

## HIGH SCHOOL YOUTH RESEARCHER SUMMER (HYRS) PROGRAM APPLICATION FORM

University of Lethbridge 4401, University Dr. W., Lethbridge, AB T1K 3M4

**Phone**: (403) 382-7161

University of Lethbridge





**Student Application Checklist:** It is important to complete the following steps when applying for the Heritage Youth Researcher Summer Program.

<b>Complete all pages of the HYRS Student Application Form.</b> Submit an essay as described in the application.
You must have at least an 85% average in each of math 20-1 or 20-2, biology 20 and one other Grade 11 science. Please submit your most recent grade reports stamped by your school office. Unless strong justification is made for cases of equity and appropriate program accessibility. Grade 12 courses will not be considered for eligibility to the HYRS Program.
Have a parent or legal guardian endorse and sign your application form.
Arrange for TWO science teachers, or one science teacher and one math teacher to be your referees. Teachers need to use the blank teacher reference forms that are included in the application package and return them to you in sealed envelopes.
Arrange for one character reference (community referee) from an adult who is not a relative and who is outside of your high school. A blank community reference form is included in the application package. Please ask your community reference to return the completed form to you in a sealed envelope. No letters will be accepted. Please include this reference form in the sealed envelope when you submit your application.
For students living outside Lethbridge who are unable to arrange their own accommodation, please note the appropriate area on this application form (Living Arrangements).
Mail (or drop-off) your application to the address below. Applications and references must be postmarked by March 31, 2020 to be considered. If you are mailing last minute, please ensure that the postal clerk stamps your envelope. Applications that are faxed or emailed will NOT be accepted.

## Valerie Archibald University of Lethbridge HYRS Program Science Commons Building 4401 University Drive West Lethbridge, Alberta, T1K 3M4

For all inquiries regarding the HYRS program please contact: Valerie Archibald at <u>HYRS@uleth.ca</u> or 1-403-382-7161



February 24, 2020

To: Students



**Expanding Young Minds** ALBERTA INNOVATES

From: Valerie Archibald, HYRS Program Manager (Lethbridge)

RE: High School Youth Researcher Summer Program (HYRS) University of Lethbridge: July 9 to August 20, 2020

The University of Lethbridge and Alberta Innovates would like to invite exceptional Grade 11 students, currently registered in an Alberta high school, to apply for the High School Youth Researcher Summer Program (HYRS). The program is designed to give students from around the province first-hand biomedical and health research experience at a university campus, and introduce them to the many educational and career options available in this field. Students work on health research projects in a variety of work environments of researchers who are on faculty at the University of Lethbridge.

Students will be supervised by a faculty member or by a member of their research team. Research projects could be in cardiology, cell biology, genetics, biomedical engineering, population health, epidemiology, digital health, or a host of other health research areas.

Applicants require at least an 85% standing in each of math 20-1 or 20-2, biology 20, and one other grade 11 science class, which is the minimum requirement to work in a university laboratory (grade 12 courses will not be considered for eligibility to the HYRS Program). We require the submission of the applicant's most recent school grades, stamped by the school office. You must be registered in an Alberta high school, eligible to work in Canada and have a social insurance number or have applied for a social insurance number before the program begins.

Academic achievement is important but so are accomplishments in other areas. An essay demonstrating interest in biomedical and health research is required. Each student must have two reference forms completed by a maximum of two of their science teachers (or one math and one science teacher), and one community reference from an adult outside the school who is not a relative. This community reference could be someone the student has done volunteer work for, a supervisor from a previous job, a girl-guide or scout leader, a community sports coach, etc. Successful applicants must fulfill immunization requirements of the university and sign a contract of conduct. Successful candidates must also commit to presenting their HYRS experiences to classes at their high school in the year following the program.

During the HYRS program, students will meet at least once a week for a variety of activities to broaden and enhance their research experience. Activities include safety and introductory sessions, tours of campus research laboratories, and discussions with guest speakers about their careers in research. Students are also required to prepare and present a research poster about their project. Students will be compensated with a stipend for the six-week period. Compensation is based on a five days per week, seven-hour workday. However, research laboratories often work on schedules required by the projects they are engaged in and HYRS participants are expected to participate accordingly.

Students must be able to commit to the full six weeks of the program and will not be able to plan time off for any reason, including: vacations, competitions, or to collect awards.

To be included in the competition, students must forward a completed application form, and references to the address indicated on the application form postmarked by March 31, 2020. If you are mailing at the last minute, please request the postal clerk stamp your envelope when you submit it. Applications that are faxed or emailed will NOT be accepted. All applicants will be informed of the selection committee's decisions at the beginning of June.

The adjudication committee will do its best to ensure a fair representation across Southern Alberta. A maximum of two students will be chosen from each school in order to allow students from all over the region to participate. **Successful candidates will be notified by June 1st, 2020.** 

As the HYRS program is open to all Grade 11 students across Alberta, only successful applicants who live in Southern Alberta Region (Claresholm and all schools south) will attend the University of Lethbridge program. If you live north of Claresholm and still wish to apply, you will need to contact the University of Calgary (if you live between Red Deer and Claresholm) or the University of Alberta (if you live north of Red Deer).

If students from outside Lethbridge do not have family or friends to stay with during the program they are responsible for their own living arrangements (see Living arrangements section of the form). Students are responsible for meals, travel and entertainment.

For all inquiries regarding the HYRS program please contact: Valerie Archibald at <u>HYRS@uleth.ca</u> or 1-403-382-7161

For more information, see the HYRS website: www.uleth.ca/artsci/hyrs





**Student Application** 



**Expanding Young Minds** ALBERTA INNOVATES

High School Youth Researcher Summer (HYRS) Program

**Personal Information** 

Are you a Grade 11 student?  Yes No			
Do you live and attend high school in Alberta?	es 🗌 No		
Name: Surname, First Name, Initial(s)			
Birthdate:	Condex (Check)		
Year Month Day	Gender: (Check)		
,	Male Female Other		
Can you legally work in Canada? (check) (Do you	have a social insurance number?)		
🗌 Yes 🗌 No			
Applicant's Complete Mailing Address:	Phone:		
	Guardian Phone:		
	Email:		
	Best way to Contact you:		
	Dest way to contact you.		
School Name and Address:	School Phone:		
concernance and Address.			
	School Principal Name:		
	Community Referee Name:		
	1)		
	Two Teacher Reference's Names:		
	1)		
	2)		

## ACADEMIC BACKGROUND

You must have at least an 85% average in each of math 20-1 or 20-2, biology 20 and one other Grade 11 science. You must have completed or be currently enrolled in the courses marked with an asterisk. In addition, you need *either* Chemistry 20 or Physics 20. Please submit the most recent report of your grades, stamped by the school office.

Check if you have completed or are currently enrolled in:

Math 20-1 🗌 or	Biology 20*	Physics 20	Chemistry 20 🗌
Math 20-2*			-

Are you currently enrolled in or have you completed any of the following Grade 12 courses? *Please note Grade 12 courses will not be considered for eligibility to the HYRS Program.* 

		J _ /	<u> </u>
Math 30 (pure)	Physics 30	Chemistry 30	Biology 30

What are your current interests, hobbies, activities and special abilities?

What high school and/or community groups are you currently involved with?

YOUR INTEREST IN SCIENCE AND RESEARCH

At present, what is your career goal, and why does it interest you?

Without biomedical research, many of our life-saving advances in medicine and health would not exist. Key to these advances is the use of animals in biomedical research according to the strictest ethical guidelines. For more information please go to the web site of the Canadian Council on Animal Care, which is the national body that sets guidelines for the experimental use of animals in academic institutions: <u>http://www.ccac.ca/</u>. As participants in university research projects, HYRS students may be asked to participate in research involving animals.

Are you willing to work in a research lab that uses animals in	Yes	🗌 No
research?		

What subject fields are you most interested in? Pick 3:

Biology	Biochemistry	Neuroscience	Chemistry 🗌
Physics 🗌	Computer Science	Mathematics	Psychology
Digital Health			

## ESSAY

Attach an essay (minimum 350 words to a maximum of 400 words, 12 point font, typewritten, double-spaced) to this application form. Please address the following points. Remember, we want to hear your thoughts and ideas.

- 1. Tell us about a particular area of scientific research impacting on health that interests you and why.
- 2. Tell us why you want to be part of the HYRS Program.

## HYRS AMBASSADORSHIP ROLE

One of the expectations of HYRS participants is that they will relate their research experiences to their peers. HYRS participants are required, upon their return to their high schools for their Grade 12 school year, to give at least one presentation about their summer research experience to a younger science class.

Are you able to commit to giving a presentation to a science class	🗌 Yes	🗌 No	
about your HYRS experience?			

## IMMUNIZATIONS

All participants in the HYRS Program should have up-to-date immunizations and be prepared to produce their immunization record upon request. Additionally, participants may be asked to obtain further immunization shots, for example Tetanus, depending on the type of research they may be working on. If you are not immunized and are not willing to obtain up-to-date immunization or comply with university regulations for additional immunizations, you can only work with those researchers who do not operate wet laboratories, if available.

Do you have up-to-date immunizations?	🗌 Yes	🗌 No
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## LIVING ARRANGEMENTS

## This section is for students from outside Lethbridge only.

Students must make their own living arrangements while attending the HYRS program. Students who are unable to find living arrangements may wish to consider options such as the Canadian Homestay Network (<u>https://canadahomestaynetwork.ca/</u>). Guardians should contact any housing agencies prior to the HYRS application deadline.

## TIME COMMITMENT TO HYRS

You must be prepared to commit to the full six consecutive weeks of the HYRS program. You will not be able to take time off for vacations, competitions or to collect awards. Failure to do so will disqualify your application and cancel your placement in the program.

Are you prepared to commit to the full six consecutive weeks of	🗌 Yes	🗌 No	
the program?			

## Signatures

Signature of Student:		Date:
Signature(s) of Parent/legal guardian:		Date:
Signature(s) of Parent/legal guardian:		Date:
Return the completed form and references to the address on the right postmarked by Tuesday, March 31, 2020.	University of Let Valerie Archibal 4401 University Lethbridge, Albe T1K 3M4	d (HYRS Program) Drive West
Faxes and Emails <u>will not</u> be accepted.		





February 24, 2020



To: Community Referee

From: Valerie Archibald, HYRS Program Manager (Lethbridge)

## RE: High School Youth Researcher Summer (HYRS) Program University of Lethbridge: July 9 to August 20, 2020

The University of Lethbridge and Alberta Innovates are pleased to offer a summer research program to exceptional Grade 11 students currently registered in an Alberta high school. The High School Youth Researcher Summer (HYRS) program is designed to give Grade 11 students from around the province first-hand experience of biomedical and health research, and introduce them to research career opportunities. Students will work on health research projects in the laboratories and work environments of participating researchers who are on faculty at the University of Lethbridge. Students will be supervised by the faculty member or by a member of the research team.

HYRS will be placing students in a position of trust with the university researchers, some of whom work with hazardous materials. The HYRS participants will be working on projects that will be used in the scientists' ongoing research. Therefore, the HYRS participants' work will have an effect on the scientists' professional reputations. HYRS participants will also be working, with a diverse group of people. To ensure the success of the HYRS program and the personal well-being of the participants, the organizers must select not only the most accomplished applicants, but those who will conduct themselves in a mature, responsible manner at all times.

Your candid remarks are much appreciated and will be used in an appropriate and confidential manner to help us select HYRS participants. Community referees cannot be related to the applicant and must be from outside the applicant's high school. The deadline for applications is **March 31, 2020.** 

For all inquiries regarding the HYRS program please contact: Valerie Archibald at <u>HYRS@uleth.ca</u> or 1-403-382-7161

For more information, see the HYRS website: www.uleth.ca/artsci/hyrs



## Community Referee

Application postmarked by: March 31, 2020.

## HERITAGE YOUTH RESEARCHER SUMMER PROGRAM

# NOTE: PLEASE USE THIS FORM ONLY. Any accompanying letters or material on the back of this form will be disregarded. Please place completed form in a sealed envelope and return to student.

Name of Student:		
Name of Referee:	Profession:	
Telephone:	Email:	
Relationship to Student:	Length of Relationship (years):	

Describe this applicant's activities with your organization (Is this applicant a team leader, a volunteer on a regular basis, an employee, etc.)

#### On a scale of one (weakest) to five (best) please answer the following:

How does this applicant work with others within your organization?

One	🗌 Two	Three	🗌 Four	Five

#### How does this applicant work with the public?

One   Two   Three   Four   Five	
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How would you rank this applicant's ability to ask questions in order to clarify responsibility or approach?

🗌 One 🔄 Two	Three	🗌 Four	🗌 Five	
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#### How would you rank this applicant's initiative?

One	🗌 Two	Three	Four	Five
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How well does this applicant respond to directions?

One Two Three Four Five					
	One	🗌 Two	Three	Four	Five

Would you trust this individual to work by themselves for a day?

One	🗌 Two	Three	🗌 Four	Five

We would appreciate any additional information regarding the questions above or any other pertinent information that would assist us in evaluating this applicant.

Signature

Date

Please return the completed form in a sealed envelope to the applicant. Applications must be postmarked no later than March 31, 2020.

February 24, 2020

To:



All High School Science and Math Teachers All School Counsellors / Career Advisors / Principals / Assistant Principals



From: Valerie Archibald, HYRS Program Manager (Lethbridge)

## RE: High School Youth Researcher Summer (HYRS) Program University of Lethbridge: July 9 to August 20, 2020

The University of Lethbridge and Alberta Innovates are pleased to offer a summer research program to exceptional Grade 11 students currently registered in an Alberta high school. The High School Youth Researcher Summer (HYRS) program is designed to give selected Grade 11 students from around the province first-hand experience of biomedical and health research, and introduce them to research career opportunities. We invite you to pass on the news about HYRS to your students and encourage them to apply.

Applicants require at least an 85% standing in each of math 20-1 or math 20-2, biology 20, and one other Grade 11 science class, which is the minimum requirement to work in a university laboratory (grade 12 courses will not be considered for eligibility to the HYRS Program). We require the submission of the applicant's most recent grade reports stamped by the school office.

Each student must have two reference forms completed by two of their science teachers, or one math and one science teacher, and one community reference form completed by an adult who is not a relative and is from outside their school. To ensure equal consideration of all references, only two teacher references per student will be accepted and the information must be provided on the enclosed reference forms. It is important for referees to return their completed reference forms to the students in sealed envelopes. Please note that the HYRS program will not accept applications from Grade 10 or 12 students. Only students currently enrolled in Grade 11 may apply.

HYRS is not just a laboratory work experience. It is a well-rounded program focused on Grade 11 students as they have a year remaining of high school in which to consider their future university studies in light of their HYRS experience. A maximum of two students will be chosen from each school in order to allow students from all over the province to participate.

Because the students will be working alongside university researchers who are volunteering their time to be mentors, we want to ensure that the students selected are not only bright, but curious about science, willing to ask questions, and show a genuine interest in the possibility of scientific research as an educational and career direction.

During the program, HYRS participants will meet at least once a week for a variety of activities to broaden and enhance their research experience. Activities include safety and introductory training sessions, tours of campus and other research facilities, and discussions with guest speakers about their careers in research. Each participant is required to prepare and present a research poster about his or her project and commit to giving a presentation about his or her HYRS experience to a science class of younger students at his or her high school in the school year following the program.

HYRS participants will invite their referring science teachers to participate in a Teachers' Day held at the end of the program. Teachers' Day offers science teachers the opportunity to meet with fellow teachers, top biomedical and health researchers, and to learn about leading research.

All applications must be postmarked by **March 31, 2020**. As the HYRS program is open to all Grade 11 students across Alberta, only successful applicants who live in Southern Alberta Region (Claresholm and all schools south) will attend the University of Lethbridge program. If applicants live north of Claresholm and still wish to apply, they will need to contact the University of Calgary (residence between Red Deer and Claresholm) or the University of Alberta (residence north of Red Deer). HYRS positions are very limited in number - approximately 50 in total for the province - so we suggest that you encourage students who are exemplary achievers. Applicants must demonstrate strong evidence of their interest and ability in sciences and mathematics and be sincerely interested in discovering more about a career in research.

For all inquiries regarding the HYRS program, please contact: Valerie Archibald at <u>HYRS@uleth.ca</u> or 1-403-382-7161

For more information, see the HYRS website: www.uleth.ca/artsci/hyrs



#### Teacher Reference #1

Application postmarked by: March 31, 2020.

HIGH SCHOOL YOUTH RESEARCHER SUMMER PROGRAM

NOTE: PLEASE FILL OUT THIS FORM ONLY. Any accompanying letters or material on the back of this form will be disregarded. Please give to student in a sealed envelope.

Student Name: Surname, First Name, Initial(s)	1
Teacher Name:	
Teacher's Complete Mailing Address:	Phone:
	Fax:
	E-mail:
School Name and Address:	School Phone:

Please assess, based on your knowledge of the student, each of the following characteristics:

	Top 5%	Top 10%	Top 20%	Top 50%	< 50%
Flexibility and ability to adapt to new situations					
Ability to work independently					
Ability to work cooperatively					
Active curiosity and engagement					
Maturity					
Communications skills					
	•	•	•		Con't

What courses have you taught this student?

Please comment on this student's initiative in approaching problems and situations. An example would be useful.

Please comment on the suitability of this student for this research program with respect to their: Strengths:

Inquisitive Nature:

In what way do you think this student would benefit from this research experience?

We would appreciate any additional information regarding the questions above or any other pertinent information that would assist us in evaluating this student.

Signature

Date

Please return the completed form in a sealed envelope to the applicant. Applications must be postmarked no later than March 31, 2020.

#### Teacher Reference #2

Application postmarked by: March 31, 2020.

HIGH SCHOOL YOUTH RESEARCHER SUMMER PROGRAM

NOTE: PLEASE FILL OUT THIS FORM ONLY. Any accompanying letters or material on the back of this form will be disregarded. Please give to student in a sealed envelope.

Student Name: Surname, First Name, Initial(s)	1
Teacher Name:	
Teacher's Complete Mailing Address:	Phone:
	Fax:
	E-mail:
School Name and Address:	School Phone:

Please assess, based on your knowledge of the student, each of the following characteristics:

	Top 5%	Top 10%	Тор 20%	Top 50%	< 50%
Flexibility and ability to adapt to new situations					
Ability to work independently					
Ability to work cooperatively					
Active curiosity and engagement					
Maturity					
Communications skills					
	•	•			Con't

HIGH SCHOOL YOUTH RESEARCHER SUMMER PROGRAM | University of Lethbridge

What courses have you taught this student?

Please comment on this student's initiative in approaching problems and situations. An example would be useful.

Please comment on the suitability of this student for this research program with respect to their: Strengths:

Inquisitive Nature:

In what way do you think this student would benefit from this research experience?

We would appreciate any additional information regarding the questions above or any other pertinent information that would assist us in evaluating this student.

Signature

Date

Please return the completed form in a sealed envelope to the applicant. Applications must be postmarked no later than March 31, 2020.