

New scientists help CCOVI ramp up support for Canada's grape and wine industry

The search is over. A viticulturist and an oenologist have been selected and hired at Brock's Cool Climate Oenology and Viticulture Institute (CCOVI), and will soon be on hand supporting grape growers and winemakers with applied research and outreach that follows priorities identified by the industry itself.

The two senior positions were created as a result of a funding announcement last December by Agriculture and Agri-Food Canada. This program arises from a collaboration between federal government's Developing Innovative Agri-Products (DIAP) program, the Grape Growers of Ontario and Brock's CCOVI. The initiative is a key part of CCOVI's heightened emphasis on outreach to the grape and wine community.

"I am excited to have two leading experts joining the CCOVI team," says CCOVI Director Debbie Inglis. "CCOVI now has the resources to offer enhanced support to the industry both locally and nationally to assist in further developing the international recognition of our industry."

Grapevine cold hardiness Viticulturist - James Willwerth



The new Viticulturist is Niagara native and Brock alumnus James J. Willwerth. Currently a Quality

Services Sensory Coordinator with the LCBO, Willwerth brings

a strong knowledge in vine physiology, cold hardiness, viticulture practices, soil/irrigation management and integrated pest management, to name a few.

"I am very excited about the position at CCOVI as the Senior Staff Scientist in Viticulture and to be working closely with the Canadian grape and wine industry through research and outreach activities," says Willwerth. He continues to say, "It is a dream come true to be based out of Niagara and work with researchers, grape growers, and winemakers who are as passionate about creating world-class wines as I am."

A grad of Brock's Oenology and Viticulture program, he has a thorough understanding of the grape industry and an excellent working relationship with researchers and members of the grape and wine sector.
Willwerth's research in viticulture includes more than 20 publications in refereed journals, presentations and invited addresses to over 10 conferences and seminars.

A PhD candidate in plant sciences at Brock in the lab of CCOVI Researcher Dr. Andy Reynolds, he holds a Certificate in Grape & Wine Technology from Brock University (2004) and a BSc degree in biology from St. Mary's University in Halifax (2001).

Grape and wine flavour chemistry Oenologist - Dr. George Kotseridis

Dr. George Kotseridis, CCOVI's new Oenologist, brings years of expertise in wine flavour chemistry, fermentation, aging aroma compounds and winemaking technology. For the



last seven years, he has been teaching courses in oenology, wine chemistry and wine technology at the Agricultural University of Athens at the undergraduate and graduate level. He also has worked at two analytical laboratories in France, in the process of developing the oenological laboratory at the Agricultural University of Athens, and has conducted research in collaboration with CCOVI on the multicoloured Asian ladybeetle (MALB) taint. Kotseridis' research in oenology includes over 30 publications in refereed journals, presentations and invited addresses to more than 10 conferences and seminars.

Kotseridis (Diploma in Agriculture Engineering specialization Food Science & Technology, University of Thessaloniki, Greece, 1993; Diplôme National d'Oenologue, University I, Montpellier, France, 1994; MSc in viticulture and oenology, Enology Faculty of Bordeaux II, France, 1995; Diplôme universitaire à l'aptitude à la degustation des vins, Faculty of Enology Bordeaux II, France, 1996; PhD in wine analytical chemistry, Faculty of Enology Bordeaux II, France, 1999) is also an Assistant Professor of oenology at the University of Athens in Greece.

Students for hire

Planning to hire vineyard, winery or retail staff?

Recruit our graduates and students who are skilled in winemaking, viticulture and wine business.

Students in the Oenology and Viticulture (OEVI) program at Brock University are seeking jobs for 2010.

To have a position posted for our OEVI students call: 905-688-5550 x4949 or e-mail: jennifer.roberts@brocku.ca

What's inside

Tinat o morao	
10 years of OEVI excellence	2
Grape and wine workshop	2
UK praise for ON Chardonnays	2
Research Q & A	3
Brock harvests another grad	3
CCOVI Lecture Series set a record	3
Briefs and Publications	4
Analytical services	4
Continuing education and events	4
Gail Higenell	1

award recipient

Come celebrate 10 years of OEVI excellence

Calling all Brock Oenology and Viticulture alumni, students and friends — it's time to celebrate. We're rolling out the barrels and lighting up the barbie for a great Canadian culinary feast celebrating our industry and all of YOU.

Don't miss out as "Chefs Without Hats" cook up some tasty delights. Our chefs will then trade their aprons for musical instruments to entertain us with tunes from Aretha to Zevon, oldies, goodies and songs you should all know.

When: Friday, August 20, 2010 at 6 p.m. Where: Pond Inlet, Brock University

More information on the event coming soon at

brocku.ca/ccovi. Stay tuned!

Grape and wine workshop: understanding Ontario wine consumers



It was a full house at the VRIC/CCOVI workshop

On June 10, more than 90 people attended the joint VRIC/CCOVI grape and wine workshop in Vineland.

Four years of research results were presented. The marketability of Ontario wines was analyzed while at the same time participants were engaged in deciding marketing research directions for the future.

Dr. Isabelle Lesschaeve, Research Director of Consumer Insights and Product Innovation at Vineland; Dr. Antonia Mantonakis, CCOVI Fellow and Assistant Professor at Brock University; and Amy Bowen, Postdoctoral Fellow, Consumer Insights and Product Innovation at Vineland, explored a number of topics ranging from sensory and psychological factors affecting wine purchase to the effect of packaging on consumers.

The lunch keynote speakers, Dr. Dirk De Clercq, CCOVI Fellow and Brock Associate Professor as well as Dr. Narongsak Thongpapanl, Brock Assistant Professor, discussed the challenges and opportunities facing VQA wines in the Ontario restaurant industry.

Ontario Chardonnays win praise at UK tasting

At a major event in the UK on May 17, some 22 Ontario wineries showcased their cool climate Chardonnays before the world's most notorious critics — British wine writers. And the jury came away with a new perspective on what they tasted.

"Ontario can now be taken seriously as a worldclass wine producer," said British wine writer Jancis Robinson.

Canadian wine writer
Tony Aspler, who
co-organized the event,
wrote that critics such as
Robinson, Oz Clarke,
Steven Spurrier and
Stephen Brook "all had
complimentary things to
say" about the wines
presented. "This could be
a historic tasting in
changing UK perceptions
about Ontario wines."

The event — Ontario
Chardonnay: seriously cool
— was held at Canada
House in London. It was
the brainchild of Bill
Redelmeier of Southbrook
Vineyards in Niagara-on-

the-Lake, who was joined at the tasting by more than 30 other Ontario winery owners and winemakers.

Chardonnay was chosen as it is the most widely planted white grape variety in the province. Wines showcased at the London affair represented the Niagara Peninsula, Lake Erie North Shore, Pelee Island and Prince Edward County.

The London event was aided by wine industry supporters, including Barb Tatarnic from CCOVI, who helped put 40 Ontario vintages before the discerning critics.

Many of the wineries at the event have Brock graduates as winemakers, vineyard and retail managers or have partnered with Brock in a variety of ways. Since Brock's Oenology and Viticulture program was created in 1997, graduates have made a significant impact on the province's grape and wine industry by applying their knowledge gained through CCOVI.



The Ontario wineries delegation in front of Canada House on May 17, 2010

Research Q&A

Optimizing grape quality



CCOVI Professional Affiliate Dr. Pat Bowen, a Research Scientist at Agriculture and Agri-Food Canada's Pacific Agri-Food Research Centre (AAFC-PARC), works with fellow AAFC-PARC researchers Carl Bogdanoff, Kevin Usher, Tom Lowery, Margaret Cliff and Gerry Neilsen, and with researchers Sue Abrams, Stacey Owen and Irina Zaharia at the Plant Biotechnology Institute in Saskatoon. The team is supported by the BC Wine Grape Council's DIAP (AAFC) project.

Describe your project

We characterized the levels of the plant hormone abscisic acid (ABA) and products made from ABA in Merlot grapes in a commercial vine-yard in the southern Okanagan Valley in British Columbia.

ABA is involved in grape development and ripening.

We also studied the effects of natural ABA applied to grape clusters pre-veraison to see whether and how the hormones are linked to the production of phenolics in wine grapes that affect the colour and mouthfeel of wine.

What have you learned?

We found that during the period from just prior to and through veraison, levels of ABA and its breakdown products change drastically and dynamically.

ABA applied pre-veraison to clusters increased colour pigmentation in the grapes

even though most of the ABA applied was not absorbed but broken down on the fruit surface.

How does this project help the industry?

This project has revealed the complexity of the process of grape development. We hope to find tools that researchers and grape growers can use for developing strategies to optimize grape quality which would enhance colour and mouthfeel of wine.

What is the future of the project?

We have continued to study the roles of irrigation management and plant hormones in determining fruit quality for winemaking.

We found that the current belief that water stress reduces grape size and improves wine quality does not apply well to grapevines cultured on coarse soils in the Okanagan Valley. There, commercially tolerable water stress levels have mostly transitory effects on grape size and little influence on grape tannins and colour pigments. Whereas climatic effects arising from site (terroir) or year-to-year variation can dominate over effects of irrigation and cultural practices.

In our current work, we are studying how irrigation frequency and the distribution of moisture in the soil profile affect grapevine hormones, grape tannins, grape colour pigments and the sensory quality of wines. Our long-term goal is to develop irrigation regimes that simultaneously conserve water and produce high quality fruit for winemaking.

This study won the 2010 Best Viticulture Paper award from the American Society for Enology and Viticulture (ASEV).

Brock harvests another graduate in wine science



From left to right: Dr. Annette Nassuth, External Examiner, Shiri Sauday and Dr. Debbie Inglis, MSc Supervisor

Shiri Sauday, graduate of the Biotechnology Masters program at Brock University, defended her thesis in May

Her dissertation "The role of Stl1p in glycerol accumulation in osmotically stressed Icewine yeast Saccharomyces cerevisiae K1-V1116" can be used to better understand wine yeast response to osmotic stress during Icewine fermentation.

Shiri defended her

thesis before Examining Committee members: Dr. Joffre Mercier, Chair; Dr. Annette Nassuth, External Examiner, Department of Molecular and Cellular Biology, University of Guelph; Dr. Charles Després, Committee Member and Dr. Debbie Inglis, Supervisor.

CCOVI and Brock University congratulate Shiri for her hard work and diligence in completing her MSc.

CCOVI Lecture Series set a record in 2010

The CCOVI Lecture Series saw another successful year with 13 lectures taking place between February and May. There was a record high attendance by industry people who took the opportunity to learn more about their field while connecting with colleagues.

CCOVI Fellows and Professional Affiliates examined topics ranging from grape growing and winemaking techniques to the marketing of Canadian wines and how the emerging wine-producing region of China might impact world markets.

This year the lectures were available via live webcasts, making them accessible around the world. Many across Canada, the States and as far as Portugal took advantage of the new service. To view archived videos and presentations, visit brocku.ca/ccovi/outreach-services/ccovi-lecture-series

CCOVI Briefs

OENOLOGY

 Bajec, M.R. and Pickering, G.J. 2010. The influence of temperature on the perceived intensity of orosensory stimuli: A time-intensity study. Oral paper at the Taste and Food Acceptance: Chemistry and Molecular Biology of Sweet, Bitter and Umami Tastes Workshop, Terra Murata Congress Center, Procida, Italy, April 14-17, 2010.

BUSINESS

- Cyr, D. and Shaw, T. 2010. The impact of global warming on Ontario's Icewine industry. VIII International Terroir Conference 2010, Soave, Italy.
- Cyr, D., Kushner, J. and Ogwang, T. 2010. A survivor analysis of the Canadian wine industry: 1984 to 2009. American Association of Wine Economics 2010 Annual Conference, Davis California.
- Cyr, D., Kusy, M. and Shaw, T. 2010. Explorations in the design of an optimal weather hedging contract for viticulture. American Association of Wine Economics 2010 Annual Conference. Davis California.

CCOVI Publications

OENOLOGY

- Pickering, G.J., Moyes, A., and Bajec, M.R. 2010. Thermal taster status associates with oral sensations elicited by wine. *Australian Journal of Grape and Wine Research* 16, 361-367.
- Bajec, M.R. and Pickering, G.J. 2010. Association of thermal taste and PROP responsiveness with food liking, neophobia, body mass index, and waist circumference. Food Quality and Preference 21 (6), 589-601.
- Pickering, G.J., Blake, A.J., Soleas, G.J. and Inglis, D. 2010. Remediation of wine with elevated concentrations of 3-alkyl-2-methoxyprazines using cork and synthetic closures. *Journal of Food, Agriculture & Environment*, 8(2), 97-101.

New Analytical Services

A new innovation for industry outreach will help Ontario produce more consistently high quality wines because the analysis that grape growers and wineries need can be done less expensively and right in their backyard.

Agriculture and Agri-Food Canada has partnered with Grape Growers of Ontario and Brock University to offer analytical services to the grape and wine industry at CCOVI

Under the new service, juice and wine samples can be tested for such indicators as sugar and acidity levels or alcohol content. Every sample is tested in duplicate using validated methods.

Grape analysis for the fall will also be available. To discuss your needs, contact Linda Tremblay at: 905-688-5550 x3510 or email Itremblay@brocku.ca

For a price list of available analytical services, visit brocku.ca/ccovi/outreach-services/analytical-services

Continuing education at CCOVI

OEVI 0N01 - Wine appreciation I: Exploring varietals

A special interest course focused on the tasting of wines from Canada and around the world. Learn and improve your skills and be able to distinguish among wine varietals. Mondays at 7 p.m. starting Sept. 13 (12 wks).



OEVI 0N06 - WSET Level 2: Intermediate Certificate in Wines & Spirits

For those employed in the beverage industry or anyone wishing to broaden their knowledge of wine and spirits in a structured way. Wednesdays at 6 p.m. starting Oct. 6 (9 wks).

For more information on these courses, contact: Barb Tatarnic at 905-688-5550 x4652 or ccovi@brocku.ca. For a complete list of courses or to register online go to brocku.ca/ccovi then click on Continuing Education.

Events

What: Wine seminars during the Niagara Grape and

Wine Festival

When: Two weekends - Sept. 18-19 and Sept. 25-26, 2010

Where: Roy T. Adams Bandshell, Montebello Park,

St. Catharines

Cost: 1 token if you have a glass or 2 tokens and we'll

give you the glass

VINES magazine and CCOVI present *Meet the Winemakers*. Relaxed interactive 50 minute seminars featuring a tasting of two wines. Meet winemakers, share the story behind their wines and their approach to winemaking.

What: The seventh annual Wine

Tasting Challenge

When: Monday, Nov. 29, 2010 Where: Toronto Four Seasons Hotel

Cost: Participation is FREE

Wine Tasting Challenge

Check winetastingchallenge.com for registration and further details. Registration opens in mid-September.

Gail Higenell—recipient of 2010 Distinguished MEd Graduate Student Award

Congratulations are extended to Gail Higenell, Senior Laboratory Demonstrator at CCOVI, for being awarded the 2010 Distinguished MEd Graduate Student Award.

This award is presented to the student with the highest graduating average in the Master of Education program.

"Congrats. This is amazing and it is so well deserved," said Debbie Inglis, CCOVI Director.