

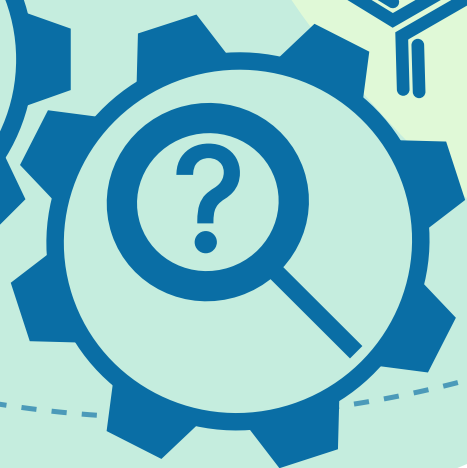


Join the

ImmunoEngineering

NSERC CREATE Program

and Transform
Your Future!



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Are you passionate about making a difference through **innovative research** and **cutting-edge technology** in **immunoengineering** and **immunotherapeutics**?

The ImmunoE NSERC CREATE Program is designed for ambitious **graduate students** and **post-doctoral fellows** seeking to enhance their career prospects, develop essential professional skills, and contribute to the advancement of new immune engineering-based technologies and therapeutics.

Scholarships available!

For more information check out the QR code or this link:
<https://immunot.ca/immuno-e-create/>



PROGRAM HIGHLIGHTS

Be part of a program that advances your career and contributes to the growth of Canada's bio-economy! Fulfill the minimum program-level requirements and earn the prestigious **ImmunoEngineering NSERC CREATE Training Program Certificate** at the Graduate Student or Postdoctoral Fellow level. Valued by our biotechnology industry partners, these certificates will become your passport to industry internships and future careers in the biotechnology industry.

Professional & Personal Development

- ✓ **Career Advancement**
Equip yourself with the skills needed for seamless entry into the biotech sector, with a focus on meaningful and impactful jobs.
- ✓ **Professional Development**
Gain expertise in key areas such as communication, teamwork, leadership, and entrepreneurship.
- ✓ **Innovative Research**
Contribute to the development of new therapeutics by leveraging lessons learned from the rapid development and implementation of the COVID-19 mRNA vaccine.
- ✓ **Interdisciplinary Collaboration**
Learn from and work alongside experts from various sectors to accelerate the pipeline from discovery science to bio-product.
- ✓ **Translational Research Continuum**
Enhance your understanding of how academia and industry collaborate to bring scientific discoveries to practical applications.

Opportunities & Benefits

All ImmunoE trainees will

- 1 Obtain an **ImmunoE training certificate** useful for future employment with industry
- 2 Be eligible for **travel funds** for conferences
- 3 Be eligible for **industry internships** with ImmunoE partner companies

PROGRAM INFORMATION

GRADUATE STUDENTS

For Graduate Student Trainees

Graduate Student Trainees entering the **1st year** of their degree can apply for entry into the ImmunoE NSERC CREATE program for a **2-year term**. Each year, applicants will be considered for a **scholarship (\$10,000/year)**, renewable up to 1x during participation in the program. Graduate students with a Natural Sciences and Engineering (NSE) project will be given preference. Having a supervisor and a co-supervisor from different disciplines will also be considered an asset.

The program provides added value to the student's home graduate program. Upon completion of the requirements for the 2-year program, students will earn an **ImmunoE CREATE Training Program Certificate**. Students can continue to be actively involved by joining the Graduate Student Leadership Program. (Visit immunot.ca for further details.)

Eligibility

Students must be enrolled to start a UBC graduate program with a research project relevant to immunoengineering or immunotherapy in September of the application year.

Research areas in immunoengineering include:

- Immune and stem-cell bioengineering
- Nucleic acid engineering and immune targeting
- Target identification and technology validation
- Microbiome-engineered immune modulation
- Engineering vaccines

... and more!

University faculty members & Industry professionals

Are you interested in participating in ImmunoE activities as a mentor, committee member, guest lecturer, mini-course developer, or in another role? Please sign up as an ImmunoE member and let us know how you can contribute!

[Faculty & Industry sign up here!](#)



PROGRAM INFORMATION

GRADUATE STUDENTS

Program Components

1. *Build a Personalized Portfolio*

Students will build a personalized website portfolio to showcase their academic, research, and professional achievements. Portfolios may highlight research interests, career goals, courses completed, technical skills, talks and posters, publications, and contributions to the community.

2. *Gain Knowledge and Technical Skills*

Students will take the following courses:

TS1: The Foundational course: BMEG 591j Immunoengineering course (3-credit UBC course, Term 2)

TS2: 2 Mini-technical courses/modules (~2-3 hrs, asynchronous)

Examples include:

- Flow and Spectral Cytometry
- In Vitro and In Vivo Models in Human Disease Modelling
- RNA and LNP Technology
- Protein Engineering

TS3: 2 Microcourses (1-2 hrs each) focused on current topics, emerging new research and technologies in immunoengineering and immunotherapeutics. Taught by experts in the field. For example, immunometabolism, stem cell therapies, tissue engineering, mRNA vaccines etc.

Notes:

- The 3 credits from TS1 can be applied to your departmental graduate student requirements. That is, this course can be a part of, not in addition to, your departmental graduate program requirements.
- Additional modules for TS2 credit will be added as they become available.

PROGRAM INFORMATION

GRADUATE STUDENTS

3. *Develop Professional Skills*

PS1: Take **3 seminars/workshops from SBME Propels or Creative Destruction Labs (CDL)** (1-2 hrs each) to develop your professional/business skills. These include: transitioning from research to industry; innovation & entrepreneurship, paths to commercialization, leadership and communication etc.

PS2: Participate in **Interdisciplinary mentoring** group meetings (3/yr)

PS3: Take **1 seminar or SBME propels panel discussion** about **Career Paths in Academia and the Biotech Industry**

PS4: Equity, Diversity and Inclusion training

Complete the online ImmunoE EDI foundations module upon entering the program and participate in a cultural experience

PS5: Participate in the **Annual Networking event** with industry partners (1/yr)

PS6: Participate in an **ImmunoHackathon**

Applications open every year in June

Don't miss the opportunity to be part of a transformative program to bridge the gap between academia and industry! Scholarships are available for the highest-ranked candidates.

Questions? Please e-mail us at immunoengineering.create@ubc.ca

For Postdoctoral Fellows

Postdoctoral Fellows with immunoengineering knowledge and expertise may apply to the program for a **one-year term**. Post-docs will benefit from professional development opportunities and workshops, participate in the active mentoring of junior trainees, and have the opportunity to lead the development of new modules, contribute to seminars or networking events, and be eligible for an industry internship. Upon completion of the program, postdocs will receive an **ImmunoE Postdoctoral Fellow Training Certificate**.

Eligibility

Postdoctoral Fellows interested in immunoengineering and the development of next-generation immunotherapeutics who are willing to innovate, participate, contribute, mentor and work with us to build a strong interdisciplinary research community are encouraged to apply. Postdocs within five years of their PhD are considered for a **one-year scholarship of \$15,000**.

Program Components

A flexible program structure allows development of an individualized training experience with selection from a range of activities. Examples include:

1. Gain Knowledge and Technical Skills

Learn through expert-led microcourses and asynchronous online modules

2. Transfer Knowledge and Experience

Mentor graduate students, develop an online module in your area of expertise

3. Develop Professional Skills

Receive mentoring from early career researchers, contribute to ImmunoE committee working groups, participate in industry networking events

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For more information and to apply, visit
<https://immunot.ca/immunoE-create/>