BC CANCER VICTORIA
Provincial Health Services Authority

Trev & Joyce Deeley Research Centre

High School Internship Program

Application Guidelines

2024

Deeley Research Centre
Xavier Pelletier High School Internship Program

Introduction:

BC Cancer's Trev & Joyce Deeley Research Centre at BC Cancer Victoria opened in July 2003. 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:

Eligibility criteria for acceptance to the HSIP is as follows:

- Students must attend 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 Department Head from their school and have the support of the school Principal.

Each high school may nominate 2 students for the HSIP.

We will apply the following evaluation criteria:

- Students must have a minimum **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 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 attention to detail)
- ✓ Interested 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:

PHSA (our parent organization) requires all staff/students/volunteers to provide proof of vaccination. In addition, students may be required to wear masks when in patient care areas.

Application and Processing of Awards:

Application deadline is **4pm, Friday March 1, 2024**. Applicants invited to participate in the program will be notified by May 31. For the 2024 year, the program will start on Tuesday, July 2 and end on Friday, August 23.

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.

Application Checklist:

- ☐ Complete and submit the fillable 2024 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 Deeley Research Centre Administration.
- ☐ 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 the 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 and adhere the requisite laboratory safety and ethics protocols. Participation in the program involves working full-time hours, Monday through 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.

At the end of their 8-week internship each student will be required to present their research findings in a 20-minute oral presentation to complete the HSIP. Parents, family, friends, and teachers of the students will be invited to attend this final presentation in person. A digital link to the presentation will be provided to those that are unable to attend in person.

In addition to learning about cancer research, the internship also emphasizes the importance of collaboration, and teamwork between HSIP students and researchers. Students are expected to seek assistance when necessary and assist in other research efforts as needed. 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:
HSIP participants 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 them for the duration of the 8-week internship. Students will plan, perform, and analyze 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 as well as DRC researchers.

Students will present a summary of their research project at the end of the HSIP in an oral presentation.

Book Club:
Students will participate in a book club that covers molecular and cell biology, immunology, and the fundamentals of cancer. They will be partnered up with another student and will be expected to read the required material. Each pair group will present the readings to DRC researchers in a PowerPoint slide presentation format. DRC researchers will provide guidance and feedback to the HSIP participants.

Presentations will be scheduled once a week at a predetermined time, date, and location. Each pair groups will present at least twice, starting the third week of the internship.

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 Ambassador Opportunities:
To foster continued 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 support from the BC Cancer Foundation's sponsorship of the HSIP.

Contacts:

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