Kent Collins, Communications Engineering and Technology student checks on the hives. **FALL 2019** LUMNIN PAGES 2-3 PLEASE COME BACK TO ME QUEEN BEE! TECHNOLOGY-INFUSED CAPSTONE PROJECT COULD HELP BEE KEEPERS IN MANITOBA » Keeping you connected » Highlighting what's new SASSINIBOINE COMMUNITY COLLEGE » Showcasing your accomplishments ALUMNI ASSOCIATION

PLEASE COME BACK TO ME UEEN BEE

TECHNOLOGY INFUSED CAPSTONE PROJECT COULD HELP BEE KEEPERS IN MANITOBA BE MORE AWARE OF THE **ACTIVITY IN THEIR HIVES.**

Assiniboine students design sensor system to help beekeepers save their queens.

The gueen bee is a vital part of any hive; without her, the colony won't survive.

If worker bees and drones can't find their queen, they will fan "I know last year, they had cows knock over some of their their wings to move air around the hive, hoping to find her scent. In the process, they create more noise than a hive that has its queen.

That's just one of the signals for bees and beekeepers that Assiniboine students Adam Lennox and Kent Collins are trying to capture with their Bee Aware project.

Bee Aware was the capstone project for the pair who recently completed their second year of Communications Engineering Technology at Assiniboine Community College.

Lennox and Collins designed a wireless sensor network to be installed inside bee hives, providing instant feedback to beekeepers.

The students collaborated with 4K Honey, a producer located about 80 kilometres southeast of Brandon. Collins knows two of the owners, inspiring him to try to help them out.

The network's features and functions were designed after several meetings with 4K to determine what information from the hives would be beneficial.

Bees don't hibernate, but must stay inside the hive during winter to keep warm enough to survive.

hives. It was the end of the year. It was cold out, so they all died. Basically, the bees would leave the cluster, make it about 10 feet and die. If the beekeepers could have got there earlier, maybe they could have saved them," Collins said.

One of the sensors used is an accelerometer that can detect movement in any direction as well as any vibrations.

If everything in the hive is humming along routinely, the sensors report the status of the hives to the beekeepers twice a day.

If the data collected indicates the possibility of an urgent event, then a notification is sent to the beekeeper immediately. These events could be the death of a queen bee, a cow knocking over a hive or someone trying to steal the hive.

Theft of hives can be a costly problem for beekeepers. The Regina Leader-Post reported earlier this year that a theft of 150 bee hives cost a beekeeper in Saskatchewan \$60,000 in lost honey production and replacement costs.

Another sensor uses a laser beam to be able to tell when bees are leaving the hive and when they return.



"At different times of the season, the bees will get different flowers. They'll take clover, then they'll take canola, then they'll take buckwheat. They'll leave the hive at different times," Collins said.

"What I want to do is log the times when they leave and the times when they come back. How long is their day? Does it get shorter with the sunlight? Do they care about sunlight? Or do they just do it until they're done?" he asked.

Collecting this information will allow the beekeepers to apply data analytics to improve operations and increase yields and profits.

Collins designed the sensors, while Lennox looked after the network that delivers the sensor information to the beekeepers by email or text on their computers or smartphones.

The sensors in the hives send data to a microcontroller unit that will collect the information from up to four hives. These units will then transfer data to a collector device in each yard, using Bluetooth technology for short distance communications. With this system, there could be up to 10 hives per yard, Lennox said.

The collector device in each yard then sends the data to a central gateway, which could be up to 10 kilometres away, using long-distance wireless protocol on a low-power wide area network.

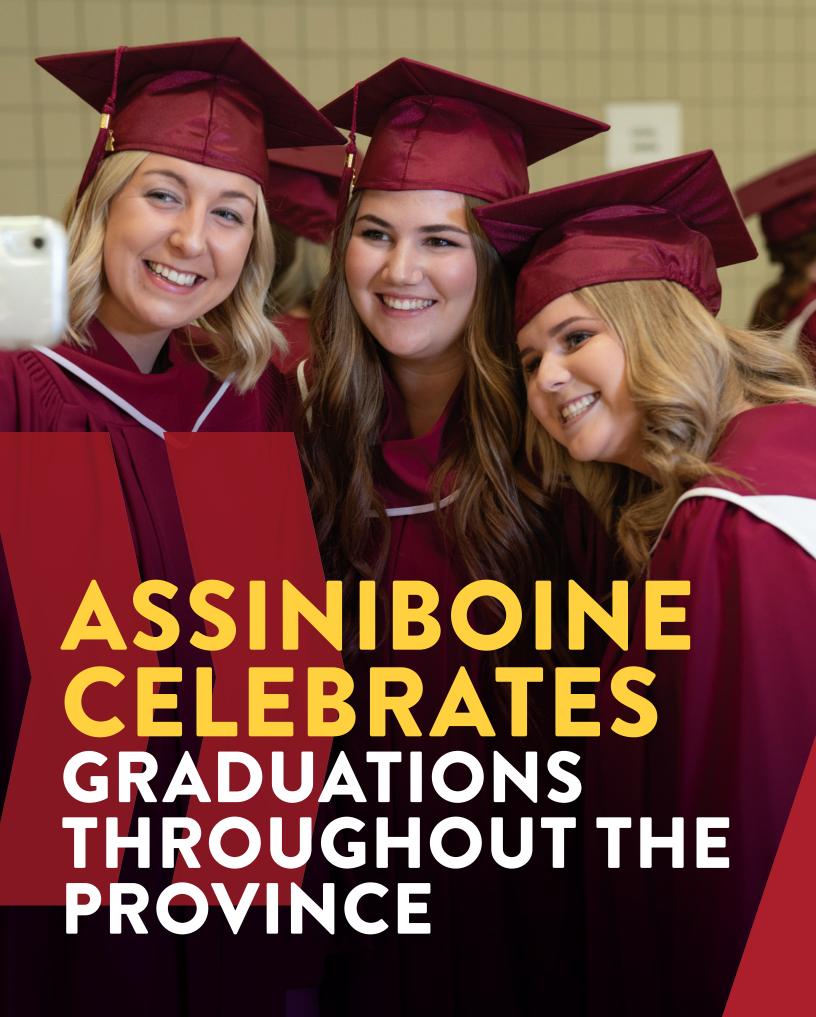
"When the data is sent to the gateway, it is processed and sent via cell towers to a cloud-based server. Data and notifications are then forwarded to the beekeeper by email or text message. It could also be uploaded to a web page, where they could view that data at any time as well," Lennox said.

The system uses solar panels to recharge batteries, saving farmers from having to replace batteries several times a month. This also allows for installation in hives in remote areas that do not have electrical service.

Collins and Lennox estimate they can deliver the system to 4K Honey for less than \$1,000 in capital costs and with low ongoing operating costs. Keeping an eye on the hives remotely would free up the beekeepers to perform other tasks.

Jordan Kulbacki, one of the owners of 4K Honey, said the sensors would give the beekeepers the ability to quickly identify any issues and make plans to deal with them.

"Typically, we only visit a yard every one to two weeks. These devices would give us a way to monitor our hives 24 hours a day, seven days a week. If a hive is having issues, we can find out sooner and do what we can to correct it or save the hive, which saves us both time and money," Kulbacki said.









Almost 1,400 individuals from across 63 certificate, diploma, apprenticeship, and advanced diploma programs were recognized as graduates from Assiniboine Community College in Brandon and Dauphin earlier this year.

"We are thrilled to be recognizing the academic achievements of graduates," said Assiniboine president Mark Frison. "They and their families have much to be proud of, and much to celebrate."

Assiniboine's board of governors refreshed the college's strategic direction this past year, including a key stated goal of reaching 2,028 graduates by 2028.

"Addressing Manitoba's lagging postsecondary rate and serving rural regions remain priorities for us," said Frison. "Graduates have completed their studies from among dozens of communitybased programs."

The college's most recent Graduate Satisfaction and Employment Survey shows that 93 per cent of graduates have jobs within nine months of completing their studies and make on average a gross annual salary of \$47,900.

Shelby Mymko, a graduate of the Interactive Media Arts program, was this year's valedictorian. "The experience Assiniboine gave us as students taught us to be connected to the community and the people around us," said Mymko.

In addition to being named valedictorian, Mymko was named as one of two graduating students this year awarded with the Lieutenant Governor's Silver Medal. Jerra Green, a graduate of the Police Studies program, was also selected to receive this award.

Graduates recognized with the Lieutenant Governor's Silver Medal have excelled academically, displayed strength of character and contributed to the college and community in a meaningful way.

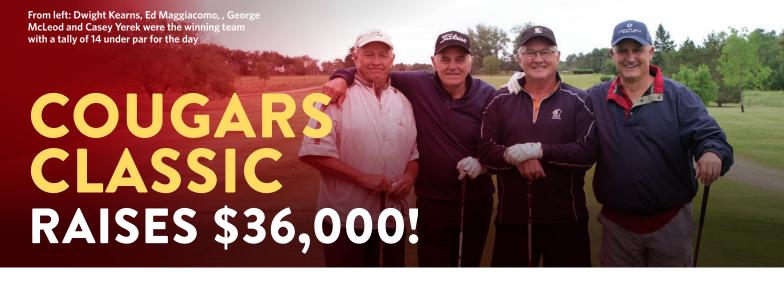
For the first time this year, 38 graduates from the college's Mature Student High School program are participating in today's ceremony. In previous years, separate ceremonies were held for this graduating class.

In addition to the Brandon graduation, the college hosted its Parkland campus graduation in June in Dauphin with more than 75 graduating from seven programs.



KELLY MCCRIMMON RECEIVES HONORARY DIPLOMA FROM ASSINIBOINE

Kelly McCrimmon was presented with an Honorary Diploma at the Brandon graduation ceremony. Mr. McCrimmon is the General Manager of the Las Vegas Golden Knights NHL hockey team, as well as over two decades serving in roles as general manager, head coach, and owner of the Brandon Wheat Kings WHL hockey club.



The skies were grey but spirits were anything but, as alumni and community members hit the links this past June 20th in support of the Cougars Classic golf tournament. Proceeds from the annual event help provide student-athletes with financial support to complete their educational goals while enhancing their learning experience through team sport and competition.

The event was hosted by the Assiniboine Alumni Association, in partnership with the Athletics department and the June tournament marked the 5th anniversary for the organizing committee.

"This year's event was a great day with a record amount of golfers that included alumni and community supporters of Cougars Athletics. Thank you very much to all participants and volunteers for working together to generate over \$36,000 for these student-athletes," says alumni association president and chairperson of the coordinating committee, Wayne Kirk. "So many of these people have been with us since year one and we appreciate the continued support along with new participants. The opportunity that these

funds provide can change lives and create educational opportunities that may not have been available otherwise."

The college's athletic teams have increasingly become stronger and more competitive due to the success of recruitment by the scouting staff. During the 2018-19 hockey season, the women's hockey team won the American Collegiate Hockey Association Division II National Championship. Going 18-6-1 in regular season the team, ranked #2 in the West, headed to the National Championships held in Frisco, Texas. The team's only losses came at the hands of the Minot State University Beavers, the same team they met and beat 2-1 in the Championship final.

Three of this season's student-athletes received Manitoba Colleges Athletic

Conference (MCAC) All-Conference honours for women's soccer and women's volleyball and four student-athletes were named MCAC Athletes of the Week.

"The money raised will not only help us strengthen our recruitment strategies and allow for our teams to be even more competitive, but also help alleviate the financial stress for our student-athletes so they can focus on their studies and respective sports. It ultimately aids in transforming our student-athletes lives." Says Athletics Director, Lindsay McLaughlin.

Next year's tournament will be held on June 18, 2020 at the Shilo Country Club once again. For more information, contact alumni@assiniboine.net.

ASSINIBOINE ALUMNI MIX & MINGLE IN WINNIPEG

This past April, staff from the Alumni Association office headed east on the #1 highway to host an alumni mixer event in Winnipeg at the Nonsuch Brewery in the Exchange District.

"With so many of our grads living and working in Winnipeg, it makes sense for us to host alumni events in the city," says Lisa Huston, Alumni Relation Coordinator with Assiniboine. "There is a large contingency of alumni doing some great work in Winnipeg... particularly graduates from our Interactive Media Arts program (previously Media

Production), where they can be seen and heard on many television networks, radio stations and digital design firms."

Added bonus to the event was the venue. Media Production alumnus, Ben Myers is now the proud co-owner of the Nonsuch Brewery located at 125 Pacific Ave. The brew house's taproom was the perfect location for alumni and friends to reconnect and reminisce with former instructors and fellow graduates.

"It was wonderful to have my fellow ACC alum and staff at the taproom for this event. ACC has been so supportive of our endeavour and we're honoured to have an event like this in our space. At Nonsuch, we're all about creating memorable moments and this was indeed a memorable one for myself as an ACC alumni as well as our team," said Myers.

With just over 20 guests in attendance, the mixer event was a great success! Be sure watch your inboxes for an invitation to the next Assiniboine Alumni Winnipeg event!



The college's sixth annual Student Achievement Celebration dinner brought together 68 Assiniboine Community College students earlier this year in an evening to honour them for their contributions in academics, athletics and community involvement.

"Participating both inside and outside of the classroom results in a much richer experience for students and forms lasting memories of their time in college for years to come," said Dr. Deanna Rexe, Vice-president, Academic at Assiniboine. "We are pleased to recognize and celebrate their hard work and accomplishments, in academics, extracurricular activities, and athletics."

Thirty-eight students received One to Watch awards. Faculty members select these recipients based on a set of criteria including academic merit, leadership, contributions to student life, community involvement and volunteerism.

"I feel very honoured to win this award. It is always nice to receive recognition of one's hard work, and I am truly grateful to be recognized," said Harold "Hulley" Martin, who won the One to Watch award in Police Studies.

Martin said he was attracted to the program because of its practical nature and the strong career prospects in the field for graduates.

The program allowed him to "learn by doing," Assiniboine's motto, through mock crime scene scenarios in the practical training centre, which includes a furnished house, a car, and other equipment, tools and props to replicate real life situations as closely as possible.

In the long term, Martin would like to specialize in the drugs and gangs unit of a police service. "It would be an incredible challenge, but it also would be incredibly rewarding," he said.

Twenty-five students were recognized with athletic awards, including Theo Bosc being named as Male Athlete of the Year and Jerra Green and Karli Frederick being named the co-Female Athletes of the Year.

A further five awards were presented by the Students' Association, recognizing students for their leadership and engagement on campus.

Above photo: Shelby Mymko, left, was named the One to Watch in Interactive Media Arts - Interactive Specialization. She received her award from Bobbie Robertson, Dean of Business.







The government of Canada, Province of Manitoba, and a number of industry and labour partners are providing a combined \$1.165 Million to Assiniboine to support a new Food Processing Centre for Animal Proteins (FPC) on campus.

"The growing world demand for protein provides our industry here in Manitoba with tremendous opportunities in new production and processing jobs," said Ralph Eichler, Minister of Agriculture, Province of Manitoba. "The new Food Processing Centre for Animal Proteins will ensure that there is a robust stream of qualified individuals to advance our processing industry for years to come, and will keep our province at the leading edge of the protein sector."

The new training facility, located at the college's Victoria Avenue East campus in Brandon, has a specialized focus on animal proteins. The first program scheduled to be delivered in the space is an 11-month Food Processing (Animal Proteins) certificate program. That program will have students learning protein processing and other necessary skills to gain employment within the industry. Future use of the centre lends itself to customized industry training and applied research.

"The Food Processing Centre will allow Assiniboine to be responsive to the workforce development needs of employers, helping us to educate students and prepare them for indemand jobs within this industry," said Mark Frison, president of Assiniboine Community College. "We are extremely appreciative of the contributions from industry and government to make this space possible."

Other funding partners include Maple Leaf Foods, HyLife, Manitoba Pork, UFCW Local 832, the Brandon Hog and Livestock Show, Western Economic Diversification of Canada and Canadian Agricultural Partnership, Ag Action Manitoba. Combined, \$1.165 million in funding will contribute to the construction and completion of the facility.

"Maple Leaf is very excited to be part of this opportunity with ACC and to stand with our industry partners to see it come to fruition," said Morgan Curran-Blaney, vice-president manufacturing – pork, Maple Leaf Foods. "Not only will this program provide a stream of skilled talent into our plant, but more importantly, it highlights meat processing as a viable and sustainable career option for students."

"The announcement today is very exciting for HyLife as we continuously strive to develop the highest quality pork products in the world. This new program will directly help to strengthen our workforce with talent developed in our communities," said Guy Baudry, COO, HyLife. We are eager to team up with ACC's Food Processing Centre for Animal Proteins program's graduates to help

our company continue to strive to be the best Canadian food company in the world that takes care of its employees, customers, and communities."

The new FPC at Assiniboine will address workforce supply shortages in Manitoba's meat processing industry. In January 2017, the Canadian Agriculture Human Research Council found that rural meat-processing facilities have an employment vacancy rate of over 9.5 per cent. These vacancies restrict processing capacity and affect future growth.

"Unions exist to create opportunities for our members, through bargaining fair deals of course, but also through education and training," said Bea Bruske, secretary-treasurer of UFCW Local 832. "Investing in the Food Processing Centre makes total sense for us; this new facility will create pathways for current and future UFCW members to acquire skills that will enhance their job and wage opportunities."

The funding comes as part of the \$3-billion Canadian Agricultural Partnership program. The funding includes \$2 billion for cost-shared strategic initiatives delivered by the provinces and territories and \$1 billion for federal programs and services.

CATCHING UP WITH... CHRIS AND CARLA SIMARD



In this edition, we feature a Q & A with husband and wife duo Chris and Carla Simard. Chris is a graduate of the Automotive Technician program, class of '96 and Carla is a graduate of the Office Administration program, class of '94. Together, they own and operate Superior Auto Service in Brandon.

Name Chris Simard

Hometown St. Lazare, MB

What program did you take at Assiniboine? Automotive Technician

What year did you graduate? 1996

Did you attend college right after completing high school? Yes, I went to Dauphin as the course was only offered in Dauphin back then. Year one was offered up there and then year two was in Brandon. It was during year two that Carla and I met. When I learned I was going to Dauphin I was excited. I was looking forward to going somewhere new and meeting new people. Dauphin was a big city when you compare it to where I grew up. I was pumped to get up there and I had a blast, it was a lot of fun.

Where are you currently employed? Superior Auto Service & Glass

What is your current job title? Owner/Operator

How long have you been employed there?15 years

Why did you choose this career path? I grew up on a farm and enjoyed working with my hands and enjoyed fixing things. I knew, just from research that this would be a high demand field which remains true today. You know, if you go in and take trades wanting to be a mechanic you almost guarantee yourself work.

What challenges have you faced since becoming a business owner in this industry? Like any trade, the biggest challenge is making sure you have enough skilled workers. It all starts with students going in to post-secondary. For me personally it hasn't been a problem since we've taken over the shop as our guys are pretty loyal. I think it is important that you pay your workers well enough that they want to stay and that you make it a fun work environment.

Why was Assiniboine your choice for post-secondary? I was a rural Manitoba boy and had no interest in going anywhere else. Kids now will move across the country, things have changed. Where I grew up, Brandon was considered a metropolis. For me, coming to Brandon was a big deal.

What is your career highlight thus-far? Taking over the business for sure. That was a big step for us. I was given the opportunity to do this after being a mechanic for a number of years and it has worked out well. I enjoy it.

What is the most important character trait you took away from your time at Assiniboine?

I gained so much automotive knowledge while I was there, but more importantly I learned a lot about meeting new people and learning how to work alongside others. You work as a team, which was really important to me. It must have rubbed off as 5 out of our 7 employees are Assiniboine graduates.

What advice would you give a prospective student? That's easy to answer. It doesn't come easy. You have to put in the hard work. You get out what you put in to it. When you go to post-secondary if you work hard and commit yourself, you will have success

Name: Carla Simard

What program did you take at Assiniboine? Office Administration

What year did you graduate? 1994

Did you attend college right after completing high school? I did. I lived with one of my really good friends. I didn't have a car and had to take the bus to school which was a new experience. I wanted to get into the medical field right out of college. I did that for a number of years. I don't use those exact skills anymore, but I definitely use what I learned.

Where are you currently employed? Superior Auto Service & Glass

What is your current job title?

Assistant Manager

How long have you been employed there? 3 years

Why was Assiniboine your choice for postsecondary? It was nice. It felt close to home. I was a country girl and wasn't wanting to move to a big city like Winnipeg or anything. I didn't really know what I wanted to do, I just thought I would give it a try. It was something that interested me so I thought I would go with Office Administration and see where that took me. It was a good choice. What is the most important character trait you took away from your time at Assiniboine?

I found it a good opportunity to learn how to be on your own. How to navigate the world without your parents close by. I learned a great deal of responsibility there.

What advice would you give a prospective student? Don't be scared to put yourself out there. Ask questions, don't be shy, and stick your neck out a bit.

ASSINIBOINE CELEBRATES 2019 PARKLAND REGION

ALUMNI AWARD RECIPIENTS









Four members of the Parkland community were recognized at an event held earlier this year in Dauphin.

Assiniboine Community College's (ACC) Alumni Association recognized the recipients of this year's Parkland Region Alumni Awards, presented at the annual Parkland Region Alumni Celebration in Dauphin earlier this spring.

This year's recipient of the Distinguished Alumni Award was Jamie Harvey. The award honours alumni of the college in the Parkland Region who have distinguished themselves in both their chosen profession and the community. It recognizes the outstanding personal and professional achievements of the college's finest graduates. Harvey is a 2004 graduate of the Business Administration program. After graduation, he began to advocate for housing needs in the community. This advocacy led him to become the Director of Parkland Crossing, an organization that leads in providing support and housing opportunities for the community. Harvey worked with local partners, faith-based volunteers and government representatives to advocate on behalf of those in need of a roof over their head. "I am honoured to be acknowledged by the college and community. Education is key to finding and following your passion. Over the years, I have learned that mine is to help people. If you want to do mission work and change the world, there is plenty to do right in our backyard," said Harvey.

The Excellence in Teaching Award honours a faculty member for extraordinary contributions to teaching and the student experience. This year, the award was shared by two recipients from the same program. Cheryl Sorenson-Voigt and Melanie Hawranik-Sobering are both instructors in the Practical Nursing program at Assiniboine's Parkland campus, and were nominated by their students for the award.

Another special recognition took place that night, as the Alumni Association recognized Joan Clarkson for all her work serving the college community. A student success advisor at the college's Parkland campus, Clarkson was honoured by the Association with the newly established Excellence in Education Award. The award recognized a non-teaching staff member who has exhibited devotion to the college community and furthering opportunities of students. "She embodies the drive the college hopes to instill in graduates in both their professional and personal life," said Gabe Mercier, Director of the Parkland campus.

THREE ASSINIBOINE STUDENTS WIN MEDALS AT

SKILLS CANADA COMPETITION

Three Assiniboine Community College students won medals at the 2019 Skills Canada National Competition held in Halifax this year.

The winners were:

Student	Competition	Hometown	Medal	Coach
Tulsa Labonté	IT Software Solutions for Business	Morden	Gold	Cheryl Little
Robert Black	IT Network Systems Administration	Minitonas	Silver	Dean Johnson
James Shaw	Electrical Installations	Russell	Silver	Keith Campbell

The medal recipients were among six Assiniboine students who competed in the national event after winning gold medals at the Skills Manitoba competition earlier this year.

"Competing with Team Manitoba was a fantastic experience that I will cherish for years to come. I'm incredibly grateful for all the support I received from my coaches and Assiniboine Community College that allowed me to participate in such an exciting competition," said Tulsa Labonté, who won gold in IT Software Solutions for Business.

In her competition, Labonté worked for 10 hours on creating and modifying a variety of documents for a Nova Scotia seafood company. Tasks ranged from creating and managing employee databases, to making company invoices, to developing interactive presentations, Labonté said.

The second-year Business Administration student, who graduated in June with a specialization in management, said her program helped develop her proficiency with Microsoft business applications such as Word, Access and Excel.

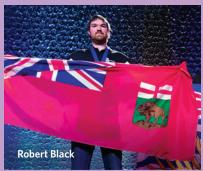
"One of the tasks we were asked to do was create an amortization schedule for a loan. Due to the accounting courses I've taken, I had a comprehensive understanding of what an amortization schedule is that went beyond what formulas to use. I also drew from the knowledge I gained from my marketing courses to create posters and presentations that aligned with the company's brand image," Labonté said.

Kate Pelletier, Assiniboine's dean of trades, and access & community programs, said the college is exceptionally proud of the achievements of these students. "Their medals are a testament to their drive and determination and an endorsement of our educational philosophy of learn by doing" said Pelletier.

Bobbie Robertson, Assiniboine's dean of business, said the students' success reflects well on them and the college. "These students have shown that they are among the best in their fields among students from across Canada. We congratulate them on their exceptional performance."

AWARD WINNERS







CONSIDER GIVING TO ASSINIBOINE'S FUNDING FUTURES CAMPAIGN

From September to November, the college's Alumni Association volunteers are canvassing graduates of the college to help support its Funding Futures campaign.

The annual campaign's proceeds help support new students of the college—future alumni—in achieving their educational goals. Since 2017, alumni donors and community members have donated close to \$45,000, helping provide an average of 300 students each year with financial awards, including scholarships and bursaries.

"One of the most common things I hear from alumni I meet, is how much they cherish the memories made from their time at Assiniboine," alumni relations coordinator, Lisa Huston says, "and they're looking for ways to pay it forward to current students so they too can enjoy the same experience."

With education costs increasing each year, the more need there is for financial support for post-secondary education. This campaign fulfills the desire that alumni have to donate while helping alleviate those challenges and constraints.

And donating is easy to do and it doesn't take much to make a difference. A donation of \$20, when combined with others, can have a tremendous impact and fund the future of so many.

To give online, go to **assiniboine.net/alumnigiving** or phone 204.725.8739.

DO YOU KNOW AN OUTSTANDING ASSINIBOINE ALUM?

Nominate them today!

Assiniboine is now accepting nominations for its alumni awards, presented at the annual Alumni Advancement dinner in Brandon and the Parkland Alumni Celebration dinner in Dauphin. The awards are an excellent opportunity to recognize the great accomplishments of the college's alumni. Individuals can nominate an Assiniboine alumnus for one of two awards:

Distinguished Alumni Award

Awarded to an alumnus of the college who has distinguished themselves in both their chosen profession and their community.

One to Watch Award

Awarded to an alumnus of the college, 35 years or younger, who has shown exceptional achievement and significant contribution to their profession or community.

There is also the Excellence in Education Award, which will be presented to a faculty or staff member who has made an extraordinary contribution to teaching and the student experience. Recipients of this award can be nominated by current students or alumni of Assiniboine.

Awards will be presented at the annual Alumni Advancement Dinner to be held March, 2020 in Brandon and at the Parkland Alumni Celebration, held in April, 2020 in Dauphin. Tickets for both dinners will go on sale in January, 2020.



The deadline for nominations is November 22, 2019. For nomination forms and more information, visit **assiniboine.net/alumniawards** or **email alumni@assiniboine.net**.

