



ONE HEALTH CLUB

IN THIS ISSUE

# One Health at Colorado State University

## What is One Health?

"One Health" is a new term for an old concept. We have noticed similarities and connections in the health between humans and animals since the 1800's, but practiced medicine and designed policies around the health of the two separately. Through a series of events in recent years, the term One Health, the idea that the health of animals, humans, and the environment are intrinsically connected and influence one another, has gained traction in the scientific communities.

*"The One Health concept is a worldwide strategy for expanding interdisciplinary collaborations and communications in all aspects of health care for humans, animals and the environment. The synergism achieved will advance health care for the 21st century and beyond by accelerating biomedical research discoveries, enhancing public health efficacy, expeditiously expanding the scientific knowledge base, and improving medical education and clinical care. When properly implemented, it will help protect and save untold millions of lives in our present and future generations."*

- [www.onehealthinitiative.com/about](http://www.onehealthinitiative.com/about)

## About Us

The CSU One Health Club supports the global One Health Initiative through organized involvement and collaboration with the environmental, public, and animal health communities.

The One Health Club is dedicated to providing a broad base of student involvement and provide a forum for the discussion of health-related issues facing humans, animals, and the ecosystem. The OHC recognizes that there is an inextricable link between the health of all species and their environment, and that a holistic approach to these issues is needed.

## Contact Us

### Website

[www.CsuOneHealthClub.org](http://www.CsuOneHealthClub.org)

### Facebook

[Facebook.com/onehealthclubcsu/](https://Facebook.com/onehealthclubcsu/)

### E-mail

[onehealthclub@gmail.com](mailto:onehealthclub@gmail.com)



## What's the Buzz? Upcoming Events

The One Health Club has many exciting upcoming events. Come by for food, information, and the opportunity to develop new professional connections in One Health!

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## Leadership Team Introduction: Christopher Clement

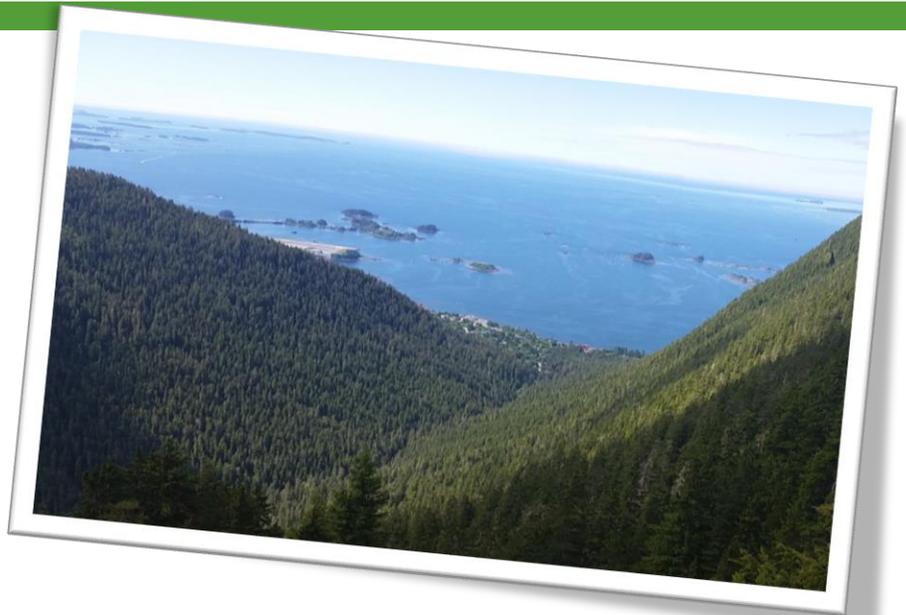
Each issue of the One Health Newsletter introduces a member of the One Health Club and a topic of interest to them. This issue, we'll introduce Chris Clement and his interest in comparative and translational medicine!

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## Upcoming Events

Check out the upcoming events that the One Health Club is working on in collaboration with others.

- Veterinary Feed Directive, Global Health, and Honey Bees!
  - Presented by Christina Geldert
  - Monday, January 29<sup>th</sup> @ 5:30pm in Path 101
- Facilitation 101 Workshop
  - Presented by Michael Visconti
  - Tuesday, February 6<sup>th</sup> @ 5:30pm-7pm in One Health Institute offices
- Earth Week
  - Presented by CSU!
  - April 16<sup>th</sup> – 22<sup>nd</sup> in various locations that are TBA.
- Other Upcoming Events
  - Will be updated in future issues!



## Earth Week

**April 16<sup>th</sup>-22<sup>nd</sup>, 2018**

Earth Day is just so cool that CSU dedicates a whole week to it. Earth Week is a CSU campus event with presentations and events in topics that span several different disciplines to discuss sustainability at Colorado State University and how you can contribute.

The health of the environment is a core component of One Health, and the One Health club is looking towards having guest

speakers and events to discuss some of the modern challenges we face in regard to environmental health, as well as proposed solutions.

As Earth Week approaches, we will update our newsletter to highlight events being hosted. Stay tuned!

### ARE WE MISSING SOMETHING?

Interested in any events that may not be here? Please contact the One Health Club and let us know what you'd like to see!

## Up Next: Veterinary Feed Directive, Global Health, and Honey Bees!

To be presented by Christina Geldert

What do veterinarians, honey bees, and global health have in common? One Health! The Veterinary Feed Directive (VFD) is a newly established law designed for the responsible use of antimicrobials in food-producing animals. Since honey bees are food producing animals, they fall under this law and under the jurisdiction of veterinarians.

Do you have questions like:

- What diseases to bees get?
- How does the health of honey bees affect global health?
- What is the Veterinary Feed Directive and why would I care?
- How is this all related to One Health?

Christina Geldert, a first-year Doctor of Veterinary Medicine Student, bee keeper, and founder of the CVMB Honey Bee Veterinary Medicine Club (HBVMC) will be presenting this topic. Come join the One Health Club and Honey Bee Veterinary Medicine Club for this interesting discussion!

- **When?** Monday, January 29<sup>th</sup> @ 5:30pm
- **Where?** Pathology 101

Questions? Please Contact Us!

**Honey Bee Veterinary Medicine Club**  
cgeldert@colostate.edu

**One Health Club**  
onehealthclub@gmail.com





## Leadership Team Introduction: Christopher Clement

Hello! My name is Chris, and I am a third-year veterinary student at CSU who is also a member of the newly made University of Alaska Fairbanks/Colorado State University 2+2 DVM Program. I am originally from Sitka, Alaska, a small town on an island with only 13 miles of road from end to end.

My goals in One Health are focused around animals and public health, particularly how it relates to rural communities that have inadequate access to both human and veterinary healthcare. This includes aspects of shelter medicine such as vaccination of zoonotic pathogens, spay & neuter programs, routine veterinary care, and client education. This also includes aspects of public health such as a focus on the food and water supply as it relates to rural communities, subsistence living, environmental contaminants in wildlife, human activities as it relates to the environment such as mining near rivers or on wildlife refuges, etc.

My plan is to return to Alaska and practice veterinary medicine & public health in the rural communities of Alaska. In my free time I run, bike, wrestle, or play card/video games. Veterinary school takes up most of my time, but I have a stack of books I also have been slowly reading, such as the James Herriot series.

*If you're interested in becoming a One Health Club Officer, please contact us!*

## Comparative & Translational Medicine

by Christopher Clement

Although we've known about similarities in the health between people and animals for centuries, it wasn't until recently we recognized that those similarities can be used to further understand and improve health of both people and animals through comparative and translational medicine. This falls under the One Health umbrella quite well.

The New York Times recently posted an article called "The Mystery of Wasting House-Cats" by Emily Anthes and explains how hyperthyroidism in cats was very uncommon until the 1970's. There was a link between a class of flame retardants used in household goods and development of thyroid abnormalities in cats. Despite this, there is not a clear understanding how that could translate to human health. This story is a good example of how a unique population health case lead to the investigation and unveiling of a potential cause for an uncommon medical problem becoming common. It also highlights potential avenues for further research to be conducted in the human health field directly related to this. I highly recommend looking up the article!

"The Answer to Cancer May Be Walking Beside Us" is a documentary done at Colorado State University. It highlights the comparison between cancer in pets and cancer in people: the similarities, differences, and how that can be used for diagnosing and treating cancer. By using both animal and human models for diagnosis and treatment, we can "translate" that information to develop new methods for diagnosis and treatment across species boundaries. Pets provide a powerful model to study because they are commonly exposed to the same environmental factors that people are. This contrasts with rat/mice models where many environmental factors are strictly controlled and regulated. Check out this documentary when you have the time!

The Golden Retriever Lifetime Study is an ongoing study in which they are following 3,000 golden retrievers throughout their life and are studying the illnesses they may develop. This is similar to the Framingham Heart Study conducted in people where participants were studied throughout their lives and has provided profound amounts of invaluable information on the risk factors for heart disease. These studies are great examples on how lifetime studies can be used to recognize risk factors and incidence of diseases in entire populations, and helps in comparing research models across species.

