



Expanding Young Minds



March 1, 2021

To: Grade 11 Students in Alberta

From: University of Alberta HYRS Program

**RE: High school Youth Researcher Summer Program (HYRS)  
University of Alberta: July 5 to August 13, 2021**

The University of Alberta and Alberta Innovates invites Grade 11 students **currently registered in high school in Alberta** to apply for the High school Youth Researcher Summer Program (HYRS). The purpose of the HYRS program is to provide students from around the province hands-on experience in biomedical and health-related research, and introduce them to the spectrum of health profession career-options. First Nations students attending a band-operated school, or a provincial school under an Education Services Agreement, are encouraged to apply.

Students selected to participate<sup>1</sup> in the HYRS program will work on a variety of health research projects in the areas of cardiology, cell biology, genetics, biomedical engineering, population health, epidemiology, health education and a host of other health research areas. Due to COVID-19 restrictions it is likely that project work and supervision will occur remotely. If restrictions are lifted students may have the option of performing some in-person work or continuing to work remotely. Therefore, students will be required to have access to a computer with mic/camera and internet (HYRS has a limited supply of loaner equipment). HYRS students will meet at least once a week for a variety of activities to broaden and enhance their research experience. Due to COVID-19 restriction, these meetings will likely be remote via Zoom, but will still include networking sessions and discussions with guest speakers about their careers in research. Students will also be required to prepare and present a research poster about their project.

#### **Priority Areas for 2021:**

**Digital Health:** the convergence of digital and emerging technologies with health, healthcare, living, and society. It has the potential to enhance the efficiency of healthcare delivery through personalizing medicine, enabling better access to care and empowering citizens to manage their own health  
**Data Enabled Health Transformation:** the creation, amalgamation, analysis, and application of large quantities of complex information to improve health /or healthcare decision-making. Examples include: data analytics, machine learning, and artificial intelligence platforms.

**Health Innovation and Technology Acceleration:** while not all discoveries have a clear path to adoption and use, research can be approached in ways that increase the potential for uptake, such as by considering marketplace need, industry pull, technology partnerships, scale-up requirements, and the types of evidence needed to mobilize support for further development. Increasing the availability of talent that can accelerate the development of innovations - particularly related to the Internet of Medical Things, xR, wearables, personalized health, and health economics – is of high priority.

Students selected for the program will be awarded a scholarship valued at \$2700. Students will be required to work 5 days per week, ~7 hours per day. However, research laboratories often work on flexible schedules as required by specific projects; HYRS students are expected to participate accordingly. Students must be able to commit to the full six weeks of the program. Students will not be able to take time off for vacations, competitions, or to collect other awards.

Although academic achievement is a factor in the selection of students for the HYRS program, the adjudication committee also considers a student's other accomplishments, scientific curiosity and aptitude for research. To

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<sup>1</sup> Only successful applicants who live north of Red Deer will attend the University of Alberta HYRS program. Students who reside within or south of Red Deer down to the region north of, but not including, Claresholm may apply to the University of Calgary program. Students who live within or south of Claresholm may apply to the University of Lethbridge program.

help the adjudicating team with this process, students are required to submit a short essay (in addition to the other requirements of the application package) that outlines their interest in biomedical or health-related research. The adjudication committee works to ensure equitable and diverse student representation in the program; as such, no more than two students will be chosen from each school in order to allow students from all over the province to participate.

To complete the HYRS application, students must obtain 2 reference letters from math/science teachers and 1 reference letter from a community member. These letters must be submitted by the application deadline of May 2, 2021.

If in-person work is permitted by July, housing on campus is possible. HYRS will only be offering housing to students from outside the greater Edmonton area since space in the on-campus residence is limited. We encourage students from communities outside of the greater Edmonton area to seek their own accommodations to avoid housing fees. However, students who cannot find their own housing can be placed in a residence on the University of Alberta campus which will cost approximately \$2,000 for the 6 week program (includes weekday dinner meal plan). There will be a limited number of \$1000 bursaries to assist with this cost.

Interested students must complete the online application and ensure their references submit their letters by midnight on Sunday, May 2, 2021. The website where the forms can be found is:

<https://www.ualberta.ca/medicine/about/social-accountability/communities/community-engagement/student-summer-prgms/hyrs-student-summer-research-program.html>

We thank all who apply; however, only successful applicants will be informed of the selection committee's decisions by the beginning of June 2021.

For all inquiries regarding the University of Alberta HYRS program, please contact the HYRS office at: [hyrs@ualberta.ca](mailto:hyrs@ualberta.ca)

Sincerely,  
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