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ccovinews

A newsletter from
the Cool Climate Oenology
and Viticulture Institute



Cool
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Institute

Brock University

CCOVI connects community and industry with new virtual opportunities

In a typical year, Brock University's Cool Climate Oenology and Research Institute (CCOVI) welcomes thousands of industry professionals and wine enthusiasts to its slate of in-person tastings, conferences, workshops and other special presentations.

When the pandemic hit, however, CCOVI explored new ways of staying connected in a virtual capacity — and those efforts are paying off.

In the past six months alone, CCOVI has engaged with more than 600 community and industry members through its new online initiatives.

"At a time when we cannot connect in-person, it's important for us to still stay in touch," says Barb Tatarnic, CCOVI's manager of Outreach and Continuing Education. "Similar to the increased demand we saw for our online continuing education courses, we knew there was a demand for virtual outreach experiences, too."

More than 100 guests attended CCOVI's new virtual wine tastings, for example. Featuring industry partners like Gabriel Demarco (BSc '13), Winemaker and Viticulturist at Cave Spring Vineyard, and Mitchell McCurdy



Brock University's Cool Climate Oenology and Research Institute (CCOVI) launched a new series of virtual tastings, including a recent event curated for Piller's Fine Foods featuring Mitchell McCurdy (BSc '18), Winemaker at Marynissen Estates Winery.

(BSc '18), Winemaker at Marynissen Estates Winery, the events have been so popular that CCOVI is already planning for additional offerings in the future.

"The past 15 months have been challenging with COVID-19, so our tasting was a chance for my senior team and their partners to connect, have a few laughs and learn about wine and pairings," says Trent Hilpert, President of Piller's Fine Foods. "The depth of Mitchell's knowledge was absolutely incredible, and the event was very well done and creative."

For Cory Petznick (BA '94), Piller's Director – Business Development, Alternate Channel, Co-Pack and Food Service, the online tasting experience was an inviting way for a beginner like himself to learn more about wine. Doing so in the company of other local Brock alumni was an added bonus.

"It is always great to reconnect with people that you share something in common with and I find that when I come across alumni from Brock, you quickly discover that there are so many great stories that you have in common and it brings back some very cherished memories," says Petznick, who participated alongside his wife and fellow alumna, Molly Petznick (BA '96).

At a time when we cannot connect in-person, it's important for us to still stay in touch.

— Barb Tatarnic

The CCOVI Lecture Series, held in a solely virtual format this year, was also popular with the grape and wine community. More than



Pictured left:

An online wine tasting event featuring Gabriel Demarco (BSc '13), Winemaker and Viticulturist at Cave Springs Vineyard, was co-ordinated by the Cool Climate Oenology and Viticulture Institute (CCOVI) for the Brock University Alumni Association as part of its online programming.

400 people tuned in to watch the lectures live — more than double that of the previous year. CCOVI also makes the videos available online, so the content can be viewed when it's most convenient for the viewer.

The same approach was taken with the technical webinar CCOVI developed with Scott Labs Canada and the Institut Oenologique de Champagne. The webinar featured international expert Bertrand Robillard, R&D manager at Institut Oenologique de Champagne, and was made available to winemakers across the country to view as it fit within their schedule.

"We knew the Brock team would be committed to executing an online delivery that would meet the needs of the winemaker, and as always, they exceeded our expectations," says Steve Clattenberg, Vice-President and General Manager of Scott Labs Canada.

For Dan Wright, Winemaker at Unsworth Vineyards, the ability to access CCOVI's "trusted" resources at his convenience

has been especially important during the pandemic.

"With there being so many online seminars these days, I have found it difficult to attend all the ones I might have found interesting," he says. "But this way, I was able to schedule it and allow my staff to watch this webinar, which otherwise may not have been possible."

Although CCOVI will resume hosting in-person events as soon as it is safe to do so, Tatarnic says expanding its online offerings has created new and exciting ways to engage with wine professionals and wine lovers alike.

As part of Brock's Homecoming weekend, for example, CCOVI has organized a guided tasting with Lawrence Buhler (BSc '03), Head Winemaker for Henry of Pelham Family Estate Winery, of three wines paired with three delicious meat selections from Piller's Fine Foods. The tasting is open to Brock University alumni and takes place online on Saturday, Sept. 25 from 3 - 4:30 p.m. The cost per wine kit is \$110.

Knowledge mobilization has always been an important part of CCOVI's mandate and providing these new virtual experiences, with increased flexibility in content delivery, has meant that more people

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- Steve Clattenberg

Vice-President and General Manager of Scott Labs Canada.

could take advantage of the resources we offer," she says. "We look forward to offering more innovative opportunities like this in the future.

Donald Ziraldo's new Icewine tells story of industry, Brock's CCOVI

For Donald Ziraldo, wine is all about "history and a great story."

The renowned winemaker's latest vintage of Ziraldo Icewine has both — bringing his career full-circle while reflecting on his role in the evolution of the Canadian wine industry and the research centre created to support it, Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI).

Set for release this summer, Ziraldo's forthcoming Riesling and Vidal Icewines were produced at Inniskillin Estate Wineries in Niagara-on-the-Lake. This is the first time since 2006 that Ziraldo has produced his wines at Inniskillin, which he co-founded alongside the late Karl Kaiser in 1975 after receiving the first winery licence since Prohibition.

"We're excited to be working with Donald Ziraldo again and offering our Inniskillin Estate guests the opportunity to buy Ziraldo Icewine," says Wendy Montgomery, Vice President, Marketing – Premium Brands at Arterra Wines Canada, Inniskillin's parent company.

Karl Kaiser and Donald Ziraldo at the opening of Brock's Cool Climate Oenology and Viticulture Institute in 1999.

From the moment they began making wine together, Ziraldo and Kaiser strongly believed that amazing wines could be produced in Canada. They also felt that having a strong research, outreach and educational partner would be key to helping the industry become what it is today.

Thanks to this foresight, Ziraldo joined a group of industry and academic partners to form Brock's CCOVI in 1996, and the Oenology and Viticulture (OEVI) program one year later.

Ziraldo led the capital campaign for the institute, and, in 1999, CCOVI opened the doors to Inniskillin Hall. The building would become CCOVI's permanent home, named in recognition of the lead \$600,000 capital

campaign donation by Vincor Inc. (now Arterra Wines Canada).

Ziraldo and Kaiser broke new ground when they began using highly regarded European Vitis vinifera vines at Inniskillin rather than the labrusca vines that were being used in Niagara at the time. After successfully proving the vines could stand up to Canadian winters and make high-quality domestic wines, they began another game-changing venture: producing a high-quality Icewine in Niagara.

"When Karl first suggested it to me, I thought, are you crazy? We're going to leave grapes on the vine to freeze and then make wine?" Ziraldo recalls. "Then, you had the skeptics who were also saying: 'Are you kidding? You're going to get someone to pay \$50 to \$100 for a half bottle of Canadian wine?' Everyone thought we were completely nuts."

After losing their first Icewine harvest to birds and overcoming other challenges along the way, their efforts would eventually pay off when the 1989 Inniskillin Vidal Icewine received the Grand prix d'Honneur at Vinexpo-France in 1991. A bottle of that historic wine can also be found in CCOVI's wine cellar, where it is professionally preserved as part of the institute's Icewine Collection.

"I'm Italian, so I'll draw the analogy of the Pope giving his blessing: This was like the French blessing Inniskillin Icewine as the best dessert wine in the world," Ziraldo says.

From then on, international awards and recognition continued to roll in and Canadian wine sales dramatically increased, effectively putting Inniskillin and Canadian wine on the global map.

Thirty years later, Ziraldo brought production of his own line of Icewines back to where it all began.



Ziraldo Icewine has other historical ties, too, as the Riesling Icewine is made from grapes grown on the original Inniskillin site in Niagara-on-the-Lake, located two kilometres down the road from the existing winery (built in 1978).

Ziraldo says the process has been "very gratifying" overall. Not only did he get to produce wine at the site where his career began, but he was also able to do so alongside his eight-year-old son, Aspen Ziraldo, who accompanied him during the harvest.

"For me, it was not only a feeling of carrying on Karl's legacy but also hopefully, with it being back at Inniskillin, the legacy will continue to carry on into the future," he says. "I don't know if my son is going to be a winemaker or a ski bum or an architect, but he has the opportunity to carry on that winemaking legacy, if he so chooses."

CCOVI Director Debbie Inglis, a leading Icewine researcher who worked directly with Kaiser on Icewine-related projects, says the release also provides an opportunity to look back on the region's rich history and accomplishments.

"Icewine is such a pivotal part of our national wine story and this pays tribute to the foresight, innovation, and hard work of everyone who helped make Canadian Icewine what it is today," says Inglis, who is also a Niagara grape grower. "With CCOVI's 25-year anniversary coming up this October, it's also heartening to reflect on how far we've come and to look forward to the exciting opportunities that still lay ahead for our industry."

Brock students receive top honours for grape and wine research

Brock University students are receiving accolades for their cutting-edge grape and wine research.

Among the students recently honoured is PhD candidate Andréanne Hébert-Haché, who the American Society of Enology and Viticulture (ASEV) has named as the 2021-22 recipient of the ASEV Presidents' Award for Scholarship in Viticulture.

It is the Society's highest award for a student in her field.

"In addition to her stellar academic record, Andréanne really impressed us with her level of community involvement and promotion of STEM (science, technology, engineering and mathematics). This is important for Presidents' Award winners, as they'll serve as student spokespersons for the Society this year," says Anna Katharine Mansfield, Director on the ASEV Board and Chair of the 2021 Scholarship Committee.

The Presidents' Award also includes a US\$12,500 scholarship as well as registration to the national ASEV conference.

Mansfield, also an Associate Professor of Enology at the Cornell Craft Beverage Institute, says the award is unique in that the successful applicant must be nominated by a professional member of the Society. ASEV is comprised of researchers, industry professionals, students and suppliers who work collectively to advance the grape and wine industry around the world.

"To have all my hard work recognized in this way, by people I have admired for years, is



Brock University PhD candidate Andréanne Hébert-Haché has been named the 2021-22 recipient of the ASEV Presidents' Award for Scholarship in Viticulture.

a big honour and very humbling," Hébert-Haché says. "It means a lot to know that these people saw me as a worthy candidate, as someone who could be their peer in the near future, and it is encouraging that members of the industry believe in me."

Working under the supervision of Cool Climate Oenology and Viticulture Institute (CCOVI) Researcher Jim Willwerth and CCOVI Director Debbie Inglis, Hébert-Haché's research seeks to identify cold hardiness variation within different grapevine cultivars. She is also researching the presence and importance of dehydrin proteins — a group of proteins that work to protect plants from environmental stressors — on cold hardiness in the dormant overwintering bud. Willwerth says Hébert-Haché is a deserving candidate of this award.

"Andréanne is a tremendous student and demonstrates exemplary leadership qualities both in the lab and in our community," he says. "She is a rising star in the field of viticulture and I am so proud of her and all of her accomplishments."

Robert Allie, a Master of Science candidate in Biotechnology, received the W. D. Hatch Memorial Postgraduate Scholarship, as well as the Donald Ziraldo and Laura McCain CCOVI Director's Award.

This is the second time that a Brock student from Inglis' lab has received the Presidents'

Award, with Faculty of Mathematics and Science post-doctoral fellow Jennifer Kelly receiving the honour in 2018 for her work on appassimento-style wines.

Hébert-Haché extended her appreciation to Kelly for her guidance navigating the application process and for serving as a role model, while also thanking both of her supervisors for their support.

"This is the second time that a student in Debbie's lab has won this award, and I think it speaks a lot to how good of a mentor she is," she adds.



Hannah Charnock.

Hannah Charnock, a PhD candidate in Biological Sciences, also received a scholarship award from the ASEV-Eastern Section. Co-supervised by CCOVI Senior Scientist Belinda Kemp and CCOVI Researcher Gary Pickering, Charnock is investigating the evolution of aroma compounds during the sparkling wine ageing process, particularly as it relates to a group of compounds produced during the Maillard reaction.



Robert Allie.

Selected as this year's recipient of Brock's W. D. Hatch Memorial Postgraduate Scholarship, as well as the Donald Ziraldo and Laura McCain CCOVI Director's Award, was Robert Allie, a Master of Science candidate in Biotechnology. Allie's research focuses on the biochemistry of yeast strains and how it pertains to producing premium Icewine, which he is completing under the supervision of Inglis.



Margaret Thibodeau.

Margaret Thibodeau, a PhD candidate in Biological Sciences, was awarded Brock's OEVI Alumni Award. Completed under the supervision of Pickering, Thibodeau's research aims to understand why individuals differ in their preferences and consumption of alcoholic beverages by studying the impact of taste phenotypes, sex and personality. She also successfully defended her thesis, "Thermal tasting: methodological considerations and implications for alcohol behaviour," on Thursday, June 10.

A fourth-year thesis student in Brock University's Oenology and Viticulture (OEVI) program has received industry recognition for her cutting-edge grapevine virus research.

Nadia Skorupski, a fourth-year thesis student, won Best Student Viticulture Poster in a virtual presentation at the internationally regarded American Society of Enology and Viticulture (ASEV) – Eastern Section (ASEV-ES) conference earlier this month.

Her poster, titled "Impact of solo and coinfections of grapevine red blotch and grapevine leafroll associated virus-3 on fruit quality," was the only undergraduate submission at this year's conference, winning out against students at both the master's and PhD levels.

"Presenting to an audience full of scientists, grad students and industry professionals can be intimidating, but I kept reminding myself that everyone is there with a collective purpose, to share new ideas and propel the industry forward," she says of the experience. "More than anything, this recognition means I was able to convey the research we're conducting at Brock University and hopefully get people excited about it."

Skorupski's thesis research examines the impact that grapevine red blotch (GRBV) and grapevine leafroll associated virus-3 (GRLaV) have on fruit quality, both individually and when the grapevine is infected with both simultaneously.

Grape growers currently lose an estimated \$23 million per year due to grapevine virus infections, making research in this area vitally important for ensuring the sustainability of the \$9-billion Canadian grape and wine industry.

"This is, to my knowledge, one of the first investigations looking at the effects of co-viral infections on fruit quality, which makes the work innovative," Skorupski says. "Coming from a history of winemaking, it is fascinating to quantify the effects of grapevine viruses (previously anecdotally observed) and extrapolate how these viruses are affecting quality of wine production."

She is conducting this work under the co-supervision of Brock adjunct Professors Wendy McFadden-Smith and Belinda Kemp. McFadden-Smith is also a Tender Fruit and Grape IPM Specialist at the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and Kemp is the Senior Scientist, Oenology, at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI).

The research is a partnership with OMAFRA, the Canadian Grapevine Certification Network (CGCN), Ontario Grape and Wine Research Inc. (OGWRI), and several grower cooperators.

"We are so proud of the work Nadia has done to bring visibility to this innovative research and its important applications to our industry," says McFadden-Smith. "Not only has no one looked at the combined effects of infection with these two viruses before, but also there have been no reports of effects of GRBV on hybrids or on the

effects of virus infection on hydroxycinnamic acid compounds in white varieties, and very little research overall on these viruses under cool climate conditions like Ontario."

Kemp adds: "This is an amazing, massive achievement for an undergraduate student during her Bachelor of Science; she should be very proud, as this is quite incredible."

While the research speaks for itself, Skorupski says it is also important to consider visual appeal when completing an academic poster to ensure the work is showcased as effectively as possible.

"When you only have a limited time to convey a message," she explains, "attractive imagery and infographics will set you apart." Skorupski's use of the BioRender program to design her poster gave it a "very professional appearance," says McFadden-Smith, adding that the inclusion of a QR code for accessing additional information "was also very innovative."

The collegiality within her department and at CCOVI was also an important part of her success, Skorupski says.

"I am so grateful to my colleagues who helped me navigate this new terrain and kept reminding me to 'honour the research' and represent it in a way that I was proud of," Skorupski says.

“We are so incredibly proud of these students — and all of our researchers — for being recognized for the important work they do to support the grape and wine industry.”

- Debbie Inglis

"The pandemic has presented many unforeseen challenges for student researchers and these awards showcase not only their talent, but also their ability to overcome obstacles and continually produce leading-edge research."



Continuing Education Courses

As well as its current online offerings, CCOVI is also preparing for the return of in-person instruction and tasting opportunities in the near future. Please contact Barb Tatarnic at ccovi@brocku.ca to receive updates as they become available.

Foundations in Winemaking (online)

October 11 - December 10

Cider & Perry Production - Foundation (online)

August 31 - December 14

Certificate in Ontario Wines (online)

October 8 - November 12

WSET Level 1 Award in Wine (online)

August 23 - September 19
September 6 - October 3
September 20 - October 17
October 4 - October 31
October 18 - November 14

WSET Level 2 Award in Wine (online)

August 23 - September 26
September 6 - October 10
September 20 - October 24
October 4 - November 7
October 18 - November 21

WSET Level 1 Award in Spirits (online)

August 23 - November 14
October 18 to September 19

WSET Level 2 Award in Spirits (online)

October 10 - November 7

Brock alumni launch new Ontario wine collaboration

Ramsey Khairallah (BSc '09), Mitchell McCurdy (BSc '18), Jeff Moote (OEVC '19), Nick Pappas (BSc '18) and Marc Pistor (BSc '06) are the founding members of Collab Wine & Beverage, an initiative to help Ontario producers launch new boutique wine, cider and perry brands and increase their visibility in the marketplace.

The first phase of the project launched in March 2020 with a small online store, selling unique alcoholic beverages from small, local brands. The team recently began construction on a physical facility in Niagara, too, where emerging brands will eventually be able to source the materials, equipment and industry knowledge needed to turn concepts into market-ready products. The hope is to complete the facility over the summer.

"It's really important for there to be an opportunity for super-creative, high-quality small brands to be loud and be seen," says Pistor. "It brings a lot of energy and recognition to the Ontario wine industry and it's something that we desperately need."

They first connected at Brock, where they all graduated from either the Oenology and Viticulture (OEVI) degree or certificate program. Pistor, who is also a continuing education instructor at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI) with a wine consulting business and brand of his own, also served as a teacher and employer to the younger members of the team. The Collab members have all worked in various facets of the grape and wine industry since graduation and have launched their own small-batch brands as well.

Pappas says his Brock education taught him to always "think of the bigger picture" when it comes to winemaking.



Brock alumnus Mitchell McCurdy (right), Winemaker, Mad Scientist/LabTech for Collab Wine & Beverage, is seen bottling his new perry line at a Niagara facility alongside cellar hand Andrew Mecke.

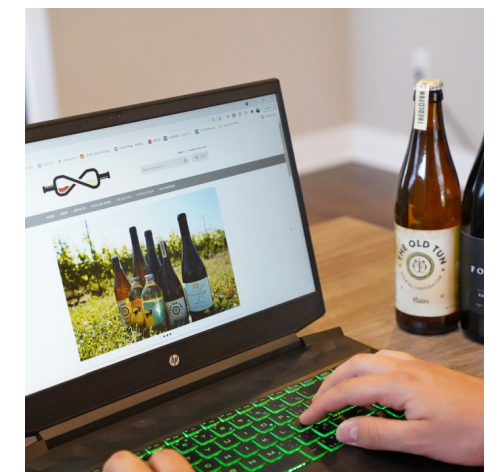
"It's not just the wine or these grapes or this tank, it's everything that is going to be coming together in the end," he says.

That complexity is why the Collab team sees so much benefit in bringing people with different skill sets, experiences and resources together to make the best products possible. They are also excited about having the freedom to explore creative and out-of-the-box styles and techniques, which a collaborative platform like this will allow for.

When the pandemic, which sparked a massive shift toward online sales and increased demand for local products, combined with a change in wine industry regulations, it only solidified the fact that they were on the right track.

"We've seen more acceptance of VQA wines, Ontario products and moving towards local, so I'm excited to have people talking about Niagara as a source of good wines and cider, to put my own styles out there and to see how a platform like this can help to elevate everybody in the industry," says McCurdy.

Pistor adds that the work CCOVI does to support and build connections within the industry plays an important role in shaping initiatives like theirs.



CCOVI's continued commitment to the wine community has given me the opportunity to draw these connections, to work with these four guys, and continue building the Ontario wine industry," he says. "Man, am I ever optimistic about the opportunities that exist with what we are trying to do."

- Marc Pistor



Institute Welcomes New CCOVI Professional Affiliate

CCOVI would like to extend a warm welcome to our newest CCOVI Professional Affiliate: José Ramón Urbez Torres.

He is a research scientist at the Agriculture and 'Agri-Food Canada Summerland Research and Development Centre in British Columbia and is the current chair of the International Council on Grapevine Trunk Diseases.

His current research focuses on the development and implementation of sustainable management strategies for fungal, bacterial, and viral diseases of Canadian grapevines and tree fruits.

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- Pickering, G. J. Dale, G. and Kemp, B. (2021). Optimization and application of the Wine Neophobia Scale. Beverages. 7, 2, 41. <https://doi.org/10.3390/beverages7020041>
- Thibodeau, M., & Pickering, G. "Aversion to the orosensations elicited by alcoholic beverages impacts both the amount and type consumed" (Poster): 14th Pangborn Sensory Science Symposium, Vancouver, Canada (Virtual), August 9th-12th 2021.
- Pickering, G. J., Hannah M. G., & Thibodeau, M. "The Foodie Index: development and variation with personality and taste phenotype" (Poster): 14th Pangborn Sensory Science Symposium, Vancouver, Canada (Virtual), August 9th-12th 2021.

PRESENTATIONS

- Belinda Kemp, Fiona Kerslake, Hannah Charnock, Jacob Medeiros and Gary Pickering. (2021). Aging sparkling base wines in contact with yeast lees: Bottle (Pétillant naturel) vs. fermenter. 45th American Society of Enology & Viticulture (ASEV) Eastern Section (ASEV-ES) Annual Virtual Conference. July 7-8, 2021.
- Hannah M. Charnock, Graham Cairns, Gary Pickering, Belinda Kemp. (2021). Metal composition of sparkling wines produced in the Niagara Region varies with production method and style. 45th American Society of Enology & Viticulture (ASEV) Eastern Section (ASEV-ES) Annual Virtual Conference. July 7-8, 2021.
- Nadia Skorupski, Wendy McFadden-Smith, Belinda Kemp. (2021). Impact of solo and co-infections of grapevine red-blotch virus and grapevine leaf-roll associated virus-3 on fruit quality. 45th American Society of Enology & Viticulture (ASEV) Eastern Section (ASEV-ES) Annual Virtual Conference. July 7-8, 2021.
- Andrew Wilson, Hannah Charnock and Belinda Kemp. (2021). Differences in the chemical composition and "fruity" aromas of Auxerrois sparkling wines from the use of cane and beet sugar during wine production. MACROWINE 2021, Verona, Italy. 23rd -30th June 2021.
- Urbez-Torres, J.R., Poojari, S., Bowen, P., Bogdanoff, C., Lowery, T., Usher, K., McFadden-Smith, W., and Moreau, D. 2021. Grapevine leafroll disease: current status and impacts on plant health and fruit quality in Canada. Canadian Grapevine Certification Network Webinar Series. March 25, 2021 (Videoconference)