Moving a One Health Way of Thinking into the Future with Real Action and Meaning
ONE HEALTH
What is it really all about?

Not a new concept….however….
A New Professional Imperative!!

Why is there a need for a One Health way of thinking?
Traveled to Ecuador on assignment
Boated the Amazon, climbed a Volcano
Returned home with many Insect Bites
Two weeks later: swollen painful joints, fever, skin lesions, discolored fingernails, shortness of breath
Radiographs = lung lesions, >10 CT scans = granulomatous visceral lesions
Two years and 76 specialists later: tentative diagnoses of Hodgkin’s Lymphoma, Non-Hodgkin’s Lymphoma, scabies, scleroderma, gastrointestinal stromal tumors (GIST)

- Scheduled for exploratory surgery for GIST, thought most likely to be sarcoma

- Blood sample to Dr. Ed Breitschwerdt at the NCSU Vet School found….. *Bartonella Vinsonii*
After surgery - the surgeon reported to father - found no evidence of malignancy.

Father answered, “I never thought she had a malignancy…(I believe) she has Bartonellosis.”

Surgeon replied: “I’m a surgeon…I don’t Know what bartonellosis is.”

This is why we need to include One Health Education in Graduate Medical Education for all specialties.

Veterinary Medicine, Mind over Miller, July 2011

Many more case studies can be found on the Galaxy DX Website.
Monarch Migration Plunges to Lowest Level in Decades

The number of monarch butterflies that completed an annual migration to their winter home in a Mexican forest sank this year to its lowest level in at least two decades, due mostly to extreme weather and changed farming practices in North America, the Mexican government and a conservation alliance reported on Wednesday.

By MICHAEL WINES NY Times: March 13, 2013
“Between animal and human medicine there are no dividing lines –Nor should there be.”
Rudolf Virchow, MD, 1821-1902
Father of Cellular Pathology
History of One Health: How did we get here?

1848-1932  **Bernard Bang, Dutch MD / DVM**, isolated *Brucella abortus* from cows, natural reservoirs,

1849-1919  **Sir William Osler, MD**: Father of modern medicine: studied under Rudolf Virchow: may have 1st coined term ‘One Medicine’?

1850-1914  **Daniel Salmon, DVM**, early USDA APHIS; hired human physicians to work across disciplines

1854-1934  **Thiebold Smith, MD** in Bureau of Animal Industry found that heat killed pathogens could immunize ...led to vaccines against typhus and to Jonas Salk producing the polio vaccine
1854-1941 **John McFadyean, DVM, MD**, challenged assertion that bovine TB was of no concern to humans

1884-1974 **Karl Meyer, DVM, MD**, UC Berkley, *integrated fields* of veterinary and human medicine (typhoid, malaria, influenza, brucellosis, anthrax, plague……etc)

1947 **The CDC/Veterinary Public Health Division** is established led by **James Steel**

1984 **Calvin Schwabe** uses the term *"One Medicine"* in his 1984 text ‘Veterinary Medicine and Human Health’

2002 **First annual One Medicine Symposium** is held in North Carolina (continues today)

2004 **The Wildlife Conservation Society (WCS)** publishes the 12 Manhattan Principles for establishing a holistic approach to preventing epidemic/epizootic disease and for maintaining ecosystem integrity
Wildlife Conservation Society holds One Health Symposia in Bangkok, China, Brazil and Brazil respectively

2007
The AMA and AVMA partner in a One Health Initiative Task Force between human and veterinary medicine

2007
One Health Initiative website team (Kaplan, Kahn, Monath, Woodall) began grassroots web communications platform

2008
AVMA publishes the Executive Summary of the AMA/AVMA One Health Task Force. JAVMA, Vol 233, No. 2, July 15, 2008

2008
FAO, OIE, WHO, UNICEF, UNSIC, World Bank develop joint pandemic flu response plan
2009

- The CDC/ One Health Office is established
- USAID establishes the Emerging Pandemic Threats program
- One World, One Health Expert Consultation in Winnipeg, Manitoba
- One Health Commission is chartered as a 501c3 non-profit
- IOM sponsors One Health Summit in Washington, D.C.
People, Pathogens and Our Planet
World Bank Report No. 50833-GLB
2010
The Hanoi Declaration

The Tripartite Concept Note is published

FAO, WHO, OIE hosts “Stone Mountain Meeting,” defines specific actions to move the concept of One Health forward

The United Nations and the World Bank recommend adoption of One Health approaches

The European Union reaffirms its commitment to operate under a One Health umbrella
2011
- The 1st International One Health Congress is held in Melbourne, Australia
- The 1st One Health Conference in Africa is sponsored by OCHEA
- Tripartite Technical Meeting in Mexico City

2012
- The Global Risk Forum sponsors the first One Health Summit in Davos, Switzerland (also 2013, 2014)
- USDA/ One Health Office is established

2013
- The 2nd International One Health Congress is held in conjunction with the Prince Mahidol Award Conference, Bangkok, Thailand

2014
- OHC Sponsored the First International Who’s Who Webinar
We came from ‘generalists healers’ to be very specialized with amazing capabilities .......... 

News Bulletin:  
It’s up to ‘us’ to create a true paradigm shift.

There are ‘many’ clusters or ‘bubbles’ of One Health activity around the U.S. and world; working hard at making this a day to day way
One Health Wake Up Call !!

We need a way to communicate / learn ACROSS disciplines

Wake Up Call!!!
Heal the Past……

Live the Present…. 

ALWAYS LOOK into the Future
Reframing ‘G.R.O.W.T.H.’

Moving from

Gross domestic product

Resource destruction

Overpopulation

Wealth inequality

Techno fixes

Towards

Hunger

Towards

Gross national happiness

Towards

Renewable resources

Towards

One world

Towards

Thrivability

Towards

Wellbeing

Towards

Hope

post growth

www.postgrowth.org
Benefits of a One Health approach

- Increased or Improved
  - Interdisciplinary Programs/Teams
  - Information Sharing / Networking
  - Disease Prevention/Interventions
  - Approaches to Therapy
  - Public Health Outcomes
  - Environmental and Plant Health
  - One Health Transdisciplinary research
  - Health and Well-being of the Planet
Engage in New Way of Thinking, Interacting and Action
How To Break Down Those Silos

BEGINS with YOU
as an Individual
Your Thinking, Your Beliefs, Your Actions

Join others in shifting the paradigm of thinking and Action

Encourage/ Demand Transdisciplinary Approaches to the complex, wicked problems that face our world
How To Break Down Those Silos

**TRANSDISCIPLINARITY**
Connecting Knowledge from each of our domains and specialties

**COLLABORATION** with
Transparency, Honesty and Respect for the other’s concerns and sensitivities Sense and Action of **INCLUSIVENESS**

**RESPECT**
for others and their knowledge and RESPECT for our Complex Interconnected WORLD and its FUTURE
The One Health Commission Charter

- Connect
- Create
- Educate

To improve health outcomes and well-being of humans, animals and plants
To promote environmental resilience through a collaborative, global One Health approach

https://www.onehealthcommission.org