

## **One Health Summer Institute 2023**

### ***What is One Health?***

The overlapping crises of climate change, emerging infectious diseases, the extinction crises, growing environmental injustices, and so on will hamper our future health and prosperity. These pressing challenges cannot be addressed without collaborations and partnerships. A One Health (OH) approach considers all the components of a system, their relationships and their dependencies. This approach emphasizes that the social, economic, and ecological contexts of complex problems such as climate change must be understood in order to find sustainable and acceptable solutions.

### ***Description***

One Health at UCalgary's Summer Institute 2023 is an in-person, one week program focusing on a One Health approach to climate change in montane ecosystems. Using class and field-based learning, you will learn about the impacts of climate change on the health of interconnected and interdependent ecosystems. You will learn that scientific inquiry from different disciplinary perspectives and engaging people on all sides of the challenge, can lead to more constructive, sustainable, and socially just solutions.

### ***Learning Outcomes***

- Gain a scientific understanding of climate change and its implications for people, animals, plants, and the environment
- Practice seeing the ecological relationships between human, animal, and environmental health
- Identify appropriate indicators to measure and / or describe the health of an ecosystem or species
- Think critically about mitigation and adaptation responses to climate change
- Discover the value of Indigenous ways of knowing and its parallels with the One Health approach
- Practice working collectively and discover the value that diverse perspectives bring to the problem

<b>One Health Summer Institute 2023 Schedule</b> (Schedule is subject to change)			
<b>Day/ Date</b>	<b>Morning</b>	<b>Afternoon</b>	<b>Evening</b>
1 / June 10	<ul style="list-style-type: none"> <li>• Arrive at Barrier Lake Research Stn</li> <li>• Settle in</li> <li>• Meet and greet</li> </ul>	<b>Stoney Nakoda Elders, Ollie and Virgil</b> Indigenous worldviews, all our relatives Blessing and smudge opening	<b>Michele Anholt</b> <b>Herman Barkema</b> <b>Kelly Munkittrick</b> <b>Fred Wrona</b> Introduction to One Health
2/ June 11	<b>Paul Galpern</b> Introduction to scientific basics of climate change How are mountain regions affected by climate and environmental change?  <b>Louise Arnal</b> Virtual Water Gallery	<b>Martyn Clark/ Al Pietroniro</b> Climate change impacts Hydrometrics <b>Bob Sandford</b> Glacial loss <b>Tim Patterson</b> <ul style="list-style-type: none"> <li>• Climate change impacts on hydrology, policy, adaptive management</li> <li>• Indigenous perspectives</li> </ul> <b>Jim Elzinga</b> <ul style="list-style-type: none"> <li>• Perspective from Guardians of the Ice</li> </ul>	<b>Michele Anholt</b> Introduce case study and assignment
3/ June 12	Athabasca Ice Fields Field Trip <b>Bob Sandford</b> <b>Tim Patterson</b> <b>Martyn Clark</b> <b>Al Pietroniro</b>	Athabasca Ice Fields Saskatchewan Crossing	
4/ June 13	<b>Corrinne Schuster-Wallace</b> Water and environmental justice <a href="#">Deborah McGregor video</a> <b>Sharon Mascher</b> Water and environmental law and governance and climate justice <b>Stoney Nakoda member (?)</b>	<b>Cherie Westbrook</b> Field trip - The ecohydrological functioning of landscapes dominated by beavers	<b>Fred Wrona</b> <b>Kelly Munkittrick</b> Intro to water ecosystems Water quality and ecological impacts
5/ June 14	<b>Fred Wrona</b> <b>Kelly Munkittrick</b> Field trip - Water ecosystems	<b>Fred Wrona</b> <b>Kelly Munkittrick</b> Field trip – Lusk Creek Meeting with Kananaskis Golf course manager	
6/ June 15	<b>Paul Galpern</b> Climate change and biodiversity <b>Professor Emeritus Ed Johnson</b> Forest response to climate change Paul's Grad Students: <b>Rowan Rampton</b> <b>Tobyn Neame</b>	<b>Paul Galpern</b> <b>Professor Emeritus Ed Johnson</b> Field trip – Travel down Hwy 40 Observe ecological and geological processes affecting changes in tree/ plant/ animal population dynamics and disturbances	
7/ June 16	<b>Kathleen Ruckstuhl</b> <b>Mathieu Pruvot</b> <b>Michele Anholt</b> Causal maps and wildlife disease – the example of bighorn sheep	Start negotiation of challenge statements	
8/ June 17	Negotiate challenge statements Closing -Knowledge Keepers Ollie and Virgle	Home	