

First-year Student Gets Re-inspired in the Lab after Pandemic School Year

As a first-year biochemistry student during a pandemic, SarahAnn Walker didn't exactly get the university experience she had hoped for. So when a job opportunity came up in a lab in Lethbridge, she jumped on the chance to apply.

"To have this job and be able to go in and interact with other people, see the lab, get to do this work, it made me realize how much I wanted to go to university and inspired me to push to continue on," Walker said, "because it was hard to start off university just online."

Her work at Allos Bioscience began in January of 2021 where Walker got hands-on experience and training to help the new company to develop their novel, protein-based biosensors. In particular the company said they're focusing on sensors for carbohydrates which are applicable across a broad range of industries including textiles to food to biofuel, to name a few. Walker wasn't simply doing the easy day-to-day activities either, she was instrumental in developing their very first biosensor prototypes.

"When you test it [the biosensor] and see that it works, to see all of those months you put in—creating the different components and then assembling them—start to come together and do what they're supposed to, it was an awesome opportunity," Walker said excitedly.



In the Allos Bioscience lab, student SarahAnn Walker: "When you test it [the biosensor] and see that it works, to see all of those months you put in—creating the different components and then assembling them—start to come together and do what they're supposed to, it was an awesome opportunity."

For Allos CEO and co-founder Harland Brandon, Walker's contributions meant the young biotech company is that much closer to realizing their commercialization goals.

“That was where SarahAnn really stepped up, so that was a major accomplishment that we wanted to hit before actually taking them to market,” Brandon explained, “so having hands to get that done made us get to market sooner than we thought we would.”

Prior to bringing on their summer students, Brandon said he and his co-founder Luc Roberts had spread themselves a little thin with Brandon taking on growing the business side in Edmonton, while Roberts focused on developing the science in their Lethbridge-based lab. This is when they learned about BioAlberta’s Boosting Biotech Internship program, which funds summer student positions for small to medium biotech companies across Alberta. Only a year since incorporating into Allos Bioscience, the duo was excited to bring on some extra hands and fresh insights only students could offer.

“Getting that co-op experience in my schooling was super beneficial for me, so paying that forward was always something we considered doing and wanted to do,” Brandon said of discovering the funding initiative. “Students can provide that necessary nudge to think about things a little bit deeper, and they might question a bit more and it actually helps you think a bit more critically.”

Outside of helping with the scientific aspects of the company, however, Brandon also noted that giving students the opportunity to develop skills in the field through funded programs such as Boosting Biotech, will lead to a stronger set of skilled workers entering Alberta’s biotech workforce.

“Bringing on students now at early stages and getting more and more students interested in biotech is super important to build that highly qualified personnel in the province,” Brandon said, “they’re going to be more excited to stay in the province rather than having to rely on outside sources, which in the long run helps build up our economy.”

Walker said she hopes to stay on with the company until the end of the year, but the influence of this experience will stick with her throughout the rest of her schooling and beyond.

“Thank you for giving me the opportunity to realize just all the different opportunities, people, interests, and everything that’s out there in the biotech world,” Walker said of the funding that made this job possible for her. “Coming from high school where everything is so narrow, this gave me the opportunity to see everything that’s out there and everything I have to look forward to in the future. This experience makes me continue to push further into my studies and work harder to complete them because it makes you realize it’s worth the work for it.”



0% Boosting Biotech

The Boosting Biotech initiative is a collaboration of BioAlberta, Innovative Medicines Canada, the Alberta Government, and Western Economic Diversification to support innovation and commercialization of discoveries by Alberta researchers and small and medium sized enterprises in the life sciences sector through experiential learning opportunities.

 Western Economic Diversification Canada Diversification de l'économie de l'Ouest Canada

  **INNOVATIVE MEDICINES CANADA**
Bringing research to life

 **bio alberta**
Association for Life Sciences Industry