The Role of the Veterinarian in Modern Society

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What is a Veterinarian?
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- Someone who diagnoses and treats disorders of animals
- Someone who cares for the health of pets, livestock, zoo and laboratory animals
- Someone who protects human health by addressing diseases carried by animals
- Someone who expands our knowledge of animal and medical science through research
Education and Training

- Those going into veterinary medicine should have:
  - A scientific mind
  - Good communication skills
  - Leadership experience

- In the US, veterinary school is a four-year professional program requiring university level prerequisite courses prior to entry
  - Same as human medical schools
Education and Training

- Pre-requisite courses are focused on sciences, but cover a variety of subjects:
  - Biology
  - Chemistry
  - Physics
  - English Language
  - Mathematics
  - Communication
  - Business Management
  - Humanities
Education and Training

While in a veterinary curriculum, students learn:
- Anatomy
- Histology
- Pathology
- Epidemiology
- Virology
- Bacteriology
- Mycology
- Medicine
- Surgery
- Parasitology
- Pharmacology
- Toxicology
- Clinical and Communication Skills
Education and Training

- A new graduate has obtained a degree as a:
  - Doctor of Veterinary Medicine (D.V.M.)
  - Veterinary Medical Doctor (V.M.D.)

- Upon graduation, the new veterinarian is prepared to:
  - Enter clinical practice as a general practitioner
  - Begin an internship to gain additional mentoring or prepare for residency training
    - Able to specialize in a variety of fields
  - Work in epidemiology
  - Become a research assistant
  - Become a meat and poultry inspector
“Today’s veterinarians are the **only** doctors educated to protect the health of **both** animals and people. They work hard to address the health and needs of every species of animal and they also play a critical role in environmental protection, food safety, animal welfare and public health.”

- American Veterinary Medical Association
The Veterinarian in History

- 2011 – World Veterinary Year
  - Celebrated 250 years of veterinary profession
- Claude Bourgelat began the first veterinary school in Lyon, France
The Veterinarian in History

- Comparative biopathology existed from the inception of veterinary medicine.
- Initially training and focus were on large animal species as these were the animals society valued:
  - Livestock – food source
  - Horses – military and transport
Human-Animal Bond

- Small animals have come to the forefront of veterinary medicine over the last century
- “The other family doctor”
Food Safety

“Farm-to-Fork”
- Advise livestock owners on production medicine and animal health
- Ante-mortem inspection of animals for slaughter
- Monitoring animal welfare during slaughter
- Carcass inspection and condemnation
Public Health

- Prevention of the introduction of foreign animal diseases, especially those that affect human health or food supply
  - Rabies
  - Foot and Mouth Disease
- Food Safety
- Effects of pesticides and industrial pollutants
- Epidemiology – investigating disease outbreaks
Environmental Protection

- Population studies of natural wildlife
- Treatment, care and rehabilitation of injured wildlife
  - Re-release
  - Use in educational institutions
- Making recommendations on environmental impact of development
Animal Welfare

- Advocates for the best interest of the animal
  - Owner
  - Farmer
  - Producer
  - Laboratory

- Educating the public about animal husbandry and the treatment of animals
- Animal rescue
- Shelter environment
Academia

- Teaching veterinary students
- Teaching veterinary technicians
- Teaching scientists
- Continuing education on new medications/procedures to practicing veterinarians
- Health care of animals in academic institutions
- “Life-long Learners”
Research

- Discovering new ways to diagnose, treat and prevent animal and human diseases
  - Malaria
  - Yellow fever
  - West Nile Virus
  - Influenza
- Monitoring effectiveness and safety of new drugs/biological products
- Bench-top research
- Clinical trials
What the future holds

- Veterinary medicine plays a valuable and diverse role in society

**One Health**
- Worldwide alliance
- Collaboration and communication between veterinarians and other medical professionals
One Health

- 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.