THE FUTURE OF ONE HEALTH:
(And our Planet!)
What we MUST be doing today!
Collaborations start with Relationships!!

Which start when we come together in direct conversations
What is ONE HEALTH all about?

Not a new concept

.......however.......  
It is a New Professional Imperative!!
“A lot of people have this ego need that makes them want to believe that Earth is the centre of the universe and humans are the most important species, the supreme expression of creation.”  - Ann Druyan
Current World Population ~ 7.23 billion

It is now estimated that it will increase by another 50% to 9 billion by 2042.

The latest United Nations projections indicate that world population will nearly stabilize at just above 10 billion persons after 2062.

http://www.worldometers.info/world-population/#pastfuture
Food and Water Security:
Human-Animal Bond

ANTIDEPRESSANT

No Words Needed...
Puccini Foundation

A vaccine developed in dogs is helping dogs with malignant melanoma and the findings have been applied to create a similar vaccine for humans!

glioblastoma multiforme, GMB ~ in humans and dogs
ZOObIQUITY
WHAT ANIMALS CAN TEACH US ABOUT HEALTH AND THE SCIENCE OF HEALING
Barbara Natterson-Horowitz, M.D., and Kathryn Bowers
Read by Karen White An Unabridged Production
Antibiotic resistance is the quintessential One Health issue

Key words  Antibiotics  ●  Antimicrobial resistance (AMR)  ●  Environment  ●  Health
  ●  Livestock  ●  One Health

The scale of antimicrobial resistance

In May this year, the long-awaited final report from the *Review on Antimicrobial Resistance* was published.\(^1\) The report estimates that the 700 000 annual deaths currently attributable to infections by drug-resistant pathogens will increase, if unchecked, to 10 million by 2050, running up a bill of US$100 trillion in terms of lost global production between now and then. The reported numbers are somewhat
Antibiotic Resistance and the Soil Microbiome

Plant-Microbe Interactions

www.the-scientist.com
Endocrine Disruptors in our Environment: flame retardants

Hyperthyroid cats

Elevated PBDE Levels in Pet Cats: Sentinels for Humans?

JANICE A. DYE, *† MARTA VENIER, † LINGYAN ZHU, ‡‡ Il CYNTHIA R. WARD, $ RONALD A. HITES, † AND LINDA S. BIRNBAUM †

U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Experimental Toxicology Division, Research Triangle Park, North Carolina 27711, School of Public and Environmental Affairs, Indiana University, Bloomington, Indiana 47405, and College of Veterinary Medicine, University of Georgia, Athens, Georgia 30602

“The danger that the decline of bees and other pollinators represents to the world’s food supply was highlighted ..... when the European Commission decided to ban a class of pesticides suspected of playing a role in so-called “colony collapse disorder.”
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
What ‘ARE’ the Challenges for developing One Health Collaborations and Research Programs ?????

• Academic Tenure process
• Government Agency silos
• Corporate Proprietary knowledge
• Environmental Resources Harvest / Destruction Destructive Agricultural Technology

• Publication system – no access

** No forum in which to communicate across disciplines and professions**
“Between animal and human medicine there are no dividing lines –
Nor should there be.”

Rudolf Virchow, MD, 1821-1902
(Father of Cellular Pathology)
Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock and Human Health.

2003 International Union for Conservation Of Nature (IUCN) Launched the

AHEAD Forum (Animal Health for the Environment And Development)

2004 (Nov), 2005, 2007, 2009 Wildlife Conservation Society holds One Health Symposia in Bangkok, China, Brazil and Brazil respectively


**Special Report**

Executive summary of the AVMA One Health Initiative Task Force report

Lonnie J. King, DVM, MS, MPA, DACVPM; Larry R. Anderson, DVM, MD; Carina G. Blackmore, DVM, PhD; Michael J. Blackwell, DVM, MPH; Elizabeth A. Lautner, DVM, MS; Leonard C. Marcus, VMD, MD; Travis E. Meyer, BS; Thomas P. Monath, MD; James E. Nave, DVM; Joerg Ohle; Marguerite Pappaioanou, DVM, MPVM, PhD, DACVPM; Justin Sobota, MS, DVM; William S. Stokes, DVM, DACLAM; Ronald M. Davis, MD; Jay H. Glasser, PhD; Roger K. Mahr, DVM
One Health Initiative will unite human and veterinary medicine

The One Health Initiative is a movement to forge co-equal, all inclusive collaborations between physicians, osteopathic physicians, veterinarians, dentists, nurses and other scientific-health and environmentally related disciplines, including the American Medical Association, American Veterinary Medical Association, American Academy of Pediatrics, American Nurses Association, American Association of Public Health Physicians, the American Society of Tropical Medicine and Hygiene, the Centers for Disease Control and Prevention (CDC), the United States Department of Agriculture (USDA), and the U.S. National Environmental Health Association (NEHA). Additionally, more than 800 prominent scientists, physicians and veterinarians worldwide have endorsed the initiative.

Please see MONOGRAPH in Veterinaria Italiana

"One Health - One Medicine": linking human, animal and environmental health
One Health Newsletter

The One Health Newsletter is a collaborative effort by a diverse group of scientists and health professionals committed to promoting One Health.

This quarterly newsletter was created to lend support to the One Health Initiative and is dedicated to enhancing the integration of animal, human, and environmental health for the benefit of all by demonstrating One Health in practice.

To subscribe to the One Health Newsletter distribution list, click here. To submit comments or article suggestions please email Mary Leigh Morris (mleighmorris@ufl.edu) or Sarah White (swh0005@epi.ufl.edu).

Current Issue

Volume 9, Issue 1

In this issue:
- Subsistence Health as an Approach to Engage Students in Rural Communities in Biomedical Research
  Karsten Hueffer DVM (German equivalent), PhD, FHEA, Arleigh Reynolds, DVM, PhD, DACVN, and Barbara Taylor, PhD

http://epi.ufl.edu/onehealth/news/one-health-newsletter/
2009

- One Health Office established at U.S - CDC
- USAID established the Emerging Pandemic Threats program

https://www.onehealthcommission.org/
2010

- The Hanoi Declaration
- The Tripartite (FAO, OIE, WHO) 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
- World Bank funds One Health Network SouthEast Asia through Massey University, New Zealand, to strengthen responses to major zoonotic disease outbreaks
2011
- The 1st International One Health Congress is held in Melbourne, Australia
- The 1st One Health Conference in Africa is sponsored by OHCEA
- Tripartite organized a High Level Technical Meeting in Mexico City

2012
- 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
Global Health Security Agenda

Countries participating in GHSA
updated as of 7 March 2016

https://ghsagenda.org/
2014
- International One Health Research Symposium held in China
- International Conference on One Medicine, One Science (ICOMOS) held in at University of Minnesota

2015
- 3rd International One Health Congress, Amsterdam, Netherlands
- World Medical Association / World Veterinary Association Joint One Health Meeting, Madrid, Spain
World Rabies Day commemorated in The Gambia

Experts warn about danger of rabies virus
Gambia Horse and Donkey Trust (GHDT), in collaboration with the Ministry of Health and the Department of Livestock Services on Tuesday...

PUBLIC HEALTH - Veterinary public health - Livestock
Welcome to the One Health Platform web portal, the virtual meeting place for the fast growing One Health community.
Develops and coordinates the specifics for each medicine, by identifying common ground, ensuring for human medicine both the common primary disease prophylaxis elements, as well as the components of the experimental medicine. In Romania, comparative medicine has benefited, since the year of 1999, from the services of a specialty institute.
S. 2634

To establish an interagency One Health Program, and for other purposes.

IN THE SENATE OF THE UNITED STATES
MARCH 3, 2016

Mr. FRANKEN introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

To establish an interagency One Health Program, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “One Health Act of 2016”.

SEC. 2. INTERAGENCY ONE HEALTH PROGRAM.

(a) IN GENERAL.—The President, acting through the National Science and Technology Council, shall coordinate and support a national, interagency One Health Program to address infectious diseases in animals and the environment, and to help prevent the transmission of known and emerging infectious diseases between animal populations and human populations.
2016

http://oheh2016.org/

http://www.cvent.com/events/2nd-global-conference-on-one-health/
On September 25th 2015, countries adopted a set of goals to **end poverty**, **protect the planet**, and **ensure prosperity for all** as part of a new **sustainable development agenda**. Each goal has specific targets to be achieved over the next 15 years.

For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you.
One Health is a pathway to Planetary Health and Global Security
What Can we Do???
Collaborations start with Relationships!! With which we can form a Global One Health Alliance
WHO's WHO in One Health

Help us make this site a central resource for One Health initiatives and activities worldwide.

Send us the information on your One Health organization. Please share this form with other organizations so that they can provide important information on One Health. Click here to download our form.
1st International Who's Who in One Health Webinar

RECORDINGS NOW AVAILABLE. LINKS EMBEDDED BELOW.

The One Health Commission was pleased to host the 1st International Who's Who in One Health "Free" Online Webinar November 10, 2014. This Webinar brought together noted One Health leaders, advocates, professional organizations and individuals to discuss One Health efforts while providing opportunities for collaboration and action towards improving the state of health for people, animals, and the environment.

The main objectives of the Webinar:

- Connect One Health stakeholders: leaders, professionals, advocates, policy makers and the general public to discuss the state of health for people, animals, and the environment
- Educate Webinar participants about current thinking towards improved health for people, animals, and the environment
- Create new strategic partnerships for multi-sectoral and coordinated action

There was no cost to attend.

Registration: CLOSED

Frequently Asked Questions: Click here to view Frequently Asked Questions.

Speaker/Presenter Contact Sheet: Click here.

Session Recordings:

- Find recordings of sessions below. For additional information contact Rachel C. Smith (rcsmith@onehealthcommission.org) or Deanna Russell (drussell@onehealthcommission.org)

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1st International WHO'S WHO IN ONE HEALTH "Free" Online Webinar
November 10, 2014
Sponsored by the One Health Commission
www.onehealthcommission.org/globlawebinar
Animal domain - OHC Webinar attendees November 2014
JOIN the GLOBAL OH COMMUNITY LISTSERV

Sign-up to get interesting news and updates from the One Health Commission delivered to your inbox.

Click here to join our global listserv

OHC LISTSERV SIGN-UP

For Email Marketing you can trust.

5500 + names
Students for One Health (SOH)

Students for One Health
One Health Commission

1. Post announcements and information about your group’s One Health efforts and events on this page to share with other students and the Global One Health community. Send to Peter Costa (pcosta@onehealthcommission.org).

2. See your SOH group listed on the Who’s Who in Students for One Health webpage to help ‘connect’ SOH groups. Complete an SOH group information template and send to Peter Costa (pcosta@onehealthcommission.org).

Students for One Health
Listserv Sign-up

Summary of First Students for One Health (SOH) online Meeting (March 30, 2015)

Students for One Health
First Web Conference
March 30, 2015 8 pm EDT
Hosted by the One Health Commission

Student Organizers:
Sarina Selleck (Cummmings School at Tufts)
Lauren Briley (NC State)

On March 30, 2015, the One Health Commission (OHC) was proud to ‘Connect’ and support the many Students for One Health groups that are working around the world to further One Health sciences. Organized by ‘students for’ students, the meeting was open to anyone interested and some One Health faculty listened in. Student organizers who ran the meeting were Lauren Brierly, NC State College of Veterinary Medicine, and Sarina Selleck, Tufts College of Veterinary Medicine. Student representatives from 24 academic institutions from 6 countries each had 5 minutes to share news about their respective One Health activities. Participants hailed from all One Health arenas and included undergraduates.
Opportunities * Education * Grants * Jobs * Mentor

One Health Undergraduate Courses / Programs

May 9 - Aug 5  Texas A&M One Health Summer Research Program
  Location: College Station, Texas, USA
  Time: 05/03/16 - 08/05/16 (Submit the online application by 5:00 PM CST, Friday, February 5, 2016.)

Aug 26 - Aug 28  One Health Leadership Experience
  Location: University of Saskatchewan, Saskatoon, Sask. Canada

One Health Graduate Educational Opportunities

Oct 1 - Oct 31  One Health Epidemiology Fellowship Program run by Massey University
  Location: Massey University of New Zealand

Jan 15 - Dec 31  Master of Science in Global Health Online Program
  Location: Online, Northwestern University

Jan 1 - Feb 29  University of Minnesota Call for Abstracts
  Location: St. Paul, Minnesota

Jan 1  Graduate Assistantship in Zoonotic Diseases, Wildlife, and Forest Management
  Location: Tennessee State University

Jan 12 - Apr 12  Course - One Health: Philosophy to Practical Integration of Human, Animal and Environmental Health
  Location: North Carolina, USA

Jan 26  Pappaspanou Veterinary Public Health and Applied Epidemiology Fellowship
  Location: Atlanta, GA

Feb 1 - May 15  InterRisk International Masters Course
  Location: Bangkok, Thailand
# Events/Calendar

Send us the information about One Health events [CLICK HERE](#)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Jun 5 - Jul 3</td>
<td>One Health, One Medicine: An Ecosystem Approach Course</td>
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<td></td>
<td>Location: Online</td>
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<tr>
<td>Jul 8</td>
<td>Webinar: One Health and the Politics of Antibiotic Resistance (Part 1 of 2)</td>
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<tr>
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<td>Time: 11:00 AM - 12:00 PM (EDT)</td>
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<tr>
<td>Jul 13</td>
<td>Antimicrobial Resistance in the Environment (Part 2 of 2)</td>
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<td>Time: 11:00 AM - 12:00 PM (EDT)</td>
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<td>Jul 19</td>
<td>Antimicrobial Resistance - Stakeholder Webinar</td>
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<td>Time: 11:30 AM - 2:30 PM</td>
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<td>Jul 20</td>
<td>Finding the Next Patient Zero: The Global Virome Project</td>
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<tr>
<td></td>
<td>Location: World Affairs Council Auditorium 312 Sutter Street, Suite 200 San Francisco, CA</td>
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<td></td>
<td>Time: 6:30 AM - 7:30 PM (Pacific Time)</td>
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<td>Jul 21 - Jul 22</td>
<td>One Health and the Sustainable Development Goals</td>
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<tr>
<td>Jul 27 - Jul 29</td>
<td>2nd African Conference on Emerging Infectious Diseases and Biosecurity</td>
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<td>Location: Lagos, Nigeria</td>
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FIRST ANNUAL

one health

DAY

november 3, 2016

Promoting efforts around the world to bring together all human, animal, and environmental health disciplines

created and hosted by

check www.onehealthday.org for more information
One Health Day - 34 Events registered as of September 20, 2016
June 9, 2016  For Immediate Release

Preparing society to create the world we need through ‘One Health’ education!

Two leading international One Health groups, the One Health Commission and the One Health Initiative Autonomous pro bono Team are partnering to help create and promote a comprehensive global education revolution that supports curriculum innovation on the unifying interconnected health of humans, animals, and the environment that sustains all life on earth. A Concept paper titled ‘Preparing society to create the world we need through ‘One Health’ education’ has been released calling for interested parties to step forward to help with planning. The One Health concept encompasses a wide range of global public health and comparative medicine endeavors.

Dr. George Lundebjerg, one of the “One Health” educational project leaders and author of a new One Health oriented book on global population health and well-being, said that, “In keeping with the UN 2030 global Agenda for Sustainability, there is an urgent need for collective action by policy-makers, public / private educators, and health professionals to provide global ONE HEALTH learning opportunities across the education spectrum.”

We must give younger generations in both low and high income nations “a better deal” for helping to shape a sustainable world, one that is being tested severely by a threatened environment, conflicts, inequities, poverty, ideological extremes, and consumerism. Time is running short. As one example, data from the Living Planet Index (2014) should “make us stop and think”: “in less than two human generations, population sizes of vertebrate species have dropped by half. These are the living forms that constitute the fabric of the ecosystems which sustain life on earth and the barometer of what we are doing to our planet, our only home.”

“…no single person, no single health profession, no single organization, and no single nation or people invented or owns One Health. It is an all inclusive, co-equal endeavor that belongs to all of humanity. A caveat: while honest debate over efficacious process should be welcome, factionalism should not.”

Mary Echols, DVM, MPH, early Editor of the One Health Newsletter (FLA), in a 2009 One Health journal piece

‘One Health’ - the Rosetta stone for 21st century health and health providers
Collaborations start with Relationships!!

We can accomplish much more by coming together in a Global One Health Alliance
Dream the Future
Work Together!!

“It’s Up to US”!!
Let us Collaborate in a Global One Health Alliance