact at GS: Ken Jean-Baptiste

After graduate school...

"Science PhDs lead to enjoyable jobs":

- low unemployment rate – 2%, 80% full-time, 10% part-time (3 years after graduation, UK Canada)

- 30% are in academia (70% in teaching, 30% university researchers)

- 95% of respondents satisfied with career, 48% very satisfied

- wide arrays of jobs in industry, consulting, charities, government

(Numbers are for STEM PhDs, UK only, Canada was similar)

Nature CAREER NEWS 07 March 2018