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# International One Health Challenges: The Hidden Complexities



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# Veterinarians have an important role in international One Health efforts





# A Increased Recognition of the Broader Role of the Veterinarian in Society

- “The convergence of animal health and public health in the area of zoonotic and newly emerging diseases is a critical link to societal well-being.”
  - Final Report, AAVMC Foresight Project 2007



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*“Quite apart from avian influenza, emerging animal diseases, three quarters of which are zoonotic, are set to become more and more part of the world landscape”*

OIE/World Bank joint press release  
Jul 29, 2010



**THE WORLD BANK**  
Working for a World Free of Poverty



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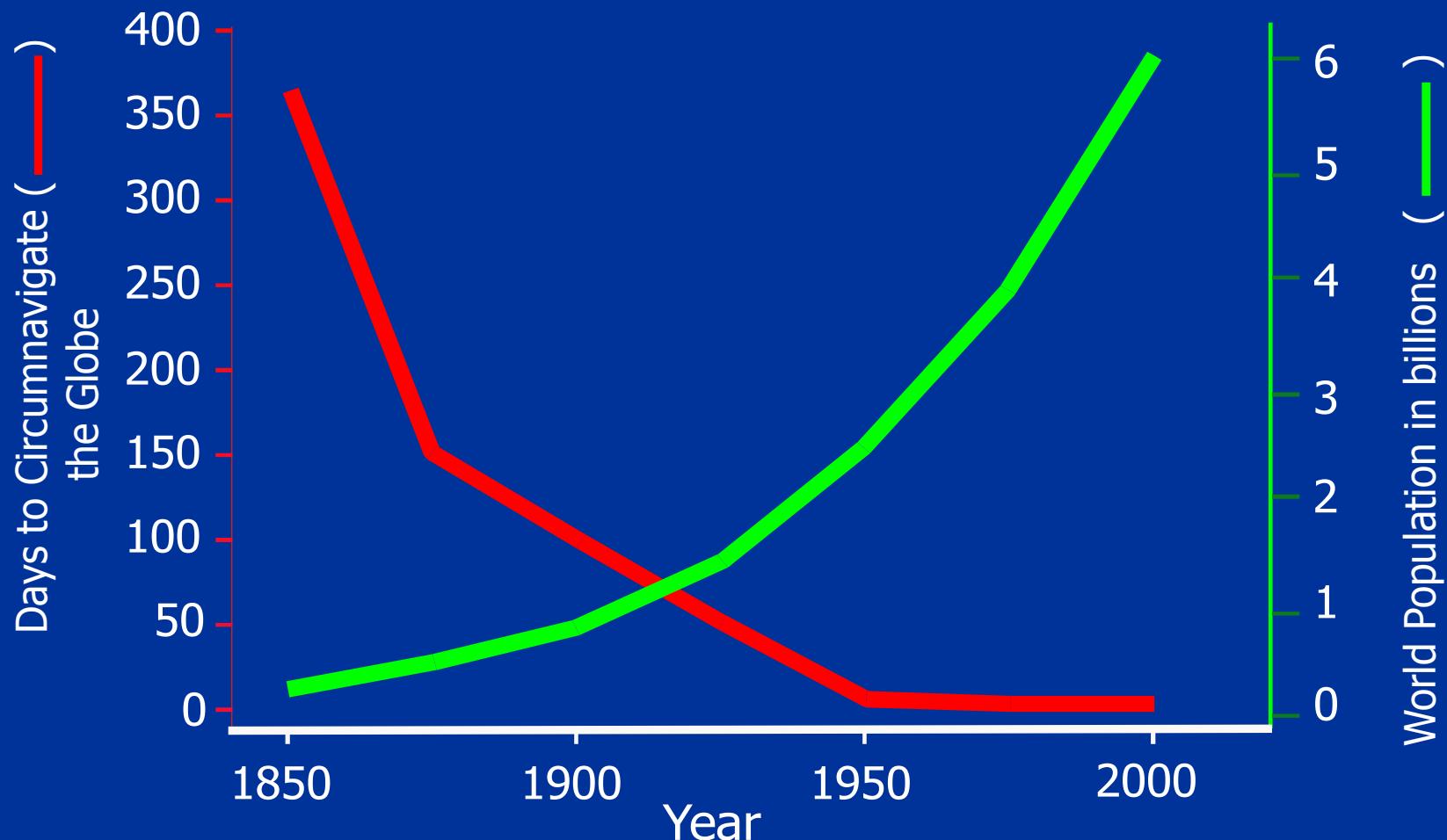
**THE WORLD BANK**  
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# Are you familiar with the OIE?

- Yes, very
- Somewhat
- I've heard of it, but am not sure what it is
- Not at all
- Isn't there a vaccine for that?

# Speed of Global Travel in Relation to World Population Growth



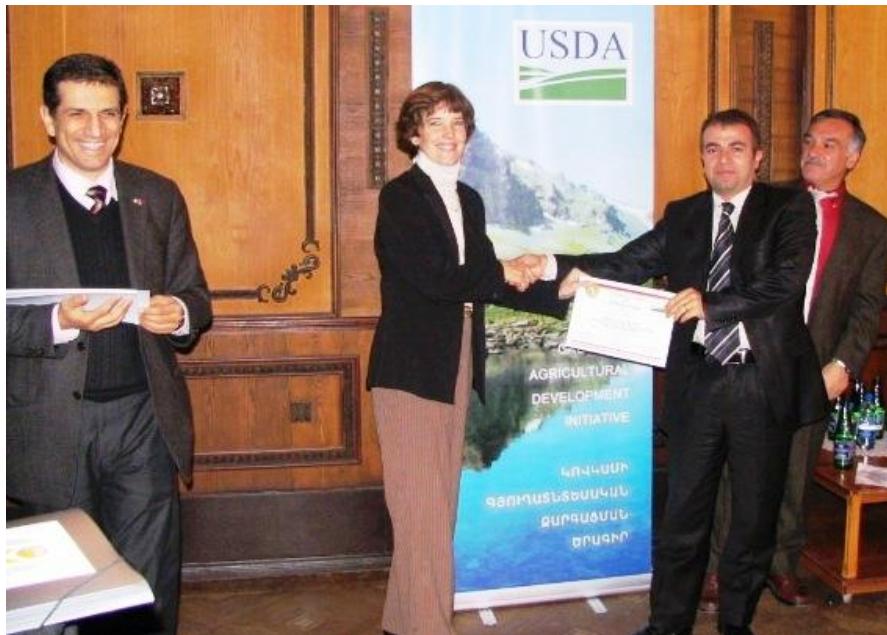
From: Murphy and Nathanson. Semin.  
Virol. 5, 87, 1994



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# How does working internationally help the United States?

- Help foster development worldwide
  - Protect ourselves from the spread of animal and zoonotic diseases
  - Strengthen networks and preparedness





# Safe food begins with healthy animals



*And in much of the world – healthy animals mean survival*

# Have you worked internationally yourself as a veterinarian?

- Yes
- No





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# Have you mentored a student working on an international project?

- Yes, directly, and I have worked overseas myself
- Yes, directly, but I have not worked overseas myself
- No
- Indirectly, and I have worked on such projects myself
- Indirectly, but I have not worked overseas myself



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# Benefits to veterinary students

- Increase their interest in and experience with food animal medicine and public health
- Develop an understanding of their role in the global community.





# International experiences

- Teach flexibility and adaptability
- Encourage innovation
- Enhance problem solving.
  - For example....





What if you're thinking this....

...and you find this?





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# What if you think you have everything you need to get a job done...





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And you find things don't work quite as  
you expected....



10-0-000



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# Students like to participate because it's fun.....



**.... We have the responsibility to be sure they experience learning that will make them better veterinarians**



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# What are we doing well?





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Wildlife Conservation Society Announces

### One World One Health Research Projects Funded by Cargill

*Researchers receive funding to conduct studies that analyze the connections between human health, food animal production, and the environment*



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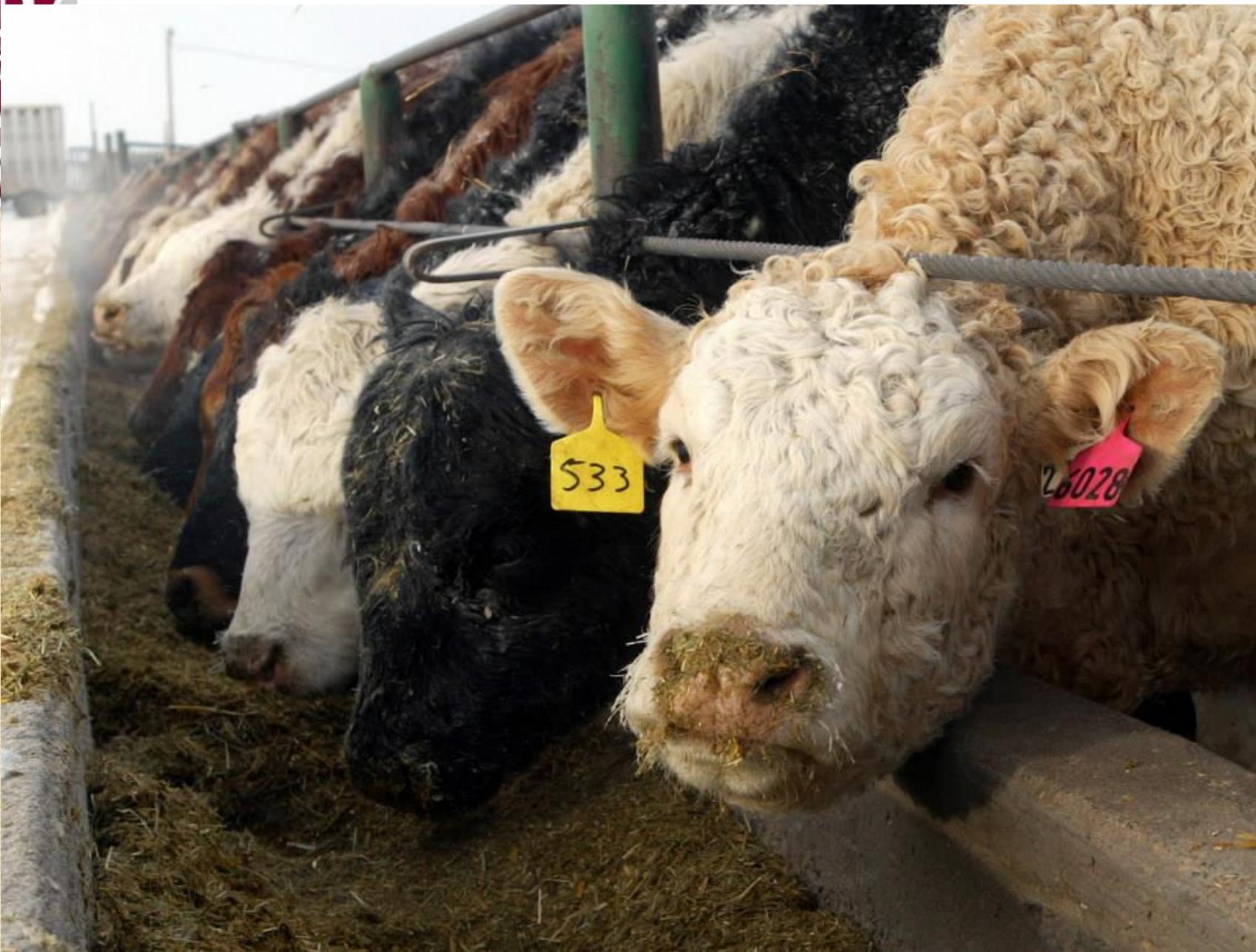


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*What can we do more of?*



Do your students who are going overseas receive any pre-travel training or orientation specific to the country they are going to?

- Yes -always
- Yes – sometimes
- No
- I'm not sure



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# There are complexities when working in international One Health...





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# Overt complexities

- Language challenges





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# Overt complexities

- Cultural complexities





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# Are they waving in support?



Cosmophilly.com

No- throwing the “na” in Greece



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# Overt complexities

- Social Complexities

## Pace Yourself: The Pace of Time around the Globe

"Anthropologists list the toughest things to cope with in a foreign land.

Second only to language is the way we deal with time"

Lienhard





# However, that information is available....



Translation

Interpreting

Training

Localization

Resources

## Country Profiles - Global Guide to Culture, Customs and Etiquette

### Free International Etiquette Guides

Understanding other people's languages, cultures, etiquettes and taboos is of great value to the traveller or visiting business person.

Scroll down the page for information on a selected number of countries. Topics include language, useful phrases, the society, culture, business and social etiquettes. You can access [Useful Phrases](#) here or through the corresponding country.





# One Health – a new layer of complexity

A word cloud centered around the theme of One Health, showing various interconnected concepts. The words are color-coded by category:

- Health**: A large, central word in dark red.
- Environment**: A large, central word in gold.
- Humans**: A large, central word in dark green.
- Dogs**, **Cats**, **Bats**, **Nile**, **West**: Smaller words in green.
- Viruses**: A word in brown with sub-words "epidemiology", "horses", "training", "exposure", and "Ehrlichiosis".
- Surveillance**: A word in light green with sub-words "products" and "GPS".
- Cattle**, **Goats**, **Skunks**, **Raccoons**, **SARS**, **cattle**, **ecological**, **disinfection**, **syndrome**: Words in brown and gold.
- Foodborne**, **waterborne**, **water**, **rabies**, **veterinary**, **Q-fever**: Words in light green and gold.
- Medical**, **anthrax**, **toxins**, **transmission**, **respiratory**, **parasite**, **public**, **agriculture**, **food**, **human**, **environmental**, **bacterial**, **dairy**, **acute**: Words in brown, gold, and light green.



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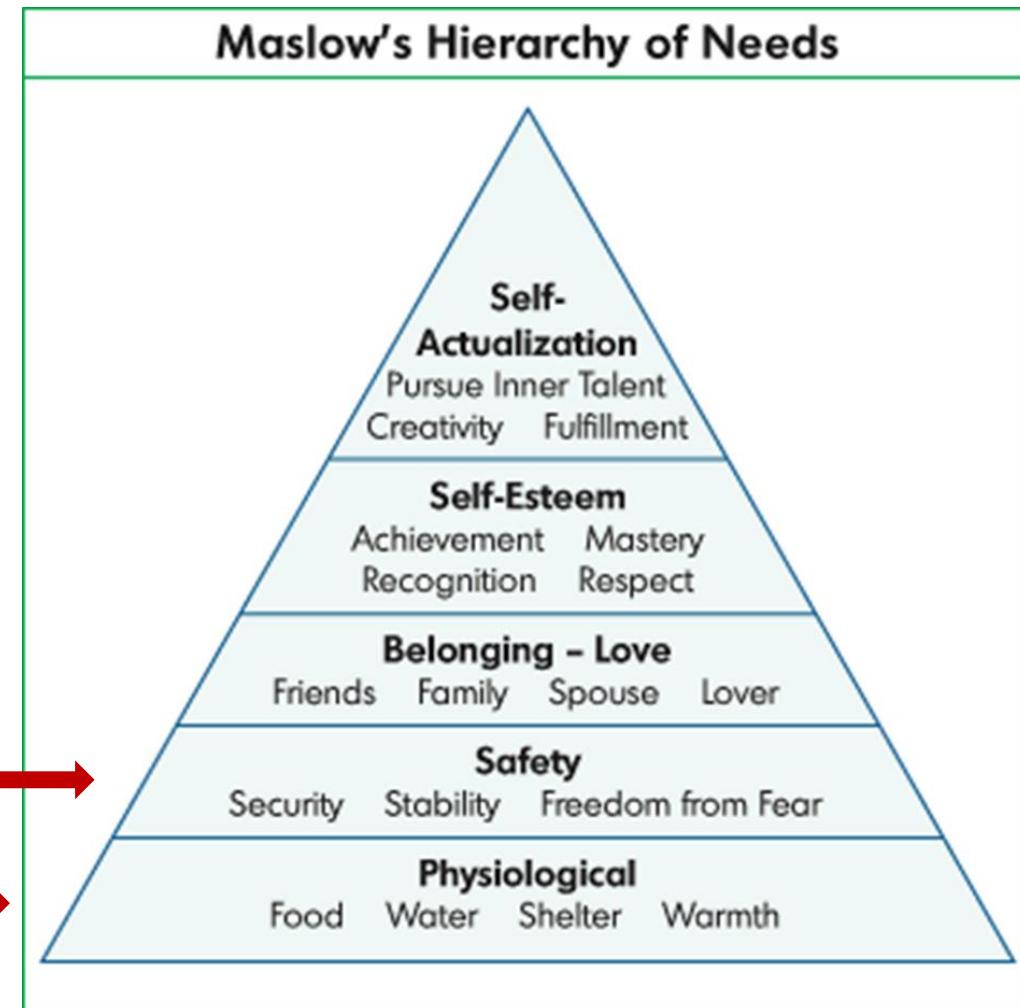
Who should we add to the  
conversations ....

and what new understandings would  
they bring?



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# Add new lenses





# ProMed – Anthrax, China 8/12

Two villagers of Ganyu county in Jiangsu province who were diagnosed with anthrax have improved after treatment, the Beijing Times reported.

The source of infection (was) a cow from another province.

About 10 villagers were involved in butchering the cow on July 25, **which was dead before arriving at the village.**



# ProMed – Anthrax, Ukraine 8/12

- Confirmed the diagnosis of anthrax in cows on 18 Aug 2012.
- Veterinarians collected the samples and treated the location where the carcass was found with disinfectants.
- But **after confirming** the diagnosis the veterinarians discovered that **the carcass of the cow had disappeared.**
- A search for the carcass was initiated ***the owner of the cows sold 150 kg of meat. The sold meat was partially recovered, and 10 kg] of meat were found in the cafe, "By the Sea".***



# ProMed –Anthrax, Colorado 8/12

- Nearly 60 cattle are dead in Colorado after an outbreak of anthrax, but officials are confident the disease has been contained.
- The outbreak occurred at a ranch in Logan County and marked the first confirmed incidence of the disease in Colorado in 31 years.
- ***Officials quarantined the ranch, and cattle at nearby ranches are scheduled for vaccinations and some may take prophylactic antibiotics as a precaution.***



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# Realistic options?





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# ***Three Aspects of Health - Inextricably Linked***

**Environment**



**Animal**

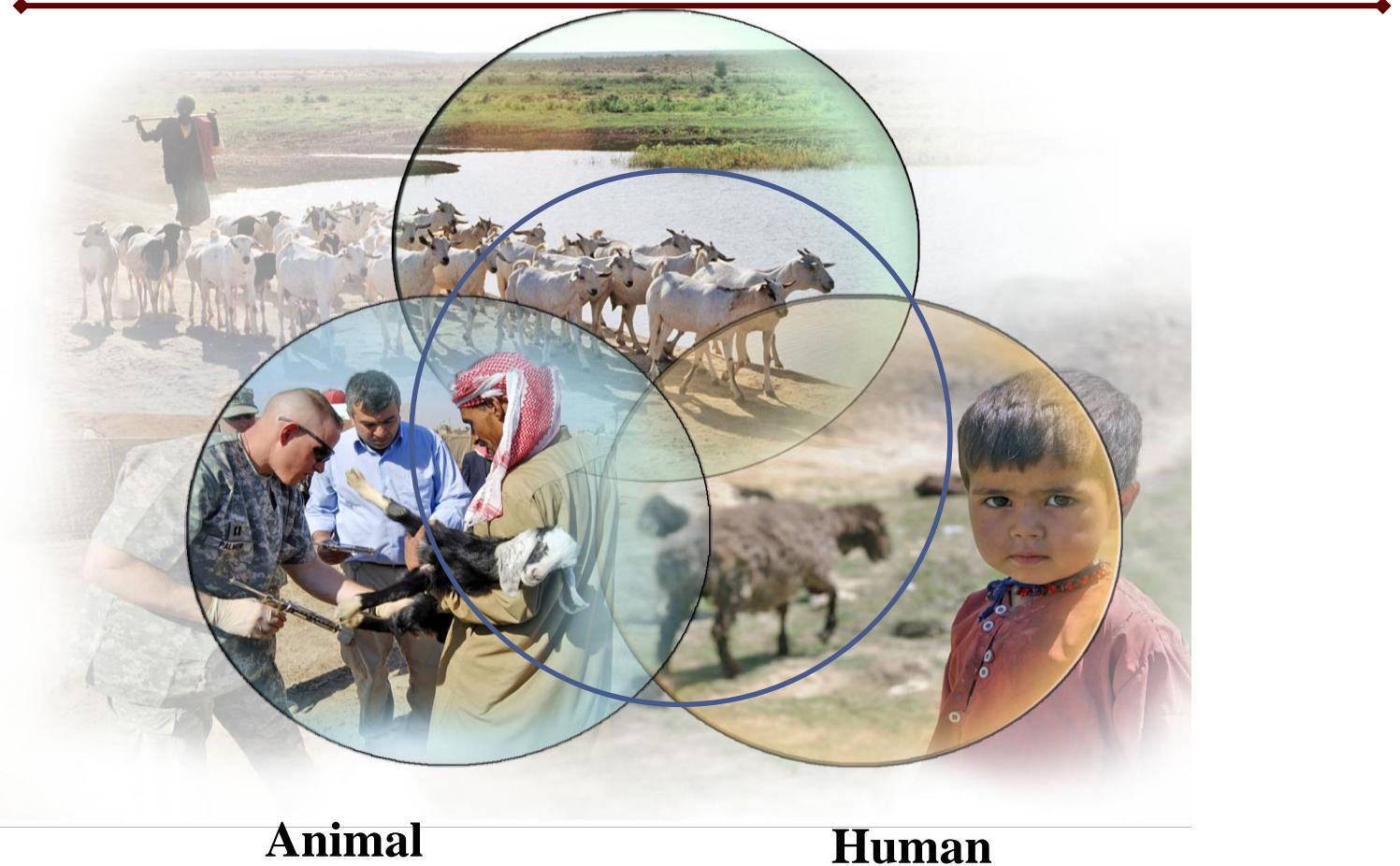
**Human**



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# ***Four Aspects of One Health - Inextricably Linked***

**Environment**

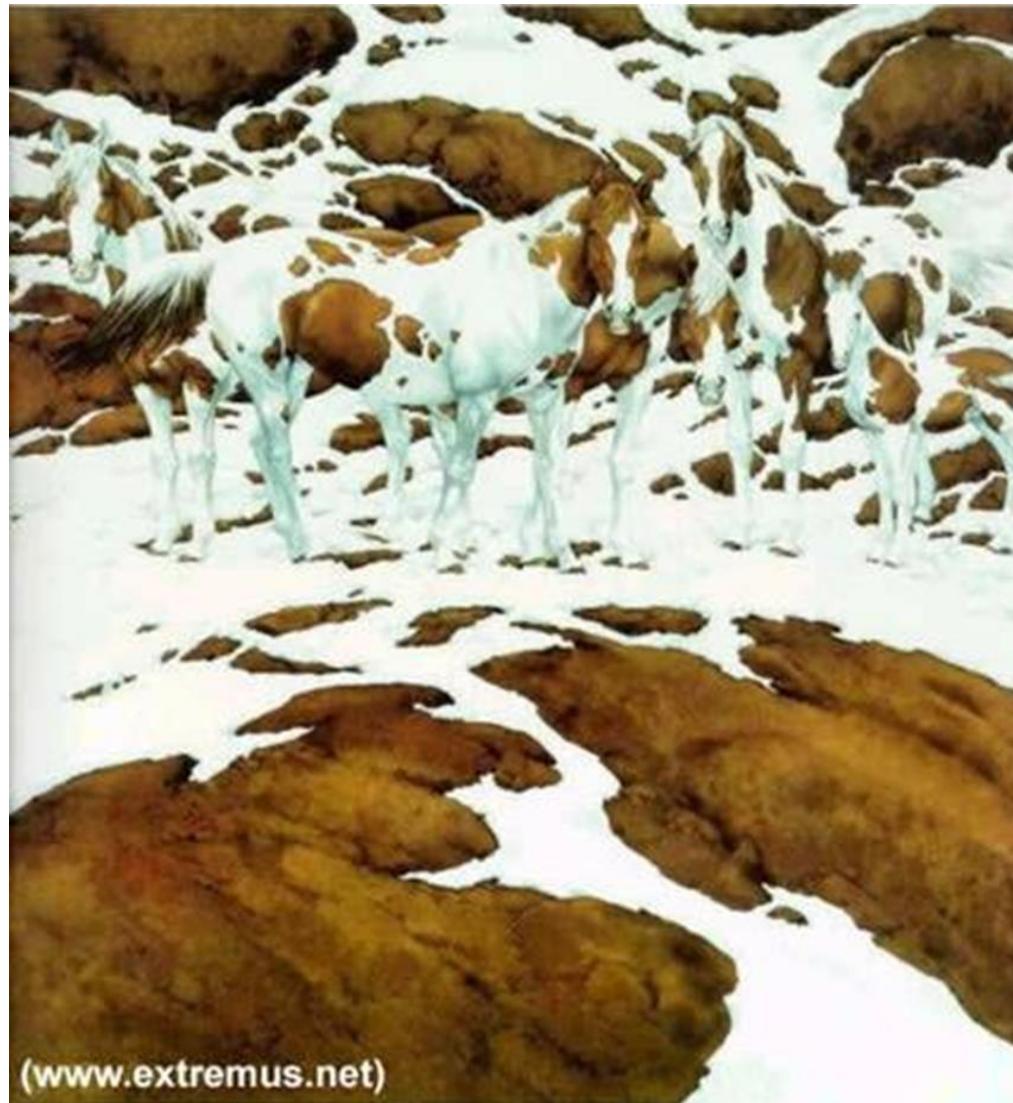


## ***Socioeconomics***



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# There are also hidden complexities...





# Hidden complexities

- Complicate the ability to be successful
- Are not as apparent as language, cultural, and social differences
- May result in inaccurate results
- May cause harm to the US-country relationship
- May endanger the student



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[Datingadvicefromaguy.com](http://Datingadvicefromaguy.com)



# What we want to avoid....

## Global

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October 23, 2008

### American Student Is Arrested in Iran While Working on Master's Thesis

An American graduate student doing research on her master's thesis in Iran has been arrested and is being held in Tehran's notorious Evin Prison, where she is at risk of torture and other ill treatment, [Amnesty International](#) reported.

The student, Esha Momeni, who is enrolled in the School of Communications, Media, and Arts at California State University at Northridge, traveled to Iran two months ago to visit her family and to do research on her thesis project, a video documentary of the Iranian women's movement.

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Have any of your students done, or do you expect to have students who will do an international project that includes working with a reportable livestock or zoonotic disease (such as rabies, anthrax, foot and mouth disease, brucellosis, tuberculosis, etc.)

- Yes
- No
- Maybe
- I'm not sure



For those who answered yes, were the students advised to research the officially reported status of those diseases in the country they were going to visit?

- Yes
- No
- I'm not sure



Were students who were going to be working in One Health related areas advised to research the human health, animal health, and environmental health infrastructure in the country they were going to visit?

- Yes
- No
- I'm not sure



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World Health Organization





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Do your students receive any training on international health and trade organizations such as the WHO, OIE, FAO, World Trade organizations, Ministries of Health, Ministries of Agriculture and others; their roles and impacts on international veterinary medicine?

- Yes -always
- Yes – some
- No
- I'm not sure



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# Understanding roles of officials is important, as is diplomacy





# Political Sensitivities

- Chief Veterinary Officers in many countries and senior staff in the Ministries of Agriculture may be political appointees without technical background and experience.
- There is a tendency in some cases to not initiate programs in order to maintain the status quo and due to lack of knowledge, funding, resources or political will.



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# Political Sensitivities

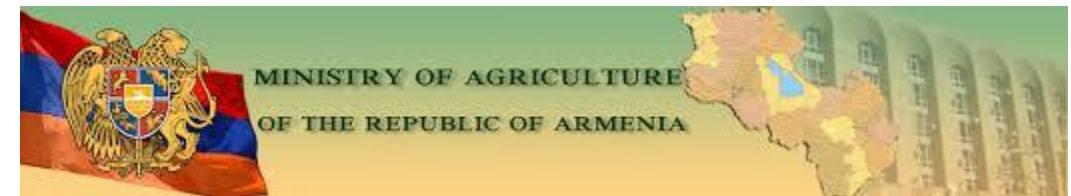
- Students doing disease research may not be able to report findings if the country has not previously reported.
- This may be particularly true of select zoonotic diseases which may be recognized in animals but not reported by the Ministry of Health or diseases that have the potential for bio- or agroterrorism such as anthrax, plague, and African Swine Fever.





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# Zoonotic Disease Authority Complexities and Competition





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# Political Complexities

*I had some problems with government and being granted access to conduct my study. Despite attempting to make contact with both Armenian Ministries of Health (MOH) and Agriculture (MOA) before starting my practicum, the MOH did not feel comfortable with my study. ...they denied me from questioning human health workers, which I then had to eliminate that specific component from my study.*



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MINISTRY OF HEALTH



# Political Complexities

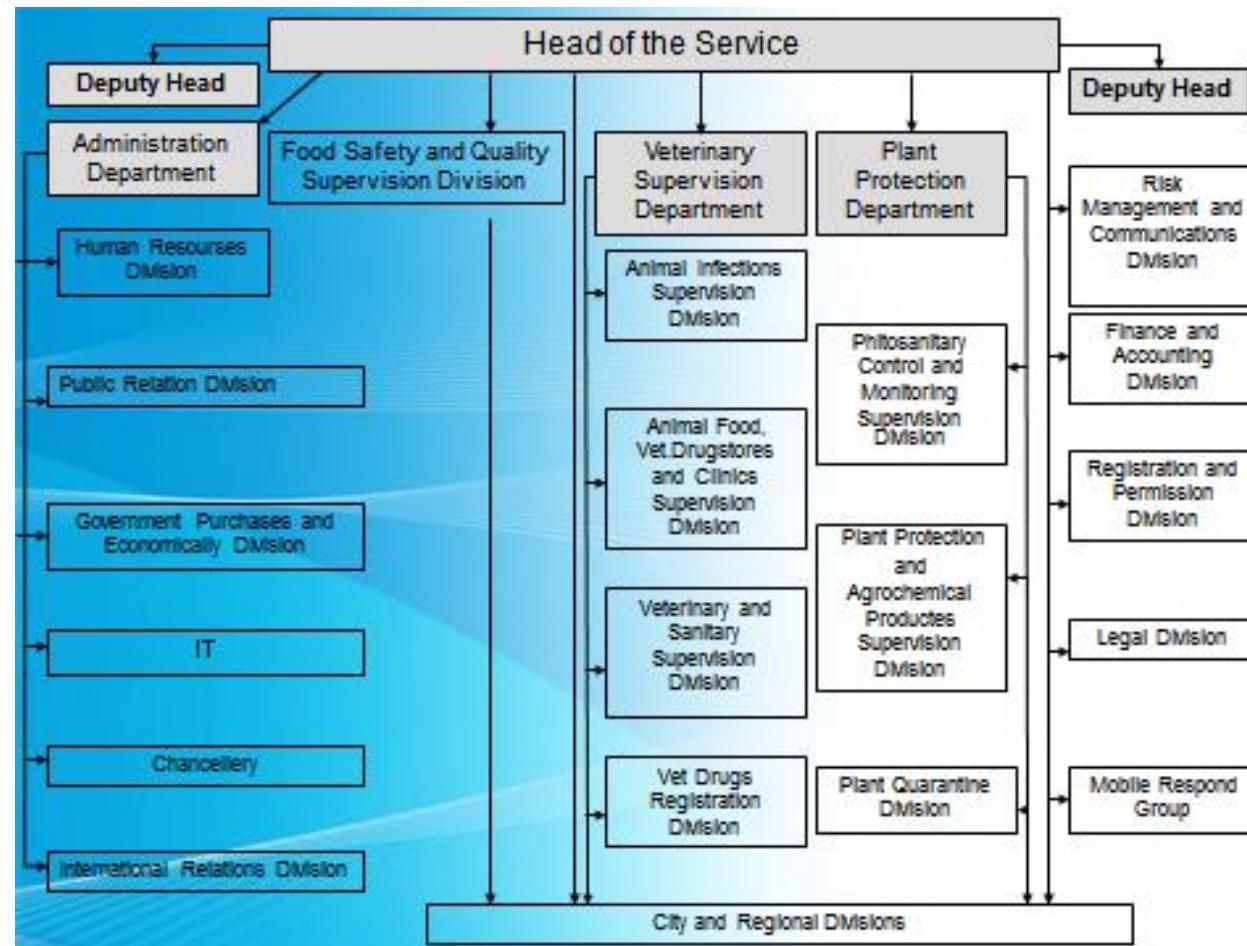
*In addition, Armenian national security was notified, and I was unable to deliver my questionnaires in person with a translator.*

*Because of these issues, I had to take impromptu actions in translating the survey to Armenian and finding a vehicle for their distribution and return.*

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# Organizational Complexities





Do you feel you understand country reporting requirements for certain diseases and how they may impact the success of international projects or training?

- Yes
- No
- Somewhat
- I never really thought of that before



Do you feel YOU need training on international health and trade organizations such as WHO, OIE, FAO, World Trade organizations, Ministries of Health, Ministries of Agriculture and others; their roles and impacts on international veterinary medicine?

- Yes - definitely
- I could use a refresher
- No, I know what I need to know
- I don't really think this understanding is important



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# AAVMC Role

***What can AAVMC do to support development of One Health globally competent students?***

1. Support the development of Distance Learning and on-line courses.
2. Provide a workshop forum for interested CVMs to participate.
3. Develop an international education portal to share best practices, expertise, and opportunities.



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# Thank you! - Discussion?

