



OLE OLSEN MALM

AN EARLY ADVOCATE FOR ONE HEALTH

HALVOR HEKTOEN

45TH. WAHVM CONGRESS, BRESCIA 2022



1. OLE OLSEN MALM AND HIS ROLE IN ESTABLISHING THE VETERINARY SERVICES IN NORWAY
2. A SUMMARY OF THE INTERACTION BETWEEN HUMAN AND VETERINARY MEDICINE IN A HISTORICAL VIEW – FROM MALM'S TRIAL LECTURE FOR HIS DISPUTATION FOR THE MEDICAL DOCTORAL DEGREE
3. ONE HEALTH – CAN WE USE THIS TERM IN A HISTORICAL VIEW?

ONE HEALTH

- AN APPROACH THAT RECOGNIZES THAT THE HEALTH OF PEOPLE IS CONNECTED TO THE HEALTH OF ANIMALS AND OUR SHARED ENVIRONMENT
- 2010 THE TERM ONE HEALTH WAS OFFICIALLY ESTABLISHED BY THE UNITED NATION
 - 1850'S RUDOLF VIRCHOW (1821-1902) «NO DIVISION BETWEEN HUMAN AND ANIMAL MEDICINE»
 - 1870'S SIR WILLIAM OSLER (1849-1919) «ONE MEDICINE»
 - 1980'S CALVIN SHWABE (1927-2006) – THE FATHER OF VETERINARY EPIDEMIOLOGY (DAVIS)
 - 2004 WILDLIFE CONSERVATION SOCIETY
 - 2007 AVMA/AMA
 - 2008 STRATEGIC FRAMEWORK OF ONE HEALTH (OIE, WHO, FAO, UNICEF, WORLD BANK)

NORWAY AFTER 1814

- INDEPENDANT NATION AFTER 400 YRS WITH DENMARK
- UNION WITH SWEDEN THAT LASTED UNTIL 1905
- NATIONBUILDING PERIOD
- DENMARK AND SWEDEN HAD VETERINARY SCHOOLS SINCE 1771 AND 1775 RESPECTIVELY
- 1818 – THE FIRST PROPOSAL IN THE PARLIAMENT TO START VETERINARY EDUCATION (1936 FULLFILLED)
- AS A RESULT, THE VETERINARY SERVICES AND ORGNIZATION IN NORWAY WAS VERY WEEK



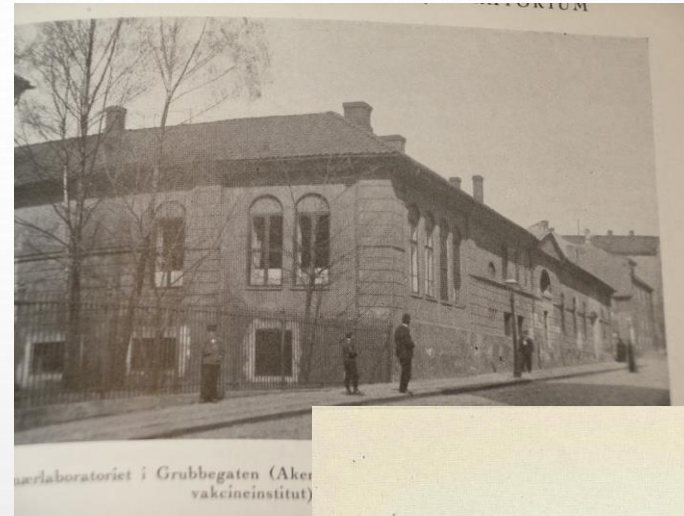
OLE OLSEN MALM (1857 – 1917)

- IN 1887 - THE MINISTRY OF HEALTH OFFERED A 3 YRS. GRANT TO A YOUNG PHYSICIAN TO STUDY VETERINARY MEDICINE IN COPENHAGEN
- OLE OLSEN MALM RECEIVED THE GRANT
- 1880 - MEDICAL DOCTOR, UNIVERSITY OF OSLO
- 1889 - VETERINARY DEGREE, COPENHAGEN
- 1889 - WORKED AT THE PASTEUR INSTITUTE AND WITH ROBERT KOCH



OLE OLSEN MALM (CONT.)

- 1890 - HE WAS APPOINTED AS THE FIRST CVO/VETERINARY DIRECTOR
- PREPARE FOR A VETERINARY EDUCATION IN NORWAY
- 1890 - ESTABLISHED THE NORWEGIAN VETERINARY INSTITUTE AND BECAME THE INSTITUTE'S FIRST DIRECTOR
- 1891 ESTABLISHED THE NATIONAL VACCINE INSTITUTE (SMALLPOX VACCINE) – (MOVED TO THE NATIONAL PUBLIC HEALTH INSTITUTE IN 1929).
- 1891 PRODUCING TUBERCULIN



OLE OLSEN MALM (CONT.)

- 1894 REVISED THE ANIMAL DISEASE ACT WHICH LASTED FOR ALMOST 70 YRS.
- 1894 ALSO REVISED THE SLAUGHTER ACT
- THE ACTS GAVE NECESSARY MEASURES TO CONTROL CONTAGIOUS DISEASES
 - DIAGNOSTIC TESTING
 - ISOLATION ON SUSPICION
 - TRACING
 - QUARANTINE
 - STAMPING OUT/SLAUGHTERING
 - ECONOMICAL COMPANSATION

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(1894).

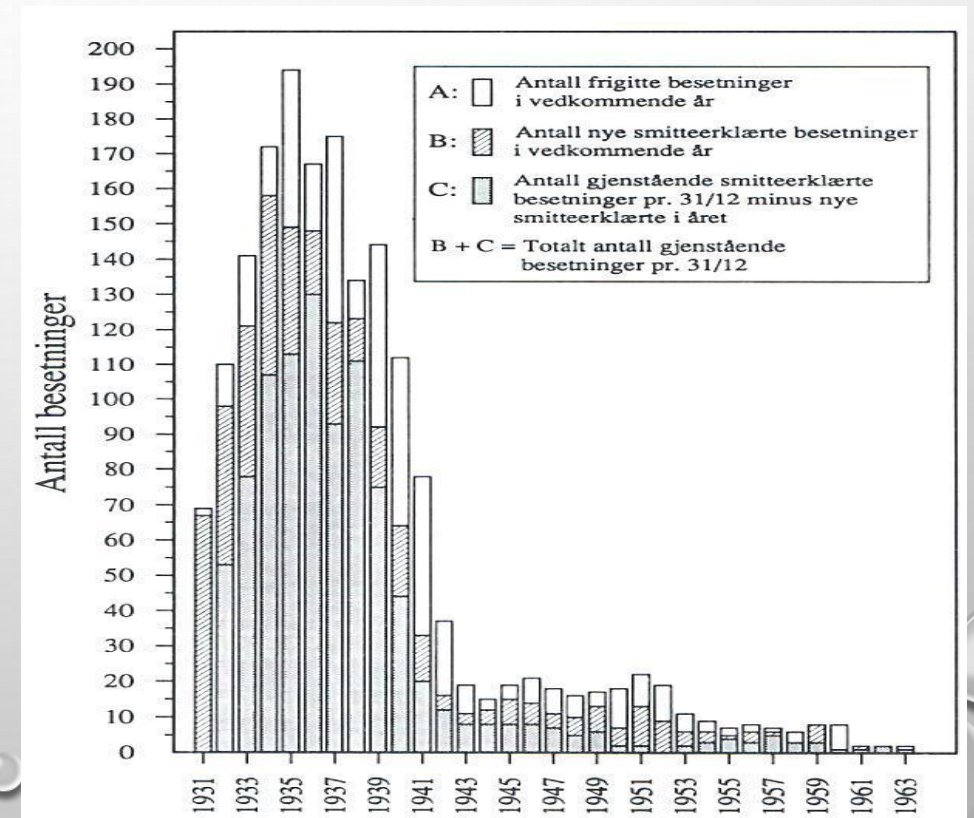
Ang. Udfærdigelse af en Lov om Foranstaltninger
mod smitsomme Husdyrsygdomme.

Indredepartementets underdanigste Indstilling af 17de Februar 1894, som ved
Kongelig Resolution af samme Dato naadigst er bifaldt.

- THE ANIMAL DISEASE ACT WAS FUNDAMENTAL FOR A SUCCESSFUL CONTROL OF CONTAGIOUS DISEASES

- ESTABLISHED A VETERINARY FIELD SERVICE – DISTRICT VETERINARY OFFICERS

- FOOT AND MOUTH DISEASE 1952
- BRUCELLOSIS 1954
- INFECTIOUS ANEMIA IN HORSES 1962
- BOVINE TUBERCULOSIS 1963 (FIGURE)
- SWINE FEVER 1963



OLE OLSEN MALM (CONT.)

- AS A PHYSICIAN, VETERINARIAN AND MICROBIOLOGIST HE HAD THE ABILITY TO SEE THAT A HEALTHY ANIMAL POPULATION IS BENEFICIAL FOR HUMAN HEALTH
- SPECIAL INTEREST IN ZONOTIC DISEASES (TUBERCULOSIS, BRUCELLOSIS)
- A NORWEGIAN PARALLEL TO PROF. **BERNHARD BANG** IN COPENHAGEN (BRUCELLA BACTERIA)
- BANG WAS ALSO A PHYSICIAN AND A VETERINARIAN
- DIRECTOR OF THE ROYAL VETERINARY SCHOOL



ONE MEDICINE – ONE HEALTH

RUDOLF VIRCHOW (1822-1902) FOUNDER OF CELLULAR PATHOLOGY, STARTED USING THE TERM ZOONOSIS. PUBLIC HEALTH/SOCIAL MEDICINE ETC, ETC.....

«BETWEEN HUMAN AND ANIMAL MEDICINE THERE IS NO DEVIDING LINE – NOR SHOULD IT BE».

SIR WILLIAM OSLER (1849-1919), MONTREAL, CANADA,

«ONE MEDICINE» TEACHING MEDICAL AND VETERINARY STUDENTS IN MONTREAL IN THE 1870'S

CO-FOUNDER OF JOHNS HOPKINS HOSPITAL - DEVELOPED RESIDENCY PROGRAM AND CLINICAL STUDENT TRAINING

FOUNDER OF HISTORY OF MEDICINE SOCIETY, LONDON
1912



DOCTORAL THESIS «ABOUT TUBERCULIN» 1894

- TRIAL LECTURE, CHOSEN TOPIC:
- “VETERINARY MEDICINE AND HUMAN MEDICINE AND THE INTERACTION OF THE TWO DISCIPLINES”

ANCIENT TIME

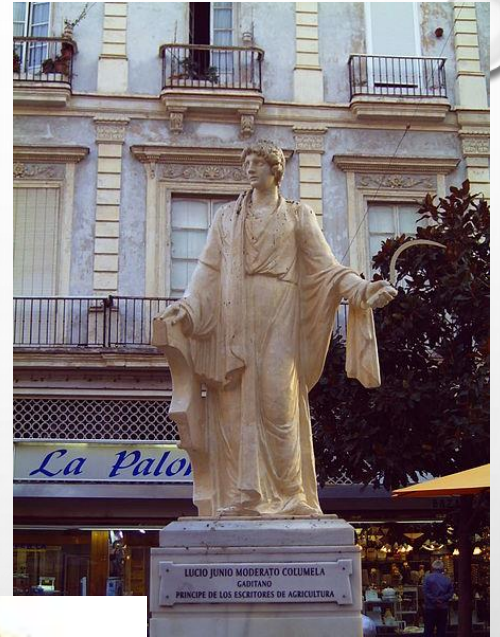
COMPARATIVE ANATOMISTS:

- ARISTOTLE (384 – 326 BC) *THE HISTORY OF ANIMALS*
- HIPPOCRATES (460 – 370 BC) COMPARATIVE MEDICINE AND ALSO STUDIED ANIMAL DISEASES
- STUDIED ANIMALS TO LEARN ABOUT HUMAN ANATOMY AND DISEASES



VETERINARIANS DURING ROMAN TIME

- **COLUMELLA** (4 – 70 AD) , BORN IN SPAIN, LIVED IN ITALY «*DE RE RUSTICA*» (RURAL AFFAIRS) 12 BOOKS, BOOK 6 AND 7; ABOUT ANIMALS AND ANIMAL DISEASES
- **ASPYRTUS** (320 AD) ROMAN CAVALRYMAN AND «*FATHER OF VETERINARY MEDICINE*» PUBLISHED A GREAT NUMBER OF BOOKS AND PAPERS. BROUGHT VETERINARY MEDICINE ALONGSIDE AND ON THE LEVEL OF HUMAN MEDICINE.
- **VEGETIUS**, ROMAN AUTHOR (450 AD): «*ARTIS VETERINARIAE SIVE MULO-MEDICINÆ LIBRI QUATUOR*», (A GUIDE TO VETERINARY MEDICINE)



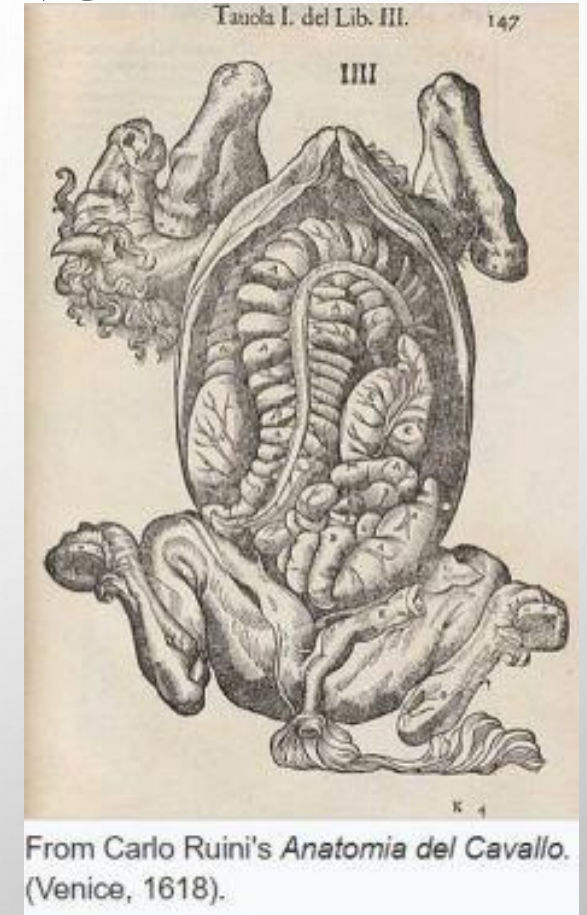
MIDDLE AGE – DARK AGE FOR MEDICAL SCIENCE

- WAR, DISEASES, FAMINE
- SUPERSTITION
- SCIENCE SUPPRESSED BY THE CHURCH



RENEISSANCE - FROM ART TO SCIENCE

- HUMAN MEDICINE AND SCIENCE GREW OUT FROM THE UNIVERSITIES IN THE 12 -1300.
- VETERINARY MEDICINE - LESS DEVELOPED
- **CARLO RUINI**, 1530 – 1598, BOLOGNA
 - LAWYER, SENATOR, HORSEMAN,
 - AMONG THE FOUNDERS OF COMPARATIVE ANATOMY «ANATOMIA DEL CAVALLO, INFERMITA ET SUOI REMIDII» (1598)
 - ANATOMY
 - EQUINE DISEASES



From Carlo Ruini's *Anatomia del Cavallo*. (Venice, 1618).

VETERINARY MEDICINE – FROM ART TO SCIENCE

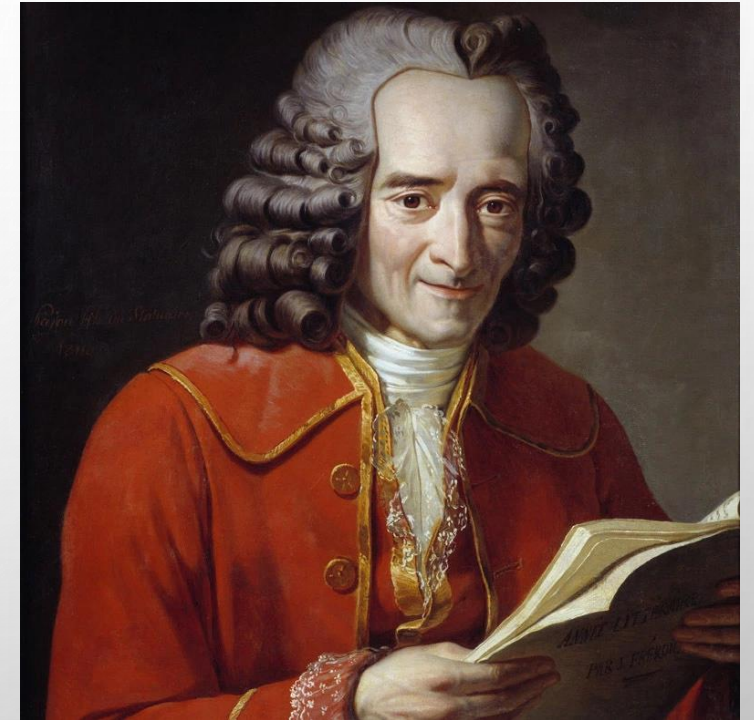
- EUROPE HAUNTED BY ANIMAL DISEASES - RINDERPEST IN THE BEGINNING OF 1700
- NEED FOR VETERINARY MEDICINE
- FARRIERS PRACTICING HORSE MEDICINE
- **CLAUDE BOURGELAT (1712 – 1779)**
 - LAWYER, LYON ACADEMY OF HORSEMANSHIP
 - FIRST VETERINARY SCHOOL, LYON 1761, PARIS (ALFORT) 1765
 - OPENING THE SCHOOLS TO FOREIGN STUDENTS



LETTER FROM VOLTAIRE TO BOURGELAT (1775)

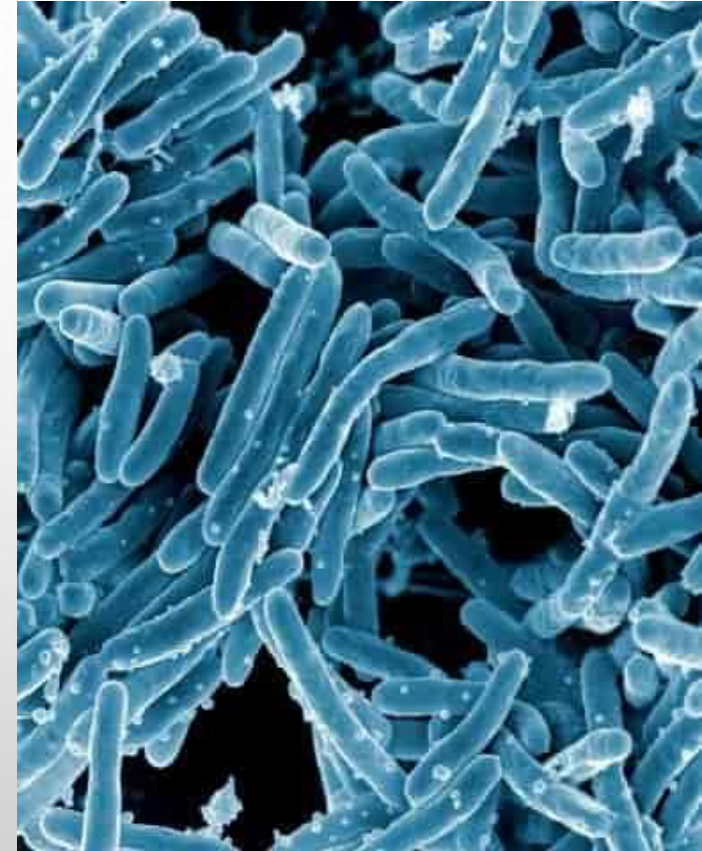
I WAS ASTONISHED WHEN I FOUND OUT THAT CATTLE DID NOT HAVE ANY MEDICAL HELP OTHER THAN FARRIERS. QUALIFIED HELP HAS BEEN MISSING EVEN IN CIVILIZED COUNTRIES.

YOU ALONE HAVE ENDED THIS SHAME. OUR COLLEGUES, THE ANIMALS, DESERVE BETTER, ESPECIALLY AFTER OUR LORD MADE PACT WITH THE ANIMALS AFTER THE FALL OF MAN.



THE AGE OF MICROBIOLOGY AND CELL PATHOLOGY

- IN THE LATE 1800 MANY MAJOR PATHOGENS WERE DISCOVERED AND ISOLATED
- MANY OF THESE DISEASES WERE ZOONOSES
- ONE BACTERIA – ONE DISEASE
 - WORK WITH ANTHRAX



FRUITFUL COLLABORATION BETWEEN PHYSICIANS AND VETERINARIANS

- ANTHRAX
 - CHABERT(V), DELAFOND(V), BARTÉLEMY(V), TOISSANT(V), PASTEUR, KOCH(MD) «ONE BACTERIA – ONE DISEASE»
- TETANUS
 - OLLIVIER(V), NOCARD(V)/ROUX(MD), SHÜTZ(V)/BEHRING(MD)
- RABIES
 - PASTEUR, ROUX(MD), NOCARD(V)
- GLANDERS
 - CHAUVEAU(V), GERARD(V), ST. CYR(V), SHÜTZ(V), LOEFFLER(MD)
- BRUCELLOSIS – FEBRIS UNDULANCE
 - BANG(V,MD), BRUCE (MD)
- TUBERCULOSIS
 - VILLEMIN(MD), CAUVEAU(V), BUOLEY(V)



TO CONCLUDE

- COMPARATIVE ANATOMY AND PATHOLOGY
- THE AGE OF BACTERIOLOGY - ZOONOSES
- ONE MEDICINE – ONE HEALTH
- SPECIALIZATION – THE MEDICAL DISCIPLINES GREW APART AGAIN
- PUBLIC HEALTH AND VETERINARY PUBLIC HEALTH

ONE HEALTH APPROACH

- TO CONTROL ZOONOSES AND EMERGING DISEASES – THE COMPLEX HUMAN-ANIMAL-ENVIRONMENTAL INTERFACE

