

Preface to the 4. edition

Prof. Dr. Dr. Oskar Schaller, the first and sole editor of the first two editions passed away after the previous edition was published. This edition is respectfully dedicated to him, in gratitude of his outstanding contribution to the international veterinary anatomical nomenclature, and veterinary anatomy in general.

The 6th edition of the N.A.V. has been released in November 2017, including more than 60 new and changed terms of structures. Therefore, the Georg Thieme publishing company asked me to update the 3rd edition of this book. (The previous editions have been published by Enke Verlag). No changes on the Osteology, Arthrology, Myology, Systema nervosum periphericum and autonomicum chapters are made. Most of the changes are updated in the chapters of Splanchnology, Angiology, and Systema nervosum centrale. A few changes are made in the chapters of Systema endocrinum and Termini generales. The term "Apparatus" has been replaced by "Systema", and the names of some structures have been

updated to correspond with the detailed list of terms provided by the Nomina Histologica Veterinaria. All changes in this 4th edition are made to contribute to the harmonization of the three veterinary nomenclatures: gross anatomy, histology, and embryology.

The Editorial Committee of I.C.V.G.A.N. has a new member, Mario Pereira-Sampaio, the President of W.A.V.A. Several changes of the chairpersons of the subcommittees of I.C.V.G.A.N. from the 5th edition can be found in the 6th edition of the N.A.V. as follows: Termini generales, Partes and regiones corporis; Osteologia et Arthrologia; Systema nervosum centrale; Organa sensuum.

My gratitude goes to Thieme, especially to Ms. Désirée Schwarz, managing editor/project manager, who gave me the opportunity to revise and update the 4th edition of this book, and to her team.

Columbia, Missouri USA, March 26, 2018
Gheorghe M. Constantinescu

Preface to the 3. edition

The book published in 1992 was based on the 3rd edition of the *Nomina Anatomica Veterinaria* (N.A.V.), 1983. The present edition is updated from the last (5th) edition of the N.A.V., 2005, and revised in both text and figures. Updating the text was followed by updating the labels of the figures. In addition, some figures have been replaced by new and original drawings. The revision included some changes in the text, comments, and footnotes. It was a sustained and continuous work over one year and four months spent by myself as the sole editor including the new drawings, in addition to my duties as professor of veterinary anatomy, including teaching, scholar activity and participation in international meetings.

From the contributors to the first edition, Professors Wolfgang O. Sack and Nestor R. de Vos passed away. The veterinary anatomist community is grateful for their valuable contribution and the success of the book. The name of Prof. Dr. Anton Hillebrand, from the University Spiru Haret in Bucharest, Romania was added to the list of contributors. I am deeply grateful to the three colleagues who sent their comments on the first edition. They are Prof. Emeritus Dr. Alexander de Lahunta, from Cornell, Assoc. Prof. Dr. Brian L. Frappier, from the University of Columbia, Missouri, and Prof. Dr. Michael Stoffel from the University of Bern. I am also thankful to Assist. Prof. Dr. Ileana A. Constantinescu for proof reading and suggestions.

Many explanatory comments and footnotes are added for better understanding of the text.

In the footnotes the *Nomina Anatomica Veterinaria* is abbreviated as N.A.V.,

and the *Nomina Anatomica* as N.A. Many structures of the 1st edition were omitted from the 5th edition of the N.A.V. and they are mentioned in the footnotes.

Due to the limited space of the pages and as many as 8 footnotes were necessary to be added to some structures, the Publisher with the consent of the Editor decided to include the majority of footnotes in the text.

The International Committee on Veterinary Gross Anatomical Nomenclature (I.C.V.G.A.N.) has now a new Chairman and Secretary, and several new chairpersons of the Subcommittees, as follows:

Chairman: Prof. Hagen Gasse, Hannover, Germany. Secretary: Prof. Wim Van den Broek, Gent, Belgium

Termini generales, Partes et Regiones corporis: Prof. Yoshiharu Hashimoto, Sapporo, Japan, Chairman of the Subcommittee

Osteologia et Arthrologia: Prof. Karl-Dieter Budras, Berlin, Germany, Chairman of the Subcommittee

Myologia: Prof. Gheorghe M. Constantinescu, Columbia, Missouri, U.S.A., Chairman of the Subcommittee

Splanchnologia: Prof. A. S. Saber, Minoufia University, Egypt, Chairman of the Subcommittee

Angiologia: Prof. Paul Simoens, Gent, Belgium, Chairman of the Subcommittee

Integumentum commune: Prof. H. Bragulla, Berlin, Germany, Chairman of the Subcommittee

Systema nervosum centrale: Prof. Ignacio Salazar, Lugo, Spain, Chairman of the Subcommittee

Systema nervosum periphericum: Prof. Peter Sótónyi, Budapest, Hungary, Chairman of the Subcommittee

Organa sensuum: Prof. Heinz Augsburger, Zurich, Switzerland, Chairman of the Subcommittee

The names of all members of the Subcommittees are listed in the 5th edition of the N.A.V. A very interesting and educational History of I.C.V.G.A.N., the Procedure to change terms in the N.A.V., the Principles of the N.A.V., Hints for the user of the N.A.V., and a Brief Latin grammar for anatomists can be found in the 5th edition of the N.A.V. Those interested in the Illustrated Veterinary Anatomical Nomenclature are encouraged to read them before searching for an anatomical term.

A list of eponyms for Systema nervosum centrale is provided at the end of the book. These eponyms are used by neurologists, by neuroanatomists, by neurosurgeons, and by those especially interested in the Systema nervosum centrale.

In general, structures are symmetrical. The vertebral column and sternum, some cranial bones, several ligaments and muscles are nonsymmetrical. The latter are mentioned as such. Therefore, there is no need to use the plural for the symmetrical structures.

For some muscles the origin is mentioned by "O" (from "Origo = origin"), and the insertion by "T" (from "Terminatio = insertion"). However, there are some muscles with reversible action, the origin and insertion being interchangeable under different circumstances – such as

the Biceps femoris, Semitendinosus, Semimembranosus, Gluteus medius, Psoas major, Psoas minor and the Triceps brachii muscles. In these cases the term "attachment" is preferable for both origin and insertion.

In the 5th edition of the N.A.V. a list of structures precedes each chapter from "Osteologia" to "Systema nervosum" (separate for the Systema nervosum centrale, Systema nervosum periphericum and Systema nervosum autonomicum). All these lists and other different terms were together subject to a special chapter in the 1st edition of this book, called "Termini generales", and I decided to leave them in the same place, with the necessary changes. The name of the chapter is now "Termini generales et peculiares".

Lastly, and paraphrasing John F. Kennedy, "I decided to take this responsibility not because it was easy, but because it was hard".

I cannot finish without sending my sincere and great thanks especially to Dr. Ulrike Arnold, Ms. Gesina Cramer and Dr. Sonja Ruffer from the MVS Medizinverlage Stuttgart GmbH & Co. KG, also to Ms. Uta Schödl (the copy editor), and to my wife, Ileana, for her understanding, moral support, constructive comments and encouragements.

Columbia, Missouri, U.S.A., January 2011
Gheorghe M. Constantinescu

Preface to the 1. edition

The *Nomina Anatomica Veterinaria* (N.A.V.) constitute the first internationally recognized list of terms serving the gross anatomy of the domestic animals, specifically the cat, dog, pig, ox, sheep, goat, and horse. The N.A.V. were first published in 1968 by the International Committee on Veterinary Anatomical Nomenclature (I.C.V.A.N.) which was appointed by the World Association of Veterinary Anatomists. The third edition appeared in 1983. The present work already includes the changes that have been approved for the fourth edition of the N.A.V. This was possible because the authors are either members or chairmen of subcommittees of the International Committee on Veterinary Gross Anatomical Nomenclature (I.C.V.G.A.N.).

The *Nomina Anatomica Veterinaria* are 6,545 Latin terms (synonyms and terms of structures present only in primates not counted) of which fewer than ten percent are explained in footnotes. Besides, the nine figures illustrating the list are all in the section on the central nervous system. Some terms appear repeatedly; ramus caudalis and tunica muscularis, for instance, 13 times each.

Similar circumstances with the *Nomina Anatomica* (N.A.) of human anatomy prompted Heinz Feneis in 1967 to publish an illustrated anatomical nomenclature with the original title of "Anatomisches Bildwörterbuch der Internationalen Nomenklatur". The book was well received and subsequently translated into several languages. It proved useful not only to students, teachers, and researchers of anatomy, but also in many other branches of medicine and biology.

The editor of the present *Illustrated Veterinary Anatomical Nomenclature* was Chairman of the International Committee on Veterinary Anatomical Nomenclature (I.C.V.A.N.) from 1965 to 1980 and soon recognized the need for an illustrated version similar to that of Feneis. He was fortunate in securing as authors outstanding veterinary anatomists who were active in matters of veterinary anatomical nomenclature and were members of the respective subcommittees of the International Committee on Veterinary Gross Anatomical Nomenclature (I.C.V.G.A.N.):

Parts and regions of the body: W. O. Sack, U.S.A., Chairman of the subcommittee;

Osteology and arthrology: O. Schaller, Austria, former Chairman of the subcommittee;

Myology: Begun by the late L. E. St. Clair, U.S.A., former Chairman of the subcommittee; continued by O. Schaller;

Splanchnology: R. E. Habel, U.S.A., Chairman of the subcommittee;

Angiology: Begun by N. R. de Vos, Belgium, former Chairman of the subcommittee; continued by P. J. Simoens, Belgium, present Chairman of the subcommittee;

Nervous system: Begun by R. C. McClure, U.S.A., Chairman of the subcommittee on Systema nervosum periphericum; continued by G. Constantinescu, U.S.A., member of the subcommittee;

Sense organs and integument: W. O. Sack, U.S.A., member of the subcommittee on Integumentum commune.

Moreover, O. Schaller was the Chairman and R. E. Habel a member of the Editorial Committee for the first edition of the N.A.V., and R. E. Habel was the Chairman and W. O. Sack was a member of the Editorial Committee for the third edition. The composition of the team of authors thus guarantees that the aims of the International Committee on Veterinary Gross Anatomical Nomenclature (I.C.V.G.A.N.) find expression in the present illustrated version of the list.

The arrangement of text and illustrations – similar to that of the “Feneis” – makes the book easy to use. The left (verso) pages contain numbered terms arranged as in the N.A.V., and each term is followed by a brief definition. The respective illustrations, labeled by numbers that correspond to those of the terms, are on the opposite page. The names of structures, their definition and depiction are therefore easy to find. An index lists all terms alphabetically.

The illustrations were produced by several artists of whom Lewis Sadler, Adrian Cornford, and William P. Hamilton are prominent medical illustrators. Dr. P. J. Simoens, who contributed the chapter on Angiologia, and Dr. G. M. Constantinescu, who contributed the chapter on Systema nervosum, drew most of the figures of those chapters themselves. A few drawings were adopted from other publications for which permission from the respective authors and publishers was obtained and indicated in the legends. The sources are listed under References. Obviously, in many cases the subject matter will be represented by illustrations similar to those in other books, although they were not copied.

I thank the Enke Verlag for publishing this book, but especially Mr. J. Niendorf, Dr. P. Kleiner, and Mr. D. Kosmidis who were directly involved in its production.

Vienna, October 1991

Oskar Schaller