

Fall 2018

# ccovinews

A newsletter from  
the Cool Climate Oenology  
and Viticulture Institute



Cool  
Climate  
Oenology &  
Viticulture  
Institute

Brock University

## CCOVI research vineyards to tackle climate change challenges

With the help of two new research vineyards, Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) is looking to aid Canada's grape growers and wineries.

CCOVI partnered with two commercial grape growers to plant the St. Catharines and Niagara-on-the-Lake vineyards that will be used for a clone and rootstock evaluation program of the main VQA grapevine varieties in Ontario.

Jim Willwerth, CCOVI Senior Scientist, said the program takes a proactive approach that will help the industry grow and adapt to challenges expected with climate change.

"We are looking at cold hardiness, fruit composition, wine quality and general vine performance, so that the industry knows the best combinations to use for our core grape varieties," said Willwerth.

Planting and management of the research vineyards was funded through the Natural Sciences and Engineering Research Council of Canada Collaborative Research and Development grant program in partnership with Ontario Grape and Wine Research Inc.

The certified grapevines were planted in June in collaboration with Huebel Grapes Estates and the support of grape growers Bill Schenck and Erwin



Grapevines have been planted in two new CCOVI research vineyards for a clone and rootstock evaluation program.

Wiens, who are each allowing the use of two acres of their land. More vines will be planted in 2019.

"This is an example of an Industry and University research program that is ultimately looking to help the sustainability of the Ontario and Canadian grape and wine industry," said Willwerth. "I think this is proof of how CCOVI's industry partnerships really shine and how we work together to achieve a common goal."

One vineyard was planted on a heavier clay soil and the other on a sandy soil to represent different vineyard conditions found in Ontario. There are different varieties of vines in each with multiple clone and rootstock combinations.

"The research we do at CCOVI is driven by the industry, and the industry, at this time, is interested in evaluating clean plant material and looking at what combinations do the best under our conditions," Willwerth said.

Bill Schenck, one of the commercial vineyard owners, has been working with CCOVI on research projects for the past 15 years.

"The reason I like working with them on research projects is it gives me first-hand knowledge on what will work on my property," said Schenck. "I am pretty excited for opportunities to see what I can do better."

"We have seen over the years with different rootstocks that vines grow differently and so, if I look to replant or plant new vineyards, it is always better to have the knowledge available."

Schenck said he is happy to help support the industry by allowing the use of his land for the clone and rootstock evaluation program.

"I think the growers in this area are very lucky that CCOVI has taken up the challenge of trying to do what is best for the industry and I think they are covering off almost all aspects of it at this point."



## Co-op gives award-winning student winemaker a career boost



Nick Pappas holds the 2017 Heritage Riesling that won a bronze medal at the All Canadian Wine Championships

Having already produced an award-winning wine and taken the next step in his career, Oenology and Viticulture (OEVI) student Nick Pappas had plenty to celebrate when he graduated this fall.

Pappas, who completed his OEVI degree in the summer, worked this harvest at Inniskillin winery in Niagara-on-the-Lake as a harvest intern.

The role was fitting for the 22-year-old Markham native thanks to his co-op experience working production and retail at Marynissen Estates Winery last year.

"My co-op experience helped me decide that I want to be a winemaker," Pappas said.

During his time at Marynissen, he had the chance to make his own Riesling thanks to Brock alumnus Marc Pistor (BSc '06), owner of Vendimia North – a contract winemaking and consultation service for Ontario wineries.

"I got really nervous and anxious when Marc first gave me control of it," said Pappas. "In the back of my head, I went back to Wine Processing and Equipment class, where my group did an arrested fermentation Riesling that didn't turn out well. But I wanted to do it again because I knew what I did wrong, and how to fix it."

Pappas was given the juice and control of the fermentation process and said he knew he had to bring the temperature down slowly to stop the fermentation at his target sugar level.

With Pistor's approval, Pappas

decided to make an off dry-style Riesling, leaving a bit of residual sugar.

"All my classes were a great foundation for learning about everything in the vineyard and everything in the cellar, and how it all comes together to make wine," Pappas said.

The hands-on experience he gained during his co-op placement allowed him to make an award-winning wine. His Marynissen Estate Winery – 2017 Heritage Riesling won a bronze medal at the All Canadian Wine Championships in June.

"When we finished that wine, we could tell we had something of very good quality," Pistor said. "It says a lot about Nick's understanding of the process of winemaking."

They made 150 cases, and his Riesling is part of Marynissen Estates "Platinum Series" – its top-tier wines.

As a winemaker, Pistor said he enjoys working with students of the Oenology and Viticulture program inside Brock's Cool Climate Oenology and Viticulture Institute (CCOVI), and that they are well prepared to enter the workforce.

"I normally don't have to go through too many instructions with CCOVI students and know they have an idea of what they are doing," he said. "In the winery, I'm always impressed by how quickly they pick up stuff, how many of the right questions they're asking and how willing they are to ask those questions."

## Student named Rising Star at Grape and Wine

Jessica Oppenlaender, a third-year student, was the recipient of the newly established RBC Niagara Wine Rising Star Award, receiving a \$1,000 bursary at the Niagara Grape and Wine Festival to continue her education.

Presented at the festival's RBC reception, the award recognizes top individuals currently pursuing an education in the wine industry.

"I am very honoured," said Oppenlaender. "I have loved science since I was a little girl, and I grew up on a vineyard."

The Niagara native comes from a grape growing family and has excelled academically in the highly demanding program. She is a top performer in the classroom, achieving the highest marks amongst her peers in her third year.

"Jessica certainly is a rising star in the grape and wine industry," said Debbie Inglis, Director of CCOVI. "I am thrilled to see her technical expertise, her passion and her ability to lead the next generation recognized with this inaugural award."

Oppenlaender spent this past summer working in CCOVI labs and is a regular volunteer at grape and wine events.



Third-year OEVI student Jessica Oppenlaender named the inaugural recipient of the RBC Niagara Wine Rising Star Award at the Niagara Grape and Wine Festival



## Educate Your Senses seminars

Continuing the long-standing tradition, Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI) hosted its popular Educate Your Senses seminars at the Niagara Grape and Wine Festival.

CCOVI hosted six wine and cheese seminars in Montebello Park in downtown St. Catharines over the two weekends.

Several seminars were led by alumni of Brock's Oenology and Viticulture program, including Chris Holman from Jackson-Triggs Winery and Eric Pearson

from Konzelmann Est. Winery.

"It's always fun to connect wine lovers and winemakers in Montebello Park," said Chris Waters, VINES Magazine editor and CCOVI continuing education instructor. "It's not only a great opportunity to learn more about the styles of wine made in Niagara vineyards, it's the chance to hear insider information from the people directly responsible for the wine you're enjoying."

## WHAT'S HAPPENING AT CCOVI

### FIZZ CLUB: DEC. 6

Mark your calendars and register to reserve your spot for the 6th annual Fizz Club

**Theme:** How base wine chemical composition influences sparkling wine aging

**Time:** 9:45 a.m. to 4 p.m.

**Who can register?:** Fizz is for sparkling winemakers or winemakers considering a sparkling wine program

**Cost:** \$50

**Email:** [ccovi@brocku.ca](mailto:ccovi@brocku.ca) for information

### 2019 CUVÉE WEEKEND March 22 to 24

Please join us for Cuvée 2019. The Grand Tasting will take place March 23 at the Scotiabank Convention Centre in Niagara Falls.

Tickets are on sale now. Visit [cuvée.ca](http://cuvée.ca) to purchase and learn more about the event.

### CONTINUING EDUCATION COURSES

**Online WSET Level 1 in Wines:** Jan. 5 to Feb. 1

**Online WSET Level 1 in Spirits:** Jan. 5 to Feb. 1.

**Online WSET Level 2 Award in Wines and Spirits:** Jan. 26 to March 1

**Online WSET Level 2 Award in Spirits:** March 16 to April 19

**Online Certificate in Ontario Wines:** Feb. 9 to March 16

**Wine Appreciation II—Explore the Wine Regions of the World:** Jan. 16 to April 10

**Intro to Wines of Ontario:** Jan. 14 to March 18

**WSET Level 3 Award in Wine:** Jan. 15 to April 30

**Cider and Perry Production Training:** April 22 to 26

*CCOVI offers a wide range of in-class and online courses, visit: [brocku.ca/ccovi/continuing-education/](http://brocku.ca/ccovi/continuing-education/) to learn more.*

## TV show shines spotlight on CCOVI and Niagara wine

A new television show, *Cork Screwed*, featuring scientists from CCOVI is teaching people about the Niagara grape and wine industry.

"We talked to winemakers, grape growers, producers and the real scientists," said Patrick Gagliardi (BA '13), a Brock alumnus who created the show with Ralph deGroot.

The Niagara natives visit a different winery in each of the five episodes. They learn about the history and geography of those wineries, explore different grape varieties and the science behind winemaking, and learn about wine and food pairings.

"By the end of the season it was way easier for me to understand a wine menu and some of the processes involved in its creation," Gagliardi said. "I find myself constantly promoting Niagara VQA wines now that I know how unique and special this region is for growing grapes."

The hosts turned to two CCOVI senior scientists, Jim Willwerth and Belinda Kemp, for help. They appear in each episode explaining things like how grapes are harvested, the process of fermentation and the meaning of terms like terroir. The pair worked to educate the hosts, and the viewers, while keeping the

lessons fun and easy to understand.

"We needed an education partner who would break down the science behind what we were learning about in each episode. CCOVI was the real deal, hands-on, ground-to-glass Canadian authority on exploring and learning about wine," said Gagliardi.

*Cork Screwed* opens at Brock University with the hosts meeting CCOVI Director Debbie Inglis, who introduces them to the expansive wine cellar in Brock's Inniskillin Hall.

"After one meeting in the CCOVI cellar, it was evident that our mandates were aligned and that Brock University was the perfect place to start," Gagliardi said.

"We had fun partnering with Patrick and Ralph on *Cork Screwed* to help breakdown the science of growing grapes and simplify the complex process of wine-making," Inglis said. "Our scientists, and the show, did a great job presenting that information to people in an easy to understand format, while introducing them to the Niagara wine industry."

*Cork Screwed* is now available on Bell's FibeTV1 and through the FibeTV app.



*Cork Screwed*, a new show airing on Bell FibeTV1

## Publications

- Kemp, B., Pickering, G., Willwerth, J. and Inglis, D. (2018). Investigating the use of partial napping with ultra-flash profiling to identify flavour differences in replicated, experimental wines, *Journal of Wine Research*. <https://doi.org/10.1080/09571264.2018.1532879>
- Ivit, N.N. and Kemp B. (2018). The impact of non-Saccharomyces yeast on traditional method sparkling wine. *Fermentation*, 4, 3, 73.
- Kwong, L., Sun, L. (2018). On Linear Wine Score Aggregators and the Preservation of Group Preferences, *International Journal of Wine Business Research*, 30: 265-276.
- Kelly, J., Yang, F., Dowling, L., Nurgel, C., Beh, A., DiProfio, F., Pickering, G., and Inglis, D. (2018). Characterization of *Saccharomyces bayanus* CN1 for fermenting partially dehydrated grapes grown in cool climate winemaking regions. *Fermentation*, 4(77), 1-13.
- Reynolds AG, Baker LT, Zhang L, Jasinski MA, Di Profio FA, Kögel S and Pickering GJ. (2018). Impacts of natural yield variances on wine composition and sensory attributes of *Vitis vinifera* cvs. Riesling and Cabernet franc. *Can J Plant Sci* 98:851-880.

## Briefs

- Kelly, J., Pickering, G. and Inglis, D. (2018). Characterization of a local yeast isolate for appassimento winemaking in cool climate regions. Poster presented at Eurosense: A Sense of Taste. Verona, Italy.
- Poojari, S., Reynolds, A., Fuchs, M., Parent, J-P., McFadden-Smith, W., Robert, G. (2018). Grapevine Virus Research Updates. 2018 Biennial Grape Research Tailgate Tour, Vineland, ON, August 30.
- Reynolds AG, Dorin B, Lee H-S, Brown RB, Jollineau M, Shemrock A, Crombleholme M, Jobin Poirier E, Zheng W, Gasnier M, Shabanian M and Meng B. (2018). Mapping Ontario Riesling vineyards by unmanned aerial vehicles (UAVs) for variability in vegetation indices, water status, and virus titer. *Proc. 12th International Terroir Congress, Zaragoza, Spain*, pp 1-7.
- Reynolds AG, Inglis D, Kelly J, Kemp B, Pickering GJ. (2018). Cold climate wine styles. *VitiNord 2018, Malmö and Copenhagen*, July 29-August 31.



Oenology and Viticulture students press Pinot Noir grapes in the teaching winery

## Brock grad wins top international wine award for third time

A graduate of Brock's Oenology and Viticulture program has once again been recognized for his winemaking at one of the most revered and influential wine competitions in the world.

Derek Kontkanen (BSc '02, MSc '05), lead winemaker at Inniskillin Okanagan in British Columbia, won the World's Best Product Trophy for Best Dessert Wine at the International Wine & Spirits Competition (IWSC) in London, England.

"To be considered to have one of the best dessert wines in the world is quite an achievement and something to be very proud of," Kontkanen said of the honour.

The award-winning wine was his Inniskillin Vidal Icewine 2016. This is now the third time he has received this prestigious award at the IWSC, winning back-to-back years in 2010 and 2011 for his Riesling Icewines from Jackson Triggs Okanagan.

"The first time was quite a thrill," Kontkanen said. "The third time is like the cherry on top of the cake. It is a great thing to be recognized for."

Kontkanen credits his success to his research at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI). Working under the supervision of CCOVI Director Debbie Inglis, he pioneered a way to condition the yeast fermenting Icewine to positively accentuate the wine.

"We looked at how to get the yeast its healthiest, to help reduce the amount of volatile acidity that gets created during fermentation," said Kontkanen.

The technique also reduces the fermentation time, limiting some of the stresses that can take away from the quality of the Icewine.

"When I moved out west, I started using that technique and have been using it ever since," he said.

Kontkanen has always been fascinated with biology and chemistry, which he says led to his desire to learn the art of winemaking. He joined Arterra Wines (then called Vincor) almost 20 years ago for a co-op placement at Inniskillin in Niagara. In 2004, he moved out west as an assistant winemaker at Jackson Triggs Okanagan. He moved up to become head of white wine produc-



Derek Kontkanen, lead winemaker at Inniskillin Okanagan, again wins top wine award at IWSC

tion and is now the lead winemaker at Inniskillin Okanagan. This is his fourth vintage there. His assistant winemaker, Anthony Coop (BSc '14, OEVC '15), is also a graduate of the Oenology and Viticulture program at Brock.

Winning a coveted IWSC award isn't easy. Entrants are evaluated in a rigorous two-stage judging process that includes professional blind tasting and detailed technical analysis.

"I am so very proud to see Derek receive this well-deserved recognition," Inglis said. "CCOVI is committed to training highly qualified people for the grape and wine industry, and ensuring research outputs get implemented into industry practice. This being his third time winning this prestigious award speaks volumes to the value of what he pioneered for the industry."

Kontkanen describes making Icewine as a labour of love, which makes this top award for Best Dessert Wine that much sweeter.

"When you bring the fruit in, it is long days and long nights. We run 24-hour shifts to process everything," Kontkanen said. "But the result is wine that is quite unique for Canada and we have excelled at it."



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