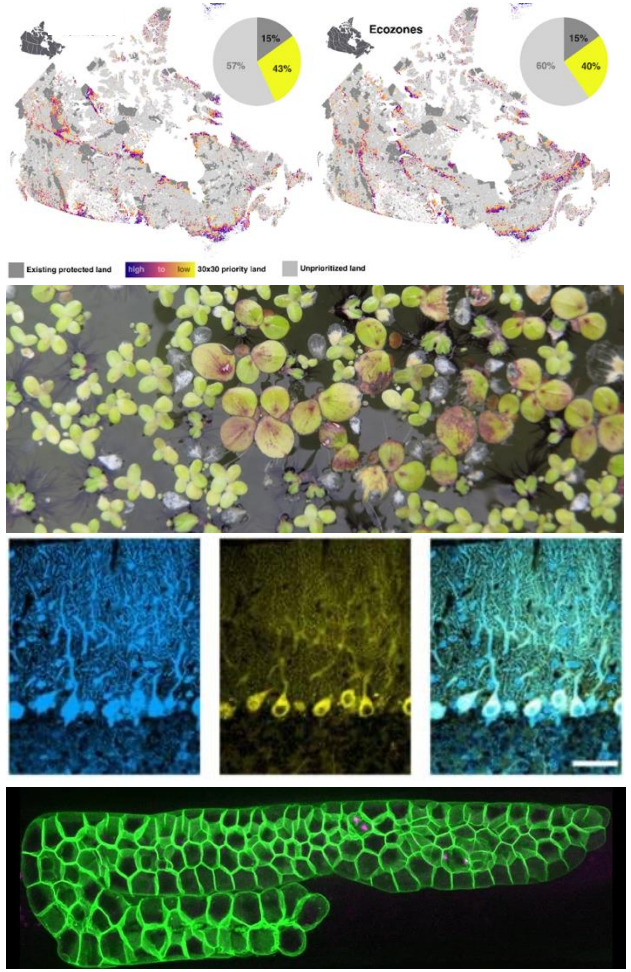
Demystifying Graduate School

Are you curious about graduate school in biology, neuroscience, or a similar field?

We are holding an event aimed at taking some of the mystery out of graduate school

We will discuss
- what it is
- why it might be right for you
- how to prepare
- how to apply
- how to finance (you get paid!)
- and what life is like as a graduate student



Hybrid event (in-person and Zoom)

Tuesday Nov. 25, 2025
6:00 – 7:00 pm EST
Stewart Biology, N2/2

Join us for a panel discussion with faculty and current graduate students, and take the chance to ask them your questions.

Zoom Link

Organized by the Biology Department Equity, Diversity & Inclusion (EDI) committee

Agenda

1) Introduction
--What is graduate school and why it might be for you?
--General steps to apply

2) Our panel

3) Your questions!

Graduate School

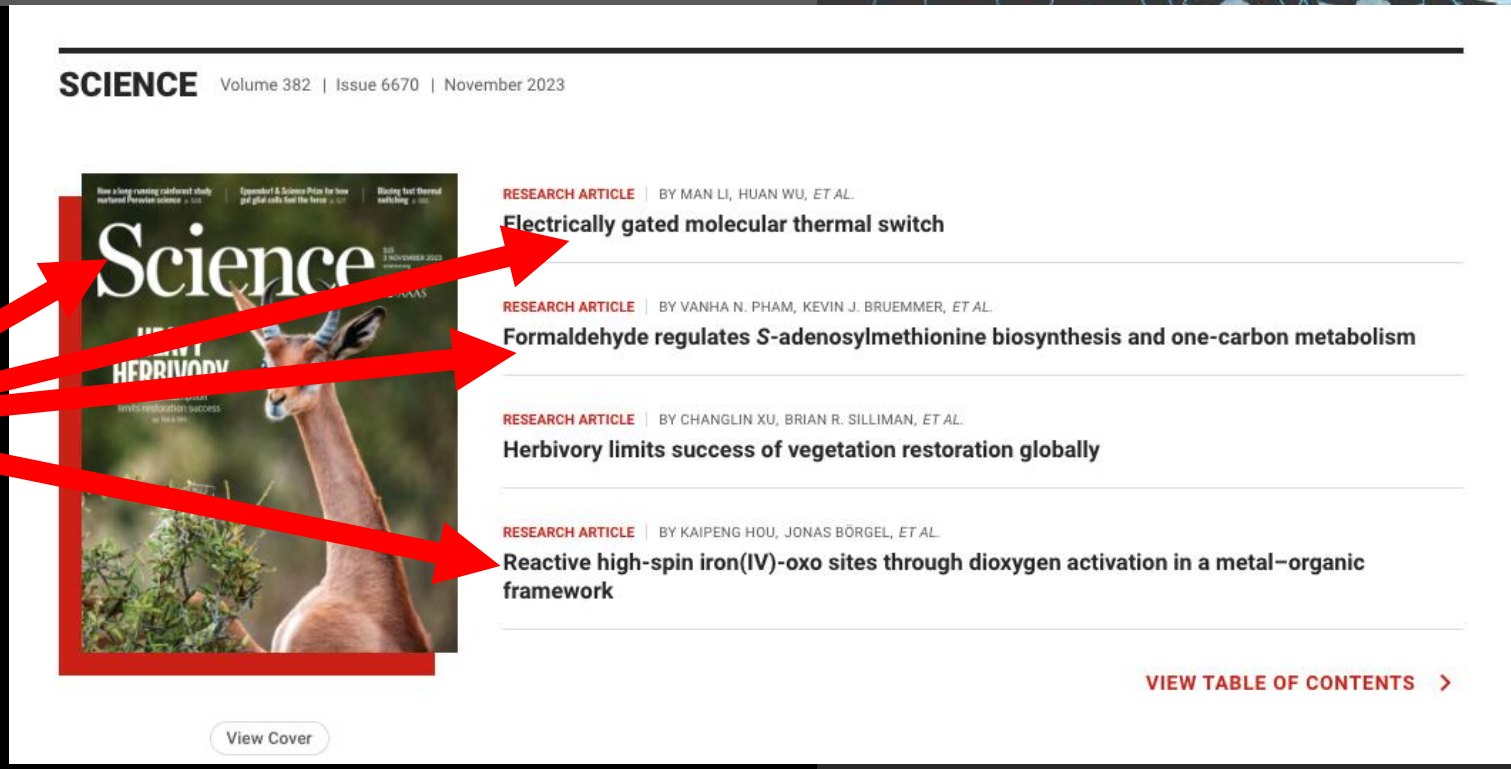
Master's 2-3 years
PhD 4-6 years

Some coursework, but mostly research
--design and perform experiments, analyze data, present data at meetings and write publications and a thesis

Why go to grad school?

You get to do science!
Make new discoveries and advance knowledge

One of these could be your new discovery!



Why go to grad school?

You get to do science!
Make new discoveries and advance knowledge

Become part of a team
Work with a group of smart and dedicated scientists

You get paid to be a grad student

--Tuition is covered and you receive a stipend (enough to live on)

--May have the opportunity to be a TA and gain teaching experience

An MSc or PhD increases your earning potential

--Advanced degree can increase the jobs you are eligible for

--On average, can increase your earnings over your lifetime

--Some jobs (like being a professor) require a PhD

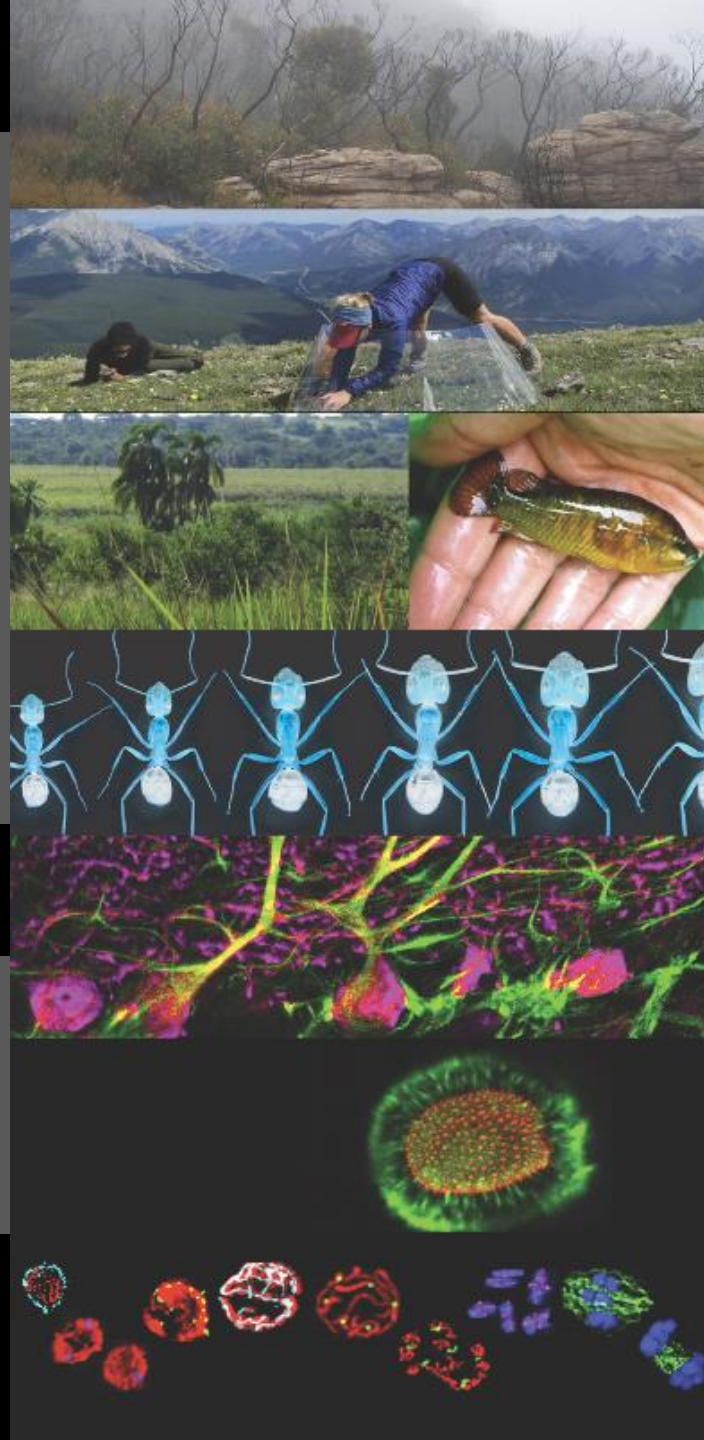
Major group	Median annual wages of college-educated workers (ages 25-59) with biology and life sciences majors (2013$)	
	Bachelor's	Graduate
All majors	61,000	78,000
All biology and life sciences majors	56,000	92,000
Major subgroups		
Zoology	58,000	104,000
Biology	56,000	96,000
Biochemical sciences	59,000	97,000
Molecular biology	54,000	88,000
Miscellaneous biology	54,000	81,000
Microbiology	62,000	89,000
Ecology	51,000	66,000
Neuroscience	48,000	61,000
Botany	52,000	66,000
Environmental science	57,000	71,000

Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau, *American Community Survey* micro data, 2009-2013.

Why Do Graduate School?

--get to do science!
--get paid to become an expert in your field
--work with folks interested in similar questions
--expand your future job options and pay

If this sounds good to you, what do you need to do next?



What are your first steps?

1) Get involved in research! This will help you to know whether you like it and will help you to get letters of reference

2) Figure out what you're interested in and look for graduate programs and researchers studying that

3) Contact professors you are interested in
   --*introduce yourself and your interests*
   --*explain why their work interests you*
   --*ask if they are taking on students*

(we will put templates for this on the EDI website)

Undergraduate research experience - how?

Some paid, some unpaid

- Paid
  - Summer undergraduate research awards
    - USRA (Canadian citizens, grades-based, *contact prof)
    - SURA (any citizen, grades-based, *contact prof)
    - A few others (Biology BIPOC, McGill-UAE)
    - Most applications are in February, contact profs in January
  - Work-study program
    - Needs-based
    - Perform research tasks, great for experience
    - Apply in the summer to meet criteria, respond to openings
  - Advertised positions
    - Sometimes listed by MBSU: here

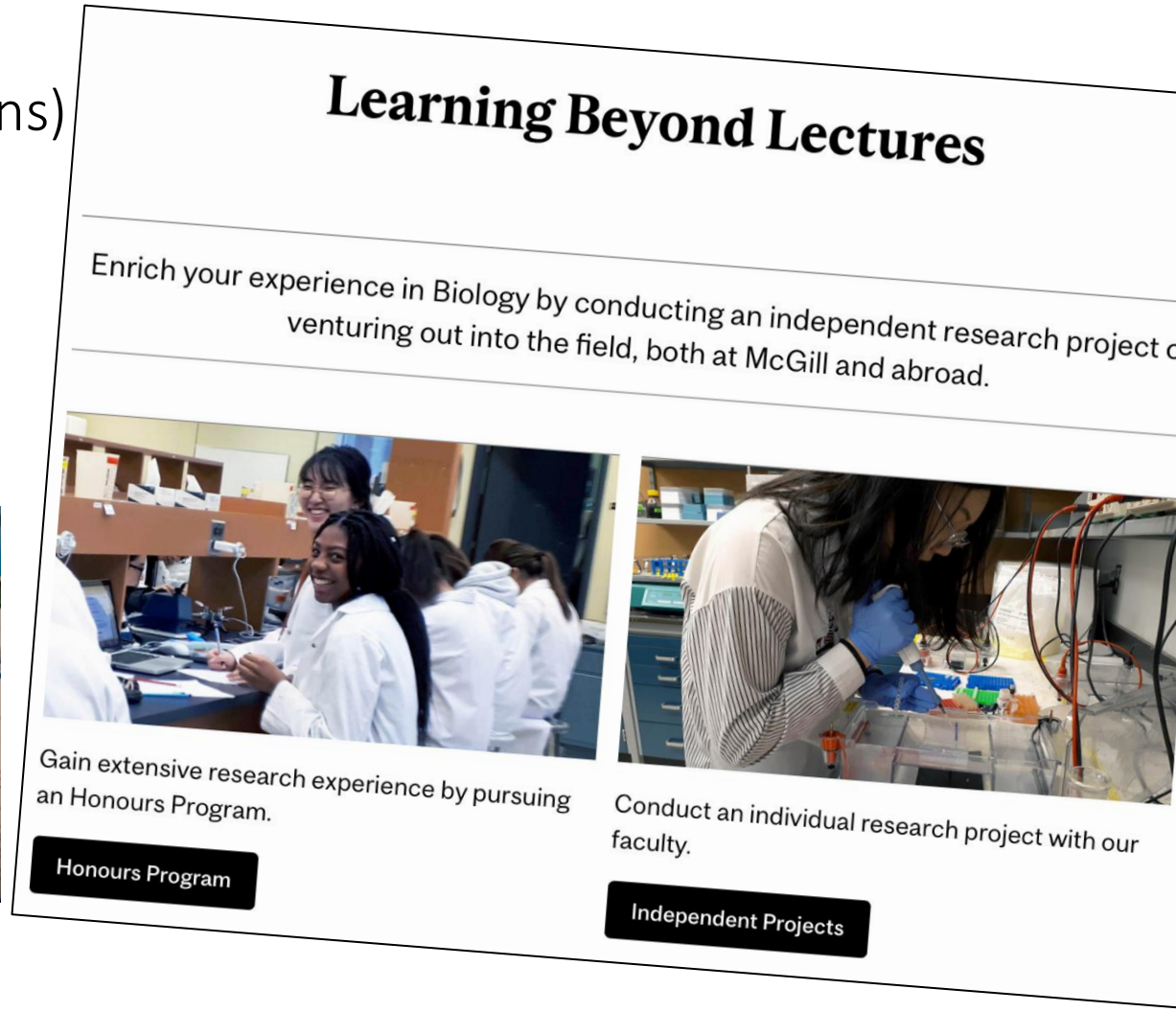
Undergraduate research experience - how?

- Unpaid, for credits in Biology
  - Independent research project* (many options)
  - Honours program*
  - Field courses
  - (sometimes) volunteer positions*

* Contact profs

How? Tips here

See examples of undergraduate research projects at the Undergraduate Research Showcase here



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Alex Warren–MSc Student

Paige Smallman–PhD Student

Jenn Sunday–Conservation, Ecology, Evolution, and Behavior

Joe Dent–Neurobiology and Behavior

Steph Weber–Molecular, Cellular, and Developmental Biology

More links!

Student Research Initiative
-- Student Handbook
-- How to get a research position (YouTube series)

Soup and Science – these profs are *looking* for undergraduate students!

From lectures to the lab: three steps to becoming an undergraduate researcher

A student's guide to undergraduate research

How to cold email for a PhD