

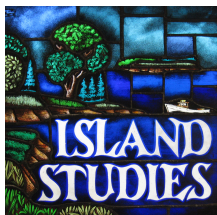


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# **Building Small Island Resilience to Global Climate Change**

An International Symposium hosted by the University of Prince  
Edward Island in Charlottetown

September 20–23, 2016

## **Program**



## Chair's Welcome

On behalf of the Planning Committee, we would like to welcome you to this symposium. Over the next few days, this meeting will situate islands at the centre of a practical discussion of climate change adaptation. For those of us who live on small islands, the signs of climate change are everywhere. But moving beyond our individual experiences, we know that the consequences of global climate change will affect an estimated 600 million islanders worldwide whose lives are intimately linked to the coastlines and the marine areas around them. It is our hope that we will provide a forum for island-centred solutions to climate change that will help those islanders. Ultimately, however, this is not just about islands and islanders. It is about every community and government with a coastline that is grappling with these issues and what they can learn from us. We look forward to this dialogue.

Dr. Adam Fenech and Dr. James Randall

## Organizing Committee

Dr. **Jim Randall, Symposium Co-chair**, UNESCO Chair in Island Studies and Sustainability; Professor of Island Studies; Co-ordinator, Master of Arts in Island Studies; Chair, Institute of Island Studies, UPEI

Dr. **Adam Fenech, Symposium Co-chair**, Director, Climate Research Lab, UPEI

Mr. **Harry Baglole**, Former Director, Institute of Island Studies

Dr. **Godfrey Baldacchino**, UNESCO Chair in Island Studies and Sustainability, University of Malta | Professor of Sociology and Incoming Pro-Rector (International Development), University of Malta

Ms. **Kathleen Brennan**, Policy & Intergovernmental Affairs Coordinator, Province of Prince Edward Island

Dr. **Laurie Brinklow**, Co-ordinator, UNESCO Chair in Island Studies and Sustainability; Co-ordinator, Institute of Island Studies, UPEI

Mr. **Gordon Cobb**, Policy Analyst, Atlantic Canada Opportunities Agency

Ms. **Juanita Diamond**, Economic Development Officer, Atlantic Canada Opportunities Agency

Mr. **Derek Ellis**, Volunteer Co-ordinator, PhD Candidate, UPEI

Mr. **Paul Giroux**, Ecology Team Leader, Parks Canada

Dr. **John McIntyre**, Associate Professor, Department of English, UPEI

Dr. **Jean Mitchell**, Associate Professor, Department of Sociology and Anthropology, UPEI

### Staff

Mr. **Mark Carr-Rollitt**, MAIS Candidate, Symposium Co-ordinator

Ms. **Claire Byrne**, Assistant to the Co-ordinator

## Keynote Speakers



### **Honourable H. Wade MacLauchlan**

Premier, President of the Executive Council

The Honourable H. Wade MacLauchlan was sworn in as Premier of Prince Edward Island on February 23, 2015.

Prior to entering provincial politics, Wade served as the University of Prince Edward Island President from 1999 to 2011. During that time, UPEI rose in stature regionally and nationally, made dramatic strides in research and development, and placed enhanced emphasis on community engagement. Previously, he was Dean of Law at the University of New Brunswick and a professor of law at Dalhousie University.

Wade was named to the Order of Canada in 2008 and to the Order of Prince Edward Island in 2014.

He has extensive community involvement, including serving as a member of the local council in the Community of North Shore; co-chairing the Georgetown Conference; serving as a board member of the Federation of P.E.I. Municipalities; and serving on the boards of several large philanthropic foundations.

Premier MacLauchlan has deep roots in Prince Edward Island. He was born in Stanhope and today resides just a few miles away in West Covehead, with his partner Duncan McIntosh.

### **Dr. Catherine Potvin**

Dr. Catherine Potvin is a professor at McGill University where she has been teaching for the last 25 years. Since receiving her PhD in Botany from Duke University in North Carolina, her research areas have been in Biodiversity and Ecosystem Functioning; Livelihoods, Empowerment and Biodiversity; REDD+: Carbon and Co-benefits; and Science to inform Climate Change Policy. In 2014 Potvin was nominated as one of 23 most influential and aspiring women leaders and a visionary for the future of Canada. Dr. Potvin has collaborated with and learned from indigenous people in Panama in an effort to preserve the country's forests. She is passionate in preserving the forests that counter greenhouse gas emissions while also tackling the countries who are the world's greatest offenders.



## Keynote Speakers



### Hon. David MacDonald

Hon. David MacDonald grew up in Charlottetown and Stanhope, Prince Edward Island. He has represented Prince Edward Islanders and Canadians in areas of social justice and human rights, the climate and ocean crisis, and reconciliation with Canada's First Peoples since the early 1960s.

He served as Member of Parliament from 1965 to 1980, serving as Secretary of State, Minister of Communications and Minister Responsible for the Status of Women from 1979 to 1980. He was Ambassador to Ethiopia and Sudan from 1986 to 1989.

In 1988 he was re-elected to the House of Commons and served as an MP until 1993, during which time he led the first House of Commons Committee on the Environment when it launched its pioneering research and recommendations for combatting runaway Climate Change. He actively participated in the prepcoms for the Earth Summit in Rio in 1992 and was Chair of the Canadian Parliamentary Delegation to that historic gathering. After his time in Parliament, his efforts on behalf of human rights both in Canada and abroad transcended his career as a parliamentarian. During this past decade, he has combined his work on confronting the tragic history of Indian Residential Schools with his heightened alarm on the fate of the world's oceans. He is the author of several books and articles on various international and domestic humanitarian issues and other public policy matters.

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# Agenda - Rodd Charlottetown Hotel

<b>Tuesday, September 20 - 6:30 to 9:00 PM</b>	
6:30-9:00 PM	Registration - Rodd Charlottetown Hotel Lobby
7:00-9:00 PM	Welcome Reception
<b>Wednesday, September 21 - 8:00 AM to 9:00 PM</b>	
8:00 AM	Registration - Rodd Charlottetown Hotel Lobby
9:00 AM	<b>Welcome Remarks</b> - MC: Dr. Adam Fenech <ul style="list-style-type: none"> <li>• <b>Star Child Eliza Knockwood</b></li> <li>• Hon. <b>Robert J. Mitchell</b>, Minister of Communities, Land and Environment</li> <li>• Symposium sponsor - <b>Insurance Bureau of Canada</b></li> <li>• Dr. <b>Robert Gilmour</b>, VP Academic and Research, UPEI</li> <li>• Dr. <b>James Randall</b>, Chair of the Executive Committee, Institute of Island Studies and UNESCO Co-Chair</li> </ul>
9:30 AM	<b>Opening Address</b> Introduction by Dr. Godfrey Baldacchino <ul style="list-style-type: none"> <li>• Hon. <b>H. Wade MacLauchlan</b>, Premier of Prince Edward Island</li> </ul>
9:50 AM	<b>Short Break</b>
10:00 AM	<b>Keynote Address I</b> Introduction by Dr. Godfrey Baldacchino <ul style="list-style-type: none"> <li>• Towards a Carbon-Neutral Canada – Acting on Climate Change: Solutions from Canadian Scholars – Dr. <b>Catherine Potvin</b>, Canada Research Chair on Climate Change Mitigation and Tropical Forests: Science for Empowerment, McGill University</li> </ul>
10:30 AM	<b>Discussion</b>
11:00 AM	<b>Questions / Facilitated Discussion</b> , led by Drs. Jim Randall, Adam Fenech & Laurie Brinklow <ul style="list-style-type: none"> <li>• What do we hope to achieve at this symposium?</li> <li>• How can you contribute to achieving these symposium goals?</li> </ul>
12:00 PM	<b>Lunch 1<sup>1/2</sup> Hours</b>

# Agenda - Rodd Charlottetown Hotel

1:30 PM	<p><b>Cultural Heritage Sessions</b> - 20-minute presentations; CHAIR: Dr. Jean Mitchell</p> <ul style="list-style-type: none"> <li>• Strategies for Preserving Cultural Heritage in Climate Change in the Pacific - Hon. <b>Ralph Regenvanu</b>, Minister of Lands and Natural Resources, Government of Vanuatu</li> <li>• Innovative Community Design for Preserving Culture on Canadian and Caribbean islands - Dr. <b>Luna Khirfan</b>, School of Planning, University of Waterloo</li> <li>• Climate Change Threats to Cultural Sites on PEI - Dr. <b>Helen Kristmanson</b>, Director, Aboriginal Affairs and Archaeology, Province of Prince Edward Island</li> </ul>
2:30 PM	<p><b>Discussion Panel</b> (Facilitated discussion led by session chair and two participants)</p>
3:00 PM	<p><b>Networking Break</b></p>
3:30 PM	<p><b>Food Security Sessions</b> - 20-minute presentations; CHAIR: Ms. Kathleen Brennan</p> <ul style="list-style-type: none"> <li>• Milan Declaration on Enhancing Food Security and Climate Adaptation in Small Island Developing States – Ms. <b>Tiina Kurvits</b>, Project Manager, Ecosystem Management, GRID-Arendal, Norway/Ottawa</li> <li>• Pacific Food Security under a Changing Climate - Dr. <b>Steven Underhill</b>, Professor of Horticulture, Faculty of Science, Health, Education and Engineering, University of the Sunshine Coast, Australia</li> <li>• Food Vulnerability in Small Island Indigenous Communities: Adaptation Recommendations for Building Resilience – Mr. <b>Charlie Sark</b>, Director, Aboriginal Tourism Association of Canada; Lennox Island, Prince Edward Island, Canada</li> </ul>
4:30 PM	<p><b>Discussion Panel</b> (Facilitated discussion led by session chair and two participants)</p>
5:00 PM	<p><b>Free time for Participants</b></p>
7-9:00 PM	<p><b>Symposium Banquet</b> featuring foods from Atlantic Canada</p>



# Agenda - Rodd Charlottetown Hotel

Thursday, September 22 - 8:00 AM to 9:00 PM	
9:00 AM	<b>Keynote Address II</b> - Introduction by Dr. Adam Fenech <ul style="list-style-type: none"> <li>Importance of the Marine Environment to Island Life: Local and Global Strategies in Building Small Island Resilience to Climate Change – Hon. <b>David MacDonald</b>, Former MP and Cabinet Minister</li> </ul>
9:30 AM	<b>Discussion</b>
9:45 AM	<b>Questions / Facilitated Discussion: The Economics of Climate Change</b> - led by Dr. Robert Greenwood
10:15 AM	<b>Renewable Energy Sessions</b> - 20-minute presentations; CHAIR: Dr. John McIntyre <ul style="list-style-type: none"> <li>Renewable Energy Potential of Small Island States – Mr. <b>Bengt-Olof Grahn</b>, Region Gotland, Sweden</li> <li>100% Green Electrical Energy for the Faroes by 2030: Lessons for Small Islands – Mr. <b>Terji Nielsen</b>, Manager, Research and Development, SEV, Tórshavn, Faroe Islands</li> <li>Experience Using Wind Power on Small Islands: Challenges and Opportunities – Mr. <b>Scott Harper</b>, Director, Wind Energy Institute of Canada, North Cape, PEI, Canada</li> </ul>
11:15 AM	<b>Discussion Panel</b> (Facilitated discussion led by session chair and two participants)
11:45 AM	<b>Lunch — 1<sup>1/2</sup> Hours</b>
1:15 PM	<b>Innovation Sessions</b> - 20-minute presentations; CHAIR: Mr. Gordon Cobb <ul style="list-style-type: none"> <li>Innovation and Governance in Climate Change Solutions for small islands – Dr. <b>Stefano Moncada</b>, Lecturer, Institute for European Studies, University of Malta</li> <li>Technology and innovation for the development of small islands: An update in an age of climate change - Dr. <b>Robert Greenwood</b>, Director, Leslie Harris Centre of Regional Policy and Development, St. John's, Newfoundland and Labrador, Canada</li> <li>Small Island Innovations and New Technologies for Addressing Threats from Coastal Erosion and Sea Level Rise - Dr. <b>Adam Fenech</b>, Director, Climate Research Lab, University of Prince Edward Island, Canada</li> </ul>

## Agenda - Rodd Charlottetown Hotel

2:15 PM	<b>Discussion Panel</b> (Facilitated discussion led by session chair and two participants)
3:00 PM	<b>Networking Break</b>
3:30 PM	<b>Communicating the Symposium Results</b> CHAIR: Dr. Laurie Brinklow <ul style="list-style-type: none"> <li>• <b>Walking the Talk with Video: Communicating the Climate Change Message</b> - Mr. <b>Bryan Ogden</b>, Wastewater Science, Malta</li> <li>• Participants will work collectively on a communiqué to be presented at the Public Symposium Facilitated by Symposium Co-chairs, Drs. <b>Adam Fenech</b> and <b>Jim Randall</b>, and Public Symposium host, Dr. <b>Godfrey Baldacchino</b></li> <li>• Closing Remarks and Thanks — Dr. <b>Jim Randall</b></li> </ul>
4:15 to 7:00 PM	<b>Free time for participants</b>
7:00 AM to 9:00 PM	<b>Public Symposium at Florence Simmons Performance Hall, Holland College</b> MC: Dr. Laurie Brinklow <ul style="list-style-type: none"> <li>• Building Small Island Resilience to Global Climate Change Dr. <b>Godfrey Baldacchino</b>, University of Malta and UPEI, UNESCO Co-Chair on Island Studies and Sustainability</li> <li>• Release and Comments on the Symposium Statement Drs. <b>Jim Randall</b> and <b>Adam Fenech</b>, Symposium Co-Chairs</li> </ul>
<b>Friday, September 23 - 9:00 AM to 4:00 PM</b>	
9:00 AM to 4:00 PM	<b>Post-Symposium Study Tour</b> Study Tour – Island Resilience and Climate Change: A Visit to PEI National Park adjunct at Greenwich; lunch at Trailside Café in Mount Stewart; and finishing with tour of UPEI, including the Climate Research Lab at UPEI.



## Speaker Bios

### **Hon. Ralph Regenvanu**

Hon. Ralph Regenvanu has degrees in anthropology and law, is an artist, and has been a Member of Parliament in Vanuatu since 2008, currently serving as Minister of Land and Natural Resources. Prior to his entry into politics, Ralph was the Director of the National Museum of Vanuatu and of the Vanuatu National Cultural Council. He was a founding Board Member of the Pacific Islands Museums Association (PIMA) and the regional cultural sites preservation organization, ICOMOS Pacifica. He has served on the International Advisory Committee for UNESCO's Memory of the World program and was a member of the Advisory Committee of Experts assisting preparation of the 2009 UNESCO World Report on Cultural Diversity.

### **Dr. Luna Khirfan**

Dr. Luna Khirfan is a professor at the University of Waterloo. Her research draws on landscape ecology, urban morphology, and urban design theories, with a focus on community climate change adaptation; community engagement and urban governance, and historic preservation and cultural resource management. Her current research project investigates the links between urban stream daylighting or "deculverting" and climate change adaptation and mitigation. Dr. Khirfan received her PhD in Urban & Regional Planning from the University of Michigan after receiving an MA in Heritage Management and an MA in Archeology from the University of Birmingham and the University of Jordan, respectively.

### **Dr. Helen Kristmanson**

Dr. Helen Kristmanson is the director of Aboriginal Affairs and Archaeology with the government of Prince Edward Island. Kristmanson's career in Maritime Provinces archaeology spans more than two decades. After completing a Master of Arts degree in archaeology at the Memorial University of Newfoundland, Kristmanson earned a PhD from the University of Manchester (UK). Her doctoral research examined the utility of archaeological knowledge to Aboriginal rights litigation. She began her doctoral studies while working as consultant for the Conne River Mi'kmaq Band in Newfoundland and subsequently served as ethno-archaeologist at Parks Canada Agency. In 2009, Helen became Prince Edward Island's first provincial archaeologist where she has maintained an active research agenda and publication record. In 2014, Helen curated the award-winning exhibit "Digging into the Past: An Archaeological Discovery at Malpeque Bay."

## Speaker Bios

### **Ms. Tiina Kurvits**

Ms. Tiina Kurvits is a project manager in ecosystem management at GRID-Arendal. GRID-Arendal is a Norwegian non-profit centre collaborating with the United Nations Environment Programme (UNEP), supporting informed decision-making and awareness-raising through environmental information management and assessment capacity building services, outreach and communication tools methodologies and products. Their mission is to create environmental knowledge while enabling positive change. Her focus within GRID includes polar issues, climate change, food security and ecosystem-based adaptation. She has a particular interest in how traditional/local knowledge can be better integrated with external knowledge to address today's environmental challenges. Her current projects include the Global Environment Facility (GEF) Blue Forests Project which promotes better coastal ecosystem management and the GEF IW: LEARN (International Waters: Learning Exchange and Resource Network), as well as Many Strong Voices, a program addressing climate change and adaptation in the Arctic and SIDS.

### **Dr. Steven Underhill**

Dr. Steven Underhill is a professor of Horticulture at the University of the Sunshine Coast in Australia. Underhill specializes in subtropical post-harvest horticulture systems in developing countries based on poverty alleviation and development outcomes. Currently his research has focused on the island of the South Pacific working with local farmers to improve post-harvest handling. Underhill also holds a Principal Research Fellow at The University of Queensland's Queensland Alliance for Agriculture and Food Innovation. He is currently chief investigator on a series of major Pacific horticulture research projects. Dr. Underhill has extensive international experience in post-harvest horticulture research, with ongoing research in Samoa, Tonga, Vanuatu, and Fiji.

### **Mr. Charlie Sark**

Mr. Charlie Sark is a member of the Lennox Island First Nation. He is a graduate of the University School of Rural Planning and Development (University of Guelph, 1996) with a Master of Science in rural planning. Prior to attending the University of Guelph, he obtained a Bachelor of Arts from Mount Allison University. Recently, he has worked with Lennox Island to develop a local eco- and cultural tourism industry. His efforts supported the drafting of a 10-year ecotourism plan for the community. The plan has been used to attract considerable investments to support the local tourism industry.

### **Mr. Bengt-Olof Grahn**

Mr. Bengt-Olof Grahn is an international project co-ordinator in the technical department of Region Gotland. Grahn has worked with many local sustainability projects as an Eco-strategist. He has worked with the Isle Pact and the Smilegov projects with European Islands, projects to research how to reduce carbon dioxide emissions more than 20% by 2020, specifically in the European islands. This project also included environmental and socioeconomic methods analyses of the development of renewable energy in the Islands. The projects ran from 2010 to 2015 and were financed partly by The EU Commission and the Directorate-General Energy and Transport programme, as well as Intelligent Europe.

### **Mr. Terji Nielsen**

Mr. Terji Nielsen is the R&D manager at SEV, the main energy supplier to the Faroe Islands. SEV is owned by the municipalities of the Faroe Islands with the goal of focusing on a greener future. Faroe Islands have set the ambitious goal for 100% green electrical energy by 2030. This electrical company, with its ongoing innovation and development, have already carried the Faroes forward on the green path, and for this ambitious goal, SEV received a Nordic Council Nature and Environment Prize in 2015.

### **Mr. Scott Harper**

Scott Harper has served as the CEO of the Wind Energy Institute of Canada (WEICan) since 2007. Prior to working with WEICan, Mr. Harper received a Bachelor of Business Administration Degree from the University of Prince Edward Island and currently sits on the Board of Governors and Chairs the Human Resources Committee. Prior to joining WEICan he worked for the Government of Canada with the Atlantic Canada Opportunities Agency (ACOA). Mr. Harper has worked in the renewable energy sector for the past 15 years and was instrumental in the planning and establishment of WEICan.

## Speaker Bios

### **Dr. Stefano Moncada**

Stefano Moncada holds a PhD in Economics from the University of Malta, where he lectures and conducts research in the areas of development and climate change, island studies, sustainable development, and impact evaluation techniques. Stefano's recent research activities include health and economic assessments, in the face of climate change, of urban communities in Africa and Small Island Developing States (SIDS). Prior to joining academia, Stefano worked in the Italian Parliament as policy analyst. Stefano is member of the board of the Islands and Small States Institute of the University of Malta, and part of the Executive Committee of the European Association of Development and Training Institutes (EADI).

### **Dr. Robert Greenwood**

Dr. Rob Greenwood is Executive Director, Public Engagement for Memorial University and of The Leslie Harris Centre of Regional Policy and Development. He is lead on the Public Engagement Framework for the University, which coordinates and supports the University's collaboration with partners and stakeholders. Rob has operated his own consulting business and has served as a Director and Assistant Deputy Minister of Policy in Economic Development departments in Newfoundland and Labrador and in Saskatchewan. He was Vice President, Corporate Development, Information Services Corporation of Saskatchewan, and was founding Director of the Sustainable Communities Initiative, a partnership of the University of Regina, the City of Regina, and the National Research Council of Canada. He has taught, consulted, published and presented extensively on community economic and regional development, strategic economic planning, sectoral and cluster development, knowledge mobilization and public engagement.

### **Dr. Adam Fenech**

Dr. Adam Fenech has worked in the area of climate change for almost 30 years starting with the IPCC First Assessment Report. He has edited eight books on climate change, and teaches regularly at universities across Canada and around the world. Dr. Fenech has worked for Harvard University researching the history of the science/policy interfaces of climate change. He has represented Canada at international climate negotiating sessions; written climate policy speeches for Canadian Environment Ministers; and authored Canadian reports on climate change to the United Nations. Dr. Fenech is presently the director of the Climate Lab at the University of Prince Edward Island and Associate Professor in the Environmental Studies program.

## Speaker Bios

### **Mr. Bryan Ogden**

Mr. Bryan Ogden is a founder of the Wastewater Science Prototype team that is working towards developing a compact wastewater treatment unit intended for use in treating waste in animal agriculture – which is the number one environmental pressure in the world. The scheme for this was the winner of the 2015 Maltese Business Idea Competition, Climate KIK.

### **Dr. Godfrey Baldacchino**

Dr. Godfrey Baldacchino is Pro Rector (International Development) and Professor of Sociology at the University of Malta, Malta; Island Studies Teaching Fellow and UNESCO Chair in Island Studies and Sustainability at the University of Prince Edward Island; and Visiting Professor of Island Tourism at the Università di Corsica Pasquale Paoli, France. He is the founding Executive Editor of Island Studies Journal and is sole author or lead co-author of 22 books and monographs, including several published by Island Studies Press; sole editor or lead co-editor of 20 other publications; and guest single or lead editor of various scholarly journal thematic issues. He is a member of the International Advisory/Editorial Boards of various journals, including The Round Table: Commonwealth Journal of International Affairs and Asia Pacific Viewpoint; President of the International Small Islands Studies Association (ISISA); Council Member of the Islands Commission of the International Geographical Union (IGU); Director for Global Islands Network (GIN); series co-editor with Rowman & Littlefield International (USA); and moderator of the island studies research website:[www.islandstudies.ca](http://www.islandstudies.ca).

### **Dr. Jim Randall**

Dr. Jim Randall is UNESCO Co-Chair in Island Studies and Sustainability, Professor of Island Studies at UPEI, and is Co-ordinator of the Master of Arts in Island Studies (MAIS) program and the undergraduate Island Studies minor. His background training is as an economic and social geographer. He has been the Principal Investigator, Co-investigator, or Collaborator on peer-reviewed grant and contract applications totalling almost \$5 million (CAD) and has written more than 35 peer-reviewed articles and book chapters in the area of quality-of-life indicators, economic and urban geography, and community-university research collaboration. Since joining the Island Studies program at UPEI, he has written on quality-of-life issues in small island jurisdictions, the state of rural PEI and biotechnology-based entrepreneurship on Prince Edward Island.

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