

Trev & Joyce Deeley Research Centre

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High School Internship Program

Application Guidelines

2020

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About the program

Introduction

The BC Cancer's Trev & Joyce Deeley Research Centre opened in July 2003 and is located in Victoria. This state-of-the-art Research Centre is supported by the BC Cancer Foundation through generous contributions by donors and grant funding. 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 today and setting the ground for the future. Students will each be responsible for a research project, which they will develop and implement from start to finish with continual support from a designated supervisor and a 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 today.
- 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.

Eligibility and Selection Criteria

Eligibility

- 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: Science Dept. Head from their school and have the support of the school Principal.

Each Vancouver Island secondary school may nominate a maximum of 2 students.

Evaluation Criteria

- 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 <u>must</u> 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. The selection committee will be seeking **well rounded** students to undertake this internship.

What to expect

HSIP Cancer Research Day

All nominated students are invited to participate in the HSIP Cancer Research Day at the Deeley Research Centre. The Cancer Research Day is held on a weekend in the spring and consists of a series of lectures by Deeley Research Centre researchers on the biology of cancer. Students will apply the knowledge received in the classroom sessions to solve a challenge using hands-on techniques in the research lab. The Cancer Research Day is a great opportunity for all the HSIP nominees to speak with cancer researchers and former HSIP interns and learn what it is like to work in the field.

Research Project

The high school intern students will be introduced to the various laboratory research methods used in cancer immunology research. Each HSIP intern will work closely with a supervisor and a team of research scientists who will mentor him or her during the 8-week internship. Interns 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.

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

Bookclub

Interns will participate in a book club that covers molecular and cell biology. Interns will be partnered up in pairs and will be expected to read the required material and one of the pair groups will present the readings to the group in a slide presentation manner. 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 and the book club component will start the 3rd week of internship.

Bursary

A \$3,000 bursary toward post-secondary education will be awarded to each intern 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. Interns who decide not to pursue post-secondary education will forfeit their rights to the bursary.

Course credit

Interns 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. Interns are encouraged to do this as it will provide official course credit on their transcripts.

Interns will need to contact their science teacher from their school as it will require teacher participation to gain this course credit. Teachers are required to come to the research centre at least 2 times to review the interns' research project and to attend the final research presentation. Teachers will work closely with the Project Leaders for the interns 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.

Interns from schools without a board authorized course number may contact their schools for credit for work experience programs where available.

Pre-internship preparation

Upon selection, students will be sent the Consent form and the Letter of Understanding.

If the students would like to gain course credit for their internship program, they will need to have a confirmed a teacher representative. It is the sole responsibility of the student to obtain the work experience program agreement from their school, if applicable.

Prior to starting the 8-week program, successful students must provide the following to the BC Cancer Trev & Joyce Deeley Research Centre:

- □ 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)

HSIP Intern Responsibilities

Interns are responsible for arranging their own accommodations and travel.

Interns 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. Consumption of illegal substances and alcohol is strictly prohibited. Internss are responsible for all meals, travel and housing. Project work-related expenses will be covered or reimbursed.

In addition to learning about cancer research, the internship also emphasizes the importance of collaborative efforts and teamwork amongst the students and other researchers. Interns are expected to seek assistance when necessary and assist in other research efforts in the lab if required. Interns 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.

For completion of the internship, each intern will be required to present their research findings in a 20-minute oral presentation. Parents, family, friends and teachers of the interns will be invited to attend this final presentation.

Evaluation:

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

Future Opportunities:

Through continuous growth and development of the Deeley Research Centre, interns 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 interns acknowledge the BC Cancer Foundation's sponsorship and assist us in promoting this unique opportunity.

Application Guidelines

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 31st. For the 2020 year, the program will start July 6th and end August 28th.

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.

The application process consists of two parts:

- 1. Online submission form
- 2. Submission of specified documents via mail or hand-delivered

Online Submission Form

* Access to the online submission form requires a Google account. *

Please ensure you have responded to all questions or prompts. Failure to do so will mean an incomplete submission and possible rejection of your application.

There are five sections to the online application.

- Section 1: Applicant Information
- Section 2: Application Questions
- Section 3: References
- Section 4: Sign-Off
- Section 5: Submission

Please refer to the online submission form for specific instructions.

Document package submission

Please gather all relevant documents and submit as one package. Please refer to the Contacts section for the address.

Application Checklist:

- □ Complete and submit the online application form. To complete the application form, you must sign up for or sign in with a Google account.
- A letter of nomination from the student's school Science Dept. Head, cosigned by the school's Principal.
- □ Three letters of reference two of which are academic references. Letters must be sealed, signed by referee, and addressed to Dr. David Bond, Research Operations Leader.
- Sealed official transcript of the student's academic record.
- Supporting document package sent as one package via mail (post-marked no later than March 1st), or hand delivered (by 4pm March 1st), to Dr. David Bond at the address specified in the Contacts section.

Contacts

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

Or contact: Dr. David Bond – Research Operations Leader BC Cancer – Victoria Deeley Research Centre 2410 Lee Ave. Victoria, B.C. V8R 6V5 250-519-5703 david.bond@bccancer.bc.ca