LIFE SCIENCES CO-OP
Microbiology and Immunology (MBIM) Information Session Jan 2024
Who am I?

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Helping launch students into scientific careers
Greater Vancouver Metropolitan Area · Contact info
500+ connections

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How do you get from *here* to *there*?
What **hard skills** do employers **expect** you to have before graduation?

- Experience in **multicolor flow cytometry**, immunological techniques, bioassays
- Experience in **analytical instruments** and techniques
- Familiarity with common lab procedures (**histology**, immunohistochemistry, nucleic acid extraction, PCR, qPCR, Western blotting)
- Experience with **aseptic processing** of mammalian or primary cell culture in a BSC
- Experience purifying and characterizing proteins
- Experience in **assay development**
- **Bioinformatics experience**
- Experience in **SDS-PAGE, HIC, UV-Vis**
- Proficient in **Microsoft applications**, FlowJo, FCS Express
- Experience in **statistics**, Machine learning, multivariable calculus and linear algebra
- Experience in **data visualization** and computer programming
- Experience in design and execution of experiments
- Experience working with animals
- Understanding of **MATLAB**
- Experience in **CRISPR-Cas9**
What soft skills do employers expect you to have before graduation?

- Ability to critically read and understand scientific literature
- Excellent verbal and written communication skills
- Ability to meet deadlines
- Strong analytical skills, including data analysis and troubleshooting
- Capacity to work independently with little supervision
- Experience writing technical documents
- Ability to keep detailed records
- Good organizational skills
- Experience communicating results in presentation format
- Organized and able to prioritize effectively
- Able to proactively collaborate
- Able to work in a fast-paced and dynamic environment
- Excellent documentation and data management skills
- Detail-oriented and good time management skills
How do you **demonstrate** that you’ve **gained the skills** employers **expect** you to have before graduation?

**Demonstrate** (dem•on•strate):

1. give a practical exhibition and explanation of (how a machine, skill, or craft works or is performed).
   "computerized design methods will be demonstrated"

2. clearly show the existence or truth of (something) by giving proof or evidence.
   "their shameful silence demonstrates their ineptitude"
Undergraduate skill building opportunities...

Co-operative education (Co-op)

Clubs (iGEM, BIOMOD, MISA)

Summer Student Research Programs (MRPM, SSRP, CBR SSRP, BCCHR SSRP)

NSERC URSA and SURE award programs

Go Global Research Exchange

Work Learn and/or campus part time jobs

Courses required by degree

CURE (course-based undergraduate research)

Directed studies courses

UBC REX program

LinkedIn Learning

Research/lab volunteer

Part time jobs
Undergraduate skill building opportunities…

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What is Co-op?

- Program that integrates academic studies with relevant, paid work experience.
  - gain skills and experience to prepare you for the future job market
  - improved employment opportunities after graduation.

Local, national, international positions
What types of work experience/positions?

- Bioinformatics Co-op Student, VGH
- Quality Control Cell Separation, STEMCELL
- Student Research Assistant, Terry Fox Lab
- Marketing Leads, STEMCELL,
- Research Assistant, UBC Michael Smith Laboratories
- Research Assistant, Institute of Molecular Biology, A*STAR (Singapore)
- Clinical Trial co-op student, OPSEI
- Research Assistant, McGill University
- Health Promotion Coordinator, UBC School of Population and Public Health
- Co-op Student, BC Cancer Deeley Research Center
- Research Assistant, UBC Faculty of Medicine
- Research Assistant, Virogin Biotech
- Research Technician, Biology, Chinook Therapeutics
- Co-op Japan, Osaka Gas, Japan
- Co-op Student, Protein Engineering, Zymeworks
- Research Assistant, ABM
- Immunology and Immunotherapy Co-op, BC Children’s Hospital Research Institute
- Co-op Student, Screening/Assay Development, adMare BioInnovations (CDRD)
- Virology Research Assistant, Agriculture and Agri-food Canada
- Contract Assay Services Co-op student, STEMCELL
- Co-op Student-Research & Co-op Student-Microbiology & Analytical Sciences, Sanofi-Pasteur
- Research Assistant, SickKids Hospital Toronto
- Clinical Research Assistant, St. Paul’s Hospital
- Co-op Student, ICORD
- Co-op Student, In Vitro Pharmacology, Xenon Pharmaceuticals
- Vineyard and Winery intern, Beaufort Vineyard
Science students currently active in the Co-op program.

Life Sciences students working every term.

Microbiology students have been active in the Co-op program since it's inception.

Many opportunities, and experience available to Co-op students that are generally not available to non-Co-op students.

Co-op enables students to achieve greater levels of success in their pursuits after graduation.

Life Sciences Co-op has an amazing staff of Coordinators, Admin, and Business Development to help students throughout their Co-op journey.
What do former co-op students think about co-op?

“When I think back to the year, I **see how far I have come.** All I did was fill out a few forms in UBC Scope and participate in a phone interview. As a result, I **met so many awesome people** and had numerous wonderful experiences. I **have become more open and independent due to my Co-op experience.**” – Rex Chen, Chemistry

“**My university experience has been transformative** and I largely credit my Co-op Education for guiding my journey. It offered the freedom to **explore different avenues of my broad degree and** eventually helped me **find a suitable career path.** I went far (figuratively and literally!) and made lasting **friendships and connections** along the way. – Lorna Tu, Biophysics

“Almost a year later from when I interviewed for my current placement, I can honestly say that **applying to the co-op program was one of the best—if not the very best—decisions I made at UBC.** I have never felt more challenged, excited, and inspired in my life and I am glad I stepped on the brakes to take the road less traveled. – Judy So, MICB

“**One of the most profound effects of co-op can be seen by comparing my academic average before and after my work term.** I better understand the application of my studies, which in turn motivates me to excel in my classes.” – Jung-Bahadur Singh Kandola, Biology

“I am grateful for the skills and confidence that I gained during my co-op placement and feel much more ‘employ-able’ as student with significant experience outside of academics. – Laura Meleady, Biochemistry
How does it work?

Participate in **Co-op training** (Workshops) & **job search**

Compete **four 4-month positions (work terms)** to graduate with the **Co-op distinction**

→ increases time to complete degree by **1 year** BUT **YOU GRADUATE WITH EXPERIENCE!**
Program Timing

WHEN the work terms happen depends on your “Co-op schedule”

→ Different schedules are available based on when you are scheduled to take core MBIM lab classes and your other goals
Program Timing

How many different positions you work in depends on what jobs you apply to and what is available when you are looking.

→ Up to 4 different positions possible (*most students do 2 different positions*)
When to apply?

2nd year: NOW
• 3 different schedules available to you dependent on timing of lab courses, MCAT/DAT etc.

3rd year: Fall term
• 2 schedule options available to you
Schedules – 2nd year SPRING application (Schedule “A”)

Options A, B, and C are available to 2nd year students applying in the spring term

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<tr>
<th>Year</th>
<th>Fall (Sept)</th>
<th>Winter (Jan)</th>
<th>Summer (May)</th>
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<td>2</td>
<td>Study</td>
<td>Study</td>
<td>(Summer off/MCAT/DAT)</td>
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<td>APPLY, Co-op Workshops</td>
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<tr>
<td>3</td>
<td>Study</td>
<td>Work</td>
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<td>Apply to positions</td>
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<td>Study</td>
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<td>Work</td>
<td>Study</td>
<td>&amp; Graduate!</td>
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### Schedules – available to spring term applicants and fall term 3rd year applicants (Schedule “B”)

*Schedule compatible with Honor’s programs or full year courses (example: CAPS 301)*

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<td></td>
<td>APPLY + Co-op</td>
<td>Apply to positions</td>
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<td>Workshops</td>
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Schedules – available to spring term applicants and fall term 3rd year applicants (Schedule “C”)

Schedule compatible with MICB 322/323 taken during the summer
Schedule compatible with students studying for the MCAT or DAT in the summer
Students will not graduate with co-op designation https://www.calendar.ubc.ca/vancouver/index.cfm?tree=4,228,547,732

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<td>MICB 322/323 OR MCAT/DAT/OAT Apply to positions</td>
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<td>APPLY and Co-op Workshops</td>
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Program Commitments

Other Time Commitments

• Application process now includes 10 hrs of “co-op training” (Feb, March 2024) as part of your application process
• Looking for positions usually takes 3-8 hrs/week until you get a position

Fees

• One Time Co-op workshop fee: $272* Co-op work term fee: $838* per term (4x)
  • Total cost of program: $3624 (but you are earning a wage!)
  • *2023/24 fees shown - fees are subject to change – please check the website for current information
• Average salary stats found on our website:
Application Deadline: 11:59pm Feb 6th 2024 (EARLIER THIS YEAR)

Visit our website

Prospective Students>choose program

Create an account in SCOPE

Apply!
Application Requirements

• Must apply **before the application deadline**
• Must have a minimum of **B- average**
• Must be a **full-time UBC student**
• Must be in **good academic standing**
• Must demonstrate **good communication skills** and a **mature, responsible attitude**
• Must demonstrate **leadership, teamwork** and **time management**
• Must demonstrate **interest in your chosen field**
Application process

Fill out online application

Upload resume (& transcripts from other institution)

Attend co-op workshops

If accepted, confirm co-op program

If offered conditional acceptance:

Apply for Co-op

SCOPE SCIENCE CO-OP INFORMATION SYSTEM

APPLICATION FORMS

Applications will be accepted April 2019 - May 2019 (11:59 pm) 2019.

For students using second year courses in the application:

MICB 322/323 and EEB 344/445 major and minor programs

MICB 322/323 and Combined COPC/MBB minor and minor programs

MICB 322/323 and Combined MBB/COPC minor programs

For students using relevant third year courses in the application:

Application form for MICB 322/323

You’re in!
SCOPE application

1. Fill out online co-op application on SCOPE
   a. Tell us why you’re interested in co-op
   b. Tell us what you hope to gain from co-op

2. Upload your resume and include:
   • Relevant employment history
   • Extracurricular activities
   • Volunteer experience
Intake process (NEW)

• Candidates who **meet our minimum requirements** will be **invited** participate in **co-op workshops** as part of the intake process

• **Notification is via email only**

• **Workshops & tutorials will occur in Feb-March 2024** and provide training & practice on resumes, cover letters, interview skills, co-op requirements → this is your intake interview process

• **Co-op program invitations sent out** April 2024

• Accepted students will have to pay the **workshop fee before April 19th 2024**
Co-op FAQ

Does a student require previous experience to be eligible for the Co-op program?
• No. Many employers will hire students without having any previous experience.

Should I apply to Co-op now, or in the fall?
• Apply now if you are in 2nd year for maximal flexibility of co-op schedule

Can a student apply to Co-op, and to Pharmacy, Medicine, etc.?
• Yes…it is sometimes better to apply to more programs on campus than less.

What are my options if I’m not a MBIM major?
• What is your major? Other co-op program options are available: BIOL, BIOC, COGS, BIOPHYSICS, CHEM, INS, etc.)

What if I’m a Combined Major?
• You can apply to co-op as a MBIM student, a CPSC student, or combined majors student (each program have different deadlines).
Co-op FAQ

Do I have to accept a spot in the Co-op program if I apply and am offered a spot?
• No – you will learn more about the program during the application process and can change your mind before you ‘officially accept’ a spot, if offered

Can a student drop out of the Co-op program if already accepted?
• Yes, but once you accept you must pay the workshop fee.
• If you have accepted a Co-op job offer or are on a co-op work term, you are committed to finishing the work term with that employer unless there are circumstances such as a health emergency, safety concern, bullying, harassment or discrimination

Does a Work Learn position count as a co-op work term?
• No, co-op work terms must be full time

Does a NSERC USRA summer position count as co-op?
• Yes, a research position that is funded by an NSERC USRA can count as a co-op position (after you have been accepted to the co-op program).
Co-op FAQ

Do I have to accept a job if I am offered one?
• **No- students are in the ‘driver’s seat’.** Students only apply to positions that they would like to apply to, and aren’t obligated to accept a job if it’s not a good fit.

Can’t a student find experience on their own?
• A student may be able to; however it is not easy…a lot of employers only what to hire Co-op students, plus the Co-op Business Development Team has a database of over 5,000 employers…essentially, we are able to offer students the chance to apply to a lot of opportunities that generally students cannot acquire through their own efforts!

Can Co-op be combined with going on Exchange (Go Global)?
• Yes! We also have opportunities for international experiences in Singapore, Germany and Japan (and others!) **when UBC is supporting international programs (during non-pandemic times)**

I am going into Medicine!
• Have you been accepted already? Always have a back-up plan – getting into medicine is not guaranteed. What is your plan if you don’t get into medicine and you don’t have any experience?
Co-op FAQ

Is there a cost to Co-op?
• Yes, UBC administers a “work-term” fee for each 4 month job placement; however, if a student does not acquire a placement, then there is no fee for the student to pay.
• Every Co-op placement is a paid position, so students generally recoup the work-term fee that UBC charges in their first month of their Co-op placement.

If there is fee for Co-op, then what are the benefits of Co-op?
1. Training on: types of jobs/career paths, professional resume and cover letter, interview skills, how to successfully transition to a professional workplace
2. Access to a large database of opportunities not available to non-Co-op students
3. Coordinator and program that guides you through your first experiences in a professional work setting
4. Full-time student status enables you to keep UPASS, student housing, interest-free loan status while in Co-op
5. Skill acquisition (hard & soft skills), network development and expansion, paid work experience
6. Local, national, and global opportunities
Co-op FAQ

Is Co-op worth it?

• Yes! Yes! Yes! And here are the reasons why…

• Co-op students become adept at searching, applying, and interviewing for positions. Co-op is a fantastic opportunity to develop these skills and receive professional guidance along the way.

• Co-op students achieve greater levels of success, acquire better opportunities, and higher pay after graduation.

• Getting experience during your undergraduate experience will set you apart from everyone else with just a degree and no experience.
Questions?

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