Changing the landscape: how society benefits from veterinary medicines



How healthy animals contribute to healthy people by:

How animal health affects human health:

Animals worldwide in numbers:

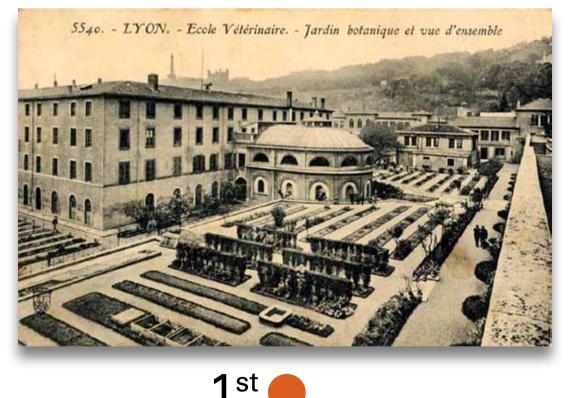
- controlling diseases that can be passed between humans and animals,
- reducing food-borne bacteria,
- improving the efficient use of the world's resources to feed a growing population,
- improving the health of the animals populating an increasingly crowded planet,
- combating hunger and malnutrition through provision of valuable animal protein,
- ensuring better incomes for the world's poorest, leading to better health
- ... healthy animals help ensure better health for the people who care for or depend on them for food, income, companionship and help.

- Of nearly 1,500 diseases we know affect people, 2/3rd can pass between animals and humans.
- Three out of four emerging diseases have come to humans through animals.
- ► 2/3rd of the world's 700 million poor depend on livestock as their main source of food and income.
- According to the OIE world production of food animals is reduced by more than 20% due to disease, so even animal diseases not transmissible to humans may lead to serious public health problems due to shortages and deficiencies in food.

► 68.8 billion poultry

- ► 2.8 billion cattle, sheep and goats
- ► 1.5 billion pigs
- 223 million domestic dogs
- ► 220 million domestic cats
- uncounted horses, donkeys, buffalos, camels, and other domestic animals including ducks, geese, rabbits and pets such as hamsters, guinea pigs, etc

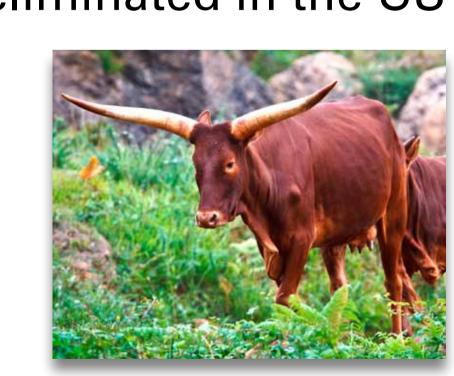
surround us and often need medicines to enjoy healthy lives.



veterinary school founded in Lyon, France

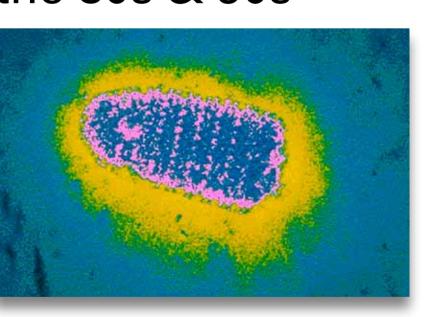
1st anthrax vaccine and rabies vaccine developed

Brucellosis virtually eliminated in the US



Development of rinderpest vaccine 1st veterinary antibiotics licensed in the US and Europe

Wide-spread availability in Western world of rabies vaccine, leading to effective control in Europe in the 80s & 90s



Discovery of thiabendazole, the 1st benzimidazole anthelmintic

1960s

Intense development of modern veterinary therapeutics, improving animal health and welfare (better pain control in pets and farm animals, better anaesthetics for surgery,

1st behavioural drug for pets)

Development of west nile virus vaccine for horses

Development of avian flu vaccine in response to human and bird flu pandemic

1761

1880s 1910s

1930s

1950s

1970s

1980s

1990s

2000s

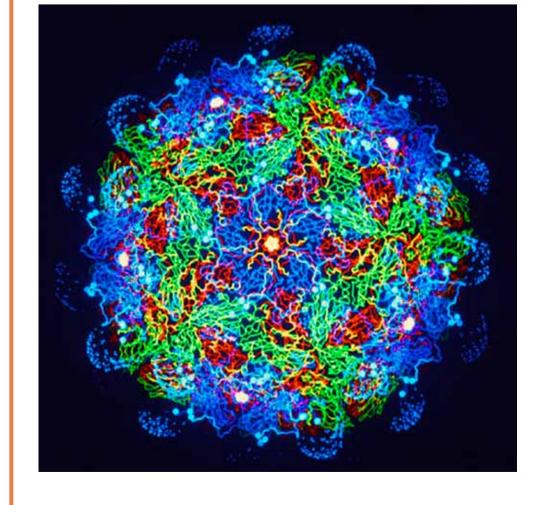
2005

2010

issued for production of antihog-cholera serum



1st US veterinary license • • 1st foot and mouth disease vaccine developed



st brucellosis vaccine developed

Discovery of avermectins as agricultural chemicals and livestock antiparasitics revolutionising parasite-control in veterinary and

Introduction • of products for reproduction management

human medicine

Development of new mechanisms for antiparasitics for livestock and pets

Development of modern foot and mouth disease vaccine



1st DNA vaccine authorised, pioneering a new technology now also used in human medicine



Rinderpest eradication field activities successfully terminated (announcement of eradication due in 2011 – only 2nd disease eliminated by global programmes)