

Trev & Joyce Deeley Research Centre

High School Internship Program

Application Guidelines

2023

Deeley Research Centre Xavier Pelletier High School Internship Program

Introduction:

BC Cancer's Trev & Joyce Deeley Research Centre opened in July 2003 and is located in Victoria, BC. This state-of-the-art Research Centre is supported solely by the BC Cancer Foundation through generous contributions by donors. A research facility of this caliber offers many opportunities to the surrounding community, one of which is the High School Internship Program. This program has been designed to offer students the opportunity to explore cancer research from the front lines; learning the latest techniques in the fight against cancer and setting the ground for the future. Each student will be responsible for a research project, which they will develop and implement from start to finish with support from a designated supervisor and team of research scientists.

Objectives:

- Introduce students to the scientific strategies and techniques used in cancer research
- Demonstrate the significance and impact of research findings and how they can be applied to cancer patients
- Expose students to the fundamental guidelines and ethics associated with cancer research
- Enable high school students to help raise awareness of BC Cancer research by liaising with their school and community

Selection Criteria:

Three criteria are required for students to be eligible:

- Students must be attending a secondary school on Vancouver Island.
- Students must be in Grade 11 at the time of application (March) and at least 16 years of age at the time of the program start date (July).
- Students must be nominated by the **Science Dept. Head from their school and have the support of the school Principal.**

Each school may nominate 2 students.

Criteria used to evaluate the applications:

- GPA – students must have a minimum of **overall 85% projected average** in Biology 11 or 12 and any two of math, chemistry or physics.
NOTE: Grade 12 courses will be accepted in place of Grade 11 courses, provided the overall 85% projected average is still met.
- Three letters of reference **must** accompany each application, two of which must be academic references.
- Students must demonstrate an interest in cancer research and the pursuit of post-secondary education in a related field (i.e. medicine, biology, chemistry, physics etc.).
- If short-listed, students will be interviewed by the selection committee.

Our ideal candidate will fit the following profile:

- ✓ Team player
- ✓ Creative
- ✓ Independent
- ✓ Demonstrated interest in lab science
- ✓ Inquisitive
- ✓ Demonstrated public speaking ability
- ✓ Disciplined work habits (i.e. good time management, productivity and care for their work)
- ✓ Demonstrated interest in a career in biomedical science/research
- ✓ Excellent problem solving skills
- ✓ High level of maturity

Please consider these above noted skills and abilities as key aspects of determining the nominees.

COVID-19 Vaccination Requirement:

Proof of vaccination will be required prior to being permitted onsite. This is a requirement under the Provincial Health Officer order on mandatory vaccination for all workers and visitors at a BC Cancer facility. In addition, mask use is required at all times, except when eating or drinking in designated areas.

Application and Processing of Awards:

Application deadline is 4pm, March 1st. Where this date occurs on a weekend, the following business day will be the deadline. Applicants invited to participate in the program will be notified by May 31. For the 2023 year, the program will start July 4, 2023 and end August 25, 2023

A \$3,000 bursary toward post-secondary education will be awarded to each student who successfully completes the 8-week program. The bursary will be held in trust for a maximum of 3 years; the funds will be released upon successful entrance into a post-secondary institution. Students who decide not to pursue post-secondary education will forfeit their rights to the bursary.

Application Checklist:

- Complete and submit the fillable 2023 HSIP Application Form available on the website.
- A letter of nomination from the student's school Science Dept. Head, co-signed by the school Principal.
- Three letters of reference – signed by referee, sealed, and addressed to Dr. David Bond, Research Operations Leader.
- Official transcript of the student's academic record.
- Supporting document package sent as one package via mail (post-marked no later than March 1st) to Deeley Research Centre Administration at the address given at the end of these guidelines.

Pre-internship Preparation:

Successful students will need to provide the following to the BC Cancer Trev & Joyce Deeley Research Centre prior to starting the 8-week program:

- Signed Consent, Waiver and Indemnity form
- Signed Letter of Understanding
- Work experience program agreement from the school's counselor indicating that Career Preparation Program credits will be given (if applicable)

Upon selection, students will be sent the Consent form and the Letter of Understanding. It is the sole responsibility of the student to obtain the work experience program agreement from their school, if applicable.

If the students would like to gain course credit for their internship program, they will need to have a confirmed a teacher representative.

- Teacher representative to review the student

Student Responsibilities:

Students are responsible for all of their own meals, accommodation and travel. Students are expected to conduct themselves in a professional and mature manner at all times. Participation in the program involves working full-time hours, Monday to Friday (37.5 hours/week), for the duration of the 8-week internship. Occasional evening and weekend work may be required. Project work-related expenses will be covered or reimbursed.

Each student, for completion of the internship, will be required to present their research findings in a 20-minute oral presentation. Parents, family, friends and teachers of the students will be invited to attend this final presentation in person or via Zoom.

In addition to learning about cancer research, the internship also emphasizes the importance of collaborative efforts and teamwork amongst the students and other researchers. Students are expected to seek assistance when necessary, and assist in other research efforts in the lab if required. Students are required to remain with the program for the duration of the 8 weeks; any absences can cause delays in the research they will be performing.

Program Outline:

Research Project:

The high school intern students will be introduced to the various laboratory research methods used in cancer immunology research. Each student will work closely with a supervisor and a team of research scientists who will mentor him or her during the 8-week internship. Students will plan and perform a series of experiments that will form the basis of their project. They will be encouraged to work together and share ideas and findings with each other and the staff of the research centre.

Students will present their research findings at the end of the program in an oral presentation.

Book Club:

Students will participate in a book club that covers molecular and cell biology. They will be partnered up with another student and will be expected to read the required material. One of the pair groups will then present the readings to the group in a slide presentation format. DRC staff will participate in these presentations to provide feedback and discussions for the interns.

Presentations will be done once a week at a predetermined time/date/location. Each pair will present twice, starting the third week of the internship.

Bursary:

A \$3,000 bursary toward post-secondary education will be awarded to each student who successfully completes the 8-week program. The bursary will be held in trust for a maximum of 3 years; the funds will be released upon successful entrance into a post-secondary institution. Students who decide not to pursue post-secondary education will forfeit their rights to the bursary.

Course credit:

Students who wish to obtain Grade 12 course credit for the high school internship program will need to notify Dr. David Bond upon start of the internship program. Students are encouraged to do this, as it will provide official course credit on their transcripts.

Students will need to contact the science teacher from their school, as teacher participation is required to gain this course credit. Teachers are required to come to the research centre at least twice, COVID-19 permitting, to review the student's research project and to attend the final research presentation. Teachers will work closely with the student's Project Leaders to assess and assign their grade for this course. The Deeley Research Centre has developed a list of criteria and evaluation methods for assisting the teacher in reviewing the student's project work.

Evaluation:

At the end of the program, each student will be asked to submit an evaluation of the program. Each student's supervisor will complete a performance evaluation of the student. This information will be made available to the student and Science Dept. Head.

Future Opportunities:

Through continuous growth and development of the Trev & Joyce Deeley Research Centre, students who have participated in the program may be asked to participate in public speaking engagements as ambassadors for this program; we ask that during these presentations students acknowledge the BC Cancer Foundation's sponsorship and assist us in promoting this unique opportunity.

Contacts:

For further information, please go to our website: <http://www.bccrc.ca/dept/drc>

Or contact:

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