BORDERS IN GLOBALIZATION SUMMER INSTITUTES

TRADE AND CUSTOMS BORDERS IN THE 21st CENTURY
The Borders of Trade Flows and the Role of Customs

When: July 11-15, 2022
Time: 8 a.m. to 3 p.m. pacific standard time
Where: University of Victoria
(Mixed Media – Virtual Option Available)

Description: This course will explore how the regulatory environment of trading network redesign borders functionally, how in practice also changes custom policies and practices. Professionals from the Canada Border Services Agency (CBSA), Pacific NorthWest Economic Region, and World Customs Organization (WCO), and Academics will lead workshopped discussions; In class and online presentations and discussions, readings and practicum sessions, auditors and students will discover the reality of 21st century borders: the borders of trade flows in a globalizing world.

Summer Institute Program Summary

(Because the Summer Institute is offered in mixed media – the program is made up of
(1) synchronous – interactive lecture & practicum and, (2) pre-recorded videos,
(3) required readings and additional readings.
Each synchronous lectures/practicum is taught in person (i.e.
by the Summer Institute guest lecturers)

MONDAY

8:00am-11:00am   **Emmanuel Brunet-Jailly:** *General Introduction to the Summer Institute*

12:00pm- 3:00pm   **Geoffrey Hale:** *Trade and Custom Borders in Comparative Perspective*

TUESDAY

8:00am-11:00am   **Hubert Duchesneau:** *The Evolution of the Customs' Profession and Institution in Canada*

12:00pm-3:00pm   **Doug Band (CBSA):** *Reforming Canada's Custom Duty Management Regime*

WEDNESDAY

8:00am-11:00am   **Shawn Hoag (CBSA):** *From Policy to Results*

12:00pm-3:00pm   **Solomon Wong:** *Airport Border Risk Management*

THURSDAY

8:00am-11:00am   **Thomas Cantens:** *Trade, Customs and Numbers*

12:00pm-3:00pm   **Claude Beaupre**: *Back to Basics - Introduction to Policy Research and Policy Briefs*

FRIDAY

8:00am-11:00am   **Alan Bersin:** *Machine Learning and Artificial Intelligence: Taking Risk Management to the Next Level*

12:00pm-3:00pm   **Peter Swartz:** *Artificial Intelligence and Customs*

*All times are in Pacific Standard time

Summer Institute Session Descriptions
Trade and Customs Border in the 21st Century

Day 1|Session 2 : Trade and Custom Borders in Comparative Perspective
with Geoffrey Hale

This session includes three lectures.

Canadian Borders in Comparative Perspective
This session will examine the physical and economic geography of Canadian borders, including different modes of transportation. It will explore challenges and opportunities arising from sectoral and regional diversity in goods and services exports in historical and contemporary perspectives.

Trade and Investment in Comparative Perspective: A Macro, Sectoral, and Regional Overview
This session outlines the interaction of bordering policies with the political economy of Canada's trade and investment policies in the context of international activities and market flows. It explores the "spaghetti bowl' effect of overlapping international agreements, reflecting different 'offensive' and 'defensive' priorities for trade and investment policies, and the challenges of developing situation awareness across multiple economic sectors.

Regulatory Cooperation: The Interaction of Domestic Regulations Across National Borders.
This session explores the meso - and micro-policy development of border policies as related to regulatory cooperation (and its limits) across multiple economic sectors.

Day 2 | Session 1: The Evolution of the Customs' Profession and Institution in Canada
with Hubert Duchesneau

The session will examine the major political, economic, social, technological forces, and international trends that have shaped the a) Customs' mandate, policies and institutions, b) Customs' profession and front line role, and Customs and border management practices in Canada. The practicum will explore how Customs administrations can work collaboratively with other government departments, foreign law enforcement agencies and, in partnership with the private sector.

Day 2 | Session 2: Reforming Canada's Custom Duty Management Regime
with Doug Band

This session will present and discuss the Canada Border Services Agency's efforts to modernize Canada's customs duty regime in order to improve voluntary trade compliance, secure revenue owing to government and create a level playing field for competition.

Day 3 | Session 1: From Policy to Results in a Dynamic Global Environment
with Shawn Hoag

During this session the various steps and considerations required to translate national policy into successful border management and enforcement will be introduced, along with dependencies and linkages. A case study related to the Government of Canada response to the threat of African Swine Fever will be used as a basis for discussion.

Day 3 | Session 2: Airport Border Risk Management
with Solomon Wong

This session contains three lectures.

The Fundamentals – Border Risk Management
Borders are fundamentally about managing risks for a country. The first session will introduce the concepts of primary areas of immigration, customs, agriculture, quarantine and other considerations for the movement of people and goods across borders.

Bilateral and Multilateral Borders
Countries need to cooperate together to manage internal and external borders: but what does this mean in terms of cooperation across different jurisdictions? A second section will outline the different models in place for the way governments cooperate and innovate across borders, along with trade and tourism development objectives.

Future Borders & Resilience
Preclearance and the evolution of borders is an ongoing challenge, especially in view of threats from terrorism, global pandemics and other disruptions. How will resilience and innovation be advanced over time is a concluding session about the private/public sector model.

Day 4 | Session 1: Trade, Customs and Numbers
with Thomas Cantens

This session contains two lectures.

Taming the numbers: how the mathematization of the border affects the public choice and the civil servants' practices
Based on several practical experiences in customs administrations and research conducted and published since 2010, the communication will describe the growing mathematization of borders - i.e. the set of rankings, scoring and computation practices related to borders and national and international institutions that use and disseminate them. To explore the origins of this political arithmetic applied to borders, the communication will draw a historical parallel with the "science of merchants" that emerged between 1650 and 1750, and describe mits specificities as a "flat knowledge" compared to economics. The communication will particularly examine how the current mathematization of borders impacts the way we perceive and control borders, how the states' and international organizations' legibility on borders compete. Finally, the communication will question our capacity to criticize number-based policies. More than statistics, numbers are becoming a new State religion,

and criticizing the "quantophrenia'' of the State has become common. This criticism is particularly valid when applied to public administrations and policies in general and border agencies in particular. Is this refusal of numbers possible, or even desirable? Can we escape the language of numbers to criticize quantitative analysis? How can we tame the numbers and still produce critical views on the State policies at the border and what are the consequences for policymakers, academics and civil servants?

<u>Customs administrations in the data ecosystem: when will algorithms dream of borders and what will these dreams be about?</u>

Algorithms and robots that finally learnt how to dream is a metaphor used by Denis Cardon, sociologist, in order to express our fears regarding the development of artificial intelligence. Customs administrations have been automatized for ages, since the 1970s for the most advanced countries and the 1980s for the developing countries. Each customs declaration counts around 60 data fields, and much more, up to 300, if we include the history logs of actions on the declaration that the Customs IT systems record continuously. Each year, a Customs administration treats hundreds of thousands or millions of declarations and stores a huge amount of data. Until recently, the large majority of administrations has not mobilized these data, and the most advanced ones only used data for very narrow functions such as risk analysis. The emergence of data science, the maturity of its open source tools and the political will to develop national artificial intelligence strategies impact customs and tax administrations worldwide. However, as a border agency with fiscal, economic and security missions that is different from other law enforcement agencies with only police functions, customs is in a specific situation regarding the common technical and ethical questions raised by the use of data, like the balance between privacy and surveillance or the capacity of machines to perform better than humans or the risk of building a machine that is as corrupt as human beings. The communication will locate customs administrations in the current data ecosystems at a time when some states are stimulating their public services to formulate public demands to the industry. The communication will also address technical and ethical challenges raised by the use of big data techniques in customs administrations. Finally, recent research and practical experience on the use of data in the context of fragility, when states lost their monopoly on violence and taxation in borderlands, will be shared.

Day 4 | Session 2: Back to Basics - Introduction to Policy Research and Policy Briefs
with Claude Beaupre

This session will (re-)introduce students to the basics of research and presentation in the policy world. In the first place, it will delve into the conceptual foundations of what policies are, what they entail, and will look into various research processes involved in both policy making and policy evaluating. Using various examples of existing policies as real-life case studies, it will ultimately demonstrate how enacted policies are the culmination of extensive and purposeful research project(s). The course will also focus on the research process as a whole, going over the project design process and the ethics to be considered throughout, as well as the various methods and data types available to researchers.

The final part of the session will focus on how to present policy research findings in the format of a briefing note. Allowing for various types of briefs depending on its topic and audience, it will provide students with tips on how to meet the key elements that all briefs must contain: an executive summary, an introduction, an overview of the research or problem, an examination of the findings, and a concluding section that explains the policy recommendations and implications of the research.

Day 5 | Session 1 : Machine Learning and Artificial Intelligence: Taking Risk Management to the Next Level
with Alan Bersin

The COVID pandemic — coupled with intensified great power rivalry between China and the United States, and the explosion of e-commerce and cyber intrusion — has posed challenges to the global supply chain perhaps more daunting than those confronted two decades ago in the wake of 9/11. Former U.S. Customs and Border Protection Commissioner Bersin will explore the pivotal and essential role that information technology – applying data fusion and utilizing machine learning and advanced analytics -- will play in the risk assessment and regulation of cross-border trade and travel. The Workshop will examine the use of big data and modern analytical methods to illuminate the global supply chain, counter transnational criminal activity on the Dark Web and elsewhere and expedite the movement of lawful and trusted trade and travel across the world.

Day 5 | Session 2: Artificial Intelligence and Customs
with Peter Swartz

This lecture will introduce Artificial Intelligence / Machine Learning and then demonstrate applications to border management. Applications will include trade facilitation and enforcement, with examples covering trusted trader / shipment programs, tax/tariff assessment, denied parties / sanctions management, and control of illicit goods.

The lecture will start with an introduction to machine learning, covering how a machine can learn on its own without being explicitly programmed, and then various regimes of learning, such as supervised, unsupervised, and reinforcement learning. We will then focus on assessment of machine learning systems, with the goal being that attendees can be knowledgeable consumers and users of machine learning output. Following, we will discuss approaches to preserve data sovereignty, privacy, and security while using machine learning – relevant for compliance to regulatory regimes such as GDPR. We will conclude the lecture with a series of examples of real-world applications in global trade, covering trade / supply-chain / ownership network mapping, identification of fiscal and non-fiscal risk, and optimizing tradeoffs between trade facilitation and enforcement.

The practicum will feature an example of training, assessing, and understanding a border management machine-learning model. No programming experience is necessary, we will provide you with a functioning code sample and dataset. For more advanced users, you will be able to modify this code and further explore applications of ML.

Summer Institute Speaker Bios
Trade and Customs Borders in the 21st Century

Doug Band is the Director General of the Trade and Anti-dumping Programs Directorate at the Canada Border Services Agency (CBSA), where he is leading transformation of Canada's customs duty regime to improve voluntary compliance and ensure a level playing field for Canadian businesses. Doug's trade leadership responsibilities range from setting national CBSA policy, international trade negotiations on customs matters, to overseeing national regulatory programs that facilitate trade. In addition, he is responsible for the administration of Canadian laws governing anti-dumping investigations which help to protect Canadian companies and jobs from unfair foreign competition. Mr. Band joined the CBSA in 2017. Previously, he was an Executive Director at the Treasury Board Secretariat responsible for federal regulatory policy for the Government of Canada. In that role Doug developed and led implementation of a suite of reforms to Canada's regulatory system which have reduced red tape and improved predictability for business. Mr. Band holds a Master's degree in Political Science from Carleton University. He is a highly trained and experienced mediator specializing in building consensus on complex public policy issues. He is also currently enrolled in Royal Roads University's Graduate Certificate Program in Executive Coaching.

Claude Beaupre is a Ph.D. Student in the Department of Political Science at the University of Victoria and University of Strasbourg Political Science Institutes.

Alan D. Bersin is Executive Chairman of Altana AI, a new company that has developed a shared artificial intelligence model of global supply chains to assist governments and the private sector to assess risk across borders and international trade and commerce. He serves also as Executive Chairman of New Macro Risks, a strategic advisory firm specializing in non-state risks attendant to Border Management, including transnational organized crime and terrorism, cybersecurity, contraband, cargo smuggling, irregular migration, and contagious disease.

Bersin is the Inaugural Senior Fellow in the Homeland Security Project at the Belfer Center, Harvard Kennedy School of Government; and the Inaugural North America Fellow at the Woodrow Wilson Center for International Scholars (Canada and Mexico Institutes). Bersin was appointed by President Obama as U.S. Commissioner of Customs and Border Protection (2010-2011) and served at various times as Assistant Secretary for Policy & International Affairs and Chief Diplomatic Officer for the U.S. Department of Homeland Security (2012-2017).

Emmanuel Brunet-Jailly is a professor of Public Administration at the University of Victoria, British Columbia, Canada.

Thomas Cantens currently works as head of research and policy unit at the World Customs Organization. Prior to taking his position at the WCO, he served in investigation and intelligence in French Customs and in three sub-Saharan Customs administrations, Mali, Cameroon and Niger. Thomas is an Associate Researcher at the Research Centre on International Development of the Auvergne University (CERDI, France). Having initially graduated as an engineer (POLYTECH Montpellier, France), he holds a PhD in social anthropology and ethnology (Ecole des Hautes Etudes en Sciences Sociales, France) and a certificate in geospatial analysis (Ecole Nationale des Sciences Géographiques, France). He has published articles, research papers and books on customs reforms, quantification, and fragility and taxation.

Hubert Duchesneau, Research Associate, International Research Center on the International Relations of Canada and Québec (CIRRICQ), Short-Term Customs Administrations' Expert with the International Monetary Fund (IMF) Retired Director, International Affairs, Canada Border Services Agency (CBSA), Hubert Duchesneau was, among others, stationed in Brussels with the World Customs Organization (WCO), as well as at the Mission of Canada to the European Union (EU). He is an accredited World Customs Organization (WCO) expert as Customs Modernization Advisor and Customs Diagnostic Facilitator. Hubert is also associated with the International Network of Customs Universities (INCU) and Borders in Globalization (BIG). Research Associate at CIRRICQ, his work focuses on the evolution of the border management profession and institution, border management modernization, collaborative border management and; integrity management.

Shawn Hoag (Director General, Commercial Programs) has been serving Canada in various leadership roles for over 30 years. As an army officer for 23 years, he was actively involved in operations in Germany, the Balkans and Southwest Asia/Afghanistan, led strategic planning initiatives, directed key army projects and worked to improve interoperability with Canada's allies. Transitioning to a public servant role in 2006, he contributed to countering the scourge of improvised explosive devices, supported human decision-making projects and led the way in army knowledge management. Joining the CBSA at the director level in 2006, he led the implementation of the Agency's first Information Management Strategy and also led CBSA planning and coordination during Operation Syrian Refugee. He was named Regional Director General Northern Ontario Region in May 2017 and for the next 4 ½ years led a great team of people who delivered the full range of border services in Eastern, Central and Northern Ontario, and the Eastern Arctic. With great humility, he also became a vocal advocate and ally for indigenous peoples.

Assuming his current role in Dec 2021, he now provides national level program leadership for CBSA policies, programs and services related to commercial goods entering and leaving Canada. Continuing to grow his role as an advocate for diversity and inclusion, Shawn has recently been named as the CBSA senior management champion for People with Disabilities. In 2005, he was appointed by the Governor General of Canada as an Officer of the Order of Military Merit (OMM), in 2016 was awarded the Public Service Award of Excellence for his leadership role during Operation Syrian Refugee and in 2019 received the CBSA President's Award for Integrity. Shawn holds a Bachelor of Engineering Degree (Engineering Management) from the Royal Military College of Canada, a Master of Science degree (Electronics and Guided Weapons) from Cranfield University (UK) and is a graduate of the Canadian Forces Command and Staff College.

Geoffrey Hale is a professor of Political Science at the University of Lethbridge, Alberta, Canada.

Peter Swartz is co-founder and chief science officer at Altana_AI. Peter has spoken on supply chains and machine learning with the World Trade Organization, the National Academies of Medicine, the US Court of International Trade, and the O'Reilly and Wolfram conferences. Previously, Peter was Head of Data Science at Panjiva (listed as Fast Company's most innovative data science companies in 2018 and sold to S&P Global). He holds a number of patents in machine learning and global trade. Peter completed his undergraduate and graduate education at Yale, MIT, and the Federal Polytechnic of Lausanne (EPFL), with a focus on engineering, statistical methods, and global trade. He was a National Science Foundation Graduate Research Fellow and has high-level proficiency in both French and Chinese.

Solomon Wong is the President & CEO of InterVISTAS. He specializes in working together with governments and industry to build border facilitation solutions. He has written extensively in academic journals about how biometrics, blockchain, and other technologies are balanced against the dynamic threats and range of values for personal privacy.

Solomon is an expert on regulatory and technological change and has advised federal ministers on a range of policy files. From re-engineering flows of people and goods through a journey to newer ways of navigating through a risk-managed environment, Solomon has helped to implement solutions for a range of private/public sector clients.