

2020 VIRTUAL FORUMS

WILDFIRES AND URBAN SMOKE KNOW NO BORDERS

OCTOBER 27, 2020

10:00AM – 11:30AM

In 2018, the Cascadia Innovation Corridor sub-committee on Higher Education and Research established a cross-border working group on Wildfires and Urban Smoke with seven research universities in British Columbia, Washington, and Oregon. Now with the intensity of 2020's wildfires and urban smoke smashing all records throughout the West Coast, the existence of this Working Group becomes a more significant regional asset.

On **October 27th**, join with forestry management researchers, government officials, conservationists and academics from all along the West Coast of Canada and the U.S.A. for this timely discussion on wildfires and urban smoke. The conversation will canvas topics including the risk of wildfire in urbanized wet forests, how universities can help guide the translation of forest management science into climate-smart public policy, and how to minimize future carbon emissions, wildfire damage and smoke impacts on health while also supporting a growing bioeconomy. [REGISTER HERE.](#)

AGENDA

10:00am	Welcome	Governor Christine Gregoire , CEO, Challenge Seattle
10:05 am	Introduction: Wildfires and Urban Smoke Know No Borders	Gail Murphy , Vice President, Research & Innovation, University of British Columbia
10:10 am	Overview: Wildfires and Urban Smoke Know No Borders	Jonathan Fink , Professor, Geology, Portland State University & Visiting Professor, Urban Analytics, University of British Columbia
10:20 am	Wildfire & Urban Smoke Flash Talks: Part One: Balancing complex wildfire risks, forest management, and human health	<i>The balancing act of restoring Cascadia's forests</i> Ryan Haugo , Director, Conservation Science, The Nature Conservancy <i>Translating the Sciences of Wildfires to Society</i> Chris Bone , Associate Professor, Geography, University of Victoria <i>Wildfire's contributions to carbon emissions</i> Werner Kurz , Senior Research Scientist, Canadian Forest Service, Natural Resources Canada <i>The health effects of wildfire smoke</i> Michael Brauer , Professor, School of Population and Public Health, University of British Columbia
10:45 am	Wildfire & Urban Smoke Flash Talks: Part Two: Preparing for and mitigating the impacts of wildfire	<i>The risk of wildfires in the wet forests west of the Cascades</i> Brian Harvey , Asst. Professor, School of Environmental & Forest Sciences, University of Washington <i>How the BC Wildfire Service assists public & government</i>

Natasha Broznitsky, Research & Innovation Officer,
B.C. Wildfire Service

Municipal water contamination by wildfires

Erica Fischer, Assistant Professor, Civil &
Construction Engineering, Oregon State University

WIFIRE: The future of wildfire monitoring

Jessica Block, Research Analyst, Calit2, University of
California, San Diego

11:05 am **Discussion and Audience Q&A**

*Please use the Microsoft Teams chat
function to pose your questions*

Jonathan Fink, Professor, Geology, Portland State University
& Visiting Professor, Urban Analytics, University of British
Columbia (Moderator)

11:20 am **Closing Remarks**

Greg D'Avignon, President and CEO, Business Council of
British Columbia

SPEAKERS



Jessica Block, Research Analyst, Calit2, University of California, San Diego

Jessica Block is a Research Analyst with Calit2 at UCSD. She is an interdisciplinary geologist and urban ecologist specializing in the use of sensor networks, remote sensing, and geospatial visualization tools for disaster response, natural resource management, policy decision-making, and sustainability. She is an expert in the management and fusion of datasets from disparate sources and uses visualization technology as the bridge between University research and the needs of community members. She has a BS in geology from UCLA, and a MS in geology and urban ecology from Arizona State University. Her research in environmental sustainability has covered regions in the American West, Southeast Australia, Peru, and Mexico where growing populations depend on increasingly unstable resources in the face of climate change.

www.calit2.net



Chris Bone, Associate Professor, Geography, University of Victoria

Chris Bone is an Associate Professor in Geography at the University of Victoria in British Columbia. His research focuses on how climate change and land use policies collectively drive forest disturbances such as wildfire and insect outbreaks, and how such disturbances elicit a range of responses from governments and communities. His work uses a complex systems science framework that involves trying to understand how natural and social systems interact to produce unpredictable outcomes of landscape change. He employs computer simulation modelling and spatial analytics for predicting the potential of forest disturbances

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under various climate change scenarios, and for evaluating how different policies and management strategies can potentially alter the risk of how disturbances unfold over time. He has worked with federal, state, and local level government agencies as well as a range of researchers and practitioners to develop new knowledge on thinking about sustainable forests in the face of climate change.

www.uvic.ca



Michael Brauer, Professor, School of Population and Public Health, University of British Columbia

Michael Brauer is a Professor in the School of Population and Public Health at The University of British Columbia and an Affiliate Professor and Principal Research Scientist at the Institute for Health Metrics and Evaluation at the University of Washington, where he leads the Environmental Risk Factors team for the Global Burden of Disease. His research focuses on linkages between the built environment and human health, with specific interest in transportation-related and biomass air pollution, the global health impacts of air pollution and the relationships between multiple exposures mediated by urban form and population health. He has participated in monitoring and epidemiological studies throughout the world and served on numerous committees, including those advising the World Health Organization, the Climate and Clean Air Coalition, the World Heart Federation, the US National Academies, the Royal Society of Canada, the International Joint Commission and governments in North America and Asia. His contributions to environmental health have been acknowledged by a number of career achievements and publication awards.

www.spph.ubc.ca



Natasha Broznitsky, Research & Innovation Officer, B.C. Wildfire Service

Natasha Broznitsky is the Research and Innovation Officer of the B.C. Wildfire Service. She started with the BCWS in 2016 on an Initial Attack crew and uses her combination of education and operational experience to facilitate research that the BCWS is involved in. She lives in Powell River.

www2.gov.bc.ca/gov/content/safety/wildfire-status

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Jonathan Fink, Professor, Geology, Portland State University and Visiting Professor, Urban Analytics, University of British Columbia

Jonathan Fink is Professor of Geology at Portland State University and Visiting Professor of Urban Analytics at University of British Columbia. He is the Director of the Digital City Testbed Center, a PSU-based program that uses a network of campuses in Portland, Seattle, and Vancouver (including UBC's) to evaluate smart city innovations. At UBC, he helps run collaborative programs intended to strengthen the Cascadia Innovation Corridor, including the Wildfire and Urban Smoke Working Group.

www.pdx.edu



Erica Fischer, Assistant Professor, Civil & Construction Engineering, Oregon State University

Erica Fischer, PhD, PE is an Assistant Professor of Civil and Construction Engineering at Oregon State University. Dr. Fischer's research interests revolve around innovative approaches to improve the resilience and robustness of structural systems affected by natural and man-made hazards. She has participated in post-earthquake reconnaissance team missions in diverse regions including Haiti, Napa, California, Italy, and Mexico City; and post-wildfire reconnaissance in Paradise, CA. Dr. Fischer performs research on a variety of different structural systems including steel, timber (CLT), composites (concrete-CLT and steel-concrete), and thin shells subjected to hazards such as earthquakes and fires. Dr. Fischer has experience as a practicing structural engineer and holds a Professional Engineering license in the states of Washington, California, and Oregon.

cce.oregonstate.edu



Brian J. Harvey, Assistant Professor, School of Environmental & Forest Sciences, University of Washington

Brian J. Harvey is an Assistant Professor at the University of Washington in the School of Environmental and Forest Sciences. His research focuses on the drivers and effects of fire and other disturbances in forests, often with a focus on how multiple disturbances (e.g., fire and insect outbreaks) interact and how a warming climate is changing disturbance regimes and forest resilience. In several currently funded projects, he is working with collaborators, partners, and graduate students to understand the drivers and patterns of forest fires west of the cascade crest in Northern Oregon and Washington, and how fire affects forest succession through a network of post-fire monitoring plots.

sefs.uw.edu

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Ryan Haugo, Director, Conservation Science, The Nature Conservancy

Ryan Haugo is the Director of Conservation Science for The Nature Conservancy in Oregon. He joined the Conservancy in 2011 and served as the Senior Forest Ecologist for the Washington and Idaho chapters before joining the Oregon chapter in 2017. Ryan is also an affiliate Assistant Professor at the University of Washington's School of Environmental and Forest Science. In his current role, Ryan leads the chapter's efforts across Oregon to develop and communicate a rigorous and responsive conservation evidence base to drive conservation actions.

www.nature.org



Werner Kurz, Senior Research Scientist, Canadian Forest Service, Natural Resources Canada

Werner Kurz is a Senior Research Scientist at the Canadian Forest Service (Natural Resources Canada) in Victoria, B.C. He leads the development of Canada's National Forest Carbon Monitoring, Accounting and Reporting System. His research focuses on carbon dynamics in the forest sector and on opportunities for climate change mitigation. He leads the Wildfire and Carbon Project of the Pacific Institute for Climate Solutions (PICS). Dr. Kurz co-authored eight reports of the Intergovernmental Panel on Climate Change (IPCC) and published over 150 peer-reviewed scientific papers. He serves as Adjunct Professor at the University of British Columbia and at Simon Fraser University and is an International Fellow of the Royal Swedish Academy of Agriculture and Forestry.

www.nrcan.gc.ca



Gail Murphy, Vice President, Research & Innovation, University of British Columbia and Co-chair, Cascadia Innovation Corridor Sub-committee on Higher Education and Research

Dr. Gail Murphy assumed the role of Vice-President, Research & Innovation on August 14, 2017. Dr. Murphy is a professor in UBC's Department of Computer Science and was formerly Associate Dean (Research and Graduate Studies) in the Faculty of Science. After completing her B.Sc. at the University of Alberta in 1987, she worked for five years as a software engineer in the Lower Mainland. She later pursued graduate studies in computer science at the University of Washington, earning first an M.Sc. (1994) and then a Ph.D (1996).

Dr. Murphy joined UBC in 1996 and was a key driver of the new Master of Data Science, a professional graduate program launching this fall — and has been instrumental in championing the creation of a Data Science Institute at the university. Dr. Murphy's research focuses on

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improving the productivity of software developers and knowledge workers by providing the necessary tools to identify, manage and coordinate the information that matters most for their work. She is a Fellow of the Royal Society of Canada and a Fellow of the Association for Computing Machinery (ACM), as well as co-founder, board member and former Chief Scientist at Tasktop Technologies Incorporated.

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Governor Christine Gregoire, CEO, Challenge Seattle, Former Governor, Washington State, Co-Chair, Cascadia Innovation Corridor

Christine Gregoire is the CEO for Challenge Seattle. Challenge Seattle is an alliance of CEOs from 17 of the region's largest private-sector employers who work together to ensure the Greater Seattle area continues to thrive as one of the most vibrant, innovative, and globally competitive regions in the world.

Previously, Chris served for two terms as Governor of the State of Washington with a \$32B biennial budget and over 60,000 employees. She led historical investment in strategically significant infrastructure, an historic number of trade missions, reformed the foster care system to protect children, and was among the first to lead in health care reform. Prior to becoming Governor, Chris served for three terms as Washington State's Attorney General.

Chris is a Member and former chair of the Fred Hutch Cancer Research Center, Member of the National Bipartisan Governor's Council. She served as Chair of the National Export-Import Bank Advisory Board 2013 – 2016.

www.challengeseattle.com



Greg D'Avignon, President and CEO, Business Council of British Columbia, Co-Chair, Cascadia Innovation Corridor

Greg D'Avignon is the President and CEO of the Business Council of B.C., a 260-member driven policy and advocacy organization comprised of the province's leading businesses in every sector of the provincial economy and B.C.'s post-secondary institutions. A fourth generation British Columbian, Greg has held senior private and public sectors leadership positions over the last 25 years, including serving the Prime Minister of Canada.

Greg is the immediate past-Chair of the B.C. Cancer Foundation and former Chair of the Canadian Breast Cancer Foundation. He is a current member of the Board of the YMCA of Greater Vancouver, the Premier's Indigenous Business Investment Council, the B.C. Academic Health Science Network, and the Pacific Autism Family Centre Foundation.

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