



Animal and Plant
Quarantine Agency

S E O U L 2 0 2 6



47th Congress of the World Association for the History of Animal Health

History of Science and Policy for Animal Health

Book of Abstracts

24 - 26 June 2026

Schofield Hall, College of Veterinary Medicine,
Seoul National University



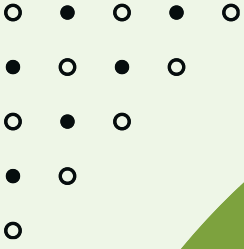


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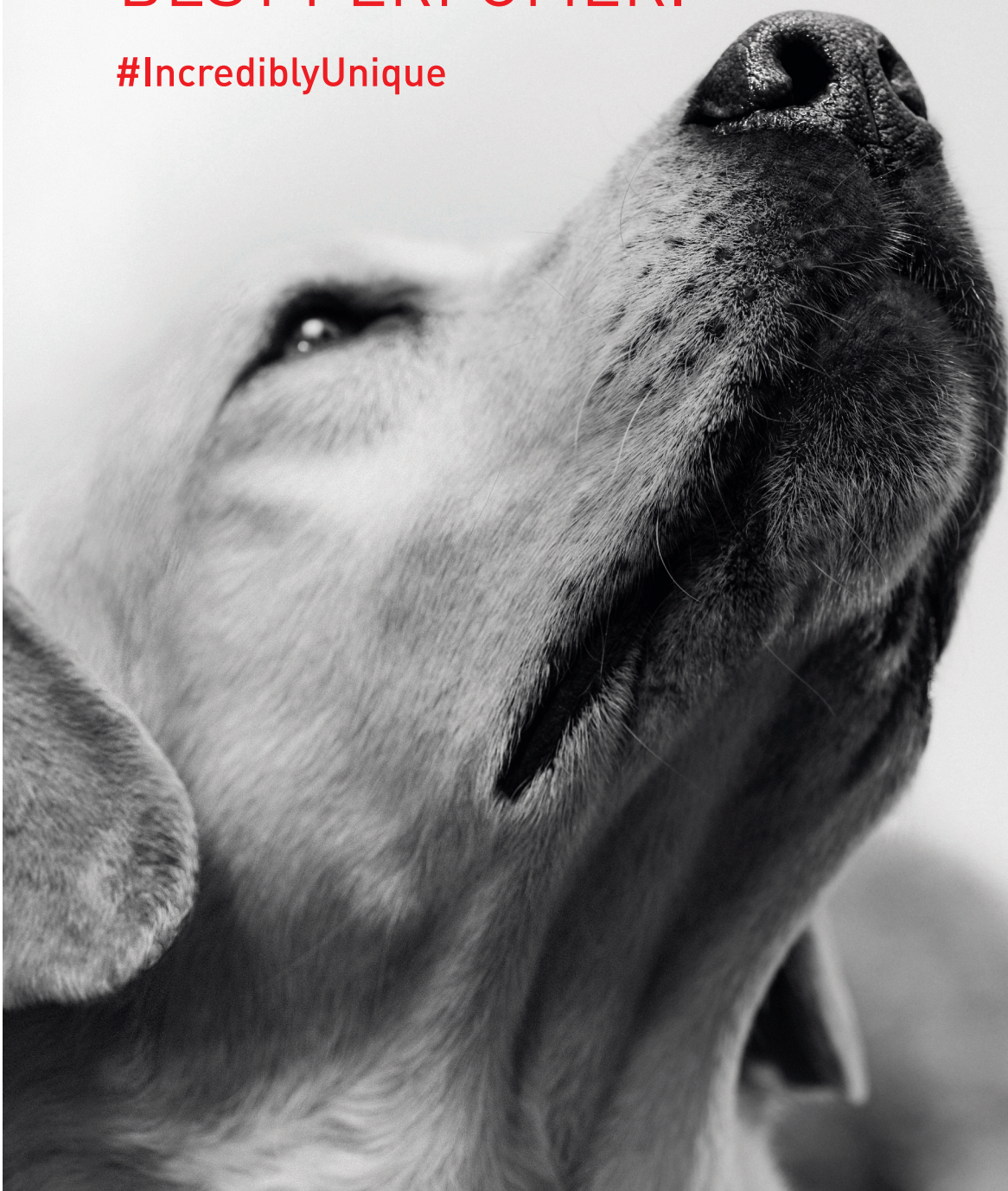
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Welcome Address

On behalf of the Organizing Committee, it is our great pleasure to welcome you to Seoul for the 47th Congress of the World Association for the History of Animal Health.

This year's Congress is hosted by two institutions with long and distinguished histories in modern veterinary medicine and animal health: the Animal and Plant Quarantine Agency and the College of Veterinary Medicine, Seoul National University. It is especially meaningful that these two institutions, both of which have played important roles in shaping the history of veterinary medicine on the Korean Peninsula, are hosting this Congress together. In 2027, the College of Veterinary Medicine at Seoul National University will celebrate its 80th anniversary, and in 2029, the Animal and Plant Quarantine Agency will mark its 120th anniversary.

This Congress is also significant as the first World Association for the History of Animal Health Congress to be held in Asia. Many of you have traveled long distances to join us in Seoul. At a time when recent international instability has made international travel more challenging, we are especially grateful for your presence. Your participation is deeply meaningful to us, and we value it all the more.

We have been able to prepare this Congress thanks to the dedicated support of our host institutions, academic committee, partner organizations, colleagues, and sponsors. We would like to express our sincere gratitude to all who have helped make this event possible.

Veterinary medicine has continuously evolved alongside changing public health challenges, scientific developments, and international circumstances. Modern science and technology have served as essential tools — and at times powerful instruments — in the advancement of veterinary medicine. Yet throughout this process, we have not lost sight of the relationships and experiences we have shared with animals, nor of the interspecies care and compassion that lie at the heart of veterinary practice.

We believe these values are among the most important for historians of animal health and veterinary medicine to continue exploring, illuminating, and sharing. In this sense, our gathering at this Congress is especially valuable. We come together from diverse fields, including veterinary medicine, natural history, science and technology studies, history, library and archival studies, and the life sciences. Together, we will reflect on the paths of science and policy that have shaped animal health, while also enjoying the opportunity to meet one another with curiosity, wonder, and collegial friendship.

We sincerely hope that your time in Seoul will be memorable, rewarding, and filled with warm memories.

Myung-Sun Chun and Soon-Rye Kang
Co-Chairs of the Organizing Committee
47th Congress of the World Association for the History of Animal Health



Congratulatory Address

It is my great pleasure to extend congratulations on the opening of the 47th Congress of the World Association for the History of Animal Health (WAHAH) in Seoul, Republic of Korea. I warmly welcome all WAHAH members, as well as researchers and professionals from Korea and around the world.

This Congress is especially meaningful, as it marks the first WAHAH Congress held in Asia. I would like to express my sincere appreciation to all participants who have made the journey from around the world to join us here in Seoul. I also extend my sincere thanks to the College of Veterinary Medicine at Seoul National University, the Organizing Committee, and everyone whose dedication has made this Congress possible.

The history of veterinary medicine is far more than a record of animal disease outbreaks and responses. It is an invaluable heritage that reflects the shared journey of humans and animals, as well as the development of veterinary medicine itself.

Efforts to control animal diseases, improve public health, ensure food security, and promote animal welfare have all progressed alongside the development of veterinary medicine. By studying this history, we gain important insights from the past that help us better understand the challenges of today and prepare for the future.

The Animal and Plant Quarantine Agency has grown alongside the development of veterinary medicine in Korea. The national animal disease control system traces its origins to 1909, during the Korean Empire, when a government organization responsible for animal quarantine and livestock sanitation was established. For 117 years, this system has played a central role in Korea's animal health policy.

In responding to national disaster-type animal diseases such as foot-and-mouth disease, highly pathogenic avian influenza, African swine fever, and many others, Korea has strengthened its national disease control and research capacity. With the expansion of international trade, it has also advanced its animal quarantine system, helping protect the health of humans and animals and safeguard Korea's livestock industry.

Today, the world faces new challenges shaped by climate change, changing ecosystems, and expanding international exchange. In the era of One Health, where the health of humans, animals, and the environment is closely interconnected, the importance of animal health has never been greater. In this changing environment, reflecting on past experience and historical lessons has become even more essential. Your dedication to studying and preserving the history of veterinary medicine and animal health is more than an effort to record the past; it is a valuable intellectual asset that can help guide society's future.

This Congress will bring together experts from many countries and disciplines to share research findings and offer new perspectives on the history of animal health and veterinary medicine. I hope it will further enrich academic exchange and strengthen the foundation for international cooperation.

I sincerely hope that this Congress in Seoul will offer all participants valuable opportunities for academic advancement and new collaborative partnerships.

Jung-rok Choi
Commissioner of the Animal and Plant Quarantine Agency



Thanks to the following organizations

Host organizations

- Animal and Plant Quarantine Agency
- Unit for Veterinary Humanities and Social Science, College of Veterinary Medicine, Seoul National University

Partners

- Korean Veterinary Medical Association
- Korean Library Association
- Korean Special Library Association
- The Korean Research Institute of Science, Technology and Civilization, Jeonbuk National University

Sponsors

- Green Cross Veterinary Products Co., Ltd
- Pig and Health Co., Ltd
- Royal Canin Korea
- Library and Technology

Program

Day 1 — Wednesday, June 24, 2026

10:00	Registration	
Opening Ceremony and Plenary Lectures		(Schofield Hall, 3F)
13:30	Opening Ceremony <i>Myung-Sun Chun and Soon-Rye Kang, Co-Chairs of the Organizing Committee</i> <i>Jun-Jeong Lee, Executive Vice President for Academic Affairs of Seoul National University</i>	
Plenary Lecture 1		
14:00	The Historical Presence of Veterinarians in Premodern Korea <i>Dongwon Shin, The Korean Research Institute of Science, Technology and Civilization, Jeonbuk National University, Republic of Korea</i>	
Plenary Lecture 2		
14:40	Animal Infectious Diseases, Grassroots Communes, and the State in Maoist China <i>Jongsik Yi, College of Liberal Arts and Convergence Science, KAIST, Republic of Korea</i>	
15:20	Coffee Break (Poster Lounge A/B)	
Parallel Session Room A		
Session I: Teaching Veterinary History		
Chair: Peter Koolmees		
15:40	Teaching Veterinary History at The Veterinary Faculty in Ljubljana, Slovenia <i>Andrej Pengov</i>	
16:05	Veterinary History Teaching at Seoul National University: Tracing the Roots of Veterinary Professionalism Education <i>Myung-Sun Chun</i>	
16:30	Teaching Veterinary History in Contemporary Japanese Veterinary Education: Current Status and a Case Study from Nippon Veterinary and Life Science University <i>Noriyasu Sasaki</i>	
16:55	Back to the Future: History and Public Education in the Dog Breeding Sector <i>Alison Skipper</i>	
Parallel Session Room B		
Session II: Veterinary/Animal Ethics		
Chair: Abigail Woods		
15:40	Veterinary and animal ethics according to Norwegian legislation from the twelfth century to today <i>Johan Fredrik Aurstad</i>	
16:05	Between Fair and Fowl: Colonial Hunting Regulations and the Precarious Status of Colonial Wildlife <i>Inbo Cho</i>	
16:30	Animal Rights in Türkiye as of 2026: The Legal Framework, Media-Reflected Incidents and a Critical Evaluation <i>Pınar Ece Yorulmaz and Serap Şahinoğlu Kuş</i>	
16:55	The Ethical Ordeal of Clinical Veterinary Medicine <i>R. Tamay Basagac Gul</i>	
17:20	Poster Q&A	
Reception and Dinner		
(Veterinary Museum and Main Building Lobby, 5F)		
18:00	Reception Dinner <i>Myung-Sun Chun and Sonn-Rye Kang, Co-Chairs of the Organizing Committee</i> <i>Jin-woo Lee, President, Korean Library Association</i>	

Day 2 — Thursday, June 25, 2026

08:30	Registration
Plenary Lectures (Schofield Hall, 3F)	
Plenary Lecture 3	
09:00	History of Traditional Chinese Veterinary Medicine and Its Application in Current Veterinary Practice <i>Wuren Ma, College of Veterinary Medicine, Northwest A&F University, China</i>
Plenary Lecture 4	
09:40	The Imperial Beginnings of International Veterinary Police in Modern East Asia: A Comparative Perspective <i>Tatsuya Mitsuda, Keio University, Japan</i>
10:20	Coffee Break (Poster Lounge A/B)
Parallel Session Room A	
Session III: Colonial animals and veterinary medicine	
Chair: R. Tamay Basagac Gul	
10:40	On Discovering the Cause of Surra, Killer of Horses in British India and the Dutch East-Indies 1879-1903 <i>Jons Straatman</i>
11:05	Skryabin's Worms: Colonial Soviet Veterinary Parasitology <i>Susan Jones</i>
11:30	Dutch Colonial Veterinary Medicine in East and Southeast Asia <i>Peter Koolmees</i>
11:55	From One-Man Service to Colonial Institution: Major G. W. Sturgess and the Transformation of Veterinary Practice in Ceylon <i>Bulent Basaran</i>
Parallel Session Room B	
Session IV: Veterinary Historical Archives and Collections I	
Chair: Noriyasu Sasaki	
10:40	The History of the Non-University Library for Medical and Veterinary History at Urk (NL) <i>Erik-Jan Tjalsma</i>
11:05	The Munich Veterinary Collection: Sharing Historical Objects Through Digitalisation <i>Michaela Pfeuffer, Veronika Goebel and Mathilde Schmuck</i>
11:30	Didactic Bibliographic Resources to Improve the Teaching and Learning in Veterinary Sciences <i>Yasser Lenis, Amy Jo Montgomery and Diego F. Carrillo-Gonzalez</i>
11:55	The precedents of artificial anatomical models in Veterinary Medicine: The case of the wooden cow, 19th century <i>Claudia Vergara Parra, Manuel García-Espantaleón Artal and Joaquín Sánchez de Lollano Prieto</i>
12:20	Lunch

Parallel Session Room A

Session V: Animal and Animal Disease Policy

Chair: Savas Volkan Genc

- 13:30 **Beyond Domestication: Preventive Veterinary Strategies and Ethological Insights in the 19th-Century Korean Encyclopedia Imwon Gyeongjeji**
Jong-Wook Jeon
- 13:55 **Veterinary Influence on Development in Jeju Island**
Michael J. Riordan
- 14:20 **Seeking Farmer Buy-In: The Introduction of The Five-Point Plan into New Zealand**
Mayinuer Tuerdi and Richard Laven
- 14:45 **The Korean "Harmful Animal": The Korean Water Deer**
Manyong Moon

Parallel Session Room B

Session VI: Veterinary Historical Archives and Collections II

Chair: Haeun Kang

- 13:30 **Archiving Veterinary Heritage in Korea: from Preservation to Open Access - Focusing on the Animal and Plant Quarantine Agency**
Yujung Sim and Ji-Eun Park
- 13:50 **Research and Quarantine Service and Its Significance as a Spatial Archive**
Hanbyul Kim and Hoosung Lee
- 14:10 **Korean Agricultural Treatises and the Reconstruction of Veterinary History**
Jeungsang Ryu
- 14:30 **From Aid Recipient to Global Technical Hub: The Centennial Evolution and International Veterinary Cooperation of Korea's Animal and Plant Quarantine Agency (APQA)**
Jaemyung Kim
- 14:50 **History of KAHIS (Korean Animal Health Integrated System)**
Seiki Jun

15:10 **Coffee Break (Poster Lounge A/B)**

Parallel Session Room A

Session VII: Human and Horse

Chair: Jaemyung Kim

- 15:30 **American Wild Horses and Population Control 1990 – 2025**
Rebecca Kaplan
- 15:55 **Equine-Assisted Activities in Unconventional Places**
Helga Mazzucco and Mario Piero Marchisio
- 16:20 **Horses Lost in Translation: Transcultural Knowledge Exchange in Medieval Equine Medicine East of Byzantium**
Jasmine Dum-Tragut

Parallel Session Room B

Session VIII: Free Topics

Chair: Susan Jones

- 15:30 **The Collaboration in the Historical-Scientific Field between the Foundation for Zooprophyllactic and Zootechnical Initiatives of Brescia and the Italian Association of the History of Veterinary Medicine and Farriery**
Mario Piero Marchisio, Daniele De Meneghi, Costantino Vitali, Mario Colombo and Helga Mazzucco
- 15:55 **Same Animals, Different Conflicts: Human–Animal Relations and Animal Management Policies in Urban and Rural Areas**
Misook Kim
- 16:20 **Success and Failure in Managing Ovine Haemonchosis**
Gareth Bath

Gala Dinner

(Hoam Faculty House Mugunghwa Hall)

18:00 Gala Dinner

Day 3 — Friday, June 26, 2026

Plenary Session		(Schofield Hall, 3F)
09:00	Young Scholar Award Ceremony and Special Presentations <i>Alison Skipper, President of WAHAH and Young Scholar Award Winners</i>	
09:40	Coffee Break (Poster Lounge A/B)	
		Parallel Session Room A
Session IX: Veterinary Profession		Chair: Jons Straatman
10:00	Historicising Veterinary Medicine and Animal Science in Nigeria <i>Oluwaseun Williams and Olayemi Oladaja</i>	
10:25	Evaluating Godlewsky and the Beginnings of Scientific Veterinary Medicine Education in Turkey in Light of New Documents <i>Savas Volkan Gen and Seda Tan</i>	
10:50	Portrayals of Female Veterinary Professionals in Fictional Cinema <i>Claudia Vergara Parra, Manuel García-Espantaleón Artal, Fernando Camarero Rioja and Joaquín Sánchez de Lollano Prieto</i>	
11:15	Animal Disease and the Professionalization of Veterinary Medicine: Foot-And-Mouth Disease and Glanders as Forces for The Maturation of Veterinary Regulation in the United States <i>Torre Dunlea, Alexa Heseltine and Justin Kasnter</i>	
		Parallel Session Room B
Session X: Biotechnology in Veterinary Medicine		Chair: Jongsik Yi
10:00	Radioactive Cows: How Radioisotopes shaped Veterinary Research in Britain c1955-70 <i>Abigail Woods</i>	
10:25	Mass Killings of Gorals and ASF-Prevention Technology in South Korea <i>Kiheung Kim</i>	
10:50	Finding Relief: Defining 20th Century Acupuncture Research in the American Veterinary field <i>Marisa Kuennen</i>	
11:15	An Account on the History of the Italian Acarology/Ixodology <i>Daniele De Meneghi and Ivo Zoccarato</i>	
General Assembly and Closing		(Schofield Hall, 3F)
11:40	General Assembly of the WAHAH Closing Remarks <i>Alison Skipper, President of WAHAH</i>	
12:30	Lunch	
13:30	Cultural Tour / Optional Program	

Posters

Poster Lounge A (3F)

A-1	The Tendency Toward the Humanization of Companion Animals: an Intercontinental Perspective.	<i>Joseph Esteban Cabarique Mojica, Juan Valencia, Juan Manuel Pizano Rodriguez, Diego Fernando Carrillo Gonzales, Enoc Valentín Gonzáles Palacio and Yasser Yohan Lenis</i>
A-2	The Trocar: A Historically Versatile and Indispensable Instrument of Veterinarians	<i>Mathilde Schmuck</i>
A-3	Online Biographical Archive of Italian Veterinarians	<i>Ivo Zoccarato, Anna Maria Grandis, Mario Marchisio, Giovanni Battista Graglia and Daniele De Meneghi</i>
A-4	Professor Stanisław Kirkor (1905–1963) and the rise of modern Honeybee disease diagnostics in Poland	<i>Jaroslaw Sobolewski</i>
A-5	Piotr Stefan Seifman (1823–1903) and the Foundations of Systematic Rabies Control in Polish Lands	<i>Aleksandra Bloch and Jaroslaw Sobolewski</i>
A-6	The Sound That Holds the Herd Together: An Evaluation of the Functional and Symbolic History of Animal Bells	<i>Savas Volkan Genc, Suleyman Haydar, Ahmet Gokturk, Emre Hunuk and Abdullah Koyun</i>
A-7	Horses as Mascots during Queen's Visit: Human and Animal Relations, Aristocracy, Festivity, and Gender	<i>Omotolani Onike</i>
A-8	From Instrument to Partner: the Ethical History of Animal-Assisted Interventions	<i>Min-Gyu Lee and Dong-Jin Chae</i>
A-9	Institutional Growth and Changing Review Practices in Animal Research Ethics: A National Five-Year Analysis in South Korea	<i>Soohee Leem</i>
A-10	War and Veterinary: Wars of Invasion and Civil War at the Veterinary School of Madrid	<i>Claudia Vergara Parra, Manuel García-Espantaleón Artal and Joaquín Sánchez De Lollano Prieto</i>
A-11	The Use of the Centaur Chiron on Medals and Badges of Some Military Veterinary Services	<i>Mario Piero Marchisio</i>
A-12	Multilingual Glossary of Horse Terms - Extended Version	<i>Helga Mazzucco and Mario Piero Marchisio</i>
A-13	The Evolution of Military Veterinary Medicine in Korea: From Medieval Equine Medicine to Modern Veterinary Corps	<i>Yong G. Sung</i>
A-14	The Cellular Evolution of Modern Veterinary Medicine: the Aygün–Perk Continuity in Stem Cell Research from Europe to Türkiye	<i>Bulent Basaran and Cem Perk</i>

Poster Lounge B (2F)

With the Special Digital Exhibition of the History of the Animal and Plant Quarantine Agency

B-1	From Administrative Boundaries to Movement-Based Control Zones: Manure-Transport Networks and Epidemiological Evidence for FMD and ASF Response	<i>Hachung Yoon</i>
B-2	Epidemiological Significance of Biosecurity Noncompliance in Highly Pathogenic Avian Influenza Outbreak Farms: Clustering and Association-Rule Insights from Korea	<i>Hachung Yoon</i>
B-3	Historical Development of Bovine Tuberculosis Control in South Korea	<i>Sehyun Son, Junghwa Lee, Keun-Ho Kim, Seung Uk Baek, Jin-Ju Lee, Yun Sang Cho and Ok-Mi Jeong</i>
B-4	Evaluation of the protective efficacy of foot-and-mouth disease vaccines against O/CATHAY topotype virus in pigs	<i>Ye-Ji Kim, Dong-Wan Kim, Mi-Kyeong Ko, Donghyeon Kim, Seo-Yong Lee, Tae-Jun Kim, Hyejin Kim, Sung-Han Park, Ji-Hyeon Hwang and Yoon Hee Lee</i>
B-5	National Serosurveillance for Four Foreign Livestock Infectious Diseases in the Republic of Korea	<i>Yeong-Eun Shin, Ji-Hoon Park, Dong-Gyu Ahn, Jin-Hwa Heo, Hae-Eun Kang and Eun-Jin Choi</i>
B-6	Identification of African Swine Fever Virus with IGR I in Korea Using Next-Generation Sequencing	<i>Hyun Jung Lee</i>
B-7	Avian Influenza Surveillance and Highly Pathogenic Avian Influenza Outbreak in the Republic of Korea since 2003	<i>Kwang-Nyeong Lee and Youn-Jeong Lee</i>
B-8	Chronological Overview of Bovine Brucellosis Occurrence and its Etiological Factors in Korea	<i>JinJu Lee</i>
B-9	Development and Historical Significance of Korean Veterinary Administration: Tracing the Regional Heritage of APQA	<i>Yu Jung Sim and Ji-Eun Park</i>

Practical Information

1. Transportation and Shuttle Information

1.1 Getting to the Congress Venue

The nearest subway station to the congress venue is “*Seoul National University Station*” on Line 2 (Green Line). For navigation in Seoul, *Naver Map* or *Kakao Map* is recommended.

1.2 From the Venue to Central Seoul

From the Veterinary Medical Teaching Hospital / Dental Hospital bus stop, participants may take buses to central Seoul:

- Bus 750: toward Seoul Station / Gwanghwamun area
- Bus 501: toward Seoul Station / Jongro area

Participants may also use a taxi or a ride-hailing service such as *Uber* or *K.ride*.

1.3 On-campus Shuttle: Hoam Faculty House ↔ Congress Venue

For participants staying at Hoam Faculty House, a shuttle to the congress venue will run once per day. Participants who wish to use the shuttle are kindly asked to arrive at the Hoam Faculty House lobby at the scheduled departure time.

Scheduled departures from Hoam Faculty House:

- Wednesday, 24 June: 13:00
- Thursday, 25 June: 08:30
- Friday, 26 June: 08:30

For return transportation to Hoam Faculty House during the congress, please check with the registration desk.

1.4 Transportation to the Gala Dinner

The Gala Dinner will be held at Hoam Faculty House.

A shuttle bus to the Gala Dinner venue will depart at 17:30 from the parking area in front of Building 85, College of Veterinary Medicine. After the Gala Dinner, participants are kindly asked to arrange their own transportation from Hoam Faculty House to their accommodations. From Hoam Faculty House, *Nakseongdae Station* (subway Line 2) is approximately 20 minutes on foot, about 10 minutes by bus, or reachable by taxi.

1.5 Transportation for the Cultural Event

The cultural event will take place on Friday, June 26. A bus will depart at 13:30 from the parking area in front of Building 85 at the College of Veterinary Medicine. After the tour, the bus will return to both Hoam Faculty House and the College of Veterinary Medicine. However, because the tour will end near City Hall, participants staying at hotels in central Seoul may find it more convenient to go directly to their accommodations from the City Hall area or to spend the evening in central Seoul.

2. Lunch

Lunch will be provided in a boxed-lunch format and distributed at the registration desk. Please keep your congress badge with you when collecting your lunch.

Participants may freely use the following areas for lunch:

- Poster Lounge A, 3rd Floor
- Poster Lounge B, 2nd Floor
- Central lobby and outdoor terrace on the 5th floor

3. Coffee Breaks and Poster Lounges

Coffee and light snacks will be served during the scheduled coffee breaks at:

- Poster Lounge A, 3rd Floor
- Poster Lounge B, 2nd Floor

Participants are warmly invited to enjoy refreshments while viewing the posters and having informal conversations with other participants. Please note that Poster Lounge B, 2nd Floor, will also host a Special Digital Exhibition on the History of the Animal and Plant Quarantine Agency. We encourage all participants to visit the exhibition during the congress.

4. Wi-Fi and Other Information

Wi-Fi is available in all session rooms. Please select **SNU_guest** from the Wi-Fi network list and enter your name when prompted. The connection will remain valid for 24 hours. Eduroam is available throughout the SNU campus.

For the Poster Lounges and other session rooms, Wi-Fi information will be posted at each room's entrance.

The nearest café to the College of Veterinary Medicine is Cafe SNUCOS 137, located in the Language Education Institute, where coffee and simple beverages are available.

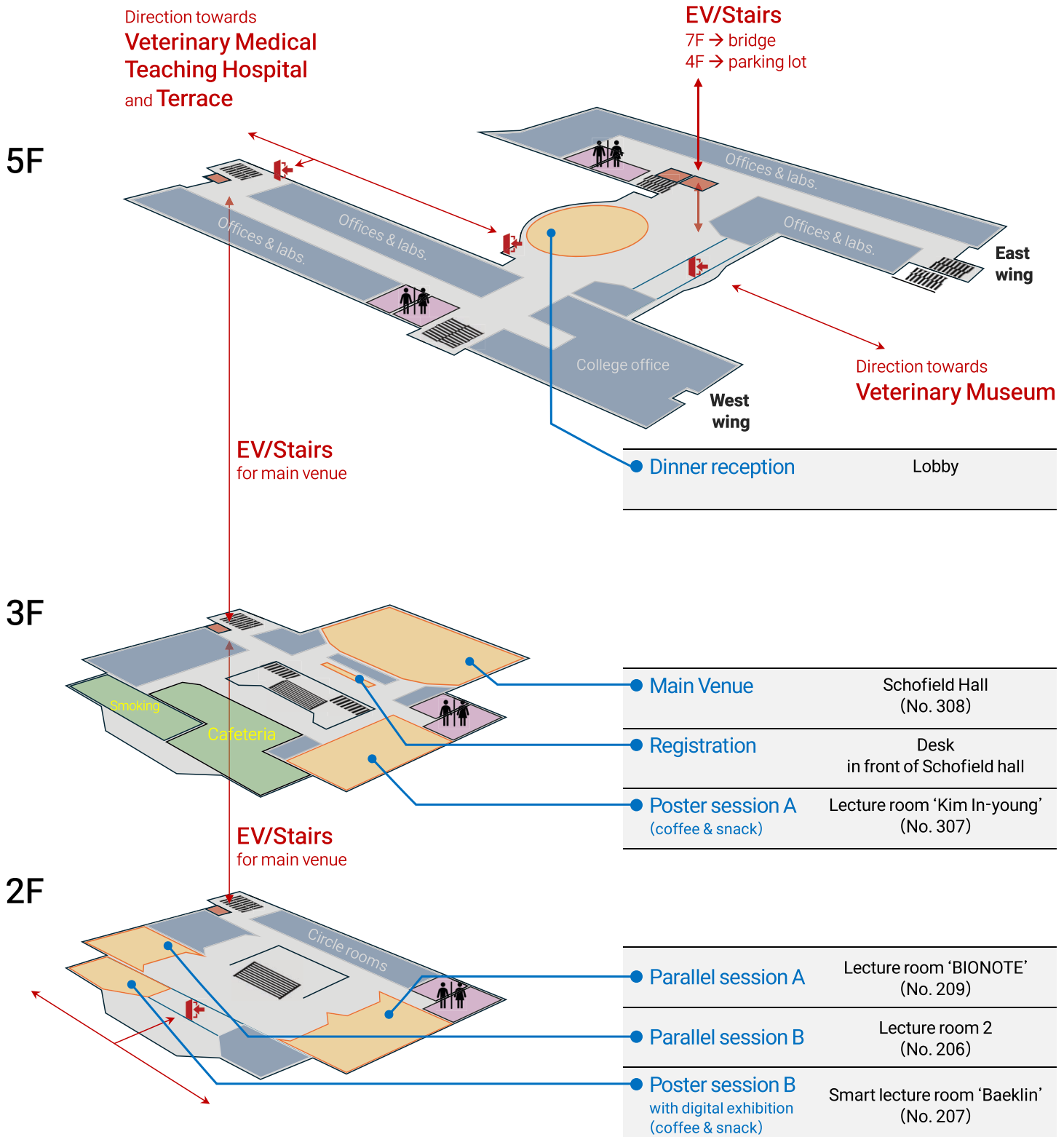
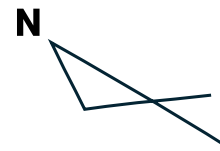
Nearby dining options also include:

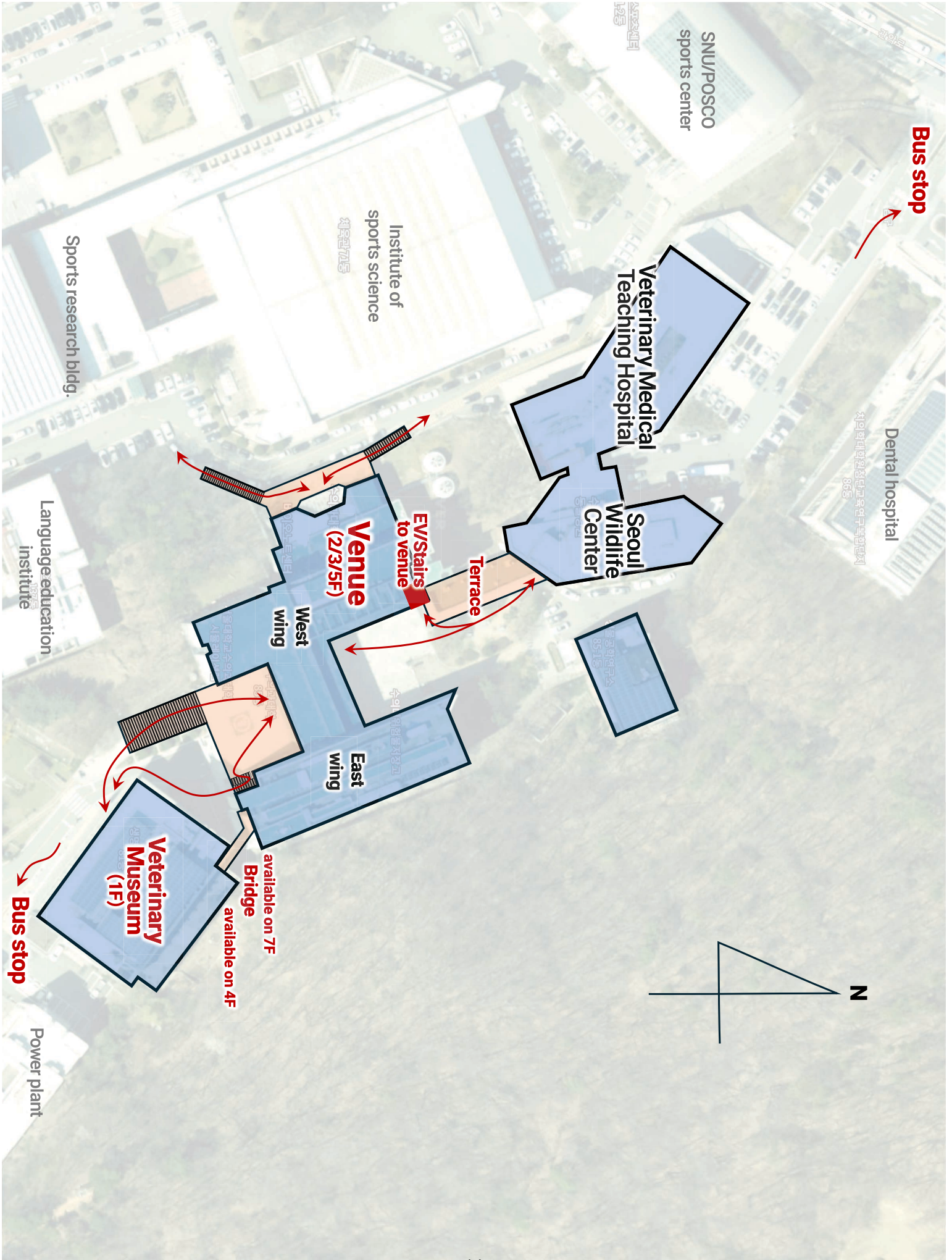
- Montre Chef (pizzeria)
- Popoin (Vietnamese restaurant)

For any questions regarding venue access, transportation, Wi-Fi, lunch, coffee breaks, the cultural event, or other practical matters, please visit the registration desk at any time. Congress staff in blue T-shirts and volunteers will be happy to assist you.

47th WAHAH CONGRESS

VENUE MAP





Bus stop

Dental hospital

SNU/POSCO
sports center

123

Veterinary Medical
Teaching Hospital

Seoul
Wildlife
Center

Terrace

EV/Stairs
to venue

Venue
(2/3/5F)

West
wing

East
wing

available on 7F
Bridge
available on 4F

Veterinary
Museum
(1F)

Bus stop

치안관리지원단교목연구실
185동

8515

수의대학행정관

올대학교수연구실

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sports science
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institute
10275

Power plant

N

ABSTRACTS



PLENARY LECTURES

Plenary Lecture-1

The History of Korean Veterinary Medicine before the Twentieth Century: Institutions, Knowledge, and Popularization

DONGWON SHIN

*The Korean Research Institute of Science, Technology and Civilization, Jeonbuk National University,
Republic of Korea*

Today's presentation examines the history of Korean veterinary medicine before the twentieth century, focusing on horse medicine from three perspectives: institutions, knowledge, and popularization. In premodern Korea, horses were essential resources for military affairs and transportation, while cattle formed the basis of agricultural production. Accordingly, the management of animal health became an important matter directly connected with state administration and the livelihood of the people. From the Three Kingdoms (from the 1st century BCE to 676 CE) period onward, the state established systems of horse administration and veterinary institutions, which were further systematized during the Goryeo (918–1392) and Joseon (1392–1910) dynasties through professional horse doctors and ranch administration. During the Joseon period, veterinary knowledge was compiled and developed through medical texts such as *Newly Compiled Comprehensive Formulary of Equine and Bovine Medicine* (1399), *Great Compendium of Equine Medicine*, and *A Vernacular Korean Annotation and Abridgment of the Compendium of Equine Medicine*. Korean veterinary medicine adopted the traditions of Chinese veterinary learning while also incorporating indigenous experience and prescriptions based on local medicinal ingredients, thereby forming a distinctive Korean tradition. In particular, the translation of veterinary texts into Korean script and their inclusion in encyclopedic compilations promoted the wider dissemination of veterinary knowledge among the general population. The Joseon government also responded to livestock epidemics such as cattle plague and horse epidemics through both medical treatments and ritual practices, publishing and distributing manuals of veterinary prescriptions as part of state-level disease control measures. Thus, traditional Korean veterinary medicine developed beyond a simple healing technique into a distinctive body of knowledge combining state institutions, Confucian ideals of benevolent governance, and practical learning. Through this discussion, today's presentation aims to illuminate the historical significance of traditional Korean veterinary medicine and its place within the broader history of East Asian veterinary science.

**The Animal Infectious Diseases, Grassroots Communes, and the State
in Maoist China**

JONGSIK CHRISTIAN YI

College of Liberal Art and Convergence Science, KAIST, Republic of Korea

This lecture examines how Maoist China (1949–1976) confronted epizootic and zoonotic diseases, focusing on the mass animal vaccination campaigns at the core of what was termed “Comprehensive Prevention and Treatment.” It argues that the fight against animal infectious disease was less directed from above than delegated downward. Because livestock health—unlike human health—was only loosely tied to the Chinese Communist Party’s political legitimacy, and because state resources were channeled toward industrialization, upper-level governments outsourced veterinary work to grassroots communes under the banners of the “mass line” and “self-reliance.” Drawing on archival cases from Beijing, Guangxi, Gansu, and Shaanxi, the paper traces how local veterinary cadres and peasant prevention workers not only administered vaccines but, by the 1960s and 1970s, were expected to manufacture rabbit-attenuated swine fever vaccine themselves at commune-level “vaccine manufacturing posts.” This delegated self-reliance fostered genuine grassroots expertise and trust, yet it also bred uneven quality control, countless ineffective vaccines, and a disease never eradicated. The episode reveals both the resilience of local actors and the evasions of a state that offloaded multispecies welfare onto the communes—inviting us to reconsider what communal responsibility for animal health might still teach us.

Plenary Lecture-3

The Developmental History of Traditional Chinese Veterinary Medicine

XINHUI WANG, WUREN MA

College of Veterinary Medicine, Northwest A&F University, China

Traditional Chinese Veterinary Medicine (TCVM) represents a comprehensive veterinary system deeply rooted in Traditional Chinese Medical theory, focusing on disease prevention, treatment, and health maintenance in animals. Its theoretical foundation is built upon core principles including the Yin-Yang and Five Elements theories, Zang-Fu organ systems, and meridian theory, theory of Qi, Blood, and Body Fluids, theory of etiology and pathogenesis. The practice emphasizes holistic approaches and syndrome differentiation in both diagnosis and treatment methodologies.

The origins of TCVM can be traced back to prehistoric times (Prehistoric Era to 22nd Century BC). As humans began domesticating wild animals and raising livestock, they gradually acquired knowledge about animal diseases and sought treatments, marking the beginning of veterinary medicine. Archaeological discoveries, such as animal bones and medical tools unearthed at sites like the Zengpiyan Cave in Guilin and the Hemudu site in Zhejiang, provide evidence of early animal husbandry and medical practices during the Neolithic Age.

During the Xia (approx. 21st-16th century BC) and Shang (approx. 16th-11th century BC) dynasties, advancements in agriculture and animal husbandry promoted the preliminary development of veterinary knowledge. Oracle bone inscriptions from the Shang Dynasty contain records of animal shelters and disease names, along with accumulated pharmacological knowledge. By the Western Zhou (approx. 11th century-771 BC) and Spring and Autumn periods (770-476 BC), specialized veterinarians were appointed, distinguishing between internal medicine ("animal diseases") and external medicine ("animal ulcers"). Comprehensive treatments such as oral dosing, surgery, nursing, and dietary therapy were developed.

The Warring States period (475-221 BC) to the Qin (221-207 BC) and Han (202 BC-220 AD) dynasties was a critical phase for the formation of TCVM's theoretical system. The *Huangdi Neijing* (Yellow Emperor's Inner Canon) laid the theoretical foundation based on the principles of Yin-Yang and the Five Elements, holistic concepts, and syndrome differentiation. The *Shennong Bencaojing* (Shen-nong's Herbal Classics) from the Han Dynasty, an early pharmacological work, recorded medicines for both humans and animals. The Qin Dynasty's "Stable and Pasture Laws" represented the earliest regulations on animal husbandry and veterinary medicine.

During the Sui (581-618) and Tang (618-907) dynasties, veterinary disciplines became more systematized. The Tang Dynasty initiated formal veterinary education, and Li Shi's *Simu Anji Ji* (The Manual for Equine Husbandry and Health) became a classic text. The Song Dynasty (Northern Song: 960-1127; Southern Song: 1127-1279) established veterinary hospitals and pharmacies, with numerous specialized works published. The Yuan Dynasty's (1271-1368) Bian Bao enriched diagnosis and treatment theories. The Ming Dynasty (1368-1644) marked a peak in TCVM's development; Yu Benyuan and Yu Benheng's *Yuanheng Liaoma Ji* (Yuan Heng's Collection for Treating Horses) was a comprehensive and influential work, while Li Shizhen's *Bencao Gangmu (Compendium of Materia Medica)* included significant veterinary content. Development slowed during the Qing Dynasty (1644-1912), but works like *Yang Geng Ji* (Yanggeng's Treatise on Cattle Care and Cultivation) and *Niu Jing Bei Yao Yi Fang* (Essential Prescriptions for Cattle Diseases) continued to appear.

In the modern era (1840-1949), the introduction of Western veterinary medicine posed challenges to TCVM. However, the Chinese people tried to promote the integration of Chinese and western veterinary methods in its base areas. After the founding of the People's Republic of China in 1949, TCVM entered a new phase of vigorous development. The government implemented policies to "unite, utilize, educate, and improve" TCVM, leading to the systematic collation of ancient texts, scientific research, and education. Significant achievements were made in acupuncture, herbal feed additives, and companion animal disease prevention.

In the new era, adhering to the principle of integrated development with western veterinary medicine, TCVM actively addresses contemporary challenges and has achieved a significant transformation and innovative expansion in its application fields. Its focus has shifted from livestock such as cattle and sheep to the rapidly growing pet healthcare industry, where it demonstrates unique advantages in treating chronic diseases, age-related conditions, and ailments in exotic pets among companion animals like dogs and cats. Simultaneously, in the field of farm animals, TCVM has transitioned from traditional individual-based syndrome differentiation to group-based syndrome differentiation, which is better suited for modern large-scale farming. Its philosophy of "preventive treatment" aligns with the demands of green farming and supports national policies aimed at reducing use of antibiotics. Contemporary TCVM is actively integrating with modern science and technology, utilizing molecular biology and network pharmacology to elucidate the mechanisms of herbal medicines, while leveraging artificial intelligence and advanced diagnostic equipment to enhance its scientific foundation and clinical applicability.

The internationalization of TCVM has evolved into a multidimensional and systematic development landscape. Since its establishment in 1974, the International Veterinary Acupuncture Society (IVAS) has expanded to include members from over 40 countries. In 1987, the First International Veterinary Acupuncture Conference, hosted by Professor Yu Chuan in Beijing, attracted veterinarians from more than ten countries. The Asia Society of Traditional Chinese Veterinary Medicine (ASTCVM, founded in 2005) promotes regional cooperation through academic conferences and standard-setting initiatives, while the founding of the World Association of Traditional Chinese Veterinary Medicine (WATCVM) in Spain in 2013 further marked the global recognition of TCVM as an important discipline within veterinary medicine. In the field of education, Chi University in the USA has trained over 13,000 veterinarians from more than 80 countries through distance learning programs. Additionally, high education institutes in China, including China Agricultural University, Northwest

A&F University and Nanjing Agricultural University, have continuously cultivated international talent by enrolling international students, organizing international training workshops, and engaging in collaborative research. Together, these efforts have built a comprehensive international dissemination system encompassing academic organizations, educational institutions, and research platforms.

Despite challenges such as the need for modern interpretation of its theoretical system, improvement of its educational framework, and increased societal recognition, the future development of TCVM will remain committed to the principle of "upholding tradition while innovating." By preserving the essence of its core theories and deepening integration with modern veterinary medicine, TCVM will vigorously promote "integrative veterinary medicine." Through strengthened industry-academia-research collaboration and the cultivation of multi-level talent, it will continue to contribute Chinese wisdom to safeguarding animal health, promoting sustainable development in animal husbandry, and advancing the "One Health" initiative.

**The Imperial Beginnings of International Veterinary Police in
Modern East Asia: A Comparative Perspective**

TATSUYA MITSUDA

Keio University, Japan

This keynote lecture is the first tentative attempt to situate the history of veterinary medicine in modern East Asia within a global comparative framework. Focusing on the expansion of a Japanese imperial veterinary regime that evolved in lockstep with the colonization of Taiwan, Korea, and parts of China across the first three decades of the twentieth century, it compares and contrasts the implementation of “veterinary modernity” with that in European colonies, where veterinary knowledge, state interventions, and prophylactics became tools of empire. From the Meiji Restoration (1868) onward, Japan modernized its veterinary infrastructure along Western lines, driven above all by the military’s voracious demand for beef and by a deep fear of rinderpest incursions from the Asian mainland. Two major conflicts—the first Sino-Japanese War (1894–95) and the Russo-Japanese War (1904–05)—rapidly exhausted domestic bovine resources and compelled Japanese agricultural scientists and veterinary officials to seek solutions offshore. The result was the progressive transformation of colonial Korea, and subsequently Manchuria and Shandong, into the “ranch of the metropole.” The lecture traces how this imperial veterinary regime functioned as a biopolitical formation of knowledge and power, subjecting colonial bovine bodies to surveillance, regulation, and prophylactic intervention—not only to extract economic value, but also to legitimize Japanese sovereignty and create sanitary buffer zones beyond the formal borders of empire. From the construction of quarantine stations at Korean ports and a 1,200-kilometer immunization corridor along the Korea–China border, to the deployment of rinderpest sera in contested borderlands and the appropriation of the Qingdao slaughterhouse, Japanese veterinarians consistently framed their interventions as the export of “veterinary modernity” to peoples and places deemed scientifically deficient. This rhetoric of sanitary improvement, the lecture argues, closely paralleled, but also significantly differed from, the colonial veterinary regimes of European colonies in Africa and South Asia. By placing Japan’s imperial veterinary history in global perspective, this lecture demonstrates the particular East Asian experience of “veterinary modernity” and opens new ground for comparative colonial history, inviting scholars to consider how the entanglement of science, empire, and animal health shaped—and continues to shape—the landscapes of disease control and livestock governance across the world.



PARALLEL SESSIONS

Teaching Veterinary History at the Veterinary Faculty in Ljubljana, Slovenia

ANDREJ PENGOV

Institute for Microbiology, Veterinary Faculty, University of Ljubljana, Slovenia

Introduction

The objective of the subject is to present a short overview of the history of veterinary medicine from the prehistoric era till present times. Teaching and learning methods include computer presentations (Power-point), analysing of old veterinary literature and presentation of case reports with discussion. History of veterinary medicine is an optional subject placed in the first year (second semester) of our curriculum.

Contents

- Domestication and healing of animals in prehistoric times
- Veterinary medicine in non-European antique nations
- Greek and Roman veterinary medicine
- Development of veterinary medicine in Middle Age
- Veterinary medicine from Renaissance to the foundation of first veterinary schools
- Development of veterinary profession and sciences in modern times
- Development of veterinary medicine in Slovenia
- Important Slovene medical and veterinary experts of 18th and 19th century
- Old veterinary professional literature

Intended learning outcomes

The understanding of the history of veterinary medicine undoubtedly widens horizons and contain numerous elements, which are the basis for further studies of veterinary medicine.

Based on good and bad experiences from the past the students obtain a critical relation to present events in the medical profession.

Assessment methods

At the end of the lecture's students must pass an oral exam. Evaluation scale: 1-5 negative, 6-10 positive, considering the statute of the University in Ljubljana.

Recommended literature

1. Stefancic A: Short overview of the history of veterinary medicine, Ljubljana: Veterinary faculty, 1969
2. Pintar I: History of medicine, Ljubljana: Faculty of medicine, 1950
3. Jurca J: Slovene veterinary history till the 18th centuries, Ljubljana: Veterinary faculty, 1997

Veterinary History Teaching at Seoul National University: Tracing the Roots of Veterinary Professionalism Education

MYUNG-SUN CHUN

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Seoul National University established its Department of Veterinary Medicine in 1947 with a four-year curriculum. Compared with the colonial-era higher education curriculum for veterinary and livestock science, which largely emphasized technical knowledge and skills, the post-liberation program modestly expanded toward liberal arts under the influence of American educational models. After the Korean War, the first-year curriculum was further strengthened with liberal arts and foundational science courses, including foreign languages, history, law, biology, and chemistry. Within this broader curricular shift, the veterinary college also offered courses in veterinary administration and veterinary law. Veterinary history education emerged during the postwar rebuilding of the college. A course initially framed as the history of veterinary administration began in 1958, one year after veterinary history had been introduced as a one-unit, semester-long course for third-year students. Veterinary history was subsequently taught to fourth-year students until 1976. However, the postwar veterinary college faced substantial constraints, notably a shortage of trained faculty in several required fields; instructors were often recruited from medical disciplines, making the development of veterinary history expertise particularly difficult. Unlike medical history in the College of Medicine, the veterinary college had limited capacity to establish a dedicated research and teaching base in its own history, and instruction was frequently delivered by temporary lecturers who relied on medical-historical materials. A handwritten lecture note, *Introduction to Korean Veterinary History*, printed in 1967, provides a concise chronology of traditional veterinary medicine and the modernization of the veterinary profession in early twentieth-century Korea. By examining this lecture note and related curricular changes, this study traces the development of veterinary history education in Korea and considers its later connections to professionalism education in the reformed veterinary curriculum of the twenty-first century.

Teaching Veterinary History in Contemporary Japanese Veterinary Education: Current Status and a Case Study from Nippon Veterinary and Life Science University

NORIYASU SASAKI

Division of Basic Veterinary Medicine, Nippon Veterinary and Life Science University, Japan

Veterinary history has an important but limited place in veterinary education in Japan. In the national Model Core Curriculum for Veterinary Education, historical topics are included in introductory veterinary education, especially in courses such as Introduction to Veterinary Science. In practice, however, veterinary history is rarely offered as an independent subject. Because there are no university teachers in Japan whose primary research field is veterinary history, teaching is often limited to standard textbook descriptions or brief accounts of each university's own history. This presentation reviews the current status of veterinary history education in Japan and presents the case of Nippon Veterinary and Life Science University (NVLU), where veterinary history is taught as a separate subject. At NVLU, veterinary history was formerly offered as a two-credit course consisting of fourteen classes. Following curriculum revision, it was reorganized into two one-credit elective courses for first-year students: History of Science and Veterinary History. Although elective, these courses are taken by almost all first-year students. The History of Science course consists of seven classes on the general history of science and medicine, including the history of animal welfare, the history of zoos, and the emergence and achievements of zoo veterinarians in Japan. The Veterinary History course also consists of seven classes and addresses the history of rabies and its eradication in Japan, rinderpest, the westernization of veterinary medicine in the late Edo and Meiji periods, the history of veterinary education in Japan, and major diseases such as foot-and-mouth disease and bovine spongiform encephalopathy. This case suggests that veterinary history can serve as a meaningful part of introductory veterinary education and should be more clearly recognized within the curriculum.

Back to the Future: History and Public Education in the Dog Breeding Sector

ALISON SKIPPER

Veterinary and Research Advisor, Royal Kennel Club, United Kingdom

The present is always formed by the past, but awareness of this in the veterinary world is generally overshadowed by an emphasis on current scientific knowledge. In one high-profile and topical field of animal welfare, however, it is widely recognised that today's problems have literally been shaped by historical beliefs and practices. Breed-related health problems in pedigree dogs can be divided into those related to inbreeding within genetically isolated breed populations and those related to exaggerated body shapes linked to the requirements of formal breed standards. Ample historical evidence demonstrates both the gradual evolution of these practices since the late nineteenth century and the progressive recognition of their various impacts on canine health and welfare. Yet, despite increased awareness of these problems, breeding practices that compromise genetic diversity and that favour extreme conformation remain culturally important to many breed communities, impeding effective change. These communities may perceive suggested reform as betraying tradition, although such arguments are often paradoxically rooted in misinformation or misunderstanding about the past. But this difficulty can become an opportunity. Using real-world examples from my interdisciplinary work at the Royal Kennel Club in the UK, this paper will show how public education that uses historical analysis to explore these modern issues can challenge people's preconceptions in an interesting, accessible and non-confrontational way, providing a valuable route to effective engagement across multiple audiences. I argue that history can serve as a powerful tool to shift public perceptions of dog breeding practices and potentially drive behavioural change to improve canine welfare in the future.

Veterinary and Animal Ethics according to Norwegian Legislation from the Twelfth Century to Today

JOHAN FREDRIK AURSTAD

Norsk Veterinærhistorisk Selskap, Norway

Objectives: Animals and humans have lived together for a very long time. Society has changed a lot and so has the way people think about animals. The word ethics is not used in the legal texts until the most recent Animal Welfare Act but is used in commentaries and preparatory works for laws. If ethics is related to right or wrong in specific situations, is it possible to find ethics in laws that deal with animals?

Methods: I have read regulations on the treatment of animals from the first written Norwegian sources to the present day. It is the regulations¹⁾ in force at any given time that have been the framework for my work as a veterinarian in the encounter with animals, animal owners and society. Through this article I have attempted to put ethical labels on the various main paragraphs in the laws from 1200 - 2000.

Results are to be given during the oral presentation.

Conclusions: The first penal code states that the punishment was limited to cases where cruelty was shown in the mistreatment of the animal(cattle). Before the first animal protection law, there were rules for the slaughter of livestock and domesticated reindeer. The rules were based on a recognition that animals had the ability to feel pain. It was not until 1935 that the first animal protection law distinguished between necessary and unnecessary suffering for animals that humans had control over. The next step emphasized that animals' instincts and natural needs should be considered. Finally, the animal welfare law from 2009 states that animals have intrinsic value. During these years 1200 – 2000, the focus has shifted from avoiding animal cruelty and suffering to actively creating conditions for good animal welfare.

Between Fair and Fowl: Colonial Hunting Regulations and the Precarious Status of Colonial Wildlife

INBO CHO

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Republic of Korea*

Animal protection as a modern concept, despite claiming itself as evidence of progress and morality, is a historical construct of class division, colonialism and imperialism. This presentation examines the colonial dynamics surrounding modern animal preservation by shedding light on hunting restrictions and the precarious status of wild animals in colonial Korea. Establishing the Hunting Regulations(狩獵規則) in 1911, the Government-General of Korea imposed a series of policies to administer hunting and game. This was under the ideal that controlling hunting activities would lead to successful wildlife reproduction. Yet in reality, this was easily swayed by the interests and motifs of not only colonial policymakers, but also Japanese recreational hunters and sometimes local Koreans. As a result, the status of wildlife easily oscillated between ‘harmful pests’ and ‘beneficial animals’, ‘protected species’ and ‘typical game’. This is well portrayed in the case of birds, especially cranes and pheasants. Cranes were specifically stated as ‘protected species’ in the Hunting Regulations. Nevertheless, their lives were frequently taken not only by poaching, but also by official hunting ban lifts. Pheasants, on the other hand, were a staple game even before modern restraints were imposed. As such, their extinction was considered a serious issue. While this worry led to extending the closed season for pheasants, this was under the intention of sustaining them as common game for recreational hunting. Japanese hunters and officials also reprimanded Korean falconers as the major culprit of culling pheasants. Thus, these examples aptly show the modern ideals, actors, and intentions that rendered the unstable and ‘adrift’ status of colonial Korean wildlife.

Animal Rights in Türkiye as of 2026: The Legal Framework, Media-Reflected Incidents and a Critical Evaluation

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¹*Department of History of Veterinary Medicine and Deontology, Turkey*

²*Department of History of Medicine and Ethics, Turkey*

Animal rights in Türkiye are primarily regulated by Law No. 5199 on the Protection of Animals, which entered into force in 2004. This law aims to ensure that animals are treated well and appropriately, taking into consideration human, animal, and environmental health. It includes provisions regarding the adoption, breeding, registration, and care of animals, as well as measures for their protection and penal sanctions to be applied in cases of violation. In order to address the population of stray dogs in Türkiye, certain amendments were introduced to the law in 2024. The most controversial provisions concern the possibility of euthanizing animals deemed appropriate by municipalities after the establishment of shelters. Although some revisions have been made, various problems and shortcomings in implementation still persist. Limited resources of local authorities for animal care and welfare, insufficient shelter capacity and hygiene conditions, lack of training, and the absence of a centralized inspection mechanism make it difficult to ensure the protection and welfare of animals. In addition, attempts by certain individuals or groups—without legal authority—to collect or kill animals have led to serious animal welfare concerns. Recent media reports regarding the improper collection and killing of animals have sparked significant ethical debates. In this context, there is a widespread public perception that the penalties imposed for crimes against animals are not sufficiently deterrent. Animal rights advocates, non-governmental organizations, and academics argue that the current regulations fail to adequately protect animals and to resolve existing problems, and they call for more effective implementation and sanctions. This study aims, as of 2026, to analyze the current legal framework on animal rights in Türkiye, evaluate the present situation and its media reflections, examine the ongoing debates on the issue, and propose various policy recommendations to address the existing challenges.

The Ethical Ordeal of Clinical Veterinary Medicine

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Ethics is a branch of philosophy concerned with value-based questions such as right and wrong, good and bad, and the moral duties and responsibilities of individuals. It not only defines the moral nature of actions but also systematically analyzes the values underlying these judgments and how they can be justified, especially in situations of conflict. In this context, veterinary ethics has developed as a scientific field addressing value-related issues arising both from human–animal relationships and from the unique moral challenges encountered in professional practice. In veterinary medicine, the animal is the patient while the human is the decision-maker, requiring veterinarians to balance animal welfare, professional obligations, and societal expectations. This makes ethical decision-making inherently complex and distinctive. Many ethical violations in clinical veterinary practice originate from the structural characteristics of the profession. Dual responsibilities toward both animal patients and human clients, conflicts of interest, threats to professional autonomy, the evolving social status of animals, tensions between animal welfare and animal rights, and the limitations of professional regulations all contribute to this complexity. In addition, individual factors such as insufficient knowledge and competence, inadequate ethical education, moral deterioration, negligence, lack of discipline, and excessive profit orientation also play a significant role in unethical behavior. This paper aims to examine the underlying causes of deontological and ethical violations in clinical veterinary practice, analyze how such violations are justified, and discuss strategies to prevent unethical conduct and strengthen ethical awareness within the profession.

**On Discovering the Cause of Surra, Killer of Horses in British India
and the Dutch East-Indies 1879-1903**

JONS STRAATMAN

Retired Veterinary Practitioner, Netherlands

The discoveries of Pasteur (1822-1895) and Koch (1843-1910) accelerated tremendous research on the causative agents of human and animal diseases during the last two decennia of the nineteenth century. During these years an almost nonexistent discipline developed into a fully grown science. In 1879 the Welsh veterinarian Griffith Evans (1835-1935) serving a military posting in India received the order to investigate the cause of a disquieting loss of horses by a disease locally known as Surra. Familiar with the work of Pasteur and Koch, Evans was able in a short time, with the aid of original research, to indicate hitherto unknown protozoan parasites in the horse's blood as causative. His superiors however were quite dissatisfied and as a result he was posted to an insignificant district in southern India. What was the reason for Evans superiors dissatisfaction? What were they expecting from his research? Could they point out some shortcomings in his investigations? Many years later in 1897 the Dutch government veterinarian C.A. Penning started an investigation on Surra on Java. Until then this disease was not recognized as such and had not been described before even though it seemed to occur frequently. As well as the publications of Evans, Penning knew of the research (1893) of Scottish pathologist David Bruce on Nagana (trypanosomiasis in cattle) and sleeping sickness in humans. Bruce established that the Tsetse fly was the carrier of both diseases. Pennings's research was meticulous and the question could arise if he was able to find what Evans superiors ostensibly lacked in the latter's work. Could Pennings for example contribute to the unravelling of the complicated life cycle of this trypanosome?

Skryabin's Worms: Colonial Soviet Veterinary Parasitology

SUSAN JONES

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Objectives

1. To examine the development of Soviet veterinary parasitology through the work of helminthologist Konstantin Ivanovich Skryabin (1878–1972).
2. To evaluate whether Soviet veterinary parasitology functioned as a “colonial” science during its development between 1917 and the 1950s.
3. To compare Soviet veterinary parasitology with Western practice, focusing on British India, where veterinary science has been interpreted as a tool of colonial rule.

Methods

1. Social-historical analysis of the veterinary sciences, based on primary sources including archival film, Soviet Communist Party records, Kazakh state archives, and Skryabin’s publications.
2. Historiography: Analysis of Russian- and English-language monographs and articles.
3. Comparative approach: Comparison of Soviet veterinary parasitology in Kazakhstan with British veterinary practice in colonial India.

Results

1. K.I. Skryabin was the most important Soviet veterinary parasitologist, the "father" of the discipline.
2. Skryabin developed Soviet veterinary parasitology in the colonial hinterlands, including Kazakhstan.
3. A brief comparison with British colonial veterinary practice in India reveals significant parallels with the Soviet case in Central Asia.

Conclusions

Focusing on the work of the eminent veterinary parasitologist K. I. Skryabin (Academician of the Soviet Academy of Sciences and recipient of 15 national prizes), this presentation argues that Soviet veterinary parasitology functioned as a colonial science. Originating in the Russian/Soviet hinterlands, it supported Soviet development in the Far East and Central Asia. In Kazakhstan, veterinary parasitology facilitated livestock collectivization and the forced settlement of nomadic peoples. While scientific knowledge of helminths improved animal and human health, it also enabled the crowding of people and livestock on collective farms against Kazakh wishes. Veterinary parasitology thus operated as a tool of Soviet colonialism (similar to British India). This interpretation challenges Russian-language historiography, which has denied the colonial nature of the Soviet regime and portrayed veterinary parasitology as developing primarily in metropolitan laboratories.

Dutch Colonial Veterinary Medicine in East and Southeast Asia

PETER KOOLMEES

IRAS, Faculty of Veterinary Medicine, Utrecht University, Netherlands

This lecture examines two interrelated dimensions of the globalization of animal healing: international trade and colonial expansion. In the eighteenth century, the Dutch trading post on Dejima (near Nagasaki) became a centre for the exchange of medical and veterinary knowledge. European medical theories and anatomical atlases were introduced into Japan, while concepts derived from Chinese and Japanese medicine (acupuncture and moxibustion) were exported. A popular Dutch booklet on equine medicine (1688) was translated into Japanese. The colonization of the Dutch East Indies entailed veterinary activities aimed at sustaining healthy populations of domestic and imported animals. These efforts were essential for food supply, warfare, labour and transport. Maintaining animal health in tropical environments posed major challenges for the relative small group of Dutch vets employed by the Civil and Military East Indian Veterinary Service. One example is the control of rinderpest outbreaks across Java, Sumatra and Borneo in the period 1879-1884. The colonial government established a Veterinary Research Institute dedicated to the study of animal diseases within their specific ecological contexts. In 1907 a Dutch-Indian veterinary school was attached to this institute to obtain a workforce of indigenous veterinarians. Research on surra, dourine, and Newcastle disease, conducted in the colonial laboratory surpassed that undertaken at the vet school in Utrecht. This achievement, however, would have been impossible without the indispensable contribution of indigenous veterinarians. Colonial veterinary medicine thus showed a dual character: while it generated significant scientific knowledge and institutional innovation, it simultaneously operated within, and contributed to structures of colonial domination and social inequality. The post-colonial era witnessed a gradual shift from colonial exploitation to development collaboration.

From One-Man Service to Colonial Institution: Major G. W. Sturgess and the Transformation of Veterinary Practice in Ceylon

BULENT BASARAN

The Veterinary History Society, United Kingdom

Objectives: This study aims to examine the professional career of George William Sturgess (1872–1940), M.R.C.V.S., I.S.O., V.D., in order to analyse the establishment and institutionalization of modern veterinary services in colonial Ceylon (present-day Sri Lanka). It seeks to contextualize Sturgess’s work within British veterinary historiography, colonial administration, and the globalization of veterinary science.

Methods: The research is based on historical and archival analysis of official colonial reports, contemporary scientific publications, professional records, and biographical sources, including *The Veterinary Record*. Sturgess’s scientific research, administrative practices, and military service were examined using a historical-analytical approach grounded in veterinary history, colonial science.

Results: The findings demonstrate that upon his appointment as Government Veterinary Surgeon in 1895, Sturgess assumed responsibility for animal health in a colony lacking any formal veterinary infrastructure. Over more than thirty-six years of uninterrupted service, he transformed a single-person post into an institutionalized Veterinary Department equipped with laboratories, regulatory authority, and trained personnel. His experimental studies on osteitis fibrosa in horses provided early evidence linking the disease to calcium deficiency and phosphorus imbalance, contributing to international discussions on veterinary nutrition. His *Veterinary Manual of Cattle Diseases* (1915) further exemplifies the adaptation of British veterinary knowledge to tropical and colonial conditions.

Conclusions: Sturgess’s career illustrates the intertwined development of veterinary science, colonial governance, military structures within the British Empire. His work highlights colonial veterinary medicine as a hybrid field combining scientific research, administrative authority, and imperial service. This study contributes to a transnational understanding of veterinary historiography and underscores the significance of colonial contexts in the global development of veterinary medicine.

The History of the Non-University Library for Medical and Veterinary History at Urk (NL)

ERIK-JAN TJALSMA

V.H.G., Netherlands

Objectives: The aim of the presentation will show the history how a personal initiative can lead to an extensive library consisting of 5 warehouses with 4,000 metres of books all of which deal exclusively with medical and veterinary history

Methods: In a Power Point presentation a chronological survey will be given, with texts and photos, In the presentation the present about the history of the village where the library is situated and of the history of the library itself.

Results: In the presentation the present activities of the library will be discussed and also the place of the library in the veterinary field of the Netherlands today.

Conclusions: The library has much lower thresholds than university libraries and it is a inter disciplinary meeting point for people who are interested in the medical and veterinary history.

The Munich Veterinary Collection: Sharing Historical objects Through Digitalisation

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The Institute for Palaeoanatomy, Domestication Research and History of Veterinary Medicine at the Veterinary Faculty of Ludwig Maximilian University in Munich has a diverse and rich historical scientific collection, which is, however, little known and only accessible to a restricted audience. The various items of this collection include numerous veterinary instruments, for which there are unfortunately only few exhibition opportunities. In order to promote the accessibility, visibility and research of these objects, they are currently being digitalised. As part of the DFG project 'FAIR-Artifacts of medical history', selected instruments are therefore being entered into the online inventory programme 'digiCULT.web', with all acquired information being recorded and in accordance with current documentation standards. The aim is to ensure that two outstanding sub-collections of national significance from the participating universities, Christian Albrecht University in Kiel and Ludwig Maximilian University in Munich, are made available as digitised material sources for research and teaching. This will be achieved by ensuring a standard of cataloguing that meets the required quality level and by publishing the digitised material on the FAIR Artifacts portal. To this end, the instruments are being inventoried with a wide range of photos, and 10% of them are being digitised in 3D. The publication of digitalised material and further research projects will enable interdisciplinary and global research and cooperation.

Didactic Bibliographic Resources to Improve the Teaching and Learning in Veterinary Sciences

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The use of didactic instruments plays a pivotal role in enhancing the level of knowledge in veterinary science students. The direct instruction of basic animal reproduction concepts in students enrolled in veterinary medicine programs, allows them to elucidate the biological and molecular mechanisms that perpetuate the animal species in an ecosystem. Therefore, universities must implement didactic strategies that facilitate the teaching and learning processes for students and, in turn, enrich learning environments. To evaluate the effect of the use of a didactic textbook on the level of theoretical knowledge in the theme of embryo-maternal recognition for veterinary medicine students. The participants (n=24) were divided into two groups: control (CG) and experimental (EG). Both groups received 4 hours of theoretical training regarding the basic concepts in bovine reproduction; however, the EG group was also exposed to a guided lecture and the activity play-to-learn from a cow reproduction didactic textbook. A pre-test and a post-test were applied to assess the prior and subsequent knowledge of the participants. Descriptive statistics were applied to identify the success rates for each test. Afterward, a repeated measures model was applied where the effect of the intervention was considered. No significant difference ($p>0,05$) was observed in the number of right answers for groups CG ($54,2\%\pm 12,7$) and EG ($40,8\%\pm 16,8$) in the pre-test. No difference ($p>0,05$) comparing the number of right answers in CG pre-test ($54,2\%\pm 12,7$) and post-test ($60,8\pm 18,8$). However, the EG showed a significant ($p<0,05$) difference in the number of right answers when comparing pre-test ($40,8\%\pm 16,8$) and post-test ($71,7\%\pm 14,7$). After the theoretical training and the didactic activity in the EG, an increase of 10.9% ($p<0,05$) in the number of right answers was found when compared with the CG. The use of didactic

**The Precedents of Artificial Anatomical Models in Veterinary
Medicine: The case of the Wooden Cow, 19th Century**

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The interdisciplinary project “Meeting in the Body of the horse” at the University of Salzburg, Austria, financially supported by the Austrian Science Fund, offers the rare opportunity to trace the history of what is presumably one underlying text from the ninth to the eighteenth centuries, its journey from the Muslim Middle East to the Christian East Mediterranean and back, and thus also the ways and means of transmitting knowledge in equine medicine and hippology across geographic, ethnic, linguistic and religious boundaries – and through various historical periods. A lost medieval Armenian equine medicine manuscript from midst of the 13th century, the existence of which is known only from a colophon in another manuscript, and an Armenian medical manuscript, probably from the 18th century, rediscovered in 2008, which contains a horse book, form the framework of this project. Based on this previously unstudied medical manuscript, the project will be placed in a larger research context to demonstrate and map the knowledge transfer between Christian West and Muslim East at the turn of the Middle Ages and the early modern period. It opens a new page in the history of medieval horse medicine – East of Byzantium, between Bagdad, Cairo, the crusaders’ states and the last Georgian kings. This is done by comparing Armenian, Arabic, Georgian and European equine manuscripts and their reciprocal translations.

**Beyond Domestication: Preventive Veterinary Strategies and
Ethological Insights in the 19th-Century Korean Encyclopedia *Imwon
Gyeongjeji***

JONG-WOOK JEON

Jeonbuk National University, Republic of Korea

This presentation explores the sophisticated veterinary knowledge preserved in the *Jeoneoji* (Treatise on Husbandry and Fishing) section of the *Imwon Gyeongjeji*, a monumental 19th-century Korean encyclopedia. While traditional East Asian animal care is often perceived as empirical, this study reveals a systematic approach to equine health that integrates humoral theories with rigorous preventive protocols. A central theme of the treatise is the conceptualization of the horse as a "Fire Animal" (*Hwachuk*), necessitating seasonal interventions such as "Spring Phlebotomy" (*Banghyeolbeop*) to balance internal heat before the peak of summer. Furthermore, the text details advanced surgical procedures including "Nasal Fenestration" (*Hwakhbibeop*) to enhance respiratory efficiency and distinct methods of castration—*Hwaseon* (thermal) and *Suseon* (non-thermal)—tailored to the animal's constitution and vitality. Beyond clinical practice, the *Jeoneoji* advocates for ethological welfare, proposing specific stable management techniques to prevent inter-male aggression and advocating for "Salt-based Hydration" to ensure metabolic health through optimal urination. By analyzing these records, this session aims to re-evaluate the historical significance of Joseon's veterinary policy, which prioritized constitutional prevention over reactive cure, offering a unique East Asian perspective to the global history of animal health.

Veterinary Influence on Development in Jeju Island

MICHAEL J. RIORDAN

Catholic Priest, CEO of Isidore Development Association, Republic of Korea

Fr P.J. McGlinchey was very much influenced by his Veterinary Surgeon father, Paddy. As a youth, he accompanied his father when he was doing his calls and saw how his father, as well as treating sick animals, advised the struggling farmers on various methods of agriculture. He also saw how his father found joy when farmers succeeded in their endeavors. After being ordained as a Columban missionary, priest P.J. was appointed to South Korea and arrived before the end of the Korean war in 1953, A year later he was sent to Jeju Island, a poor and isolated region that reminded him of rural Ireland. There, he set up a new parish and also founded the Isidore Development Association to improve the livelihoods of the locals. He was renowned as a Catholic priest for helping people regardless of their religion. The people were already very proficient in producing crops from their meagre holdings and so drawing on his veterinary background, he focused on animal husbandry, beginning with pig farming. P.J. discovered that traditional pig-rearing practices caused widespread infection with pork tapeworm, leading to serious human illness especially brain damage. Through patient education and experimentation, he helped farmers adopt healthier methods, breaking the disease cycle and transforming pig rearing into a viable industry. This integration of faith, science, and daily life significantly improved public health. To provide local employment for Jeju women he established a weaving industry and imported sheep to supply it with wool. To improve beef production, he imported Hereford cattle from Australia, which later suffered from a tick born disease. With help from volunteer veterinarians Kevin Bell, Jo Bell, (Australia) and Terry Fogarty (Ireland), effective treatments were developed, benefiting both beef and dairy industries. Overall, the story highlights how P.J. McGlinchey with international veterinary cooperation, transformed Jeju's agriculture.

Seeking Farmer Buy-In: The Introduction of the Five-Point Plan into New Zealand

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The five-point mastitis control plan was developed in the UK in the late 1960s and represented the first such scheme that was focused on engaging farmers, through targeting effective and practical measures that were not prohibitively expensive. Prior to the development of the five-point plan, mastitis control in New Zealand emphasised the importance of good management but failed to understand the value of identifying measures that were practical on farm. This led to complaints when farmers regarded the process as “too time consuming”. Thus in 1973, when the five-point plan was first implemented in New Zealand by the Waikato Dairy Laboratory, the focus was on ensuring farmer engagement rather than blaming the farmer. For example, the only major change to the plan in the transfer from the UK to New Zealand was the replacement of teat-dipping with teat spraying, on the basis of spraying being much quicker, an attribute which already endeared it to many New Zealand farmers. Engagement of farmers was further encouraged by featuring cartoons of the five-point plan, by creating well-known tunes into “mastitis melodies” that extol the five-point plan, and by organising a competition among farm families to list the five-point plan. Finally in 1975, the National Milk Quality Advisory Service Scheme was introduced. This scheme was based on adopting the five-point plan and provided farmers with high bulk milk somatic cell counts (BMSCC) with free services from veterinarians, dairy advisory officers and instructors. Over the first 2 years of the scheme there were moderate reductions in BMSCC on supported farms but a significant proportion of supported farmers failed to complete the recommended advice. So, despite a farmer-focus, farmer buy-in still remained a challenge in mastitis control.

The Korean “Harmful Animal”: The Korean Water Deer

MANGYONG MOON

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The water deer is primarily found in Korea and China and it is divided into two subspecies based on habitat. The International Union for Conservation of Nature (IUCN) has designated the water deer as a vulnerable species at risk of extinction, and it is also designated as a natural monument in North Korea. However, South Korea is home to 90% of the world’s water deer population. They were designated as harmful wildlife in 1994 due to the significant damage they cause to farms. The significant proliferation of water deer in Korea is the result of social development in South Korea intertwining with its ecological environment. This presentation aims to trace the relationship between Korea’s modern history and the ecology of the water deer, examining how its designation as harmful wildlife and the corresponding countermeasures have changed. As Korea industrialized, the water deer population grew due to the disappearance of its natural predators. However, this led to increased crop damage and traffic accidents, resulting in its classification as a harmful animal. This demonstrates that the classification occurred within a specific historical and political context, placing the water deer in a paradoxical state of protection and management.

Archiving Veterinary Heritage in Korea: From Preservation to Open Access - Focusing on the Animal and Plant Quarantine Agency

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This study introduces the “Digital Curation and Knowledge Diffusion Model” established by the Animal and Plant Quarantine Agency (APQA) to transform veterinary heritage materials into scholarly resources. Beyond serving as historical records, veterinary heritage provides foundational data for addressing emerging infectious diseases and establishing national quarantine policies, offering essential insights for contemporary research and policy development. Nevertheless, conventional management systems have focused primarily on physical preservation and limited accessibility, which hindered broader scholarly access and formal academic citation. To address these limitations, APQA advanced its services through a systematic process: identification & collection, digitization, MARC-based cataloging, online and offline exhibitions, and institutional repository development with DOI (Digital object Identifier) registration. APQA ensured data reliability through precise bibliographic control using the MARC format and achieved compatibility with international standards through metadata mapping (MARC to Dublin Core). By assigning DOIs, APQA transformed various veterinary records into internationally citable scholarly assets. The effectiveness of this model is evidenced by the 2025 usage data. The institutional repository hosted 22,006 records, reaching 13,827 unique users and 89,148 page views. Of the 14,025 DOIs issued, 12,992 DOI-linked accesses were recorded. Following the start of DOI registration in August 2025, third-quarter page views increased nearly tenfold relative to the second quarter, suggesting significantly improved accessibility and scholarly use of veterinary heritage. By utilizing digitized veterinary heritage, this model supports the application of modern research methods, including big data analysis, while enhancing the persistence and citability of archival resources through DOIs. In conclusion, this study demonstrates that veterinary heritage archives can assume a substantive role in research through a systematic transition from preservation-centered management to digitalization, open access, and sharing. When shared globally, these archives will realize broader scholarly value.

Visualizing Veterinary Heritage: A Historical Re-Evaluation of the Facade Relief at the Former National Veterinary Research and Quarantine Service and its Significance as a Spatial Archive

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The former main building of the National Veterinary Research and Quarantine Service in Anyang, completed in 1964, stands as a monumental architectural heritage that encapsulates the modernization of South Korean veterinary science. Designed by Lee Gwang-no, one of Korea's most prominent modern architects, the facility features a prominent facade relief that was misattributed in official records for decades. This study corrects this historical inaccuracy and explores the site's profound significance as a spatial archive. Through interdisciplinary research, this study reveals that the relief was designed by Kim Se-jung, arguably the most celebrated monumental sculptor in modern Korean history. The collaboration between a top-tier architect and a national sculptor for a quarantine facility is highly exceptional. It demonstrates an unprecedented level of artistic consideration and institutional investment in veterinary science during the early 1960s—a post-war era typically focused strictly on functional rebuilding. This convergence indicates a deliberate effort to visualize the authority and noble vision of veterinary public health through high-level public art. The decisive evidence for this attribution comes from the discovered oral testimony of Dr. Park Geun-shik, the former director who supervised the construction. His testimony proves that veterinary leadership was directly involved in these artistic discussions, actively shaping the institutional identity of the quarantine service. The relief is, therefore, a vital primary source reflecting the state's early efforts to institutionalize epidemiological defense. Ultimately, this study proposes a new preservation model. By applying the concept of "placemaking," this historic veterinary facility—embodying a rare intersection of scientific history and national art—can be conserved as a dynamic "third place." This ensures that the spatial legacy of veterinary advancements is creatively transmitted to future generations as an interactive cultural heritage.

Strategic Archiving and Digital Transformation of Agricultural Heritage: A Focus on the Translation of Classical Korean Agricultural Treatises and the Reconstruction of Veterinary History

JEUNGSANG RYU

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The National Agricultural Science Library (NASL) has undertaken a long-term initiative to reconstruct Korea's agricultural and veterinary heritage through systematic translation, the acquisition of international archival materials, and digital integration. For decades, essential sources on traditional husbandry and early veterinary practices have remained difficult to access due to linguistic barriers and the dispersal of historical materials overseas. This project seeks not only to preserve these materials but also to reposition them within the global historiography of veterinary medicine. Between 2001 and 2015, NASL produced modern Korean translations of 57 classical agricultural treatises and 46 texts from Korea's modernization period. To strengthen the historiography of veterinary medicine, the library collaborated with the East Asian Library, University of California, Berkeley, and obtained digitized copies of 58 rare Korean-language livestock manuals held by the Russian State Library, including *Doyaji Chineun-beop* (Methods of Swine Husbandry). In addition, NASL acquired more than 340 specialized volumes on veterinary and livestock science from Japanese research institutions. A further milestone was the digitization of 29 sets of handwritten manuscripts by Takahashi Noboru, providing important primary sources for reconstructing livestock and veterinary policy during Korea's Japanese colonial period (1910-1945). By integrating agricultural heritage with specialized veterinary archives, this initiative reconstructs the institutional and scientific history of animal health, livestock improvement, and disease control in Korea. The resulting digital archive establishes a new foundation for comparative veterinary historiography and contributes to understanding the historical roots of contemporary Korean livestock science. Beyond preservation, the NASL Archive serves as a dynamic research platform that bridges traditional husbandry knowledge, modern veterinary scholarship and digital humanities approaches.

**From Aid Recipient to Global Technical Hub: The Centennial
Evolution and International Veterinary Cooperation of Korea's
Animal and Plant Quarantine Agency (APQA)**

JAEMYUNG KIM

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The Animal and Plant Quarantine Agency (APQA) of the Republic of Korea, which traces its origins back to the establishment of the Export Cattle Quarantine Station in 1909, represents a century of excellence in national veterinary services. A definitive milestone in its modern history was the "Strengthening of Veterinary Services" project (1984–1988), conducted in partnership with the United Nations Development Programme (UNDP) and the Food and Agriculture Organization (FAO). During this pivotal era in the 1980s, Korea focused on modernizing its veterinary infrastructure and dispatching expert personnel for advanced technical training in countries such as the USA, UK, and Australia to establish a robust framework for controlling exotic animal diseases. Through decades of dedicated research and institutional growth, APQA has successfully transitioned from a beneficiary of international aid to a proactive global leader. Today, the agency operates eight designated WOA (World Organisation for Animal Health) Reference Laboratories covering critical diseases such as Foot-and-Mouth Disease, Avian Influenza, and Brucellosis. Leveraging this expertise, APQA has been spearheading technical cooperation in the Asian region; since 2012, it has hosted annual international workshops on animal disease diagnosis, providing advanced training to over 180 veterinary professionals from 16 member countries, including Thailand, Vietnam, and Malaysia. This presentation will review the historical trajectory of APQA's international cooperation, illustrating how the foundational support received in the late 20th century provided the catalyst for Korea's current role as a leading technical hub for animal health and biosecurity in Asia.

History of KAHIS (Korean Animal Health Integrated System)

SEIKI JUN

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KAHIS (Korean Animal Health Integrated System) is a National Integrated Animal Health Information System established to prevent livestock diseases and to minimize their spread through the application of advanced information and communication technologies. The system was initiated with the establishment of an Information Strategy Plan (ISP) in 2008 and was developed in four sequential phases from 2009 to 2012. Full-scale operation began in 2013. KAHIS integrates and manages fundamental livestock data, including farms, livestock facilities, livestock vehicles, and disease-related information. It supports all stages of animal disease control, ranging from routine preventive and surveillance activities to diagnostic procedures from suspected case reporting to confirmation, coordinated control measures and situation monitoring, and post-outbreak management such as burial site supervision. A key strength of KAHIS lies in its GIS-based spatial information system, which visualizes livestock disease occurrence and animal population distribution while enabling advanced statistical analyses. Based on accumulated big data, a predictive model for Highly Pathogenic Avian Influenza (HPAI) has recently been developed and implemented. The prediction accuracy for outbreak risk was 45% during the 2024/2025 winter season and improved by more than 10 percentage points in the 2025/2026 season. This advancement marks a strategic shift in Korea's animal disease control paradigm from reactive response to proactive prevention. Since its launch in 2013, KAHIS has undergone continuous enhancement. In response to rapidly evolving technological environments, the development of a next-generation KAHIS is planned for 2027. Although no directly comparable system currently exists internationally, KAHIS demonstrates strong potential for adaptation in other countries, particularly in farm and livestock vehicle management.

American Wild Horses and Population Control 1990 – 2025

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While wild horses initially evolved in North America, they became extinct on the continent 12,000 to 5,000 years ago. Domesticated horses were introduced by European settlers in the 15th and 16th centuries and over time, populations of feral horses developed along the eastern seaboard and in the mountain states. During the 19th and 20th centuries, these animals were simultaneously viewed as pests, as commercially valuable for rodeo horse breeders and pet food companies, and as symbols of the American West, independence, and freedom. As the 20th century progressed, many of the free-roaming horses on the eastern seaboard fell under the management of state and federal agencies. In the western United States, a mid-20th century movement led by Velma Johnston (aka Wild Horse Annie) transformed feral mustangs into federally protected wild horses under the 1971 Wild-Free Roaming Horses and Burros Act. Controlled by the Bureau of Land Management, the Wild Horse and Burro program charged the United States government with the care and keeping of those animals in designated protected zones. This new protection along with the depletion of natural predators led to an explosion of wild horse populations in the west. By the 1990s, it became evident that horse populations had to be artificially managed to prevent overpopulation and starvation. Political and physical realities led to demands for technological interventions such as reversible birth control. Used on both eastern and western free-roaming horse populations, IUDs and immunocontraceptives like Porcine Zona Pellucida (PZP) have provided alternative means of population control starting in the 1990s through the present. While many support these measures, they have not ended the political fights over wild horse population control and the role of these animals in the American west landscape.

Equine-Assisted Activities in Unconventional Places

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There has been a lot of talking about pet-therapy and equine-assisted activities in the last few decades. Activities conducted with the presence of animals can bring many benefits to the people involved, both from the physical and mental point of view. Sometimes, for several reasons, some patients cannot reach horses to perform therapy, but it is impressive to learn how some organizations, with the help of veterinarians and specialists, manage to find a way for horses to reach the people in need. This short research tries to retrace the history of horse-therapy and explores equine-assisted activities in some places that the Authors decided to call “unconventional”, like nursing homes or prisons. It is very interesting to see how, in many different countries, horses and ponies can make a difference in some people’s lives. Horses in nursing homes can provide important benefits to the elderly and bring smiles in often boring routine days. In prisons inmates can learn through horses how to manage their emotions, ability which will be essential to them in life outside prison, also to prevent recidivism. In this kind of activities, ethics and animal welfare must always be a priority too: that is where veterinarians play a pivotal role. In order to give this article more realism, the Authors also reported an interview to Ms. Michela Medoro, owner of a small educational farm, who organized and carried out visits to several nursing homes with her two ponies in some areas of Tuscany (Italy).

**Horses Lost in Translation: Transcultural Knowledge Exchange in
Medieval Equine Medicine East of Byzantium**

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In 2026, an interesting large-scale piece was added to the Complutense Veterinary Museum. It is an artificial anatomical model of a bovine designed for the study of foetal manipulation within the uterus. Inside, it features leather harnesses simulating the uterus, within which a mannequin representing the foetus was placed. The documentary research undertaken has not made it possible to establish a date or author for the piece; the model appears in the press at the beginning of the 20th century. The tradition of wooden anatomical models is very old, dating back to the models of Felice Fontana (18th century), and various examples exist in veterinary medicine, including a life-size anatomical model of a horse preserved at the Complutense Veterinary Museum. This investigation highlights the early interest of applying artificial models in veterinary education and aims to promote the exchange of information on similar models in other faculties and institutions.

The Collaboration in the Historical-Scientific Field between the Foundation for Zooprophyllactic and Zootechnical Initiatives of Brescia and the Italian Association of the History of Veterinary Medicine and Farriery

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The Brescia Foundation for Zooprophyllactic and Zootechnical Initiatives (FONDIZ, <https://fondiz.it/>) was established on 27 January 1955 with the aim of addressing agricultural and zootechnical issues, focusing in particular on providing assistance to farmers, sharing technical information for improving livestock breeding and providing professional development for Veterinarians. In view of its important social function, the Presidential Decree No. 462 of 17 January 1956 recognised the Foundation as a non-profit organisation and recognised its specific legal status. The Foundation's Statute, rewritten in 1969, broadened its institutional aims and led the Foundation to collaborate with new partners, also establishing a Technical Advisory Committee, a body with the technical expertise necessary to draw up programmes of high scientific value in various fields of the veterinary sciences and animal production. Over the years, an increasing number of training and refresher courses have been organised, making the Foundation a reliable point of reference at national level for professional development aimed at operators in the broad fields of veterinary and animal sciences. The Foundation's commendable cultural activity has resulted in the publication of over 120 "Quaderni" ("Notebooks"), monographs that since 1979 have dealt also with topics of current scientific interest and historical insights into the origins of Veterinary Medicine and the related professions. The Authors describe in detail the important historical and scientific collaboration that has existed for over twenty years between the Foundation in Brescia and the Italian Association of the History of Veterinary Medicine and Farriery (A.I.S.Me.Ve.M.) in Turin. Furthermore, the Authors would also like to emphasize the huge work done by the former Council Boards Members of the Foundation and of A.I.S.Me.Ve.M. for promoting and strengthening the long and fruitful collaboration between the two institutions which will hopefully continue for a long time in the future.

**Same Animals, Different Conflicts: Human-Animal Relations and
Animal Management Policies in Urban and Rural Areas**

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This study aims to compare cases from urban and rural areas to analyze the characteristics and differences in human–animal conflicts arising from the implementation of local government animal management policies, focusing on Jeonbuk-State, South Korea. In recent years, economic losses caused by animals, including human injuries and crop damage, have increased, prompting expanded policy responses and heightened public attention. Currently, animal management in Korea is largely implemented through regulations and enforcement under related laws, such as the Animal Protection Act, while local governments operate more detailed management systems through national legislation and local ordinances. However, even when dealing with the same animal-related issues, urban and rural areas often exhibit different perceptions and response patterns. In urban areas, concerns about animal protection and welfare tend to be emphasized, whereas in rural areas, crop damage and safety issues directly related to livelihoods are key criteria for animal management. These differences in perception influence how animal management policies are accepted and implemented, and, in some cases, lead to conflicts within local communities. Accordingly, this study reviews changes in animal-related laws and policies in Korea and Jeonbuk State and examines cases of wildlife damage and the implementation of management policies in rural areas. Through this analysis, the study explores the social structure that shapes human–animal conflicts. This research argues that harmful wildlife management policies should not be understood merely as measures for population control, but rather as policies shaped by social perceptions of human–animal relationships and by specific regional contexts. By doing so, the study reinterprets wildlife management policies in Korea through the lens of human–animal relations and local community conflicts and suggests policy approaches that account for regional characteristics and diverse stakeholder interests.

Success and Failure in Managing Ovine Haemonchosis

GARETH BATH

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Safe effective remedies started with phenothiazine in 1945, followed by tetramisole and thiabendazole in the 1960s, and Ivermectin in the 1980s, with several narrow spectrum drugs. This had the mostly unintended effect of making helminth management drug-dependent. Advisors promoted whole-flock, frequent and pre-determined regular treatments, which appeared to work well for a time until anthelmintic resistance (AR) emerged as an inevitable result. The Pharmaceutical Industry enthusiastically adopted this approach since it promoted sales and boosted profits. Sales forces were established based on turnover, targets and incentives, accompanied by repeated advertising, ‘special offers’, and sponsorships. Competition and generics drove prices down, benefiting sheep farmers but increasing drug reliance. Long-acting broad spectrum and combination anthelmintics prolonged and worsened this dependency. Treating animals according to the weakest meant that most animals were treated unnecessarily and the weakest were not identified for culling. The huge genetic diversity within populations of *Haemonchus contortus* made the likelihood of revealing AR genes more probable. The rate of genetic change is determined by selection intensity, population size, heritability, variation, generation interval and number, persistent selection and the number of traits selected – all of which operated in favour of AR and, with the overuse of drugs, against the maintenance of strains of worm-hardy sheep. The spread of AR worm strains was hastened by indiscriminate purchase of sheep without quarantine, dispersion sales, drug purchases based solely on price, and complete reliance on drugs. After 2000, the introduction of Targeted Selective Treatment slowed AR and identified weak sheep for culling. Selection of rams was proven as a practical route to hardiness. Correct grazing management practices assisted worm management by reducing the parasite load. A balanced, holistic approach promoted sustainable management of *Haemonchus contortus*.

Historicising Veterinary Medicine and Animal Science in Nigeria

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Objectives: This paper traces the evolution of veterinary science in Nigeria from the precolonial period to the present, examining how the development of animal health practices, veterinary education and veterinary institutions have shaped the nation's agricultural and economic fortunes.

Methods: The study relies on extensive archival research, oral histories, and analysis of colonial and institutional records to document critical transitions in veterinary knowledge systems and infrastructure.

Results: The analysis begins with precolonial Fulani ethnoveterinary expertise, which represented sophisticated indigenous approaches to livestock management and disease prevention. Colonial interventions introduced formal veterinary medicine through campaigns against major epizootics that threatened both livestock populations and colonial economic interests. This period witnessed the establishment of foundational institutions: the Veterinary Headquarters and the pioneering Central Veterinary Laboratory in Vom, Plateau State, which became West Africa's primary centre for veterinary research and disease surveillance. The paper examines the creation of Nigeria's first Veterinary School in Vom, marking a watershed moment in professional veterinary education. Subsequently, the proliferation of Colleges of Veterinary Medicine and Veterinary Teaching Hospitals across Nigerian universities democratised access to veterinary training while addressing regional livestock needs. The study further explores the emergence of Federal Veterinary and Agriculture Colleges and Institutes, which expanded technical and vocational training in animal health. Finally, the paper analyses the establishment of regulatory and research frameworks through the Veterinary Council of Nigeria and the Agriculture Research Council of Nigeria, which standardised professional practice and coordinated research priorities.

Conclusions: The research concludes that Nigeria's veterinary development reflects a dynamic interplay between indigenous knowledge systems, colonial imperatives, and postcolonial nation-building efforts. This historical trajectory reveals how institutional capacity-building in animal health has been integral to Nigeria's broader developmental aspirations, though challenges in sustaining these institutions persist. The paper argues for recognizing this historical legacy when addressing contemporary livestock sector challenges.

Evaluating Godlewsky and the Beginnings of Scientific Veterinary Medicine Education in Turkey in Light of New Documents

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The presentation addresses the establishment process of scientific veterinary education in the Ottoman Empire and examines the symbolic, institutional, and historical dimensions of this process through the example of the Prussian Veterinarian Godlewsky. However, for many years, what was known about such an important figure consisted only of the letters translated by Prof. Dr. Nihal ERK (Godlewsky, Sommer: *Veterinary Medicine in Turkey (In the Mid-19th Century)*, trans. Prof. Dr. Nihal Erk, Ankara University Faculty of Veterinary Medicine Publications, Ankara, 1972). Given the significance of this individual, it was naturally impossible that no information or documentation existed in the Ottoman and Prussian archives. In our archival research, we located a substantial body of important information and documents concerning Godlewsky and his activities in Turkey. According to the earliest document identified, Godlewsky was assigned not only to treat the army's horses but also to carry out veterinary health services at the Tophane-i Âmire. These findings demonstrate that, in its early phase, modern veterinary medicine in the Ottoman Empire developed in close connection with industrial and military structures. They also render more visible both the functional importance of veterinary medicine within Ottoman modernization and its position within the state apparatus. Another study examines the Ottoman system of rewards and symbolic bestowal in the context of veterinary medical history. Decrees of appointment, petitions, and imperial orders preserved in the Ottoman archives reveal how Godlewsky, as the founder of military veterinary education, was appreciated and honored by the state. This bestowal was not merely an individual reward; it also indicates that the military veterinary school—and thus modern veterinary education was recognized by the state as a legitimate and valuable institution. When considered together, these studies show that Godlewsky was not only a technical and educational figure in Ottoman veterinary history but also one of the symbolic

Portrayals of Female Veterinary Professionals in Fictional Cinema

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The aim of this communication is to present and discuss three cinematic examples of female veterinarian protagonists, with a focus on their professional representation. The study forms part of a broader research project on the representation of women veterinarians in film. An exploratory search was conducted across major international film databases, including IMDb and Filmaffinity, as well as widely used streaming platforms, to identify titles featuring women veterinarians in leading roles. From the corpus identified, three films were selected as case studies based on the centrality of veterinary practice to the plot: *Iris* (The Netherlands, 1987), *Les Vétos* (The Vets, France, 2019) and *도그데이즈* (Dog Days, South Korea, 2024). A quantitative analysis was applied, obtaining the percentage of appearance according to the veterinarian's screen time, and the number of scenes with veterinary practices. Following this, a qualitative film analysis was applied, focusing on the depiction of professional practice, and character construction. In these films, veterinary practice functions as a core narrative element rather than an incidental detail. The protagonists are portrayed as competent professionals whose clinical expertise, and emotional labour are integral to the storyline. These representations emphasize everyday professional challenges, interpersonal relationships, and social responsibility. Thus, depictions we consider as positive contribute to a more realistic public image of the profession and provide relevant material for the historical reflection on gender and the identity of veterinary.

**Animal Disease and the Professionalization of Veterinary Medicine:
Foot-and-Mouth Disease and Glanders as Forces for the Maturation
of Veterinary Regulation in the United States**

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This paper offers an analysis of scientific understanding and regulatory approaches regarding two livestock diseases—foot-and-mouth disease (FMD) and glanders—that were ascendant in the nineteenth and twentieth centuries. Both diseases conspicuously exerted influence in the United States (U.S.), which—like countries in Europe and Asia—established veterinary institutions to help manage them. Using inductive analysis of primary sources such as U.S. Bureau of Animal Industry reports, correspondence amongst veterinary and medical microbiologists, and congressional documents, the paper highlights how trade-related crises, high-consequence disease events, and scientific discoveries influenced disease control approaches. The analysis focuses on developments including the codification of biosecurity practices, the growing scientific recognition of indirect transmission via fomites, support for federal involvement in disease response, and the rationale for early veterinarians to be accepted as qualified members of the wider scientific and medical profession. While other diseases (notably, contagious bovine pleuro-pneumonia) also played a role in the development of U.S. animal disease regulation, FMD and glanders gave veterinarians an opportunity to cement their reputations as contributors to both science and society. During the closing and opening of the nineteenth and twentieth centuries, respectively, U.S. regulators shifted from targeting visibly FMD-infected animals to regulating contaminated environments, an effort that logically followed American regulators' acceptance of the germ theory of disease (even prior to the establishment of the discovery of the actual etiological agent for FMD). Meanwhile, glanders—a zoonotic bacterial—disease offered a unique opportunity for the U.S. veterinary profession to collaborate with (and be accepted by) their peers in human medicine. Indeed, medical practitioners sought to understand the connection between animal (largely horse) cases of glanders and the transmission from animals to humans. The roots of U.S. animal disease control may be best located at the intersection of economics, professional education, and military priorities.

Radioactive Cows: How Radioisotopes Shaped Veterinary Research in Britain c1955-70

ABIGAIL WOODS

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This presentation uses radioisotopes to reconstruct the historical connections between livestock health, dairy farming and the nuclear industry in Britain. Just after the Second World War, concerns about the health impacts of nuclear fall-out were aroused by the creation of a national nuclear programme, international testing of nuclear weapons, and the 1957 fire at the Windscale nuclear processing plant. Milk was identified as the key source of danger, causing scientists to investigate the ‘milk pathway’ through which radioactive contaminants moved from soil to plants to dairy cows and via milk to humans. Studies of the cow’s role in the milk pathway took place at the Agricultural Research Council’s Field Station for Animal Disease Research in Berkshire. They used a novel biotechnology (and product of the nuclear industry): radioisotopic tracers. Scientists focussed particularly on the metabolism of strontium-90, an analogue of calcium, which could potentially cause leukaemia and bone cancer. The findings informed radiation safety guidelines issued by the Medical Research Council. Scientists then used the same facilities, and the knowledge and technical expertise that they had developed, to study milk fever (hypocalcaemia) in dairy cows, which was a growing problem in intensive farming systems. The findings shaped wider understandings of metabolic diseases in dairy cows, leading to their recognition as man-made conditions created by the industrialisation of animal bodies and environments.

Mass Killings of Gorals and ASF-Prevention Technology in South Korea

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The goral is an indigenous species native to East Asia and is globally classified as an endangered animal. The decline in the number coincided with the onset of modernization. From the 1960s onward, the industrialization of Korean society threatened their habitats, and by the 1980s the species had nearly disappeared. In response, the government launched systematic conservation policies to restore goral populations, which had become relatively successful by the 2020s. However, an alarming event took place during the winter of 2023–2024. During this period, at least 990 gorals—equivalent to 70 percent of the estimated 1,600 gorals on the Korean Peninsula—perished. One explanation suggested that African Swine Fever (ASF) played a critical role. To block the movement of wild boars, which were identified as a major vector, the authorities implemented an unprecedented policy: constructing fences traversing the Korean Peninsula from east to west, stretching 1,831 kilometer-artificial barriers. This work examines the reasons why the construction of these fences was accepted even though so many gorals perished. In European countries such as Denmark, Germany, and Poland, the construction of ASF-control fences has generated controversy because the infrastructures are seen as forms of violence against European integration and the principle of free movement. By contrast, in South Korea the fence has come to function as a symbolic technology of defense against external “invasion,” resonating with the existing fence system in the Demilitarized Zone (DMZ). The mass killing of gorals thus emerges as an unintended consequence of this fencing technology. This work adopts a comparative approach to examine how fencing technologies in European and South Korean contexts have been differently designed, justified, and implemented. It argues that these differing “social technologies” have led to divergent outcomes, including the fatal result of the restored goral population was lost.

Finding Relief: Defining 20th Century Acupuncture Research in the American Veterinary field

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Objectives

1. Examine how veterinary practitioners impacted the development of Traditional Chinese Medicine in the United States through the early research of the International Veterinary Acupuncture Society
2. Consider how relief was described and defined by 20th century American veterinary acupuncturists working with animal patients
3. Compare the outcomes of 20th century acupuncture research in the American veterinary and human medical fields

Methods

1. Primary Source Evaluation: In depth analysis of publications and proceedings, such as the International Veterinary Acupuncture Society Conferences
2. Historiography: Critical examination of the history of acupuncture according to English articles and textbooks
3. Social Worlds Framework: Discusses how acupuncture maps and associated technologies were boundary objects in the social worlds of human and animal medicine

Results

1. Late 20th Century American Veterinary Acupuncturists viewed relief in terms of animal performance and utility
2. Acupuncture mapping techniques were viewed as equally efficient because of how relief was defined
3. Comparing the American Veterinary and human medical fields during this time period reveals unique acceptance of both TCM and biomedical epistemology in veterinary acupuncture practice

Conclusions

In the late 20th century, veterinary practitioners and researchers developed acupuncture maps using unique methods and technologies. This presentation argues that the complex definition of relief in veterinary medicine allowed for the co-existence of Transpositional and Traditional mapping techniques despite their conflicts. Acupuncture was seen as a form of neuromodulation, informed by technologies that could intervene in the body's electric conductivity and neural pathways. Acupuncture maps functioned as boundary objects between veterinary medicine and its human counterpart; practitioners researched acupuncture's efficiency and effectiveness through animal patients. This presentation challenges the current historiography that primarily interprets the development of Traditional Chinese Medicine in the United States through the human medical field.

An Account on the History of the Italian Acarology/Ixodology

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Objectives: The purpose is to report on the Italian contribution to the medical and veterinary Acarology/Ixodology from the time of ancient Romans to present days.

Methods: Starting from the review work on Italian parasitology by Roncalli-Amici (2001), the authors focused their bibliographic search on Italian Ixodology, with special reference to the Romans's period until the '80s.

Results: Old Roman authors, as Cato the Elder in *De Rustica*, provided first evidence of methods for prevention- treatment of mange, reportedly useful also against tick's attachment. During Middle Ages, various authors referred on ectoparasites, although without quoting explicitly ticks. In 16th century, Aldrovandi, in *De animalibus insectis* (1602) gave the first systematic account on ectoparasites, including ticks and/or other ectoparasites supposed to be –or accounted for being- ticks. With the introduction of the microscope, Redi (1664, 1668) issued 29 engraved plates of insects, outstanding those of the first rendition of ticks with eight legs. Even if Ixodological studies in Italy remained quite limited during late '800s-early '900s, we must remember Canestrini (1887) who first described *Boophilus annulatus*. During and between the two world wars, the interest in Ixodology diminished. In 1958, Starkoff published the first comprehensive monograph on ticks, followed by the exhaustive work on occurrence and geographical distribution of ticks in Italy by Manilla-Sobrero (1988).

Conclusions: From late '80s to-date, a growing number of scientists –from different research groups throughout Italy- became actively involved in research on ticks and tick-borne diseases, thus making it difficult to report on all of them, due to space limitation in this abstract. However, the Authors can provide the bibliographic search done on the most recent period on the Italian contribution to medical and veterinary Acarology/Ixodology. Acknowledgement: This work is dedicated to the past Raffaele Roncalli-Amici, Italian scientist naturalised U.S. citizen, veterinarian and passionate historian, A.I.S.Me.Ve.M. member.

ABSTRACTS



POSTER PRESENTATIONS

The Tendency Toward the Humanization of Companion Animals: An Intercontinental Perspective

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Throughout human history, non-human animals have been domesticated to enhance the provision of services, resources, and associated benefits. The domestication process has facilitated the development of mutualistic psycho-emotional relationships that influence the emotional cortical structures of both humans and non-human species. The present study aimed to assess the tendency to humanize companion animals among populations in South Korea, Asia and Colombia, South America. A validated construct was employed to evaluate the level of humanization among participants residing in Seoul and Busan, South Korea (N = 75), and Sincelejo, Colombia (N = 75). The instrument comprised three multiple-choice questions, each allowing a single response. For the item, “How many years would you like to live with a pet?”, 68.4% of respondents in South Korea indicated a preference to remain with their companion animal “forever,” whereas 45.1% of respondents in Colombia provided a similar response. Regarding the question, “Do you sleep with your pet in the same bedroom?”, 78.9% of participants in South Korea answered affirmatively, compared with 34.6% in Colombia. In response to the item, “Do you put clothes or outfits on your pet?”, 42.1% of respondents in South Korea and 27.0% in Colombia reported doing so. Comparatively, the likelihood of respondents in South Korea expressing a desire to live indefinitely with their companion animal was 1.5 times higher than that observed in Colombia. Likewise, co-sleeping in the same bedroom with companion animals occurred 2.9 times more frequently in South Korea than Colombia. Finally, dressing non-human animals in clothing or accessories was 1.6 times more prevalent among South Korean than Colombian participants. These findings indicate a comparatively stronger psycho-emotional attachment and a more pronounced tendency toward the anthropomorphization of companion animals among South Korean guardians relative to those surveyed in Colombia, South America.

The Trocar: A Historically Versatile and Indispensable Instrument of Veterinarians

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The trocar is a surgical instrument well known to veterinarians, mainly for its current uses for puncturing the rumen of ruminants and in minimally invasive surgery. If the instrument is familiar, it is no longer part of the standard surgical kit that every veterinarian used to carry. While some historical models are widely known, many models and their uses remain little known to both historians and veterinarians. Among recent publications on the history of veterinary medicine, some address the development of specific surgical instruments, such as those used for castration or equine dentistry, however none deal exclusively with the trocar. Additionally, these publications generally address various instruments related to each other by their function, while the work presented here examines the different versions of a single instrument and explores the various functions for which they were designed. In order to comprehend the evolution of the trocar and its multiple applications in veterinary medicine, it is essential to consider the historical and scientific context in which it was developed. An extensive review of historical literature and the study of trocars belonging to the Institut für Paläoanatomie und Geschichte der Tiermedizin has made it possible to compile an inventory of models historically used in Western veterinary medicine. This has also revealed the various fields in which trocars were used: therapy, microbiology, diagnostics, or even experimental physiology. To illustrate and summarise this information, a timeline showing the different historical models of trocars used in Western veterinary medicine has been created. This comprehensive graphical overview presents the trocars alongside major scientific and historical events, enabling the relationships between instruments and discoveries to be understood at a glance. The timeline also provides an overview of the various uses of the trocar, offering insight into the broader evolution of techniques in veterinary medicine.

Online Biographical Archive of Italian Veterinarians

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Objectives: The goal of this contribution (poster) is to give an update on the progresses of the biographical repertoire/archive on Italian veterinarians and most important farriers, being compiled by the Italian Association of History of Veterinary Medicine and Farriery (A.I.S.Me.Ve.M.)

Methods: The writing of the biographical profiles follows the structure of the Dictionary of American Medical Biography [1]. Since 2019, the biographies are being published on the A.I.S.Me.Ve.M. website (<https://storiamedicinaveterinaria.com/biografie/>)

Results: so far 70 biographies of veterinarians and farriers who contributed to the development of these two professions (68 men and 2 women), accompanied by photos or portraits, have been posted on the A.I.S.Me.Ve.M.'s website. The biographies, related to a period ranging from early 19th century to the end of the 20th century, all but one (Carlo Ruini). They concern 30 university teachers, 23 practitioners who worked in different fields of veterinary sciences and 12 officers of the Army Veterinary Corps of which 4, who died in war, were awarded the Gold Medal of Military Valour. About farriers, 4 biographies are posted, all are non-commissioned officer of the Italian Army.

Conclusions: the idea of this biographical archive is not new and draws inspiration from a similar international initiative promoted by Mathijsen and Katic, in 1993, during the 29th WAHVM Conference, in Cordoba. Their slogan was “better one person too much, than one person missing” [2]. The biographic repertoire is an ongoing work, done by quite many different members of our Association. The Authors deem it important that this biographical archive will keep expanding as a useful tool for research, teaching -or simple curiosity- about the veterinary world. Acknowledgement: the authors would like to thank the A.I.S.Me.Ve.M. members who have already contributed to the development of the archive and are grateful to those members who will do so in near future.

Professor Stanisław Kirkor (1905–1963) and the Rise of Modern Honeybee Disease Diagnostics in Poland

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Objectives: This study aims to discuss the contributions of Professor Stanisław Kirkor (1905–1963) to the development of modern diagnostics and control of honeybee diseases in Poland, and to highlight the impact of his international experience on these developments.

Methods: A qualitative analysis was conducted of materials describing Kirkor's scientific and organisational activities, with an emphasis on diagnostic procedures (including the 'Kirkor method' used in the case of nose mite disease), institution building, and knowledge transfer from leading wartime/post-war centres in Liebefeld (Switzerland) and Rothamsted (United Kingdom).

Results: In 1946, Kirkor organised Poland's first specialist research unit dealing with beneficial insect diseases in Gorzów Wielkopolski, which was later moved to Swarzędz (1956), strengthening the country's research and training potential. He promoted and standardised laboratory diagnostics, including the early diagnosis/description of tracheal mite disease (acarinosis) and the development and dissemination of a practical microscopic technique (the "Kirkor method") for diagnosing nose mite disease, which became part of routine laboratory practice. His efforts supported the inclusion of key bee diseases in official control measures and enabled large-scale professional training in field implementation (in 1949, approximately 800 veterinarians and beekeeping experts were trained).

Conclusions: Kirkor's work created a lasting bridge between international, advanced apipathology and Polish regulations on diagnostics and training of state veterinary service employees.

Piotr Stefan Seifman (1823–1903) and the Foundations of Systematic Rabies Control in Polish Lands

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This historical study examines the contribution of Piotr Stefan Seifman—a pioneering veterinarian and physician, and the first director-organizer of the veterinary school in Lviv (1881–1897)—to the development of systematic rabies (canine rabies) control in the Polish lands. We conducted a narrative analysis of Seifman’s key rabies-focused publications (1867, 1874, 1888) and his contemporaneous reports and summaries in professional medical and veterinary periodicals, with attention to clinical description, contagion concepts, and proposed preventive measures. Seifman’s 1867 work proposed a structured clinical staging of rabies in dogs (onset, irritability, paralysis), supporting more explicit recognition and reporting. His later texts emphasized practical strategies to limit disease transmission. They helped justify veterinary–police regulations aimed at reducing transmission risk, including dog identification/marketing, taxation of dog ownership, observation of suspected cases, and the removal of rabid animals. He also engaged critically with early post-exposure approaches emerging after Louis Pasteur’s work, disseminating vaccination and treatment summaries and discussing factors influencing incubation (e.g., the distance from the bite site to the central nervous system). In 1888, he addressed the biosafety hazards of post-mortem examination of rabid animals and considered how decomposition processes might affect infectious risk. Seifman’s output illustrates an early, system-oriented framework for rabies management that linked clinical observation, public regulation, and professional education, contributing to later institutionalized rabies control in the region.

The Sound That Holds the Herd Together: An Evaluation of the Functional and Symbolic History of Animal Bells

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This presentation examines the functional, cultural, and symbolic history of animal bells as an early herd-management tool within the framework of veterinary medical history. From the earliest phases of animal domestication, pastoral societies developed practical instruments to monitor, manage, and protect livestock under conditions where direct visual control was limited. Among these instruments, the animal bell stands out as a low-cost yet highly effective auditory tracking device, enabling herders to locate animals, maintain herd cohesion, and respond rapidly to loss or danger in extensive grazing systems. Archaeological and ethnographic evidence indicates that the practice of attaching sound-producing objects to animals' dates back to at least the second millennium BCE. In Mesopotamia, Anatolia, and Central Asia, bells were widely used to reduce the risk of animals straying from the herd, to facilitate night-time monitoring, and to enhance security against predators or theft. Classical Greek and Roman agricultural sources further demonstrate the historical continuity of bell usage, particularly among cattle and goats, underscoring its role in early preventive herd management. The study highlights species-specific patterns in bell use. In cattle husbandry, bells were often attached to lead animals to assist in tracking widely dispersed herds, anticipating the modern concept of "leader animals" in herd behavior studies. Among sheep and goats, bells served primarily as a protective measure against loss in rugged terrain, while tonal variations allowed individual or subgroup identification. In camels, bells acquired a more complex function: beyond practical tracking, they became integral to caravan organization, orientation, social communication, and symbolic representation of economic value and status. In Anatolian and broader Turkish cultural contexts, animal bells also carried rich symbolic meanings, including protection against evil, the evil eye, and misfortune, reflecting pre-scientific notions of preventive animal health. From a contemporary veterinary perspective, the paper discusses both the welfare-supportive aspects of bell

Horses as Mascots During Queen's Visit: Human and Animal Relations, Aristocracy, Festivity, and Gender

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The project of the decolonization movement in colonial Nigeria focused on areas where both subjects and nationalists played a role in advocating for Nigeria's independence. However, the study of animals like horses, as colonial subjects, is unexplored. Through Queen Elizabeth's Visit to Nigeria in 1956, the study of pleasure brings humans and animals together in a domestic environment. Human-horse relations, through pleasure, speak politically and socially to recreational activities in the creative process of shaping colonial Nigeria. In this paper, gender is explored in aesthetic manifestation, with festivity as a means that generates a broad outlook during the Queen Elizabeth Visitation in 1956. This paper aims to pose two questions that explore the intersection of pleasure, space, and the human in the creative demonstration of modernism, nationalism, and decolonization: How were horses utilized as both military and socialized animals to facilitate unity, celebration, and a mediatory role that bridged the divide between males and females, especially for Her Majesty? How were the race courses in Enugu, Port Harcourt, Ibadan, Kaduna, and Lagos defined by the routes and gatherings that brought people together to celebrate the Queen's visit? Through animal theory, the social history that explores the Her Majesty's Visit, whether as a means of strengthening colonial ties in terms of modernity by extending colonialism or assessing the readiness of colonial Nigeria for independence, highlights the power of women in maintaining unity, bringing gender history into the study of decolonization. Through colonial correspondence and newspapers, this work employs horses, gender, and spaces of celebration as sites and projects of readiness and modernity to understand the language of celebration, festivity, recreational culture, and accommodation.

From Instrument to Partner: The Ethical History of Animal-Assisted Interventions

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This study explores animal-assisted interventions (AAI) through changes in animal health and human–animal relationships over time. It focuses on the ethical shift from seeing animals as tools to understanding them as partners in human care. By reviewing key ideas from earlier human-centered views to modern ethical approaches, the study shows that AAI is more than a treatment method. It is a relational practice based on respect, care, and animal welfare. Without this perspective, AAI may return to a tool-based approach that ignores the welfare of animals. This study highlights the need for ethical awareness in AAI practice and education.

Institutional Growth and Changing Review Practices in Animal Research Ethics: A National Five-Year Analysis in South Korea

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Animal research ethics has evolved from a framework centered on regulatory compliance toward institutionalized governance systems. The enactment of the Animal Welfare Act (1991) and the institutionalization of the IACUC system in Korea (2008) contributed to the formal establishment of structured oversight mechanisms in animal research. As oversight systems expanded, ethical review became embedded within institutional decision-making processes. However, whether quantitative growth of IACUC infrastructure has translated into substantive strengthening of protocol review practices remains insufficiently examined. This study analyzes national five-year data to assess the relationship between structural expansion in ethical oversight and changes in review outcomes. The analysis includes (1) the number of operating IACUCs, (2) annual protocol review volume, (3) total animal use, and (4) the proportion of protocols approved without modification. The first two indicators represent institutional growth and oversight capacity, whereas the approval rate functions as an indicator of review rigor and the degree of committee intervention. During the study period, both the number of IACUCs and total protocol reviews increased steadily, reflecting continued institutional expansion and growing administrative oversight. In contrast, the proportion of protocols approved without modification declined over time, indicating a growing tendency toward revision requests and closer ethical review. Although total animal use fluctuated in response to broader research activity, numerical trends alone did not sufficiently capture qualitative changes in governance practice. These findings suggest that institutional expansion may be accompanied by strengthened review rigor rather than simple quantitative control of animal use. Evaluating ethical governance, therefore, requires attention not only to structural growth but also to evolving standards and practices within the review process itself.

War and Veterinary: Wars of Invasion and Civil War at the Veterinary School of Madrid

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This communication analyses differences and similarities in the Veterinary School of Madrid following the impact of three wars. This institution suffered the consequences of the French invasion (1808–1812), the absolutist restoration of King Ferdinand VII (1823–1828), and the Spanish Civil War (1936–1939). All these conflicts have in common the material damage due to looting and theft, and the dismantling of the teaching, administrative and auxiliary staff, as well as repressive measures and ideological control. During the first war, the centre served as a barrack, keeping its teaching activities to a minimum with a lack of resources, alongside treating horses and producing horseshoes. During the second period, the school was occupied by the invading army. Although teaching was maintained, there were intense reprisals against students and teachers. The ideological clash between liberals and absolutists and the director's ambition for the control of the institution worsened the situation. During the last war, even though there were no foreign invasions, other countries were involved in this conflict, which was also characterised by a repression and control of teachers and auxiliary staff. The establishment was partially occupied by the army and, due to technical and scientific advances in veterinary medicine, a variety of tasks were undertaken alongside caring for horses and producing horseshoes, such as the production of serums, food analysis and biological samples. In addition, educational activities for the army and society were developed. Even though the school suffered thefts and shortages, teaching activities continued, as did research to a lesser extent. Money transfers, with delays and cutbacks, allowed the institution to continue operating. Being a veterinary centre has meant that activities during times of war were not interrupted and it took on military duties parallel to the evolution of veterinary medicine.

The Use of the Centaur Chiron on Medals and Badges of Some Military Veterinary Services

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The Ancient Greeks considered Chiron the father of the medical and veterinarian thought. Chiron probably lived in Pelion 13 Centuries before Christ. Historically, Chiron was a Knight who also gave his contribution to the medical and veterinary science. Mythologically, before ascending to heaven to create his own constellation, the Centaur of Thessaly instructed not only Achilles the warrior hero, Jason the navarch, Theseus, Nestor and Patroclus but he took special care of Asclepius (Aesculapius for the Latins) that would become the Master of Masters, the true “God of Greek Medicine”. Thanks to the fusion between mythology and history, in the contemporary age Centaur Chiron is the symbol of several Military Veterinary Services. Military badges are authorized, specialized insignia worn on uniforms to signify a service member's qualifications, ratings, achievements, or unit affiliation. They represent earned trust, technical skill, and dedication to duty, acting as visual identifiers for rank, specialized training, and combat experience. Military commemorative medals are symbolic, often artistic objects created to celebrate events, anniversaries or to honour a particular military corps or unit. Unlike decorations for valour, these medals serve to preserve historical and cultural memory. They are very often made to be given to military or civilian personnel who have completed their service with a particular unit. The research considers the badges and medals depicting the centaur Chiron, produced for the Italian Army Veterinary Service, the French Military Veterinary Service, the British Royal Army Veterinary Corps, the Indian Army Veterinary Corps and the Pakistan Remount Veterinary & Farm Corps.

Multilingual Glossary of Horse Terms - Extended Version

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The aim of this presentation is to analyse the terms normally used in some of the most common European languages to refer to horses. This is the second and expanded version of this article: to the European languages already analyzed, some Germanic languages, ancient languages and Turkish were added. For all of them, both linguistics (Languages for Specific Purposes and word-formation) and historical remarks are given. By trying to clarify the origin of some words it surprisingly comes out how several words in different linguistic areas seem to have common roots. The research also tries to compare different ancient cultures, and it highlights how, despite linguistic and geographical differences, there are some common beliefs about horses that shaped the attitude towards them during the history of mankind, above all in the field of religion, art and the consideration of horses as status symbols.

The Evolution of Military Veterinary Medicine in Korea: From Medieval Equine Medicine to Modern Veterinary Corps

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During the Goryeo (918~1392) and Joseon dynasties (1392~1910), Equine veterinarians (known as *Ma-ui*) were professional technical officials belonging to the Ministry of Military (known as Byeong-jo) focusing on the maintenance and treatment of military horses. Following the Gabo Reform in 1894, the system transitioned toward Western-style veterinary medicine under military administration. Following the foundation of the Republic of Korea (1948), the military veterinary service was established as a branch of the medical corps, adopting the U.S. military organizational structure. Since the establishment of the Army Veterinary Corps in 1949, the Army veterinarians primarily focused on the management and care of military horses until the Korean War. In the post-Korean War era through the 1960s, the mission shifted to emphasize food safety, as well as the research and control of parasites and infectious disease vectors. Following the establishment of military working dog training centers and military horse units in the 1960s, the service broadened to support the health management of military working dogs and horses. Currently, the military veterinary service contributes significantly to military public health and the management of military-owned animals, adopting a "One Health" approach that integrates human, animal, and environmental health. Within the Korea Air Force and Navy, veterinary officers are predominantly tasked with the healthcare of military working dogs and the implementation of public health measures.

The Cellular Evolution of Modern Veterinary Medicine: The Aygün–Perk Continuity in Stem Cell Research from Europe to Türkiye

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Ord. Prof. Dr. Tahsin S. Aygün emerged in the 1960s as a foundational architect of veterinary medicine's scientific identity in Türkiye. He transformed the profession from its military-practical roots into a laboratory-based, experimental, and research-driven discipline. By institutionalizing pathology, microbiology, and clinical sciences during the Early Republican era, Aygün consolidated the biomedical research infrastructure that would later enable advances in cellular and molecular therapeutics. His paradigm shift established the intellectual and structural groundwork for regenerative medicine in Turkish veterinary science. Globally, the clinical application of stem cell technologies in veterinary medicine began in the early 2000s. Early equine studies employed intralesional injection of autologous bone marrow-derived mesenchymal stem cells (MSCs) for tendon injuries (Richardson et al., 2007; Smith, 2008), followed by MSC-based therapies for musculoskeletal disorders (Taylor et al., 2007). In small animal practice, intra-articular administration of adipose-derived MSCs in canine osteoarthritis marked a pivotal development (Srzentić Dražilov et al., 2018), while long-term studies confirmed the safety of allogeneic applications (Kriston-Pál et al., 2020). These advances defined a localized, biologically targeted regenerative treatment paradigm. Representing the contemporary extension of this continuum, Assoc. Prof. Dr. Cem Perk has, since 2020, integrated stem cell applications into clinical veterinary practice in Türkiye through refined site-specific injection techniques. Achieving approximately 80% cellular retention at target tissues, this approach enhances therapeutic efficacy and controlled regeneration. Clinical improvement rates of up to 90% have been reported in osteoarthritis, alongside successful outcomes in corneal diseases and Progressive Retinal Atrophy (PRA), including the first feline intraocular application recorded in Türkiye in 2024. Additional benefits have been observed in wound healing, spinal cord injuries, and peripheral nerve damage. This trajectory reveals clear epistemological continuity between Aygün's institutional scientific legacy, Perk's regenerative medicine innovations, illustrating the evolutionary progression of Turkish veterinary medicine from experimental foundations to advanced cellular therapeutics.

**From Administrative Boundaries to Movement-Based Control Zones:
Manure-Transport Networks and Epidemiological Evidence for FMD
and ASF Response**

HACHUNG YOON

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Administrative boundaries are commonly used to define animal disease control zones during transboundary animal disease emergencies, yet they may not reflect real contact structures that drive spread risk. We propose a movement-based zoning framework that integrates epidemiological information with livestock vehicle movement networks, emphasizing a practical policy constraint: movement of manure transport vehicles should remain within the same disease control zone to reduce cross-zone contamination pathways while maintaining operational feasibility. Using a Python-based network analysis pipeline and national livestock vehicle movement data, we evaluated the functional coherence of existing zones by quantifying within-zone and cross-zone movements, with stratified analyses for key vehicle types and pig-farm subsets. During the 2024/2025 special control period and a 12-month observation window (Aug 2024–Jul 2025), 99.5–99.6% of overall livestock vehicle movements occurred within the same zone or adjacent zones. Manure-transport vehicles showed the strongest locality: 99.9% of movements were within-zone or adjacent, and farm-to-treatment facility trips were predominantly within-zone. Building on these findings, we outline a comparative application to foot-and-mouth disease (FMD) and African swine fever (ASF) preparedness by isolating pig farms and identifying boundary segments associated with the small fraction of cross-zone manure logistics. The framework supports policy decisions by prioritizing zone adjustments where high-frequency movements contradict administrative borders, thereby improving zoning efficiency, implementation compliance, and risk reduction under emergency response conditions. This approach provides an evidence-based pathway to redesign control zones from administrative units toward movement-informed, operationally realistic biosecurity governance.

Epidemiological Significance of Biosecurity Noncompliance in Highly Pathogenic Avian Influenza Outbreak Farms: Clustering and Association-Rule Insights from Korea

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Highly pathogenic avian influenza (HPAI) remains a persistent threat to poultry production and public administration, repeatedly testing the effectiveness of on-farm biosecurity and outbreak response systems. This study examines the epidemiological significance of biosecurity noncompliance identified in HPAI outbreak farms and discusses how recurring deficiency patterns can inform prevention priorities and policy design. Using investigation records from confirmed HPAI-affected poultry farms across multiple epidemic seasons, we categorized and synthesized observed deficiencies along key points of farm entry and daily management, including vehicle and personnel controls, disinfection procedures, boundary integrity, and wildlife/rodent barriers. We then assessed how frequently specific deficiencies appeared and how they co-occurred as “profiles” of weakness rather than isolated failures. Our findings suggest that biosecurity deficiencies cluster into recognizable patterns that likely reflect structural vulnerabilities in farm operation and compliance culture. A first profile concentrates on failures at the farm interface—such as inadequate control of vehicles, entry procedures, and disinfection—highlighting the epidemiological importance of preventing pathogen introduction via high-contact pathways. A second profile emphasizes within-farm management gaps—such as incomplete separation of clean/dirty zones, insufficient facility-level barriers, and weaknesses in wildlife exclusion—underscoring the role of environmental persistence and indirect transmission routes. Importantly, frequently co-occurring deficiencies indicate that interventions should prioritize bundled measures (e.g., entry control plus verified disinfection plus boundary reinforcement) rather than single-item checklists. By interpreting deficiency patterns as epidemiological signals, this work supports a shift toward risk-based inspection and resource allocation, offering evidence to refine practical guidance, auditing strategies, and prevention policy for future HPAI seasons.

Historical Development of Bovine Tuberculosis Control in South Korea

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Bovine tuberculosis (bTB), caused by *Mycobacterium tuberculosis* variant *bovis*, is a chronic wasting zoonotic disease first reported in Korea in 1913 among imported dairy cattle. To prevent the spread of bTB, the Korean government has implemented a national surveillance program for cattle based on the "test-and-slaughter" principle since the 1960s. Traditionally, the intradermal tuberculin skin test (TST) served as the primary diagnostic tool for live cattle. In 2014, the interferon-gamma release assay (IGRA) was officially introduced as an ancillary diagnostic method. Furthermore, the parallel application of TST and IGRA in affected herds has enhanced the diagnostic sensitivity of bTB. Notably, following the 2016 mandate for pre-movement testing and the requirement for test certification, the prevalence of bTB in Korea has gradually declined since 2019, reaching a herd prevalence of 0.24% in 2025. In slaughterhouses, bTB-suspected lesions identified during post-mortem inspections are confirmed using polymerase chain reaction (PCR). However, bacterial isolation is not currently employed in routine surveillance due to the lengthy processing time (minimum 6 weeks) and the shortage of Biosafety Level 3 (BSL-3) facilities and trained personnel. The management of bTB is a critical global priority for both the livestock industry and public health. It is hoped that this review will be a helpful resource for evaluating current bTB control management policies and exploring potential avenues for future system optimization in South Korea.

Evaluation of the Protective Efficacy of Foot-and-Mouth Disease Vaccines Against O/CATHAY Topotype Virus in Pigs

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Foot-and-mouth disease (FMD) viruses are classified into seven distinct regional pools according to their serotypes and geographic distribution patterns. The Republic of Korea (ROK) is situated in Pool 1, where serotypes O, A, and Asia1 are consistently reported in domestic livestock. Recently, the risk of incursions by the O/CATHAY topotype in Pool 1 has markedly increased, raising concerns regarding its potential introduction into the ROK. To evaluate the protective efficacy of three commercially available FMD vaccines currently deployed in the ROK against this topotype, a controlled experimental challenge was conducted using four separate groups of pigs. The vaccines tested included O1/Manisa+O/3039, O/Primorsky, and O1/Campos. Each of the three groups received a 2 mL dose of a designated vaccine at eight and ten weeks of age, while two pigs were maintained as unvaccinated controls. At 21 days post-vaccination, all pigs were challenged with the O/HKN/5/2019 virus of the O/CATHAY topotype. The results demonstrated that although all vaccines provided protective effects, O1/Campos exhibited superior efficacy by producing the fewest clinical signs and substantially reducing viral shedding compared with unvaccinated controls. Collectively, these findings suggest that while O1/Campos could be utilized in emergency situations, the development of a vaccine specifically targeting the O/CATHAY topotype remains necessary.

National Serosurveillance for Four Foreign Livestock Infectious Diseases in the Republic of Korea

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National serosurveillance for previously unexploited foreign livestock infectious diseases (FLIDs) is a crucial activity for internally verifying the safety of the livestock industry and externally recognizing that the country is disease-free. However, because these diseases have never been reported before, they often receive less attention and funding than catastrophic or wasting diseases already occurring domestically. Therefore, the Foreign Animal Diseases (FAD) Division of the Animal and Plant Quarantine Agency as a national standard veterinary diagnostic institution is tasked with conducting statistically significant serosurveillance, taking into an account various factor. The purpose of this study is to operate a national serosurveillance system for major FLIDs and utilize the results as proof of absence both domestically and internationally. FAD Division conducts active surveillance in collaboration with local governments for PPR, SVD, VS, and RVF. The serosurveillance plans are established for each disease based on national livestock statistics and a multistage stratified random sampling method. However, the surveillance volume is designed by applying factors such as herd prevalence, individual prevalence, assay sensitivity, herd detection sensitivity, and 95% confidence intervals. A separate system for reporting suspected disease cases is implemented when clinical symptoms and mortality rate are observed. Sample is collected by local governments, and antibody testing is initially performed by the central government using ELISA kits. If antibodies are detected, a final diagnosis is made using a neutralization test. Serological surveillance for four FLIDs over a period of 20 years has confirmed antibody negativity through 2025. In particular, for PPR, annual serological surveillance results are submitted to the WOAHP and to recertify the country's disease-free status. This national serosurveillance is used to serologically prove that the country is absent of FLIDs, thereby applying strict import sanitary conditions to protect the domestic livestock industry and enhancing the image of disease-free livestock products domestically.

Identification of African Swine Fever Virus with IGR I in Korea Using Next-Generation Sequencing

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African swine fever virus (ASFV) is a highly contagious and lethal double-stranded DNA virus that causes significant economic losses to the global swine industry. In Korea, ASFV isolates have predominantly exhibited Genotype II, the IGR II for several years. In this study, we performed a comparative genomic analysis of ASFV isolates detected in the intergenic region between I73R and I329L (IGR I). Although most Korean ASFV isolates belonged to the IGR II, the IGR I was first identified in 2023 from a case in Gimpo, Gyeonggi-do, among domestic pig farms and was subsequently detected again in 2025 in Dangjin, Chungcheongnam-do, representing the second reported occurrence in Korea. Genome size comparison revealed that the Dangjin isolate (189,887 bp) was shorter than the reference strain Georgia 2007/1 (190,584 bp) and a previously reported Korean isolate (190,582 bp), due to an approximately 700 bp deletion spanning from the mid-region of MGF110-7L to the downstream portion of the 285L coding sequence. The emergence of the IGR I in geographically distinct regions, together with the observed genomic deletion, indicates that the genomic composition of ASFV circulating in Korea differs from the previously predominant IGR II-dominated pattern. These findings suggest the possible introduction of genetically distinct ASFV lineages from overseas.

Avian Influenza Surveillance and Highly Pathogenic Avian Influenza Outbreak in the Republic of Korea Since 2003

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Since 2003 HPAI viruses have been introduced winter season repeatedly, however intermittently, but it has recurred every winter season since 2020. A detailed and comprehensive avian influenza (AI) surveillance programme is implemented in Korea, encompassing poultry at registered and authorised holdings, wild birds, and even mammals present at poultry premises. In 2024 more than 621,000 tests were conducted as part of active surveillance across poultry farms, slaughterhouses, designated high-risk wild bird habitats, and traditional markets. The majority of these tests were molecular diagnostic assays for the early detection of H5 and H7 subtype viruses. Between 2020 and October 2025, over 2.5 million clinical or environmental samples were collected from poultry. Most screening tests were performed by local veterinary services, while confirmatory testing was conducted at APQA. The authorities designate a special disease control period, which in principle coincides with the highly pathogenic avian influenza (HPAI) high-risk season during winter, when the risk of virus introduction is considered highest. During this period, surveillance intensity is increased through more frequent sampling and establishment-level monitoring. For instance, the sampling frequency for laying hen and poultry breeder holdings increases from quarterly to monthly, while for fattening duck farms it increases from once to twice per rearing cycle. If an HPAI outbreak occurs, surveillance during this period is further reinforced through expanded sampling and more frequent testing. Although very intensive active surveillance is implemented, it is important that the mandatory reporting system is in place requiring farm owners and field veterinarians to immediately notify the authorities of any suspected cases. So, inter-ministerial coordination and intensive cooperative surveillance is crucial for early detection of HPAI. Surveillance results need to be used for epidemiology and risk analysis.

Chronological Overview of Bovine Brucellosis Occurrence and Its Etiological Factors in Korea

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Bovine brucellosis, mainly caused by *Brucella (B.) abortus*, is a major zoonosis. The disease was first reported in Korea in 1955 and has persisted since then. The herd prevalence peaked at 2.18% in 2006, followed by a sharp decline after the implementation of strengthened control policies. Since 2012, herd prevalence has been maintained below 0.2%, although sporadic outbreaks have recently occurred in certain regions. Between 2016 and 2019, brucellosis occurred most frequently in the Gyeongbuk region. Since 2020, however, the majority of occurrence have been reported in several regions, particularly Jeonnam. Bacterial isolation from affected farms consistently identified only *B. abortus*. A high number of *B. abortus* isolates have been identified since 2018, following the start of active survey to achieve disease-free status. In epidemiological findings, the majority of etiological factors between 2004 and 2006 was mainly animal movement (49.9%). From 2018 to 2024, the proportion of unknown cases (65.3%) increased, while animal movement (15.1%) and neighboring transmission (16.6%) occurred at similar rates. Furthermore, to verify the reliable etiological evidence for brucellosis, the close relationships among isolates were determined using molecular phylogenetic analysis. *B. abortus* isolates were classified into 22 MLVA genotypes (K) and 8 MLSA sequence types (STs). Before 2012, K1 and K2 were dominated with a high proportion and only 3 types of STs (1, 2, 4) appeared nationwide. From 2012 to 2018, both K and STs showed a diverse combination of more than six types. Then, since 2018, K19 and K4 have appeared mainly in certain regions, particularly Gyeongnam and Jeonnam. Since 2021, only two STs (3, 5) have been identified in several regions. In the future, continuous molecular epidemiological monitoring will be essential to provide reliable evidence for establishing effective strategies to prevent and control bovine brucellosis in Korea.

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Development and Historical Significance of Korean Veterinary Administration: Tracing the Regional Heritage of APQA

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This work examines the development and historical significance of Korean veterinary administration by tracing the regional heritage of the Animal and Plant Quarantine Agency (APQA). Modern Korean veterinary history began in early 20th-century Busan. During the Japanese colonial period, the requisition of Korean cattle led to the spread of infectious diseases, resulting in the establishment of the Quarantine Service for Cattle Export (1909) to inspect cattle and the Rinderpest Antiserum Manufacture Institute (1911) to produce vaccines. Following the Korean War, refugees settled in the quarantine cattle sheds, known as Somak Village, where an exhibition hall now preserves this history. Additionally, the Animal Memorial Monument (1916), erected to honor animals sacrificed for vaccine research, remains a vital heritage reflecting the research environment of that era. Veterinary administration reached a turning point with its relocation to Anyang in 1963. The Veterinary Research Laboratory (1942) and the National Animal Quarantine Center (1962) led the modernization of the livestock industry. These institutions also supported the successful hosting of the 1986 Asian Games and 1988 Seoul Olympics through international-standard veterinary technology. Built in 1963 with U.S. aid, the Anyang headquarters featured modern research facilities and its relief sculpture received the 2003 Beautiful Building Award. While the original building is preserved in Anyang, a replica of the sculpture is displayed at the Gimcheon headquarters. The organization was restructured into the National Veterinary Research and Quarantine Service (1998), becoming APQA in 2013 after incorporating plant quarantine services. In May 2016, APQA moved to Gimcheon, serving as the national authority for animal and plant disease control and quarantine. Through these shifts, APQA has evolved into a preeminent national institution in this field. By illuminating these sites of veterinary history, this work ensures this heritage is preserved and remembered as part of our national legacy.

