

# The work of Ferenc Hutyra and József Marek

## Ferenc Hutyra (1860–1934)

Ferenc Hutyra (1860–1934) doctor, veterinarian, rector of the Hungarian Royal Veterinary College, a member of the Hungarian Academy of Sciences, internationally acknowledged authority in veterinary science. He introduced the approach of human medicine to veterinary science.

He had great achievements in veterinary pathology, epidemiology, internal medicine, immunology, serology and virology as well as in forensic veterinary medicine.

He was also an organiser of the veterinary system in Hungary with strategic thinking.



Though he was a professor of several subjects, he focused on veterinary epidemiology, the research of the diagnosis and treatment of infectious diseases of animals. His research into several diseases (such as tuberculosis, malleus, cattle plague, anthrax, erysipelas, tetanus) of great economic impact was outstanding.

He has identified the pathogen of the brucellosis of swine. He proved that classical swine fever was a viral disease and made a vaccine against it. In order to enhance research of infectious diseases, he founded a laboratory of virology together with János Köves which worked under the name of Phylaxia Vaccine Works from 1912. He was the first to use tuberculin and mallein tests.



A sertésorbánc, a lépfene és a sertéspestis tünetit szemléltető preparátumok (Forrás: Kóronctani és igazságügyi állatorvostani tanszék)

He deserves the credit for drawing the level of veterinary training and research up to the international standard. His book in veterinary internal medicine written with Jozsef Marek, also published in German in 1905, was published in 11 languages and was considered a basic manual and textbook for decades.

He participated in the edition of several veterinary journals and publications (e.g. *Állategészségügyi Évkönyv*, *Jahresbericht über das Veterinärwesen in Ungarn*, *Veterinarius*, *Állatorvosi Lapok*) by means of which he influenced the Hungarian and international veterinary community greatly. He also had a column in the agricultural journal entitled *Köztelek*.

However, he was interested not only in the matters of the college, he also had a broad conception of the veterinary system, and utilizing his international authority and knowledge he contributed to the development of the veterinary service, to the elaboration of modern legal regulations, the effective fight against animal diseases with a great number of studies and proposals. He played a great role in the foundation of the National Veterinary Council in 1900.

He was managing the presentation of the Hungarian Royal Veterinary Academy and College as well as the Hungarian veterinary service at the so-called millenary exhibition of 1896 and the Paris World's Fair in 1900. He was also the chief organiser of the 8th International Veterinary Congress, Budapest in 1905. All this contributed greatly to the international acknowledgement of Hungarian veterinary science.

It was Ferenc Hutýra upon whose initiative the vaccination of animals against anthrax, also threatening humans, and erysipelas was started. His proposal was forwarded by director Ferenc Varga.



Erysipelathus suis Anthrax carbunculus intestini (Equus)  
Source: Department of Pathology and Forensic Veterinary Medicine





Classical swine fever (boutons) and the advertisement of the Hutýra-Köves anti-swine fever serum  
 Source: Department of Pathology and Forensic Veterinary Medicine

**Hutýra Ferenc – Marek Jozsef:**  
*Spezielle Pathologie und Therapie der Haustiere.*



**Hutýra Ferenc – Marek József: *Spezielle Pathologie und Therapie der Haustiere.***

The first German edition of the world-famous book was published in two volumes in 1905. The first volume was written by Ferenc Hutýra on infectious diseases, while the second volume by József Marek on the diseases of organs. 5 more editions were published in German language from the two mentioned authors (1909, 1910, 1913, 1920 and 1922). In the 7th edition published in 1938 Rezső Manninger joined the authors and these three authors wrote also the 8th and 9th German editions (1941, 1945). In the 10th and 11th (1954, 1959) János Mócsy was found among the authors as well.

The book was published in 5 English (1912, 1913, 1916, 1938, 1946), 3 Italian (1916, 1926, 1949), 3 Spanish (1920, 1968, 1973) editions (sometimes with more reprints), in 2 Russian (1910/1937, 1961/1963) editions (in more parts), in one Turkish (1937), Serbian (1949), Polish (1962), Chinese (1962/1965 – in more parts), Hungarian (textbook variant), Slovakian (1954), French (1959/1960) and Vietnamese (1962) edition, altogether in 11 foreign languages.

The authors always provided Hungarian veterinarians and university students with textbooks which were not the shortened versions of the „great German” book but differed in both structure and content. This book was continued by the recent successors.

Rezső Manninger and János Mócsy corresponded a lot with the German Fischer publishing house about terminating further editions because they supposed that science had specialized

so much that one author cannot summarise the findings in one volume and cannot establish his own position on the basis of diverse opinions any more.

Source: Mészáros János: Hutÿra – Marek – Manninger – Mócsy: *Spezielle Pathologie und Therapie der Haustiere* c. könyv létrejötte, diadalútja és az újabb kiadások megszűnése (az első kiadás centenáriuma alkalmából). *Magyar Állatorvosok Lapja*, 2005. 127. 246-250.

**Rezső Manninger** (1890-1970), veterinarian, awarded the Kossuth Prize twice, member of the Hungarian Academy of Sciences, head of the department of infectious diseases (1927–1963), founder and the first director of the Central Veterinary Institute. He was an internationally acknowledged, outstanding scientist in the field of veterinary microbiology and infectious diseases



**János Mócsy** (1895–1976), veterinarian, awarded the Kossuth and the National Prize, head of the department and clinic of internal medicine (1935–1961), an inter-nationally acknowledged expert in veterinary science. He was the first in Hungary to research the problems of animal hygiene in large-scale animal husbandry.



### Budapest Prize

Property of the Semmelweis Museum of the History of Medicine

The 8th World Veterinary Congress decided to offer its profit for the foundation of an international prize for the coming world veterinary congresses. Thus the Budapest Prize was founded. The 11th London congress considered publications from the last 25 years and awarded Ferenc Hutÿra and Jozsef Marek the prize in honour of their book in veterinary internal medicine translated to several languages.



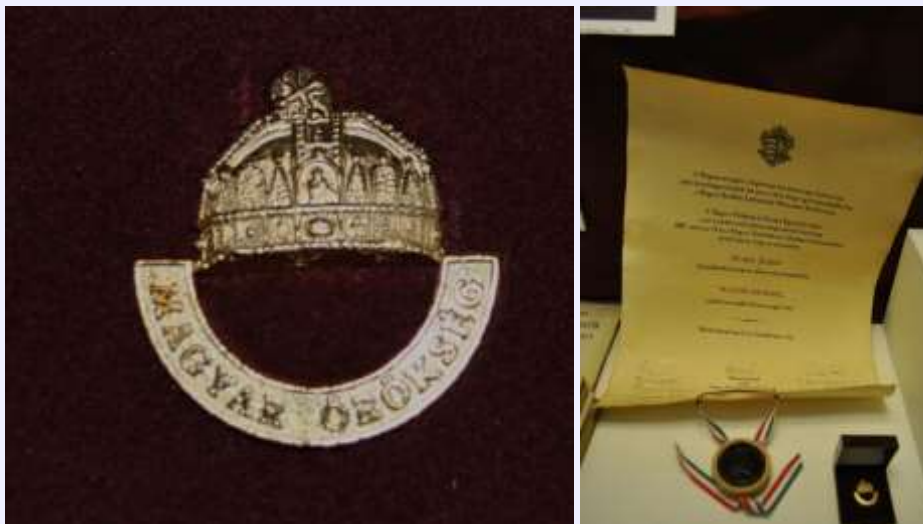


### József Marek (1868–1952)

József Marek (1868-1952) "master of veterinarians worldwide", first leader of the independent department and clinic of internal medicine (1904-1935), awarded the Kossuth Prize, member of the Hungarian Academy of Sciences.



József Marek gave a broad interpretation of internal medicine. He was an open-minded, innovative scientist well-known for his striving for perfection and modesty who applied the achievements of human medicine widely in veterinary medicine. He laid particular emphasis on correct and accurate diagnosis and differential diagnosis, and for this reason he developed several methods for clinical and laboratory diagnostics. His name is associated with the exploration of the physiological background, the development of diagnostic methods and the therapy of different digestive and respiratory diseases, neurological disorders, animal diseases due to metabolic disturbance. Examples are swine fever, Marek's disease, liver fluke disease, gid, rickets, etc. In all areas he introduced many innovations (electro-diagnostics, nasal and laryngeal mirror, endoscope, Marek's tube, drugs), and he also worked on the development of traditional methods (e.g. percussion). He also excelled in the etiology of neurological and metabolic diseases, and dealt with some of the issues of animal psychology, too. He set a good example in leading his clinic, where he himself often carried out patients' clinical and physical examination. His also demanded from his colleagues a thorough medical examination, an accurate anamnesis and case-history. Clinical experiences motivated him and were the basis of his scientific work. These were concluded in a number of internationally important books and publications.



József Marek József, a member of the Hungarian Academy of Sciences, honoured with Kossuth-prize was awarded postumus Magyar Örökség-díjat (Hungarian Heritage prize) in 2007 which was given to the dean of the Faculty of Veterinary Science



**Marek, J.: *Lehrbuch der Klinischen Diagnostik der inneren Krankheiten der Haustiere***

A considerably augmented German version of "Klinikai diagnosztika" (Clinical diagnostics, 1902) which ran into several editions, including clinical examination methods, laboratory and diagnostic procedures in allergy, the examination of clinical immunological and bacteriological problems, X-ray and electro-diagnostic methods, etc.



**Rhinolaryngoscope.** An instrument, developed by József Marek, for the examination of the nose and the paranasal sinuses, the larynx and the trachea.



Fasciola hepatica mounted on a slide and abnormalities caused by liver flukes in the liver of a cattle (white, dilated parts of bile vessels)

Source: Department of Parasitology and Zoology



**Distol.** At the end of the 19th century liver fluke threatened 5-40% of cattle and sheep populations. Marek (with Pál Pataki) had improved its clinical diagnostics and developed Distol for its therapy. It was the only effective medicine for decades, which also proved to be a huge success for the manufacturing Chinoin Pharmaceutical Factory.



**Electromyography device.** It was used for testing the electric stimulability of the peripheral nervous system and the muscles. At the 1900 Paris World's Fair Marek presented the results of his electrodiagnostic examinations in horses, dogs, cattle and sheep with the help of figures showing their motor points.



Electric stimulability test for horses

Photo by György Klösz

**Nasogastric tube (Marek's tube).** Marek made a distinction between intestinal tympany and acute gastric dilatation in colic horses, and on the basis of statistical examinations he proved that the drainage of gastric contents, which can easily be performed in a veterinary practice, significantly improves the survival rate. He was the first to describe the strangulation of the colon caused by the spleen-kidney membrane in horses.



Photo: Dr. Perényi János

Source: Üllő, Nagyállatklinika



