

One Health at UCalgary Executive Summary



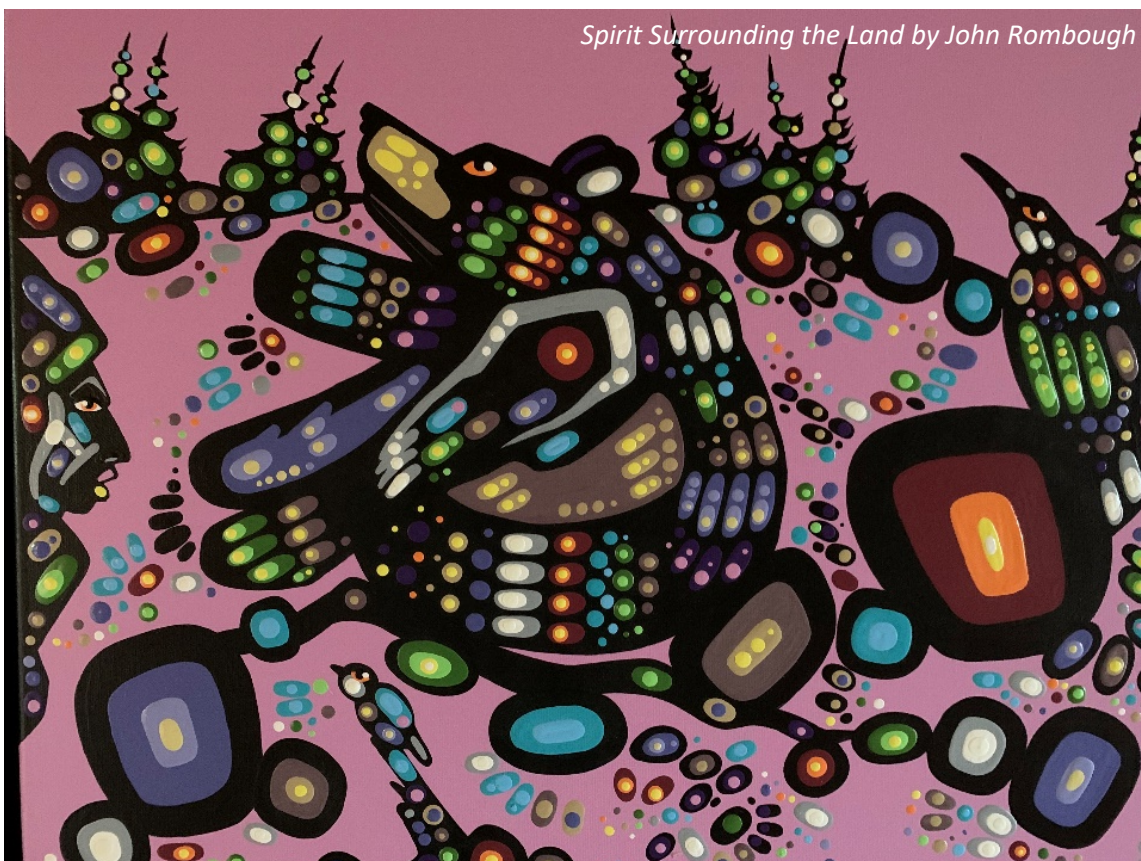
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One Health at UCalgary (OH@UC) was founded in 2019 as an emerging, cross-cutting research theme and we are pleased to share with you the first strategic plan. We would like to thank our incredible partners, the scholars and administrators from across UCalgary, for their enthusiastic and tireless support. Without your efforts this strategy would not have been possible.

One Health takes a systems view of complex problems, recognizing interconnections of people and animals in their shared environments. The One Health lens encompasses the social, economic, cultural, physical, built, and political environments that can either promote or inhibit wellness. This approach uses innovative strategies to address complex problems to meet the needs of today's and future generations by respecting nature, environmental limits, and social justice.

Complex problems include global challenges such as the emergence of COVID-19, accelerating climate change, loss of biodiversity, increasing rates of antimicrobial resistance, growing food and water insecurity, and the infrastructure gap. Knowledge and understanding of complex problems are often incomplete or contradictory, people with diverse perspectives are involved, and the problem, and its potential solutions, often impose a substantial initial economic burden. We believe that the important linkages between people, animals, and the environment can illuminate new approaches to tackling these wicked problems. We assemble transdisciplinary teams around complex problems to identify and implement robust and sustainable solutions.

Due to system qualities inherent in complex problems, a One Health approach with solutions co-developed from diverse disciplinary spheres and cultural perspectives, is necessary for effective and sustainable change.



The concepts embraced by One Health date back thousands of years. Indigenous peoples have held the relationships between human beings, non-human animals, and the environment as central to health and wellbeing since time immemorial. These Indigenous worldviews and epistemologies precede and inform the origins of One Health (Jennifer Markides, PDF Werklund School of Education).

Vision

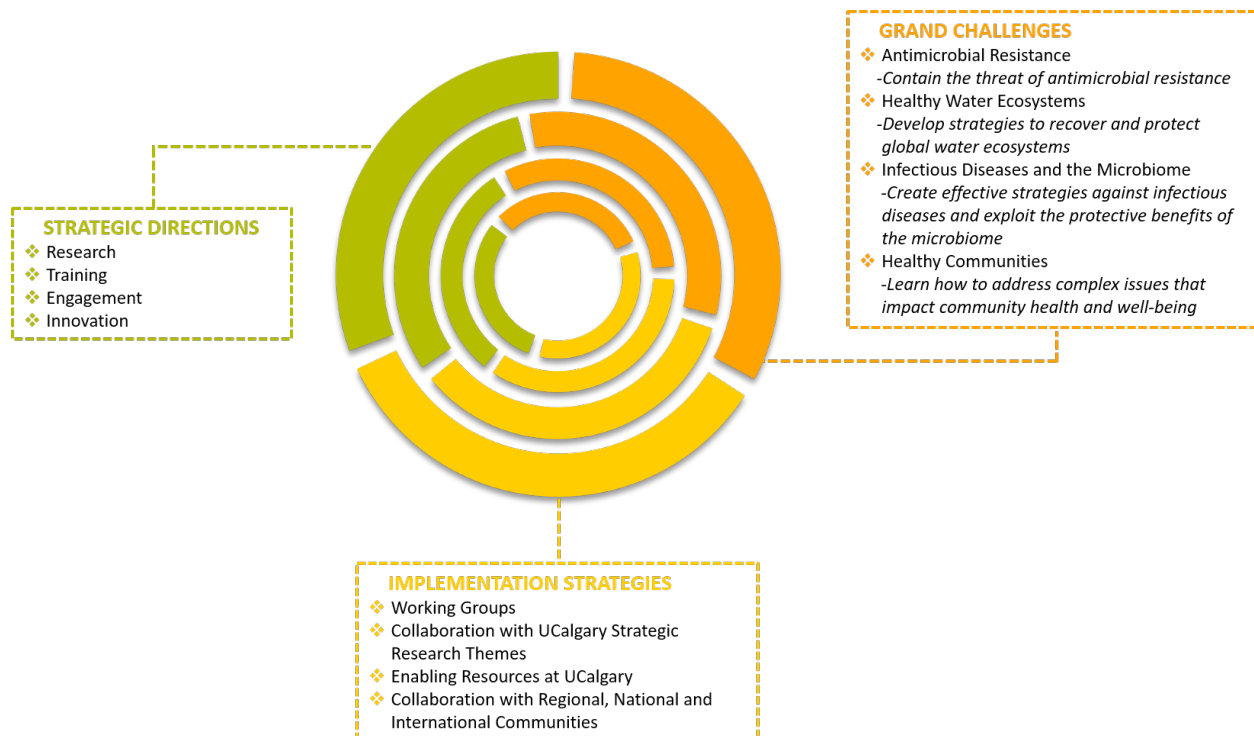
Improved health and wellbeing for people, animals, and the environment.

Mission

Using a One Health approach, OH@UC will create partnerships across UCalgary, our communities, and the world to improve our understanding of connections among people, animals and the environment, and to solve complex problems for the benefit of all.

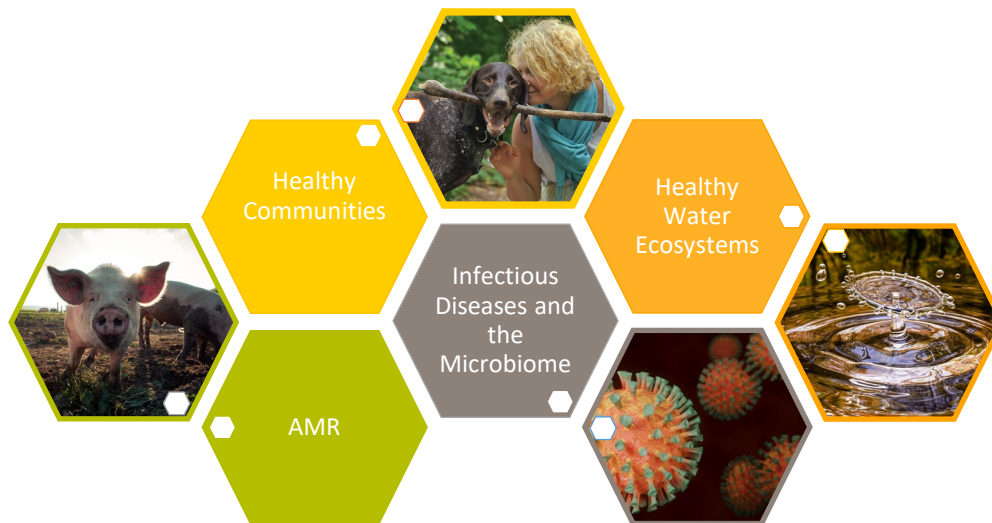
Our core values are to:

- **Collaborate:** We deliver better outcomes through inclusive partnerships, shared goals, and integrated co-developed approaches that draw on diverse expertise in research, practice, and policy; *together we go further.*
- **Excel:** We embrace challenging work and achieve excellence in research, teaching, and knowledge engagement and mobilization that promotes meaningful improvements in human, animal, and environmental well-being in ways that are shared, equitable and fair; *excellence creates progress.*
- **Innovate:** Pushing boundaries is risky. We promote innovation through an environment of trust, respect, inclusiveness, and creativity; *innovation pushes boundaries.*
- **Inspire:** We believe that building supportive transdisciplinary relationships that facilitates the exploration of interesting and complex questions from various perspectives inspires researchers and trainees; *inspiration requires new perspectives.*



Inspiration and impact

Our strategic research direction enables UCalgary researchers to build on their current research successes and address global challenges impacting the health of people, animals, and the environment. OH@UC is committed to being a transdisciplinary hub for research excellence. We connected four *Grand Challenges* of our time, with ambitious but achievable goals that harness science, technology and innovation to solve important national or global problems. We will focus our research efforts on: i) *antimicrobial resistance*, ii) *healthy water ecosystems*, iii) *infectious diseases and the microbiome*, and iv) *healthy communities*.



Invest in the future

OH@UC is committed to involving trainees as our partners. We will provide valuable research opportunities and training initiatives that address the technical skills and the social and communication competencies necessary for transdisciplinary research, learning, and engagement. We will prepare our trainees for the challenges of the 21st century and increase Alberta's and Canada's capacity for One Health research and innovation within our priority areas.



Trainees, Ellen de Jong and Kayley McCubbin, conducting field research for a project on mastitis-related antimicrobial use.

Make things better

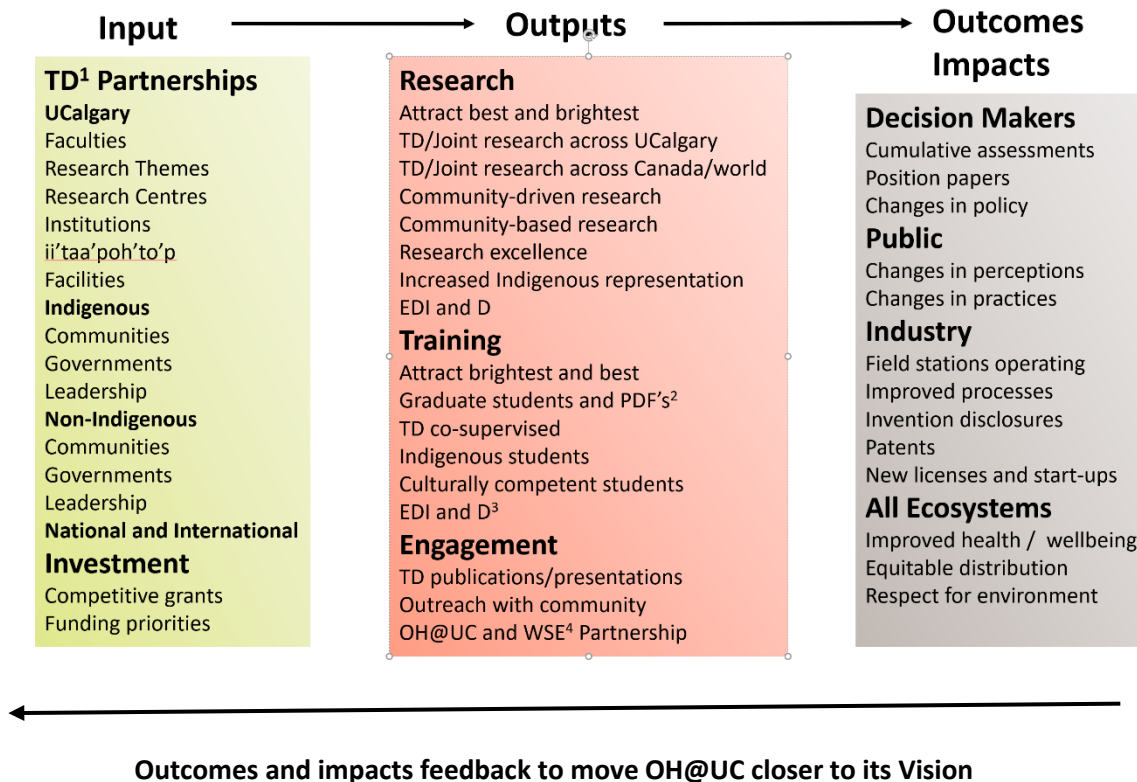
Our relationships and partnerships will cross boundaries of communities, scientific disciplines, academia, government, and private industry. These relationships and our connections to land and place will support development of innovative policies, procedures, and practices. Our roles as stewards will be emphasized. By engaging stakeholders and respecting the land, we will be better positioned to carry out a public purpose than could be accomplished by one organization alone.



Children are our future. If we aspire to live in a more collaborative and connected world in which One Health is commonly understood and operationalized, then, we must start educating children today about One Health (OH@UC and Werklund School of Education Partnership).

Measuring impact

OH@UC will be critically examined to demonstrate progress and as a tool to help us improve. As a new program, we will conduct a formative assessment in 2021 by collecting appropriate metrics and analyzing information about our inputs, activities and outcomes.



¹TD, Transdisciplinary

²PDF, Postdoctoral fellow

³EDI and D, Equity, Diversity, Integration, and Decolonization

⁴WSE, Werklund School of Education

Summary

One Health at UCalgary's Strategic plan recognizes the strength of UCalgary's researchers and research infrastructure. This is the perfect time for UCalgary to embrace One Health research, training and outreach. As the world struggles to adapt to living during a pandemic, it begins to recognize the consequences of not respecting natural limits and acknowledges the impact of social injustice. We can offer the best innovative ideas and solutions for sustainable solutions today and for the next generations. Thank you again to our partners for believing in us. We look forward to an exciting and promising future.