



Cool
Climate
Oenology &
Viticulture
Institute

Brock University

Celebrating 20 years of CCOVI Research

Queen's Landing Forum initiates the discussion in forming CCOVI in 1996



In the spring of 1996, a group of 37 leaders from across the industry and academia meet to discuss the goals and vision for the Cool Climate Oenology and Viticulture Institute

In 1996, CCOVI's partnership is officially established with GGO and WCO



October 26, 1996 marks the official start of the partnership between the Grape Growers of Ontario and the Wine Council of Ontario to initiate the Cool Climate Oenology and Viticulture Institute

Two NSERC industrial research chairs are appointed to CCOVI in 1997



Dr. Andrew Reynolds is appointed as Viticulture Chair and Dr. Hennie van Vuuren is appointed as Oenology Chair in July 1997.

First students enter the Oenology and Viticulture program at Brock University in the fall of 1997



First “Experiential Learning” work placements, later to become co-op start in 1997



Students gain hands-on work experience during their time at Brock



Students gain hands-on work experience during their time at Brock



June 1998, Brock University officially marks construction of Inniskillin Hall, home to CCOVI



CCOVI launches Continuing Education courses for professional development within the industry in 1998



CCOVI Advisory Council is established in 1998



In Dec. 1998, the CCOVI Advisory Council is established to ensure input is received from industry, government, and other academic institutions for the ongoing direction of CCOVI.

Canada Foundation for Innovation invests in CCOVI in 1999



In 1999, Canada Foundation for Innovation and Ontario Innovation Trust approve grant in support of construction of Inniskillin Hall and the purchase of research equipment for the new facility.

Opening of Inniskillin Hall in June 1999



In September 1999 the Canadian Wine Library opens its doors



First students graduate from the Oenology and Viticulture program in 2000



NSERC Strategic Grant funds Icewine research in 2001



In 2001, a NSERC strategic grant was received to study the unique composition and production of Canadian Icewines.

Icewine



CCOVI's cutting-edge Icewine research has:

- Defined the unique composition of Icewine
- Improved Icewine quality (by overcoming yeast stress response during Icewine fermentation)
- Examined how to distinguish authentic Icewine from its 'faux' counterparts

Icewine Research over the years



First International Bacchus Wine Conference in 2002

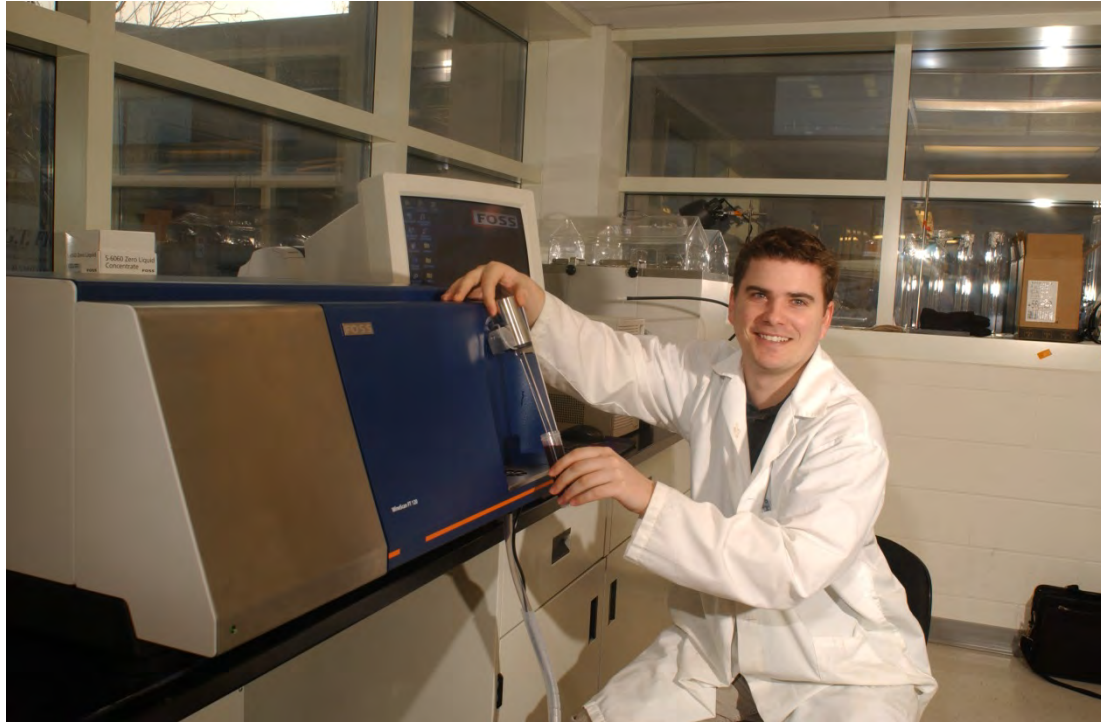


First Triggs International Premium Vinifera Lecture Series at CCOVI in 2004



Pascal Marchand
Regisseur du Domaine / Estate Manager
Domaine de la Vougeraie, France
Understanding Pinot Noir via Terroir

Investment in equipment in 2004



In 2004, Canada Foundation for Innovation and Ontario Innovation Trust supported the purchase of integrated tools for biotechnology.

NSERC invests in Multi-coloured Asian ladybeetles (MALB) research in 2005



In 2005, NSERC strategic grant funded research to study MALB behaviour in vineyards and remediation techniques.

Funding for further research on this program was received in 2009 from the newly formed Ontario Grape and Wine Research Inc.

Multi-coloured Asian ladybeetles (MALB)



When MALB were impacting juice and wine quality, CCOVI researchers:

- Identified the taint compound
- Determined a tolerance level
- Developed remediation methods
- Produced a best practices guide for the industry

Brock produces its first PhD graduate focusing on wine research in 2007



In February of 2007, Gary Pigeau graduated with his PhD in Biotechnology for his thesis entitled "Icewine Fermentation by *Saccharomyces cerevisiae*: Fundamental Stress Responses and Comparative Fermentation Dynamics"

In 2007, CCOVI created a new Fellows and Professional Affiliates Program



Researchers	Fellows	Professional Affiliates
Dr. Debbie Inglis	Dr. Pat Bowen	Dr. Linda Bramble
Dr. Gary Pickering	Dr. Ralph Brown	Dr. Karl Kaiser
Dr. Andy Reynolds	Dr. Carman Cullen	Dr. George Soleas
	Dr. Tony Shaw	Dr. Richard Smart

CCOVI evolves to expand its research mandate across the entire value chain in 2008



Funding builds Consumer behaviour laboratory in 2008



In 2008, with funding from the Canada Foundation for Innovation and the Ontario Ministry of Research and Innovation, CCOVI's consumer behaviour laboratory is opened

CCOVI delivers the first “Riesling Experience” conference to Ontario in July 2008



In March 2009, CCOVI became accredited as a program provider for WSET



Harvesting Innovation funding received in 2009



In 2009, CCOVI in partnership with the GGO, received \$1.9 million in funding from Agriculture and Agri-Food Canada's developing innovative Agri-Products program and OGWRI for the program Harvesting Innovation for Growth and Sustainability of the Canadian Grape and Wine Industry.

CCOVI launches Analytical Services as part of its outreach to the community in 2010



CCOVI signs MOU with Agriculture and Agri-Food Canada's Pacific Agri-Food Research Centre in 2010



CCOVI's Preharvest Monitoring Service launched in August 2010



CCOVI's researchers, fellows and professional affiliates reaches 36 in 2010



CCOVI Researchers

- Debbie Inglis
- Gary Pickering
- Andrew Reynolds

CCOVI Scientists

- Belinda Kemp
- Jim Willwerth

CCOVI Fellows

- Ralph Brown
- Don Cyr
- Dirk De Clercq
- Vincenzo De Luca
- Ronald Jackson
- Lester Kwong

- Antonia Mantonakis
- Annette Nassuth
- Michael Ripmeester
- Tony Shaw
- Jeffrey Stuart
- Narongsak (Tek) Thongpapanl
- George van der Merwe
- Maxim Voronov

CCOVI Professional Affiliates

- Carl Bogdanoff
- Pat Bowen
- Linda Bramble
- Margaret Cliff

- Janet Dorozynski
- Karl Kaiser
- Kevin Ker
- Tom Lowery
- Alexandra Mayeski
- Wendy McFadden-Smith
- Gerry Neilson
- Daniel O'Gorman
- Richard Smart
- George Soleas
- Daryl Somers
- Kevin Usher

Triggs Premium Vinifera Lecture Series extended to include British Columbia as well as Ontario in 2011



Innovation, Integration, Adaptation: A winning response to Climate Change in 2011



In 2011, CCOVI in partnership with academic and industry partners were awarded \$2.86 million from the Ministry of Research and Innovation's ORF RE program for the Innovation, Integration, Adaptation: A winning response to Climate Change for the Ontario Grape and Wine Industry program.

Grapevine cold hardiness



CCOVI's grapevine cold hardiness research has:

- Yielded molecular markers for stress tolerant grapes
- Evaluated vine buds for winter hardiness
- Determined hardiness levels through the dormant season
- Developed CCOVI's flagship outreach program VineAlert

Research: Understanding a changing climate



Appassimento wines have been identified as a possible signature wine style for Ontario. Researchers have yielded information on:

- Drying methods
- Yeast Strains
- Botrytis levels
- Consumers preference
- Best practices

Precision viticulture for cool climate terroirs



Viticulture research at CCOVI has included:

- Precision viticulture
- Grapevine water stress
- Terroir based trials



Consumer insights from a sensory perspective



Consumer and sensory research has included:

- Consumer tolerances
- Consumer preference
- Taste phenotypes



Ontario Sparkling Wine Research



CCOVI researchers are taking a transdisciplinary approach to sparkling wine research that will create a uniquely Ontario sparkling wine.

CCOVI joins the International Cool Climate Chardonnay Celebration (i4C) to host the Educational Day in July 2012



CCOVI signs an MOU with the Atlantic Wine Institute in May 2013



Sour Rot Research



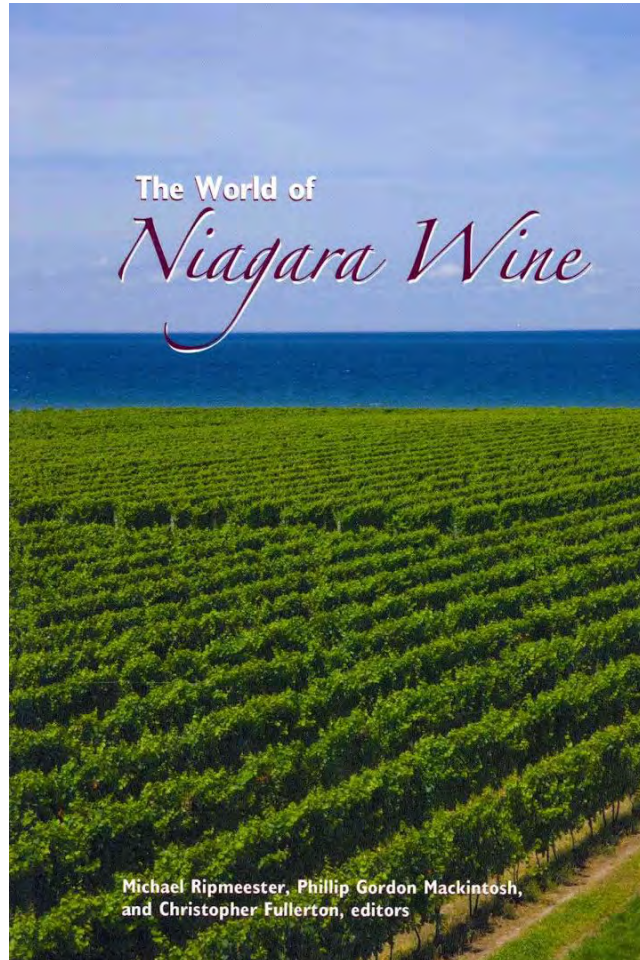
When sour rot was affecting Ontario grape crops, researchers found the causal organisms and treatment recommendations for growers to utilize.

Consumer Behaviour Research



CCOVI researchers have provided the industry with Canadian-based research on how consumers choose wine from both a sensory science and marketing perspective.

The world of Niagara Wine



With the release of the World of Niagara Wine book, the Niagara wine industry was showcased and chronicled from a business, science and cultural perspective.

CCOVI's Economic Impact assessed at \$91 million in 2014/15 to the provincial economy annually



Key highlights

- .Total annual economic impact generated by CCOVI: \$91,123,926
- .Employment impact: 307 jobs created
- .Estimated labour income: \$16,800,269
- .Crop loss avoidance: 3,362 tonnes of grapes (represents more than 6 per cent of the 2014 crop)

CCOVI takes over the organization of Cuvee in 2015



CCOVI Awards first scholarships from Cuvée 2015



The Cuvée 2015 scholarships were awarded to (left to right) Jennifer Kelly, Emilie Jobin Poirier, Damien Espinase Nandorfy and Sebastien Savard.

Funding invests in the future in 2016



In 2016, CCOVI received \$1.57 million in funding from NSERC, Ontario Centres of Excellence, OGWRI and industry partners for an integrated research program to improve grapevine health, wine quality and market competitiveness.

Canada wins bid to host the 2020 International Cool Climate Wine Symposium at Brock University

