

Spring 2016

# CCOVInews

A newsletter from  
the Cool Climate Oenology  
and Viticulture Institute



CCOVI

Brock University

## Million dollar research program invests in grape and wine industry's future

Canada's \$6.8 billion grape and wine industry faces several multifaceted challenges in order to sustain its economic impact and meet its growth potential.

To address these challenges, CCOVI researchers are leading a five year, \$1.42 million integrated research program to improve grapevine health, wine quality, market competitiveness and the sustainability of the Canadian industry.

Project lead Debbie Inglis, director of CCOVI, says many of the challenges the industry faces are due to changing climate conditions that must be addressed by working closely with industry partners.

"The outcomes of this research program will continue to open new doors for Canadian wine while also increasing Canada's reputation as a global leader in cool climate oenology and viticulture," says Inglis.

CCOVI's senior scientists Belinda Kemp and Jim Willwerth will be collaborating with Inglis on the program's various projects which include identifying the best clone and rootstock combinations for Ontario's climate and soil types, developing vineyard practices tailored to sparkling wine production, and managing tannins in Canadian red wines.

Grape growers will be able to use

the clone and rootstock results to help overcome climate change challenges and the project will also commercialize precise decision-making tools and real-time monitoring technologies for growers and winemakers.

To support this research, CCOVI received a \$600,000 grant from the Natural Sciences and Engineering Research Council (NSERC), \$345,000 in funding from Ontario Grape and Wine Research Inc. and in-kind support from industry partners totaling \$484,600.

"By leveraging funding and support from both government and industry, we are able to address timely, industry-driven research questions that will help sustain the industry's growth," says Inglis.

Industry partners contributing in-kind support to the project include Chateau des Charmes, Constellation Brands Canada, Huebel Grapes Estates, Schenck Farms and Greenhouses, Trius Winery at Hillebrand and Ziraldo Estate Wines.

This funding will be used to support five interrelated research projects based out of CCOVI:

- Clone and rootstock combinations for the Canadian climate and terroir
- Grapevine cold hardiness: biochemical and physiological responses and influence of clone, rootstock and environmental interactions

- Cold hardiness predictive systems with automation to mitigate the impact of cold weather events on grapevines
- Impact of leaf removal timing and severity on red and sparkling wine quality.

- TanninAlert: an online tannin management tool for Ontario winemakers. The impact from CCOVI's research and activities goes beyond the grape industry.

The impact from CCOVI's research and activities goes beyond the grape and wine industry. A recently released economic impact study found that in 2014-15 the institute contributed more than \$91-million and the equivalent of 307 jobs to Ontario's economy.

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## Research shows how Internet influences offline shopping

Reminding in-store consumers that information is available online makes them more likely to purchase products, a new research study from Brock University shows.

Antonia Mantonakis, an associate professor of marketing at Brock's Goodman School of Business and a CCOVI Fellow, recently co-authored a paper that will be published in an upcoming edition of the *Journal of Marketing Research* about the consumer behaviour theory behind consumers' offline purchasing decisions.

The research shows that reminders of the Internet influence offline purchasing behaviours in a somewhat unexpected way. The simple presence of a product website can affect in-store purchasing decisions even when the website is not actually visited by the consumer.

Mantonakis says this is particularly true of complicated or little-known products where there is an overwhelming amount of information to absorb. Consumers' confidence in a product is increased when they are reminded that product details are easily accessible to them.

"Imagine you go into a winery and do a tasting of a Sauvignon Blanc. The staff tell you the aromas and flavours, what it pairs with, and the price of a bottle. Simply being told by the staff that 'this information is also available online' might make you more confident about the product details, leading to purchase," she says.

In research experiments involving products such as wine and melatonin

sleep aids, Mantonakis and colleagues Rajesh Bhargava from University of Texas, San Antonio, and Katherine White from the University of British Columbia's Sauder School of Business found that by simply including reminders of website information on in-store signage and labels, managers saw an increase in sales.

In a field study at Riverview Cellars, managers saw an increase in sales whenever customers were reminded that the product, pairing and winery information was all online.

This reminder that product data is available online is referred to as a "cue-of-the-cloud" and is in line with other research that shows people use their smartphones as an extension of their own memory.

"You don't have to remember phone numbers anymore. You don't have to remember directions or product-related information. Virtually everything is stored in your phone or on Google. Previous research has shown that people think this is like a memory partner," she said.

Consumers' heavy reliance on the Internet and their ability to quickly access an array of data at any point in time works to the advantage of product managers who can use subtle reminders of this, especially when selling complicated or little-known products.

This research was recently featured in a Conversations with Goodman podcast. Listen here: <https://soundcloud.com/brock-university/conversations-with-goodman-episode-16>

## CCOVI Fellow recognized for teaching excellence

Dirk De Clercq, a CCOVI Fellow and Professor at Brock's Goodman School of Business was recently recognized for excellence in mentoring Master's students.

Awarded with Brock's 2016 Graduate Mentorship Award, his students praised him for being a keen and supportive educator.

As a mentor who sets a very high performance standard, De Clercq "always makes sure that his students receive proper guidance and support in order to meet those performance standards."

## CCOVI focuses on education at i4C

CCOVI will once again play an educational role at the International Cool Climate Chardonnay Celebration (i4C) this July.

CCOVI oenologist Belinda Kemp will take part in the School of Cool viticultural and winemaking sessions July 22.

Guests attending the Cool Chardonnay World Tour July 23 will get to participate in CCOVI's 'What kind of cool are you?' palate profiling exercise.

To purchase tickets, visit [coolchardonnay.org](http://coolchardonnay.org)

## Students supported by scholarships

Brock graduate and undergraduate students have recently been honoured for their academic achievements with scholarships to support their studies.

Jennifer Kelly, a PhD candidate in biotechnology, has been awarded the \$5,000 Dr. Joseph A. Peller Scholarship and \$5,605 Goldsmith Wyatt Mathematics Science Scholarship.

The Donald Ziraldo and Laura McCain CCOVI Director's Award of \$1,485 was given to MSc candidate Margaret Thibodeau.

MSc candidate Esther Onguta received the Dean of Graduate Studies Scholarship for \$4,000.

Fourth-year OEVI student Damian Espinase Nandorfy received the Ontario Hostelry Institute's \$3,500 Oenology and Viticulture scholarship.

# Cuvée Grand Tasting celebrates Ontario VQA wine

A sold-out crowd of more than 800 people celebrated excellence in Ontario VQA winemaking March 4 at the 2016 Cuvée Grand Tasting.

The 28th annual tasting organized by CCOVI is one of the largest celebrations of Ontario VQA wine. Hosted at the Scotiabank Convention Centre, the event featured 48 VQA wineries and 12 celebrated chefs.

“Not only does Cuvée showcase top VQA wine to consumers, the event helps the industry continue to grow by funding valuable research and scholarships,” says Cuvée manager Barb Tatarnic.

At a VIP awards ceremony prior to the Grand Tasting, two individuals were



Grape Growers of Ontario Matthias Oppenlaender, Cuvée Vineyard of Excellence winners Wes and Howard Lowrey, Julia Harnal, BASF Canada Inc.

recognized for their contributions to the grape and wine industry.

Father and son grape growers Howard and Wes Lowrey from St. David’s were honoured with the Cuvée Vineyard of Excellence Award sponsored by BASF Canada Inc. The 2016 category was best red vinifera and the Lowrey’s were recognized for their Cabernet Sauvignon vineyard. The winner is chosen by an expert panel that makes field visits throughout the growing season to monitor quality.



Viticulturist Lloyd Schmidt (left) accepts his award from Tony Aspler (right).

The Tony Aspler Cuvée Award of Excellence was presented to viticulturist Lloyd Schmidt. The award’s notation recognized Schmidt for “advancing viticulture in Ontario by

accessing the best vinifera varieties from nurseries around the world and fighting bureaucracy to do it.”

The Cuvée en Route program allowed guests to continue their wine weekend with exclusive tasting flights at 35 participating wineries across the Niagara peninsula from March 4-6.

Proceeds from the Grand Tasting contribute to the Cuvée Legacy Fund which provides scholarships and supports industry-driven research.

## BASF Canada Inc. sponsorship sends top OEVI students to Cuvée



From back left: Kailee Frasch, Breanne Gillie, Alyssa Tharby, BASF’s Julia Harnal, Esther Onguta, Elena Kotsaki, Marnie Crombleholme and Alex Gunn. Front row: Jessy Plante and Paul van der Merwe

## Study finds cultivating evangelism key to reputation building

Looking at the Ontario industry’s quest for recognition as a world-class wine region, researchers have found that cultivating evangelism among wine connoisseurs, media and restaurants plays an important role in spreading the gospel of the wineries practice and the quality of Ontario winemaking.

The paper titled “Evangelism and the amazing spread of quality reputation of Ontario winemaking” represents five years of work by CCOVI Fellow Maxim Voronov and

his Goodman School of Business colleague Wesley Helms.

“Much like going to church, the ritualized tours, wine tastings and events create social interactions that connected them to winemakers and the wine itself,” said Voronov.

Researchers emphasized that these tours and tastings must be more than marketing and aim to create an authentic relationship between wineries and their guests.

The full report is available here: [brocku.ca/webfm\\_send/41006](http://brocku.ca/webfm_send/41006)

## Vineyard of Excellence nominations open

Nominations for the 2017 Cuvée Vineyard of Excellence award will be open until June 27.

This year’s category is best white vinifera. Contact [ccovi@brocku.ca](mailto:ccovi@brocku.ca) for details.

## CCOVI Updates

- CCOVI’s annual lecture series wrapped up its season April 13th. Catch up on the latest research from our Researchers, Fellows and Professional Affiliates here: [brocku.ca/ccovi/outreach-services/ccovi-lecture-series](http://brocku.ca/ccovi/outreach-services/ccovi-lecture-series)
- CCOVI welcomed renowned viticulturist Richard Smart April 29th. Watch it here: [brocku.ca/ccovi/outreach-services/workshop-seminar-videos](http://brocku.ca/ccovi/outreach-services/workshop-seminar-videos)

## Publications

### Business

- Bhargave, R., Mantonakis, A., and K. White. "The Cue-of-the-Cloud Effect: When Reminders of Online Information Availability Increase Purchase Intentions and Choice," *Journal of Marketing Research*, in press.
- Carolyn L. Hafer, C., Mantonakis, A., Fitzgerald, R. and A. Bogaert. "The effectiveness of deservingness-based advertising messages: The role of product knowledge and belief in a just world," *Canadian Journal of Administrative Sciences*, in press.
- De Clercq, D., Thongpapanl, N., and M. Voronov. "Sustainability in the Face of Institutional Adversity: Market Turbulence, Network Embeddedness, and Innovative Orientation," *Journal of Business Ethics*, In Press.
- Welsh, D., Kaciak, E., and N. Thongpapanl. "Influence of Stages of Economic Development on Women Entrepreneurs' Start-ups," *Journal of Business Research*, Forthcoming.

### Oenology

- A., Nesbitt., B. Kemp., C. Steele., A. Lovett and S. Dorling (2016). Impacts of recent climate change and weather variability on the viability of UK viticulture-combining weather and climate records with producers' perspectives. *Australian Journal of Grape and Wine Research*.
- Pickering, G.J., Botezatu, A., Kotseridis, Y. and D. Inglis (2016). Quantifying food quality: the case of alkyl-methoxy-pyrazines in wine. *International Journal of Metrology and Quality Engineering*.
- Pickering, G.J. and R. Kvas (2016). Thermal tasting and difference thresholds for prototypical tastes in wine. *Chemosensory Perception*

### Viticulture

- Balint, G. and A.G. Reynolds. Impact of water status level on abscisic acid and its catabolites profiles in leaves and berries from two grape cultivars. I. Chardonnay. *J. Plant Growth Regulation* (in press).
- Black, J.A.K., F. Di Profio, V. le Dauphin, L.H. Moreno Luna, and A.G. Reynolds (2016). Impact of crop load and harvest date on phenolics and anthocyanins of Ontario redwine cultivars. *Canadian Journal of Plant Science*, 96 (in press).
- Fadock, M., R.B. Brown, and A.G. Reynolds (2016). Visible-near infrared reflectance spectroscopy for nondestructive analysis of red wine grapes. *American Journal of Enology and Viticulture* 67:38-46.
- Khairallah, R., A.G. Reynolds, and A.J. Bowen. 2016. The effect of harvest date on odor active compounds in aged Riesling icewines. *J. Sci. Food Agric.* 96 (in press);
- Ledderhof, D., R.B. Brown, A.G. Reynolds, and M. Jollineau (2016). Using remote sensing to understand vineyard variability: Pinot noir in Niagara, Ontario. *Can. J. Plant Sci.* 96:89-108.
- Reynolds, A.G., N. Robbins, Hyun-Suk Lee, and E. Kotsaki (2016). Impacts and interactions of abscisic acid and gibberellic acid on Sovereign Coronation and Skookum Seedless table grapes. *American Journal of Enology and Viticulture* 67 (in press).

## Briefs

### Business

- Thongpapanl, N., De Clercq, D., and M. Voronov (2016). Supporting Local Wine in the Presence of Market Turbulence and Institutional Adversity - Burgundy School of Business' Excellence in Pedagogy Research Seminar, Dijon, France, February.
- Thongpapanl, N. (2015). Communities of practice: Generating, disseminating, and applying knowledge with global colleagues - Chiang Mai University's

2015 Lecture Series. Chiang Mai, Thailand.

### Oenology

- Inglis, D. (2016). Yeast and botrytis considerations for the development of regional Appassimento wines. Ontario Fruit and Vegetable Convention, February, Niagara Falls, ON, Canada.
  - Kemp, B. (2016). Challenges involved in judging, tasting and sensory analysis of sparkling wines. Prince Edward County Winegrowers Association Conference, 5th March. Prince Edward County, ON, Canada.
  - Kemp, B. (2016). The impact of bentonite on sparkling wine autolytic characters and sensory quality. Ontario Fruit and Vegetable Convention, February, Niagara Falls, ON, Canada.
  - Pickering, G.J., Inglis, D., Nassuth, A., Reynolds, A., Shaw, T. and G. van der Merwe (2016). Climate change adaptation requires integrated, transdisciplinary research across the value chain: a case study of the Ontario Grapevine and Wine Research network. ClimWine 2016 Symposium Bordeaux, France, April.
  - Pickering, G.J., Botezatu, A., Kotseridis, Y. and D. Inglis (2016). Quantifying food quality: the case of alkyl-methoxy-pyrazines in wine. 6th International Metrology Conference, Dakar, Senegal, March.
  - Pickering, K., Plummer, R., Shaw, T. and G.J. Pickering (2016). Change adaptation in the wine industry: Concepts and measurement. ClimWine 2016 Symposium Bordeaux, France, April.
  - Stuart, J., Selim, S., Gillie, B. and S. Murdza (2016). Research Matters Pop-up Research Park. Parliament Hill, Ottawa, ON, Canada.
- ### Viticulture
- Willwerth J. (2016). New techniques for managing birds in Ontario vineyards. Ontario Fruit and Vegetable Convention, February, Niagara Falls, ON, Canada.