

NOMINA EMBRYOLOGICA VETERINARIA

SECOND EDITION

Prepared by the
International Committee on
Veterinary Embryological Nomenclature (I.C.V.E.N.)

and authorized by the
General Assembly of the
World Association of Veterinary Anatomists (W.A.V.A.)
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**This second edition of the Nomina Embryologica Veterinaria is
respectfully and in gratitude dedicated to**



Prof. Wolfgang O. Sack (1923-2005)

**who has devoted his long and productive scientific life
in promoting veterinary morphology.**

GUIDELINES

The principles of the nomenclature used in the Nomina Embryologica Veterinaria (N.E.V.) are the same of those of the Nomina Anatomica Veterinaria (N.A.V.) and Nomina Histologica (N.H.):

1. Aside from a very limited number of exceptions, each morphological concept should be designated by a single term.
2. Each term should be in Latin in the official list, but the morphologists of each country are free to translate the official Latin terms into the language of instruction.
3. Each term should be as short and simple as possible.
4. The terms should be easy to remember and should have, above all, instructive and descriptive value.
5. Structures that are closely related topographically should have similar names, e.g. Gonada, Arteria gonadalis, Vv. gonadales.
6. Differentiating adjectives should generally be opposites, as major and minor, superficialis and profundus.
7. Terms derived from proper names (eponyms) should not be used.

Terms within square brackets are used for:

- officially recognized synonyms or alternatives, e.g. Zygota [Conceptus], Mesoderma somaticum [Mesoderma parietale];
- alternatives for only a part of the complete term, e.g. Digiti definitivi [separati], Arcus pharyngei [branchiales];
- alternatives with an originally Greek diphthong (*ae* and *oe*), e.g. Cecum [Caecum], Estrus [Oestrus];
- bilateral structures, e.g. Cornu [dextrum et sinistrum].

Terms within round brackets are used for five purposes:

- for structures that are inconstant or occur variably, e.g. M. sterno(brachio-)cephalicus, Adenohypophysis (pars pharyngea);
- for indicating the partial or multiple origin of specific structures, e.g. Vagina (partim), Malleus (plerusque);
- for numerical designation of pharyngeal [branchial] structures, e.g. Saccus pharyngeus primus (I);
- for referring to a more detailed description in either the N.A.V., N.H. or elsewhere in N.E.V., e.g. Uro-enteron (*vide* Organa urinaria, N.E.V. p. 17);
- for designating particular species in which the pertaining structure is present, viz. *Bos taurus* (bo), *Canis familiaris* (ca); *Capra hircus* (cap), *Carnivora* (Car), *Equus caballus* (eq), *Felis catus* (fe), *Ovis aries* (ov), *Ruminantia* (Ru), *Sus scrofa domestica* (su), *Ungulata* (Un). When a species designation is listed after a term, it indicates that the structure occurs only in that species among domestic mammals. However, the absence of a species designation does not necessarily mean that the structure is present in all domestic mammals.

Comparable or homologous structures are listed subsequently and/or separated by a comma, e.g. Dermis unguiculae, unguulae, cornus.

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INTRODUCTION

The first veterinary anatomists to consider compiling a *Nomina Embryologica Veterinaria (N.E.V.)* were members of a Subcommittee on Histology and Embryology of the International Committee on Veterinary Anatomical Nomenclature (I.C.V.A.N.). The Subcommittee on Histology and Embryology was formed in 1965 at the 7th General Assembly of the World Association of Veterinary Anatomists (W.A.V.A.) in Giessen (Germany). Professors G. Godina (Italy), E. Kleiss (Venezuela), P. Walter (Germany) and A.F. Weber (U.S.A.) were the founding members; Prof. Weber later agreed to assume the chair.

At the 8th General Assembly of the W.A.V.A., in Alfort/Paris (France) in 1967, Prof. J. Tehver (Estonia) joined the subcommittee which meantime had divided into Cytology, Organology, and Embryology groups. Unfortunately, the minutes did not record who belonged to or chaired the embryology group.

At the 9th General Assembly of the W.A.V.A. in Mexico City (Mexico) in 1971, Prof. E. Kleiss reported having reviewed the *Nomina Embryologica (N.E.)* compiled by embryologists in human medicine and found them not to conform sufficiently with the *Nomina Anatomica Veterinaria (N.A.V.)*. Thus it became necessary to form a Subcommittee on Veterinary Embryology of which Prof. Kleiss assumed the chairmanship. Professors R. Barone (France), K. Donat (Germany), H.E. Evans (U.S.A.) and A. Weber (U.S.A.) were the members of the new subcommittee, the first formal group to deal exclusively with veterinary embryological terms. Prof. Weber was active in maintaining liaison with the Subcommittee on (human) Embryology of the International Anatomical Nomenclature Committee (I.A.N.C.) of which he was also a member.

The minutes of the 10th General Assembly of the W.A.V.A. in Thessaloniki (Greece) in 1975 report that the Subcommittee on Veterinary Embryology "had difficulties" compiling a list of terms. The I.C.V.A.N. voted to dissolve the Kleiss subcommittee and appointed a new Subcommittee on Veterinary Embryology chaired by Prof. R. McClure (U.S.A.) and proposed Professors N. Björkman (Denmark), C. Czarnecki (U.S.A.), W.O. Sack (U.S.A.), K.-U. Thiedemann (Germany) and A. Weber (U.S.A.) to be members.

At the 11th General Assembly of the W.A.V.A. held in Moscow (U.S.S.R.) in 1979, only one member of the Subcommittee on Veterinary Embryology (Prof. A. Weber) was present. It was reported that the work of the subcommittee was progressing and that a report would be submitted to the 12th General Assembly the following year.

At the 12th General Assembly of the W.A.V.A. in Mexico City (Mexico) in 1980, during the reorganization of the I.C.V.A.N., the Subcommittee on Veterinary Embryology was dissolved and replaced by a more independent International Committee on Veterinary Embryological Nomenclature (I.C.V.E.N.). Prof. H.E. Evans (U.S.A.), who was then President of the W.A.V.A., in 1983 appointed Prof. P. Mann (Canada) interim Chairman of the I.C.V.E.N.

Interim Chairman P. Mann in the years that followed recruited several veterinary anatomists to serve on the committee, resulting in October of 1984 in the following membership: M. Fallding (Canada), W.H. Gernecke (South Africa), W. Latshaw (Canada), G. Michel (Germany), W.O. Sack (U.S.A.), and P. Mann (Interim Chair, Canada); Prof. Latshaw agreed to be interim Secretary of the Committee.

In August of 1984 two veterinary anatomists from Budapest, Professor G. Fehér and Dr. T. Fanesi (not members of the I.C.V.E.N.), distributed the first two parts of a typewritten list of embryological terms titled *Nomina Embryologica Veterinaria*. Part I (Embryogenesis) comprised Biogenesis, Reproductio, and Gametogenesis; Part II (Morphogenesis) comprised Blastogenesis, Membranae fetales, and Histogenesis. The list, which subsequently was distinguished as *Nomina Embryologica Veterinaria Hungarica (N.E.V.-Hung.)*, included many comparative and avian terms and was intended to be illustrated later. Late in 1984 and in 1985 Professors G. Fehér (Hungary), N. Pospieszny (Poland), and S. Updike (U.S.A.) joined the I.C.V.E.N.

In 1985 a now nearly complete N.E.V.-Hung. was received by the I.C.V.E.N., again including many comparative and avian terms. In addition to the authors of Parts I and II, Professors G.H. Krustev (Bulgaria), G. Michel (Germany), and G. Udovin (then U.S.S.R.) are listed as authors, of whom only Prof. Michel was a member of the official committee.

The official committee (I.C.V.E.N.) being hesitant as to how to deal with the list from Hungary remained in limbo, and in April 1986 interim Chairman P. Mann resigned.

In August 1987, Prof. W.O. Sack (U.S.A.), at the 15th General Assembly of the W.A.V.A. in Montreal, agreed to be interim Chairman of the I.C.V.E.N. with the proviso that, because of other commitments, he could not be fully active in this capacity until 1989. Prof. R. Hullinger, Chairman of the Coordinating Committee of the reorganized International Committee on Veterinary Anatomical Nomenclature (C.C.-I.C.V.A.N.), conducted an election among the members of the embryology committee (I.C.V.E.N.) as a result of which Prof. W. Sack was confirmed Chairman and Prof. W. Latshaw Secretary. Prof. W.H. Gernecke retired in 1988 while several others joined the committee which by 1989 was fully active.

It was decided that the official *Nomina Embryologica Veterinaria (N.E.V.)* would include only the prenatal structures of those species covered by the N.A.V., and that the veterinary list, wherever suitable, should follow the terms and their sequence in the *Nomina Embryologica (N.E.)*. Committee members chose or were assigned portions of the material and submitted lists of terms they felt should be included in the N.E.V. The Committee was fortunate to be able to refer to the N.E. that had just been published in 3rd edition, and to the *Nomina Embryologica Veterinaria Hungarica (N.E.V.-Hung.)* which had been redistributed in revised form by Prof. G. Fehér of Budapest, the last installment consisting of Parts I and II only (now illustrated) with him as the sole author.

The lists received from the committee members were discussed and edited during a two-day meeting of five committee members in Leipzig (Germany) in 1990 and a five-day meeting, again of five members, in Ithaca (New York, U.S.A.) in 1991. The first draft of the complete N.E.V. resulting from these activities was returned to the members of the I.C.V.E.N. and presented to the members of the Coordinating Committee of the I.C.V.A.N., to authors of veterinary embryology books, and to several veterinary anatomists with expertise in nomenclature work -26 persons in all- for comment. Consideration of the comments received from 14 of these resulted in the final manuscript which was submitted to the W.A.V.A. for approval at that body's 18th General Assembly in Ghent (Belgium) in 1992. An Editorial Committee, consisting of Professors W.O. Sack, J. Frewein, and R. E. Habel and appointed by the Coordinating Committee of the I.C.V.A.N. readied the *Nomina Embryologica Veterinaria* for printing.

When the first edition of the *Nomina Embryologica Veterinaria* was published in 1994, the I.C.V.E.N. consisted of Professors and Doctors W.O. Sack (U.S.A., Chairman), W. K. Latshaw

(Canada, Secretary), Y. Eguchi (Japan), G. Fehér (Hungary), D. Julian (Spain), P.H. McCarthy (Australia), G. Michel (Germany), N. Pospieszny (Poland), G.C. Skerritt (U.K.), G. Udovin, (Russia), N.J. van der Merve (South Africa) and H. Wissdorf (Germany). In the Preface of the first edition of the *Nomina Embryologica Veterinaria*, the Editorial Committee gratefully acknowledged the contributions of Prof. G. Fehér (Hungary) and his group of East European embryologists for allowing the use of *Nomina Embryologica Veterinaria Hungarica*, and the work of the Subcommittee on Embryology of the International Anatomical Nomenclature Committee (I.A.N.C.), especially in regard to DYSMORPHIA (N.E., 3rd. ed.) whose terms were adopted with only slight modification.

At a work meeting of the Coordinating Committee of the I.C.V.A.N. on July 31, 2003 in Knoxville (U.S.A.), Prof. W.O. Sack requested to be relieved of his duties as Chairman of the I.C.V.E.N after serving in this committee for almost three decades. Prof. P. Simoens (Ghent, Belgium) was appointed as interim Chairman and was entrusted with the task of editing the *Nomina Embryologica Veterinaria* for publication on the website of the W.A.V.A. During the subsequent 22nd General Assembly of the W.A.V.A. on August 2, 2003, this proceeding was approved and Prof. em. W.O. Sack was thankfully acknowledged for his lasting efforts and excellent contributions to the activities of the I.C.V.E.N.

In 2005, the list of members of the I.C.V.E.N. was updated. Several longstanding members had resigned, including de Professors Y. Eguchi (Japan), W.K. Latshaw (U.S.A.), P.H. McCarthy (Australia) and H. Wissdorf (Germany). On June 21, 2005 we were informed of the passing away of Prof. W. O.Sack who had served as President of the W.A.V.A and I.C.V.E.N for many years.

Actual membership consists of Professors and Doctors P. Simoens (Ghent, Belgium, Chairman), I.A. Constantinescu (Columbia, USA), P. Cornillie (Ghent, Belgium); G. Fehér (Budapest, Hungary), C. Knospe (München, Germany), G. Michel (Leipzig, Germany), C. Pfarrer (Giessen, Germany), N. Pospieszny (Wroclaw, Poland) and A. Vodenicharov (Stara Zagora, Bulgaria).

For the preparation of the second edition of the N.E.V., a few typographic and linguistic errors were corrected (e.g. M. sphincter pupillae, Gemma caudalis) and some additional headers were added (e.g. Columna vertebralis, Lingua, Hyperchromia). Furthermore, several proposals for corrective and adaptive changes have been discussed and approved by the I.C.V.E.N. in 2005. These changes are included in the present edition and are described in the explanatory notes following the list of terms. In accordance with the decisions made during the General Assemblies of the W.A.V.A. in Lyon (France, 1999) and Knoxville (Tennessee, U.S.A., 2003), this new edition of the N.E.V. will not be produced in a printed form, but is published in the world wide web at the website of the W.A.V.A. The use of this novel, inexpensive and universal channel of information is intended to enhance the application of the uniform and precise nomenclature which has been developed by the efforts of the numerous members of the I.C.V.E.N. over the past four decades. It will also facilitate prospective revision and updating of the list of terms, which will be inevitable due to the large amount of new information and insights resulting from current developmental biologic research.

International Committee on Veterinary Embryological Nomenclature

Paul J.M. Simoens, Chairman & Editor

REPRODUCTIO MAMMALIUM

TERMINI GENERALES

Phylogenesis ¹	Dysmorphia [Malformatio]
	Typus dysmorphicus
Ontogenesis	Dysmorphogenesis
	Causae dysmorphogenesis
	Cursus dysmorphogenesis
Gametogenesis	
Spermatogenesis	
Spermium	
Ovogenesis	
Ovum	
Fertilisatio	
Zygosis	
Zygota [Conceptus]	
Blastogenesis [Pre-embryogenesis; Prae-]	
Morulatio	
Morula	
Blastulatio	
Blastocystis [Blastula]	
Gastrulatio	
Gastrula	
Neurulatio	
Neurula	
Embryogenesis	
Metamerismus	
Branchiomerismus	
Embryo	
Organogenesis	
Primordium	
Gemma	
Organa transitoria	
Organa rudimentaria	
Variabilitas	
Fetogenesis	
Fetus	
Morphogenesis	
Cytogenesis	
Inductio	
Differentiatio	
Determinatio	
Histogenesis	
Organogenesis	
Parturitio	
Partus	
	Dysmorphia [Malformatio]
	Typus dysmorphicus
	Dysmorphogenesis
	Causae dysmorphogenesis
	Cursus dysmorphogenesis
	Genesis postnatalis
	Neonatus
	Infantia
	Puerilitas
	Pubertas
	Juventus
	Maturitas
	Senium
	Reproductio asexualis [agametica] ¹
	Reproductio sexualis [gametica]
	Viviparitas
	Fertilitas
	Libido sexualis
	Tempus libidinis ²
	Potentia coeundi
	Potentia generandi
	Cycli sexuales feminini
	Monestrus [Monoestrus]
	Biestrus [Bi-oestrus]
	Polyestrus [Polyoestrus]
	Cycli genitales feminini
	Cyclus ovaricus
	Phasis ovogenetica
	Phasis follicularis
	Phasis lutealis
	Involutio ovarii
	Cyclus uterinus
	Phasis proliferationis
	Phasis secretionis
	Phasis involutionis
	Cyclus vaginalis
	Phasis noncornificata
	Phasis cornificata
	Phasis desquamationis

Via spermatica	Trophoblastus
Impregnatio spermii	Cavum blastocystis
Penetratio spermii	Massa cellularis interna
Conus fertilisationis	[Embryoblastus]
Membrana fertilisationis	Blastocystis bilaminaris
Membrana vitellina	Massa embryonica [Nodus
Spatium perivitellinum	embryonicus]
Liquor perivitellinus	Epiblastus
Monospermia	Hypoblastus
Dispermia	Trophoblastus
Polyspermia	Hypoblastus extraembryonicus
	Saccus vitellinus primarius
Conceptio	Blastocystis trilaminaris
Ovum fertilisatum [Spermovium]	Discus embryonicus
Pronucleus masculinus	Ectoderma embryonicum
Pronucleus femininus	Endoderma embryonicum
Aster spermaticus	Expansio nodi embryonici (Car) ⁸
Conjugatio	Embryocystis
Zygois	Expansio embryocystis (su, Ru)
Zygota [Conceptus]	Trophoblastus
	Cytotrophoblastus
	Syncytiotrophoblastus
	Endoderma extraembryonicum
Blastogenesis	
Differentiatio cellulae	
Cellula omnipotens	
Cellula pluripotens	
Cellula unipotens	
Determinatio	
Cellula indeterminata	
Cellula determinata	
Morulatio	
Fissio	
Fissio determinata	
Fissio indeterminata	
Fissio holoblastica [Fissio totalis]	
Fissio equalis	
Planum fissionis	
Planum fissionis meridionale	
Planum fissionis equatoriale	
Planum fissionis tangientiale	
Blastomerus	
Macromerus	
Micromerus	
Spheroideum [Sphaeroideum] ⁶	
Morula	
Compactio ⁷	
Blastulatio	
Blastocystis [Blastula]	
Blastocystis unilaminaris	
	MORPHOGENESIS
	Gastrulatio
	Stratificatio germinalis
	Strata germinalia
	Motus morphogenetici
	Ingressio
	Immigratio
	Invaginatio
	Involutio
	Epibolia
	Convergentia
	Elongatio
	Delaminatio
	Gastrula
	Epiblastus
	Ectoderma [Ectoblastus]
	Neuroectoderma
	Mesoderma [Mesoblastus]
	Mesenchyma
	Mesenchyma mesodermale
	Mesenchyma ectodermale
	[Mesectoderma]
	Mesenchyma endodermale
	[Mesendoderma]
	Endoderma [Endoblastus]

Discus embryonicus

Ectoderma embryonicum
 Linea primitiva
 Sulcus primitivus
 Nodus primitivus
 Fovea primitiva
 Processus notochordalis [Processus cephalicus]
 Canalis notochordalis
 Lamina notochordalis
 Mesoderma embryonicum
 Endoderma embryonicum
 Lamina prechordalis [prae-]
 Ectoderma extraembryonicum
 Mesoderma extraembryonicum
 Endoderma extraembryonicum
 Membrana oropharyngea
 Membrana cloacalis
 Area cardiogenica
 Area opaca
 Area pellucida
 Sulcus limitans disci embryonici
 Plica limitans⁹

Periodus sulci neuralis initialis

[Neurulatio]

Neuroectoderma
 Lamina neuralis
 Plica neuralis
 Sulcus neuralis
 Canalis neuroentericus
 Junctio neuroectodermalis

Crista neuralis

Periodus mesodermalis et mesenchymalis

[Celomatio] [Coel-]

Notochorda
 Mesoderma paraxiale
 Mesoderma intermedium
 Lamina urogenitalis
 Mesoderma laterale [Mesoderma laminae lateralis]
 Mesoderma somaticum [Mesoderma parietale]
 Mesoderma splanchnicum [Mesoderma viscerale]
 Mesenchyma
 Mesenchyma capitis [Mesoderma capitis]
 Mesenchyma mesodermale capitis

 ' ' Mesenchyma ectodermale capitis
 Mesoderma cardiogenicum
 Septum transversum
 Pars somatopleuralis
 Pars splanchnopleuralis
 Celoma [Coeloma]
 Celoma [Coel-] intraembryonicum [Endoceloma] [-coel-]
 Celoma [Coel-] extraembryonicum [Exoceloma] [-coel-]
 Mesothelium
 Mesenterium dorsale
 Mesenterium ventrale

Periodus sulci neuralis maturi et somitorum immaturorum

Plica neuralis
 Plica capitalis
 Plica caudalis
 Plica lateralis corporis
 Somiti
 Myoceloma [-coel-]
 Sclerotomi
 Dermatomyotomi
 Dermatomi
 Myotomi
 Prominentia cardiaca
 Sulcus opticus
 Placoda otica

PERIODUS EMBRYONICA**Periodus tubi neuralis**

Fusio plicarum neuralium
 Neuroporus rostralis
 Neuroporus caudalis
 Tubus neuralis
 Fovea optica
 Fovea otica
 Primordium cordis
 Stomodeum [-daeum] [Stomatodeum; -daeum]
 Membrana oropharyngea
 Arcus pharyngeus [branchialis] primus (I)
 Prominentia maxillaris
 Prominentia mandibularis
 Sulcus pharyngeus [branchialis] primus (I)
 Arcus pharyngeus [branchialis] secundus (II)

Periodus labii fissi

Frons
 Nasus
 Naris
 Sulcus nasomaxillaris
 Incisivum
 Maxilla
 Mandibula
 Orificium oris
 Membrum tripartitum
 Skeleton blastemale (*vide* Skeleton
 appendiculare, N.E.V. p. 9)
 Skeleton cartilagineum (*vide* Skeleton
 appendiculare, N.E.V. p. 9)
 Skeleton osseum (*vide* Skeleton
 appendiculare, N.E.V. p. 9)
 Brachium
 Antebrachium
 Manus primitiva
 Femur
 Crus primitivum
 Pes primitivus
 Primordia digitorum
 Membrana interdigitalis
 Flexurae membrorum
 Tuberculum genitale
 Plica urogenitalis
 Sulcus urogenitalis
 Proctodeum [-daeum] [Fovea analis]

PERIODUS FETALIS**Periodus fetalis initialis**

Plicae palpebrales
 Auricula
 Digiti
 Digiti primordiales [nonseparati]
 Digiti definitivi [separati]
 Plexus venosus cranialis
 Phallus
 Sulcus urogenitalis
 Labium pudendi [vulvae]
 Tuber scrotale
 Raphe anogenitalis
 Corpus perineale
 Anus

Periodus fetalis definitiva**HISTOGENESIS****Ectoderma****Epidermis**

Epithelium simplex cuboidale
 Epithelium stratificatum cuboidale
 Periderma
 Epidermis propria
 Epithelium stratificatum squamosum
 Cornificatio
 Derivatio

Epithelium tubi neuralis [Neurectoderma]

Ependymoblasti
 Spongioblasti
 Glioblasti
 Myelinisatio
 Neuroblasti
 Neuroblasti apolares
 Neuroblasti unipolares
 Neuroblasti bipolares
 Neuroblasti multipolares

 Processificatio
 Dendrificatio
 Coni augmentales

Textus cristae neuralis [Mesectoderma]

Segmenta cristae neuralis
 Ganglia craniospinalia
 Ganglia autonómica
 Neuroblasti
 Chromaffinoblasti
 Corpora para-aortica
 Neurolemmoblasti
 Myelinisatio
 Glioblasti ganglionici
 Melanoblasti
 Mesenchyma capitis
 Chondroblasti
 Odontoblasti¹⁰

 Epithelium sensorium
 Placodae neurales
 Epithelium contractile
 Myoepithelium
 M. sphincter pupillae
 M. dilator pupillae

Epithelium glandulare
 Epithelium stomodeale [-daeale]
 Ameloblasti
 Glandulae salivariae
 Epithelium proctodeale [-daeale]
 Gemma sinus paranasalis (Car)

Mesoderma

Endothelium
 Mesothelium
 Epithelium mesodermale
 Epithelium glandulare
 Textus epithelioideus¹¹
 Mesenchyma
 Angioblasti
 Textus hemopoeticus [haemopoeticus]
 Insulae sanguineae
 Textus myeloideus
 Hemocytoblasti [Haemocytoblasti]
 Textus lymphoideus
 Lymphoblasti
 Fibroblasti
 Fibrillogenesis
 Lipoblasti
 Chondroblasti
 Osteoblasti
 Substantia osteoidea
 Osteoclasti
 Cementoblasti
 Myoblasti
 Myofibrillogenesis
 Status mononuclearis
 Musculus nonstriatus
 Musculus cardiacus
 Musculus skeletalis
 Status multinuclearis
 Musculus skeletalis
 Myotubuli
 Textus conducens cardiacus
 Myofibra conducens
 Nodus cardiacus
 Chorda nephrogenica
 Tubuli renales
 Epithelium transitionale

Endoderma

Epithelium ciliatum
 Epithelium glandulare
 Epithelium simplex
 Epithelium squamosum
 Epithelium cuboidale
 Epithelium columnare
 Epithelium pseudostratificatum
 Epithelium stratificatum
 Epithelium squamosum
 Epithelium cornificatum
 Epithelium noncornificatum
 Epithelium transitionale
 Epitheliocytus neurosensorius
 Cellulae germinales primordiales

ORGANOGENESIS**SYSTEMA SKELETALE****SKELETOGENESIS PRIMARIA****Chordagenesis**

Chorda mesodermalis

Chondrogenesis

Mesoderma blastemale

Centrum chondrificationis

Precartilago [Prae-]

Perichondrium

Stratum chondrogenicum

Cartilago embryonica

Status proliferans

Incrementum appositionale

Incrementum interstitialle

Typus hypertrophicus

Subtypi differentes

Osteogenesis**Osteogenesis membranacea [desmalis]¹²**

Membrana cellularis

Os spongiosum [Os trabeculare]

Periosteum

Stratum osteogenicum

Os compactum

Osteogenesis cartilaginea

Ossificatio perichondrialis

Perichondrium

Stratum osteogenicum

Os perichondriale

Anulus osseus

Ossificatio endochondrialis

Cartilago calcificata

Gemma osteogenica primaria

Centrum ossificationis primarium

[Centrum diaphysiale]

Zonae differentiationis

Gemma osteogenica secundaria

Centrum ossificationis secundarium

[Centrum epiphysiale]

Centrum ossificationis tertium [Centrum

apophysiale]

Os primarium

Os intertextum [Os prenatale] [prae-]

Os spongiosum [Os trabeculare]

Os compactum immaturum

Osteon primarium

Os secundarium

Os compactum definitivum [Os
postnatale]

Lamellae osseae

Osteon secundarium

Medulla ossis

SKELETON AXIALE**Columna vertebralis**

Notochorda

Epithelium notochordale

Vagina notochordalis

Nucleus pulposus

Mesoderma paraxiale

Columna membranacea

Sclerotomus

Fissura intersegmentalis

Fissura intrasegmentalis

Fissura intervertebralis

Pars cranialis

Epiphysis cranialis

Pars caudalis

Epiphysis caudalis

Vertebra

Vertebra precartilaginea [prae-]

Vertebra cartilaginea

Vertebra ossea

Centrum

Processus hemalis [haemalis]

Arcus hemalis [haemalis]

Processus neuralis¹³

Arcus vertebrae

Processus spinosus

Processus transversus

Processus articulares

Costa

Costa precartilaginea [prae-]

Costa cartilaginea

Costa ossea

Discus intervertebralis

Anulus fibrosus

Nucleus pulposus

' Mesoderma sternale
 Cartilago sternalis
 Sternebrae
 Processus xiphoideus

Cranium

Desmocranium
 Chondrocranium
 Osteocranium¹⁴

Chondrocranium

Capsula nasalis
 Cartilago ethmoidalis
 Capsula otica
 Cartilago petrosa temporalis
 Sclerotomi occipitales
 Cartilago parachordalis
 Cartilago occipitalis
 Cartilago sphenoidalis
 Pars basisphenoidalis
 Pars hypophysialis
 Pars alisphenoidalis
 Os pterygoideum
 Cartilago trabecularis

Neurocranium

Meninx primitiva
 Meninges
 Capsula precranialis [prae-]
 Centra ossificationis
 Calvaria
 Os parietale
 Os interparietale
 Fonticuli

Viscerocranium

Arcus pharyngei [branchiales]
 Arcus pharyngeus [branchialis] primus (I)
 Pars dorsalis [Processus maxillaris]
 Cartilago quadrata
 Incus (pleraque)
 Maxilla
 Os lacrimale
 Os nasale
 Os palatinum
 Os zygomaticum
 Processus pterygoideus
 Ala ossis presphenoidalis [prae-]¹⁵

' ' Pars ventralis
 Cartilago mandibularis
 Malleus (plerusque)
 Mandibula (Ossificatio membranacea partim; Ossificatio cartilaginea secundaria, partim)
 Arcus pharyngeus [branchialis] secundus (II)

Pars dorsalis
 Stapes
 Cartilago tympanohyoidea
 Cartilago stylohyoidea
 Processus styloideus ossis temporalis

Cartilago epihyoidea
 Pars ventralis
 Cartilago ceratohyoidea
 Cartilago basihyoidea (partim)
 Processus lingualis (partim) (bo, eq)

Arcus pharyngeus [branchialis] tertius (III)

Pars ventralis
 Cartilago basihyoidea (partim)
 Processus lingualis (partim) (bo, eq)

Cartilago thyrohyoidea [thyreo-]
 Arcus pharyngeus [branchialis] quartus, quintus, et sextus (IV, V, VI)

Partes ventrales
 Cartilago epiglottica
 Cartilago thyroidea [thyroidea]
 Cartilago arytenoidea [-taenoidea]
 Cartilago cricoidea

SKELETON APPENDICULARE

Skeleton blastemale
 Skeleton cartilagineum
 Crista membri
 Gemma membri thoracici
 Columna membri thoracici
 Lamina primitiva membri thoracici
 Manus primitiva
 Primordia digitorum manus
 Gemma membri pelvini
 Columna membri pelvini
 Lamina primitiva membri pelvini
 Pes primitivus
 Primordia digitorum pedis

Skeleton osseum
 Diaphysis
 Metaphysis
 Cartilago physialis¹⁶
 Epiphysis proximalis
 Epiphysis distalis
 Lamina apophysialis
 Apophysis
 Articulationes
 Zona chondrogenica
 Epiphysis cartilaginea
 Cartilago articularis
 Interzona avascularis
 Cavum articulare
 Zona peripherica
 Structurae endarticulares
 Stratum synoviale primordiale
 Capsula articularis
 Ligg. primordialia accessoria

SYSTEMA MUSCULARE

Myogenesis

Mesoderma paraxiale

Myotomi
 Myotomi prechordales [prae-] [pre-otici;
 prae-]
 Primordium musculorum oculi
 Myotomi parachordales [occipitales]
 Primordium musculorum linguae
 Myotomi spinales
 Pars epaxialis
 Primordia musculorum epaxialium
 Pars hypaxialis
 Musculi unisegmentales
 Musculi multisegmentales

Regio cervicalis

Primordia musculorum
 M. sterno(brachio-)cephalicus (partim)
 M. trapezius (partim)
 M. geniohyoideus
 Mm. infrahyoidei
 Mm. prevertebrales
 Mm. scaleni
 Mm. pectorales
 Diaphragma thoracicum
 Primordium gemmae membri thoracici

Primordium musculorum dorsalium
 Primordium musculorum ventralium

Regio thoracolumbalis

Primordium musculorum
 Mm. intervertebrales
 Mm. flexores spinae
 Mm. parietis abdominis
 Primordium gemmae membri pelvini
 Primordium musculorum dorsalium
 Primordium musculorum ventralium

Regio sacrocaudalis

Primordium diaphragmatis pelvis (partim)

Mesoderma intermedium

Mm. nonstriati ductuum urogenitalium

Mesoderma laminae lateralis

Mesoderma somaticum

Sphincter cloacalis (plerisque)
 Primordium sphincteris ani externi
 Primordium sphincteris urogenitalis

Mesoderma splanchnicum

Musculatura canalis alimentarii
 Musculatura arboris tracheobronchialis
 Musculi apparatus urogenitalis

Mesoderma cardiovasculare

Musculi cardiaci
 Musculatura vasorum¹⁷

Mesoderma branchiomicum

Primordia musculorum arcuum pharyngeorum
 [branchialium]
 Arcus pharyngeus [branchialis] primus (I)
 Mm. masticatorii
 M. tensor tympani
 M. tensor veli palatini
 Venter rostralis musculi digastrici
 Arcus pharyngeus [branchialis] secundus
 (II)
 Mm. faciei
 M. stapedius
 Venter caudalis musculi digastrici
 M. stylohyoideus
 Mm. auriculares
 Arcus pharyngeus [branchialis] tertius
 (III)
 M. stylopharyngeus

' Arcus pharyngeus [branchialis] quartus
(IV)
M. cricothyroideus
Arcus pharyngeus [branchialis] sextus
(VI)
Mm. laryngis
Mm. nervi accessorii [XI]
Mm. pharyngis (Radices craniales)
Mm. palati (Radices craniales)
M. sterno(brachio-)cephalicus (partim)
(Radices spinales)
M. trapezius (Radices spinales)

APPARATUS DIGESTORIUS

Primordia

Saccus vitellinus primitivus
Pars vitellina proximalis
Pars vitellina distalis
Lamina prechordalis [prae-]
Enteron primitivum
Stomodeum [-daeum] [Stomatodeum;
-daeum]
Pre-enteron [Prae-]
Mesenteron
Metenteron
Proctodeum [-daeum]

CAVUM ORIS

Stomodeum [-daeum] [Stomatodeum; -daeum]

Prominentia frontonasalis
Prominentia maxillaris
Prominentia mandibularis
Membrana oropharyngea
Saccus entericus cranialis

Primordia palati et vestibuli

Processus palatinus medianus
Palatum primitivum
Foramen incisivum
Processus palatini laterales
Palatum proprium
Lamina labiokingivalis
Sulcus labiokingivalis
Lamina buccokingivalis

Sulcus buccokingivalis
Gemma glandulae parotideae
Vestibulum oris
Labia oris
Bucca
Gingiva

Lingua

Primordia lingualia
Tuberculum linguale laterale [distale]
Tuberculum linguale medium
Sulcus terminalis
Tuberculum linguale proximale [Copula]
Gemmae gustatoriae
Papillae gustatoriae
Papillae mechanicae
Sulcus linguoingivalis
Gemma glandulae mandibularis
Gemmae glandularum sublingualium
Gemma glandulae zygomaticae (Car)

Dens

Lamina dentalis

Gemma dentis
Organum enameleum
Status gemmalis
Status cappalis
Status campanalis
Epithelium enameleum externum
Reticulum enameleum
Epithelium enameleum internum
Ameloblastus
Prisma enameleum
Lamina basalis enamelea
Vagina radialis epithelialis
Diaphragma vaginae radialis
Porus vaginae radialis
Cuticula dentalis

Papilla dentis

Pulpa dentis
Odontoblastus
Predentinum [Prae-]
Dentinum

Sacculus dentalis

Lamina cementoblastica
Cementum
Lamina periodontoblastica

' Periodontium

Lamina osteoplastica

Alveolus dentalis

Canalis eruptivus

Dens deciduus

Dens permanens

PRE-ENTERON [PRAE-ENTERON]

Pharynx primitivus

Arcus pharyngei [branchiales]

Sacci pharyngei

Saccus pharyngeus primus (I)

Recessus tubotympanicus (*vide* Auris
media, N.E.V. p. 23)

Saccus pharyngeus secundus (II)

Fossa tonsillaris

Saccus pharyngeus tertius (III)

Pars dorsalis

Gemma parathyroidea [-thyroidea]
externa

Pars ventralis

Gemma thymica major

Saccus pharyngeus quartus (IV)

Pars dorsalis

Gemma parathyroidea [-thyroidea]
interna

Pars ventralis

Gemma thymica minor

Saccus pharyngeus quintus (V)

Corpus ultimobranchiale

Diverticulum thyroideum [thyroideum]

Foramen cecum [caecum]

Ductus thyroglossus [thyreo-]¹⁸

Glandula thyroidea [thyroidea]

Esophagus [Oeso-] primitivus

Ventriculus primitivus [Gaster primitiva]

Duodenum primitivum

Diverticulum hepaticum

Ductus hepatopancreaticus

Ductus choledochus

Pars cystica

Ductus cysticus

Vesica fellea

Pars hepatica

Antrum hepaticum

Ductus hepatici

Laminae hepaticae¹⁹

Gemma pancreatica ventralis

Ductus pancreaticus ventralis

Pancreas ventrale

Processus uncinatus (Ru)

Systema ductale primitivum

Acini pancreatici

Insulae pancreaticae²⁰

Gemma pancreatica dorsalis

Pancreas dorsale

Ductus pancreaticus dorsalis

Systema ductale primitivum

Acini pancreatici

Insulae pancreaticae²⁰

Anastomosis ductalis (fe, su, Ru)

Duodenum (partim)

MESENTERON

Duodenum (partim)

Ansa umbilicalis intestini

Crus craniale

Crus caudale

Rotatio ansae umbilicalis intestini

Jejunum

Ileum

Pedunculus vitellinus

Ductus vitellinus

Vestigium ductus vitellini²¹

Bulla cecalis [caecalis]

Cecum [Caecum]

Colon ascendens

Ansa proximalis coli (Ru)

Ansa spiralis coli (su, Ru)

Ansa distalis coli (su, Ru)

Colon ventrale (eq)

Flexura pelvina (eq)

Colon dorsale (eq)

Colon transversum (partim)

METENTERON

Colon transversum (partim)

Colon descendens

Colon sigmoideum

Cloaca

Rectum

Canalis analis (partim)

Uro-enteron (*vide* Organa urinaria,
N.E.V. p. 17)

PROCTODEUM [-DAEUM]

Canalis analis (partim)
 Membrana analis
 Anus
 Gemma sinus paranalis

CELOMATA [COEL-] ET SEPTA

Celoma [Coel-] extraembryonicum
 Cavum chorionicum
 Celoma [Coel-] umbilicale
 Celoma [Coel-] intraembryonicum
 Vesiculae celomicae [coel-]
 Cavum celomicum [coel-]
 Cavum parietale
 Septum transversum
 Celoma [Coel-] pleuropericardiale
 Cavum pleuropericardiale
 Canalis pericardioperitonealis
 Hiatus pleuropericardialis
 Plica pleuropericardialis
 Membrana pleuropericardialis
 Cavum pericardii
 Cavum pleurae

 Hiatus pleuroperitonealis [-peritonealis]
 Plica pleuroperitonealis [-peritonealis]
 Membrana pleuroperitonealis
 [-peritonealis]
 Septum transversum
 Diaphragma

 Celoma [Coel-] peritoneale [peritoneaeale]
 Cavum peritonei [peritoneaei]
 Bursa omentalis
 Vestibulum bursae omentalis
 Cavum mediastini serosum
 Recessus caudalis
 Recessus dorsalis
 Recessus lienalis
 Spatium subphrenicum
 Processus vaginalis
 Hiatus umbilicalis
 Anulus umbilicalis

**MESENERIA ET PLICAE
 PERITONEALES [PERITONAEALES]**

Mesenterium dorsale primitivum
 Mesoesophageum [-oesophageum] dorsale
 Mesogastrium dorsale
 Omentum majus
 Lig. phrenicolienale
 Lig. gastrophrenicum
 Lig. gastrolienale
 Mesoduodenum dorsale
 Mesenterium
 Mesojejenum
 Mesoileum
 Mesocolon
 Mesorectum

 Mesenterium ventrale primitivum
 Mesoesophageum [-oesophageum] ventrale
 Mesogastrium ventrale
 Omentum minus
 Lig. hepatogastricum
 Lig. hepatoduodenale (partim)
 Lig. falciforme
 Lig. coronarium
 Lig. triangulare
 Mesoduodenum ventrale
 Lig. hepatoduodenale (partim)

 Plica umbilicalis mediana
 Mesovesica
 Lig. vesicae laterale
 Lig. vesicae medianum

 Mesenterium urogenitale
 Plica suspensoria gonadalis
 Mesorchium
 Mesovarium
 Plica genitalis²²
 Mesenterium ductus paramesonephrici
 Lig. latum uteri
 Mesosalpinx
 Mesometrium

 Mesenchyma gubernaculare
 Lig. ovarii proprium
 Lig. teres uteri
 Lig. testis proprium
 Lig. caudae epididymidis
 Gubernaculum testis
 Gubernaculum ovarii
 Descensus testis
 Descensus ovarii

SYSTEMA CARDIOVASCULARE**COR****Mesoderma splanchnicum**

Mesoderma cardiogenicum
 Primordium endocardiale
 Primordium myocardiale
 Primordium epicardiale

Cor primordiale

Primordium sinus venosi
 Primordium atriale
 Primordium ventriculare endocardiale
 Ventriculus saccularis primitivus

Cor tubulare simplex

Sinus venosus
 Atrium primitivum
 Junctio atrioventricularis
 Ventriculus primitivus
 Bulbus cordis primitivus
 Truncus arteriosus
 Endocardium primitivum
 Cardioglia [Cardiogelatina]²³
 Myocardium primitivum
 Epicardium primitivum

Mesocardium dorsale
 Mesocardium ventrale
 Prominentia cardiaca

Cor sigmoideum

Sinus venosus
 Pars transversa
 Cornu [dextrum et sinistrum]
 Ostium sinuatriale
 Valvulae sinuatriales
 Atrium primitivum
 Canalis atrioventricularis communis
 Tubera endocardialia atrioventricularia
 Septum intermedium²⁴
 Ventriculus primitivus
 Ansa bulboventricularis
 Sulcus bulboventricularis
 Ostium bulboventriculare
 Tuber endocardiale
 Bulbus cordis
 Crista bulbaris
 Septum spirale

Cor quadricameratum

Conus arteriosus
 Sulcus interventricularis
 Sulcus interatrialis
 Sulcus coronarius
 Sinus venosus
 Sinus coronarius (partim)
 Vena obliqua (partim) (Car, eq)
 Tuberculum intervenosum
 Valva sinus venosi
 Septum spurium
 Crista terminalis
 Valva venae cavae caudalis
 Valva sinus coronarii
 Atrium primitivum
 Septum interatriale primum
 For. interatriale primum
 For. interatriale secundum
 Septum interatriale secundum
 Foramen ovale [Foramen interatriale]
 Limbus fossae ovalis²⁵
 Valvula foraminis ovalis
 Atrium [dextrum et sinistrum]
 Pars venosa
 Musculi pectinati
 Canalis atrioventricularis
 Tubera endocardialia atrioventricularia
 Valva atrioventricularis
 Valva atrioventricularis sinistra
 [bicuspidalis]
 Valva atrioventricularis dextra
 [tricuspidalis]
 Bulboventriculus
 Septum interventriculare
 Foramen interventriculare primum²⁶
 Foramen interventriculare secundum²⁷
 Pars muscularis
 Pars membranacea
 Septum atrioventriculare²⁸
 Trabeculae carnae
 Musculi papillares
 Ventriculus [dexter et sinister]
 Bulbus aortae
 Cristae aorticopulmonales
 Septum aorticopulmonale (partim)²⁹
 Aorta (partim)
 Valva aortae
 Valvulae semilunares

' Truncus pulmonalis (partim)
Valva trunci pulmonalis
Valvulae semilunares

SYSTEMA VASCULARE

Mesenchyma
Textus angioblasticus
Insulae sanguineae
Endothelioblasti
Hemocytoblasti [Haemocytoblasti]³⁰
Rete capillare primitivum
Circulatio embryonica
Rete vasculare
Phasis bilateralis
Phasis inequalis [inaequalis]
Musculatura vasorum

Arteriae

Truncus arteriosus
Cristae aorticopulmonales
Septum aorticopulmonale (partim)²⁹
Truncus pulmonalis

Truncus aorticus³¹
Arteriae coronariae
Aortae ventrales
Arcus aorticus primus (I)
Arcus aorticus secundus (II)
Arcus aorticus tertius (III)
Truncus brachiocephalicus (partim)
A. carotis communis (partim)
A. carotis externa
Arcus aorticus quartus (IV)
Truncus brachiocephalicus (partim)
Arcus aortae definitivus (partim)
A. subclavia dextra (partim)
Arcus aorticus quintus (V)
Arcus aorticus sextus (VI)³²
Truncus pulmonalis³³
Ductus arteriosus³⁴
Ligamentum arteriosum
Aorta dorsalis
A. carotis interna
A. subclavia dextra (partim)
Arcus aortae definitivus (partim)
Aorta thoracica
Aorta abdominalis
A. sacralis mediana

' A. caudalis mediana

Aa. intersegmentales dorsales

Rami dorsales
Anastomoses dorsales
A. vertebralis
A. basilaris
Anastomoses ventrales
Truncus costocervicalis
Rami ventrales
A. subclavia
A. subclavia dextra (partim)
A. subclavia sinistra
A. axialis membri thoracici³⁵
Aa. intercostales dorsales
Aa. lumbales
A. iliaca externa (partim)

Aa. splanchnicae laterales [Aa. intersegmentales laterales]

A. phrenica caudalis
A. adrenalis [supra-]
A. renalis
A. gonadalis

Aa. splanchnicae ventrales [Aa. intersegmentales ventrales]

Aa. vitellinae
Truncus celiacus [coeliacus]
A. mesenterica cranialis
A. mesenterica caudalis
A. allantoica
A. umbilicalis
A. iliaca externa (partim)
A. axialis membri pelvini³⁵
A. iliaca interna

Venae

Vv. extraembryonicae

V. vitellina
V. allantoica
V. umbilicalis

Vv. intraembryonicae

V. umbilicalis
Ligamentum teres hepatis
Ductus venosus
Plexus venosus visceralis
Vv. viscerales
V. pulmonalis communis

- ' ' Vv. vitellinae
 - Vena cava caudalis (partim)
 - V. portae hepatis
- Vv. afferentes hepatis
- Vv. efferentes hepatis [Vv. hepaticae]
- Pars hepatica venae cavae caudalis

Vv. somaticae

- V. cardinalis
 - V. cardinalis communis
 - Vena cava cranialis (partim)
 - Sinus coronarius (partim)
 - V. azygos sinistra (partim) (Ru, su)
 - V. cardinalis cranialis
 - V. capitis primaria
 - V. jugularis externa
 - V. jugularis interna
 - Anastomosis precardinalis [prae-]
 - Vena brachiocephalica sinistra
 - Vena brachiocephalica dextra
 - Vena cava cranialis (partim)
 - V. obliqua (Car, eq)
 - V. cardinalis caudalis
 - V. azygos (partim)
 - V. cordis magna
- V. subcardinalis
 - Vv. adrenales [supra-]
 - Vv. gonadales
 - Vena cava caudalis (partim)
 - Anastomosis subcardinalis
 - V. renalis sinistra
- V. supracardinalis
 - V. azygos dextra (partim)
 - V. azygos sinistra (partim)
 - Anastomosis supracardinalis
 - Vena cava caudalis (partim)
 - Anastomosis subsupracardinalis
- Vv. intersegmentales
 - Vv. marginales membrorum
 - Vv. membri thoracici
 - V. subclavia
 - Vv. membri pelvini

SYSTEMA LYMPHATICUM

- Mesenchyma
 - Textus lymphoblasticus
- Sacci lymphatici
 - Saccus jugularis

- ' Saccus subclavius
- Cisterna chyli
- Saccus retroperitonealis [-peritonealis]
- Saccus iliacus
- Saccus inguinalis
- Vas lymphocapillare
- Vasa lymphatica
 - Ductus lymphaticus trachealis
 - Ductus thoracicus duplicatus [dexter et sinister]
 - Ductus lymphaticus dexter
 - Ductus thoracicus definitivus
 - Junctio lymphaticovenosa
- Primordia nodorum lymphaticorum
 - Lymphonodi
 - Lymphonodi hemales [haemales] (Ru, su)
- Arcus pharyngeus [branchialis] secundus (II)
 - Tonsilla palatina
- Primordia tonsillarum
- Tonsillae
- Primordia lienis
 - Lien
 - Lien accessorius
- Arcus pharyngeus [branchialis] tertius et quartus (III et IV)
 - Thymus

APPARATUS RESPIRATORIUS**Nasus**

- Prominentia frontonasalis
- Placoda nasalis
 - Placoda olfactoria
- Prominentiae nasales
 - Prominentia nasalis lateralis
 - Prominentia nasalis medialis
- Prominentia frontalis
- Fovea nasalis
- Sulcus intranasalis
- Sulcus internasalis
- Sulcus nasomaxillaris
- Sulcus nasolacrimalis
- Saccus nasalis
- Membrana oronasalis
- Processus palatinus medianus
- Palatum primitivum
- Choanae primitivae
- Septum nasi primitivum

Processus palatini laterales

Palatum proprium

Cavum nasi

Regio respiratoria

Regio olfactoria

Conchae primitivae

Rugae conchae

Gemmae paranasales

Sulci paranasales

Sinus paranasales

Arbor respiratoria

Eminentia hypobranchialis

Tuber epiglotticum

Sulcus laryngotracheoesophageus [-oeso-]

Crista laryngotracheoesophagea [-oeso-]

Septum laryngotracheoesophageum [-oeso-]

Tubus laryngotrachealis

Tuber arytenoideum [arytaenoideum]

Glottis primitiva

Trachea

Pulmo embryonalis

Gemmae pulmonales

Pulmo fetalis

Periodus pseudoglandularis

Gemmae lobares

Gemmae segmentales

bronchopulmonales

Periodus canicularis

Arbor bronchialis

Gemmae bronchulares

Bronchuli

Periodus sacculi terminalis

Bronchuli respiratorii

Sacculi alveolares

Periodus alveolaris

Ductuli alveolares

Septa alveolaria

Alveoli pulmonis

APPARATUS UROGENITALIS

ORGANA URINARIA

Mesoderma intermedium

Lamina urogenitalis

Chorda nephrogenica

Nephrotomi

Pronephros

Glomerulus externus

Tubuli pronephrici

Nephrostoma

Canaliculus nephrostomaticus

Ductus pronephricus

Mesonephros

Blastema mesonephricum

Corpus mesonephricum

Cumulus mesonephricus

Vesicula

Nephronum mesonephricum

Corpusculum mesonephricum

Capsula glomeruli

Glomerulus

Tubuli mesonephrici

Pars secretoria

Pars colligens

Ductus mesonephricus

Plica mesonephrica³⁶

Ligamentum diaphragmaticum

Ligamentum genitale craniale

Metanephros

Blastema metanephricum

Capsula renis

Nephronum

Corpusculum renis

Capsula glomeruli

Glomerulus

Tubulus secretorius

Tubulus convolutus proximalis

Ansa nephroni

Tubulus convolutus distalis

Tubulus colligens

Gemma ureterica

Torus uretericus

Ductus uretericus

Pelvis renalis primitiva

Ductus colligens primarius

Ureter

Pelvis renalis

Calices renales

Ductus papillares

Tubuli colligentes

Tubuli colligentes recti

Tubuli colligentes arcuati

CLOACA (*vide* Metenteron, N.E.V. p.12)

Membrana cloacalis
Septum urorectale

Rectum

Sinus urogenitalis primitivus

Canalis vesicourethralis

Pars vesicalis
Pars urethralis

Bulbus sinuvaginalis

Vagina (partim)
Hymen

Bulbus sinu-utricularis

Uterus masculinus (partim)

Sinus urogenitalis definitivus

Pars vesicalis

Urachus
Plica umbilicalis mediana

Pars pelvina

Urethra feminina
Uterus masculinus (partim)

Pars prostatica urethrae
Gemmae glandulares prostaticae

Pars penina sinus urogenitalis

Sulcus urethralis
Pars penina urethrae

Bulbus penis
Glandula bulbourethralis

Vestibulum vaginae

Glandula vestibularis major

Proctodeum [-daeum]

Membrana analis

Canalis analis

Anus

ORGANA GENITALIA

Gonada³⁷

Status indifferens

Crista genitalis
Epithelium celomicum [coel-]

Mesenchyma
Cellulae germinales primordiales

Migratio
Chordae sexuales

Cellulae germinales

Blastema retis

Testis

Tunica albuginea testis

Chordae sexuales

Spermatogonia

Epithelium celomicum [coel-]

Tubuli seminiferi

Tubuli seminiferi contorti

Cellulae germinales

Cellulae sustentaculares

Tubuli seminiferi recti

Rete testis

Stroma

Mediastinum testis

Septula testis

Endocrinocyti interstitiales prenatales

Ovarium

Chordae sexuales

Ovogonia

Epithelium

Tunica albuginea ovarii

Cortex

Chordae corticales

Ovogonia

Racemus ovarum³⁸

Folliculi corticales primordiales

Epitheliocyti folliculares

Corpora atretica

Medulla

Chordae medullares

Rete ovarii

Stroma ovarii

Textus connectivus cellularis

Endocrinocyti interstitiales

Ductus genitales³⁷

Status indifferens

Tubuli mesonephrici

Ductus mesonephricus

Sulcus paramesonephricus

Ductus paramesonephricus

Ductus genitales masculini

Tubuli mesonephrici

Ductuli efferentes

Ductuli aberrantes craniales

' Ductuli aberrantes caudales
 Paradidymis
 Ductus mesonephricus
 Ductus epididymidis
 Appendix epididymidis
 Ductus deferens
 Ampulla ductus deferentis
 Glandula vesicularis
 Ductus ejaculatorius
 Trigonum vesicae
 Ductus paramesonephricus
 Appendix testis
 Uterus masculinus (partim)

Ductus genitales feminini

Tubuli mesonephrici
 Epoöphoron
 Paroöphoron
 Ductus paramesonephricus
 Pars preinfundibularis [prae-]
 Appendix vesiculosa
 Pars infundibularis
 Pars postinfundibularis
 Tuba uterina
 Primordium uterovaginale
 Uterus
 Vagina (partim)
 Ductus mesonephricus
 Ductus epoöphori
 Ductus deferens vestigialis

Organa genitalia externa

Status indifferens
 Tuberculum genitale
 Phallus primitivus
 Membrana urogenitalis
 Ostium urogenitale
 Sulcus coronarius
 Plicae urogenitales
 Sulcus urogenitalis
 Tubercula labioscrotalia

Organa genitalia externa masculina

Phallus primitivus
 Pars dorsalis penis
 Glans penis
 Sinus urethralis (eq)
 Lamella glandaris
 Preputium [Prae-]
 Plicae urogenitales

Sinus urogenitalis
 Canalis urogenitalis
 Pars urethralis penis
 Urethra
 Tubercula labioscrotalia
 Scrotum
 Raphe scroti
Organa genitalia externa feminina
 Phallus primitivus
 Pars dorsalis clitoridis
 Glans clitoridis
 Sinus clitoridis (eq)
 Lamella glandaris
 Plicae urogenitales
 Labia pudendi [vulvae]
 Tubercula labioscrotalia
 Plicae laterales (ca)
 Sulcus urogenitalis
 Vestibulum vaginae
 Glandula vestibularis major
 Glandulae vestibulares minores

GLANDULAE ENDOCRINAE**Glandula thyroidea [thyreoidea]**

Diverticulum thyroideum [thyroideum]
 Foramen cecum [caecum]
 Ductus thyroglossus [thyreo-]¹⁸
 Glandulae thyroideae [thyreoideae]
 accessoriae

Glandulae parathyroideae [-thyreoideae]

Saccus pharyngeus tertius (III)
 Pars dorsalis
 Gemma parathyroidea [-thyreoidea]
 externa
 Saccus pharyngeus quartus (IV)
 Pars dorsalis
 Gemma parathyroidea [-thyreoidea]
 interna
 Saccus pharyngeus quintus (V)
 Corpus ultimobranchiale
 Endocrinocytus calcitoninus³⁹

Hypophysis

Saccus adenohipophysialis
 Canalis craniopharyngeus
 Adenohipophysis
 Pars distalis

- ' ' Pars tuberalis
- Lumen residuale
- Pars intermedia
- (Pars pharyngea)
- Gemma neurohypophysialis diencephali
- Infundibulum
- Neurohypophysis

Glandula pinealis

- Gemma pinealis
- Corpus
- Pedunculus
- Recessus pinealis

Glandula adrenalis [suprarenalis]

- Cortex [Organum interrenale]⁴⁰
- Mesothelium
- Epithelium mesodermale
- Epithelium glandulare
- Textus epithelioideus
- Medulla
- Textus cristae neuralis
- Epithelium glandulare
- Chromaffinoblasti

Insulae pancreaticae¹⁴ (*vide* Pancreas
ventrale, dorsale, N.E.V. p.12)

Thymus (*vide* Pre-enteron, N.E.V.p.12 et
Systema lymphaticum, p.16)

SYSTEMA NERVOSUM

- Neurogenesis
- Lamina neuralis
- Plica neuralis
- Sulcus neuralis
- Tubus neuralis
- Crista neuralis (*vide* Histogenesis,
N.E.V. p.6)

Tubus neuralis

- Canalis neuralis
- Stratum ependymale
- Stratum palliale
- Stratum marginale
- Lamina dorsalis
- Epithelium plexus choroidei [chorioidei]
- Lamina dorsolateralis [Lamina alaris]
- Sulcus limitans

- Lamina ventrolateralis [Lamina basalis]
- Lamina ventralis
- Neuroporus
- Neuroporus rostralis
- Neuroporus caudalis
- Lamina terminalis

Encephalon

- Substantia alba
- Substantia grisea
- Liquor cerebrospinalis
- Vesiculae encephali
- Lamina epithelialis

Archencephalon

- Prosencephalon
- Telencephalon
- Diencephalon
- Mesencephalon

Deuterencephalon

- Rhombencephalon
- Metencephalon
- Myelencephalon

Prosencephalon

- Cavum prosencephali
- Rhinencephalon
- Cavum rhinencephali
- Bulbus olfactorius
- Cortex piriformis
- Fissura rhinalis
- Area paraterminalis
- Hippocampus primitivus
- Hippocampus
- Gyrus dentatus
- Fornix [Fimbria]

Telencephalon

- Cavum telencephali
- Pars mediana
- Lamina terminalis definitiva
- Lamina commissuralis
- Commissura rostralis
- Commissura hippocampi
- Commissura neopallialis
- Ventriculus tertius (partim)
- Hemispherium [-sphaerium] cerebri
- Ventriculus lateralis [dexter et sinister]
- Foramen interventriculare encephali

- ' ' Stratum choroideum [chorioideum]
 - epitheliale
- Tela choroidea [chorioidea]
 - Fissura choroidea [chorioidea]
- Paleocortex [Palaeocortex]
- Neocortex
 - Cortex trilaminaris primarius
 - Cortex stratificatus definitivus

Diencephalon

- Cavum diencephali
 - Ventriculus tertius (partim)
- Tela choroidea [chorioidea]
- Gemma pinealis
- Gemma neurohypophysialis

Mesencephalon

- Cavum mesencephali
 - Aqueductus [Aquae-] mesencephali
- Flexura cephalica

Rhombencephalon

- Cavum rhombencephali
 - Ventriculus quartus
 - Lamina epithelialis rhombencephali
- Tela choroidea [chorioidea]
- Metencephalon
 - Flexura pontina
 - Labium rhombencephalicum
 - Cerebellum
- Myelencephalon [Medulla oblongata]
 - Flexura cervicalis

Medulla spinalis

- Canalis centralis
- Zona ventricularis [ependymalis]
 - Ependyma
- Zona intermedia [pallialis]
 - Substantia grisea
 - Lamina tectalis
 - Commissura dorsalis
 - Lamina dorsolateralis
 - Columna grisea dorsalis
 - Lamina ventrolateralis
 - Columna grisea ventralis
 - Lamina basalis
 - Commissura ventralis
- Zona marginalis
 - Substantia alba
 - Funiculus dorsalis

- ' ' Funiculus lateralis
- Funiculus ventralis
- Intumescencia cervicalis
- Intumescencia lumbosacralis
 - Conus medullaris
 - Filum terminale
- Ascensus medullae spinalis

Crista neuralis

- Segmenta cristae neuralis
- Ganglia craniospinalia
- Ganglia autonómica
 - Ganglion sympathicum
 - Ganglion parasympathicum
- Placodae neurales
- Nervi craniospinales

Meninges

- Mesenchyma sclerotomicum
 - Meninx primitiva
 - Ectomeninx
 - Lamina interna periostealis
 - Dura mater craniospinalis
- Textus cristae neuralis
 - Endomeninx
 - Arachnoidea craniospinalis
 - Reticulum arachnoideum
 - Pia mater craniospinalis
 - Tela choroidea [chorioidea]

ORGANA SENSUUM**ORGANUM GUSTUS****ORGANUM OLFACTUS****OCULUS⁴¹**

- Placoda optica
 - Fovea optica
 - Recessus opticus
- Vesicula optica
 - Cavum opticum
 - Pedunculus opticus
- Calix opticus
 - Labrum calicis
 - Lamina externa calicis
 - Spatium intraretinale
 - Lamina interna calicis
 - Cavum calicis

' Fissura optica

Placoda lentis

Fovea lentis

Porus lentis

Vesicula lentis

Cavum lentis

Epithelium lentis superficiale

Epithelium lentis profundum

Fibrae lentis

Capsula lentis

Neurectoderma opticum⁴²

Retina

Lamina interna calicis

Pars optica retinae (partim)

Stratum nervosum⁴³

Stratum ependymale

Stratum neuroepitheliale

Stratum palliale

Stratum nucleare internum

Stratum ganglionare

Stratum marginale

Stratum neurofibrarum

Nervus opticus

Ora serrata

Pars ceca [caeca] retinae (partim)

Pars ciliaris retinae (partim)

Epithelium nonpigmentosum⁴⁴

Pars iridica retinae (partim)

Epithelium pigmentosum⁴⁵

Lamina externa calicis

Pars optica retinae (partim)

Stratum pigmentosum retinae⁴⁶

Pars ceca [caeca] retinae (partim)

Pars ciliaris retinae (partim)

Epithelium pigmentosum⁴⁷

Pars iridica retinae (partim)

M. sphincter pupillae

M. dilator pupillae

Mesenchyma opticum

Tunica vascularis lentis

Mesenchyma camerae vitreae

Arteria lentis

Arteria hyaloidea

Canalis hyaloideus

Corpus vitreum

Membrana vitrea

Mesenchyma camerae aquosae⁴⁸

Camera aquosa⁴⁸

' Humor aquosus

Mesenchyma capsulare

Tunica interna⁴⁹

Tunica vasculosa bulbi [Uvea]⁵⁰

Choroidea [Chorioidea]⁵¹

Lamina vasculosa

Lamina pigmentosa

Corpus ciliare (partim)

M. ciliaris

Iris (partim)

Stroma iridis

Membrana pupillaris

Tunica externa⁵²

Sclera

Cornea (partim)

Ectoderma opticum⁵³

Cornea (partim)

Organa oculi accessoria

Plicae palpebrales

Palpebrae

Epithelium ectodermale

Epidermis

Cilia

Epithelium conjunctivale

Gemmae glandularum palpebrarium

Glandulae palpebrales

Gemmae glandulae lacrimalis

Glandula lacrimalis

Sulcus nasolacrimalis

Ductus nasolacrimalis

Saccus lacrimalis

Canaliculi lacrimales

Phasis conjunctionis palpebrarum

Tunica conjunctiva palpebrarum

Palpebra tertia

Tunica conjunctiva bulbi

Epithelium corneae

AURIS

Auris interna

Placoda otica

Fovea otica

Vesicula otica [Otocystis]

Labyrinthus membranaceus

Pars utricularis

Laminae semicirculares
 Foci absorptionis
 Ductus semicirculares
 Ampullae
 Crista
 Utriculus
 Macula utriculi
 Pars saccularis
 Sacculus
 Macula sacculi
 Ductus reuniens
 Ductus cochlearis
 Lagena
 Organum spirale
 Diverticulum endolymphaticum
 Ductus endolymphaticus
 Saccus endolymphaticus
 Capsula otica
 Mesenchyma oticum
 Spatia perilymphatica
 Labyrinthus cartilagineus
 Labyrinthus osseus
 Canales semicirculares
 Vestibulum
 Cochlea

Auris media

Saccus pharyngeus primus (I)
 Recessus tubotympanicus
 Tuba auditiva
 Diverticulum tubae auditivae (eq)
 Cavum tympani
 Cellulae tympanicae
 Antrum mastoideum
 Cellulae mastoideae
 Membrana pharyngea prima (I)
 Membrana tympanica
 Arcus pharyngeus [branchialis] primus (I)
 Cartilago dorsalis
 Incus (pleraque)⁵⁴
 Cartilago ventralis
 Malleus (plerisque)⁵⁴
 M. tensor tympani
 Arcus pharyngeus [branchialis] secundus (II)
 Cartilago dorsalis
 Stapes (partim)⁵⁴
 M. stapedius

Auris externa

Sulcus pharyngeus [branchialis] primus (I)

Meatus acusticus externus
 Arcus pharyngeus [branchialis] primus et secundus
 Tubercula auricularia
 Auricula

INTEGUMENTUM COMMUNE

Ectoderma

Epidermis primordialis
 Periderma
 Stratum intermedium
 Stratum basale
 Epidermis definitiva

Gemma pili

Bulbus pili
 Papilla pili
 Conus pili
 Truncus pili
 Vagina epidermalis pili
 Folliculus epithelialis
 Pili⁵⁵

Gemma glandulae cutis

Glandulae cutis
 Glandulae sudoriferae
 Glandulae sebaceae
 Glandula mammaria
 Crista mammaria
 Cumulus mammarius
 Gemma mammaria
 Processus primarius
 Processus secundarius
 Ductus lactifer
 Papilla mammae
 Vallum cutis (Ru, eq)
 Papilla mammae proliferativa (Ru, eq)
 Papilla mammae eversa (Car, su)
 Ductus papillaris
 Sinus lactifer

Unguicula (Car), Ungula (Un)

Epidermis unguiculae, ungulae
 Campus unguiculae, ungulae
 Matrix unguiculae, ungulae
 Lamina unguiculae, ungulae
 Eponychium unguiculae, ungulae
 Hyponychium unguiculae, ungulae

Cornu (Ru)

Gemma cornus
Epidermis cornus
Fovea cornualis
Cirrus cornualis

Mesenchyma

Mesenchyma primarium
Mesenchyma secundarium
Ectomesenchyma
Mesenchyma mesodermale

Mesoderma**Dermis [Corium]**

Dermis unguiculae, ungulae, cornus
Vagina dermalis pili
Papilla pili
M. arrector pili
Stroma glandulae cutis
Tela subcutanea

Crista neuralis

Melanoblasti
Melanocyti epidermales
Melanocyti dermales

MEMBRANAE FETALES**Saccus vitellinus**

Saccus vitellinus bilaminaris
Saccus vitellinus trilaminaris⁵⁶
Cavum vitellinum
Pedunculus vitellinus
Ductus pedunculi vitellini
Sinus terminales

Choriogenesis**Trophoblastus**

Cytotrophoblastus
Syncytiotrophoblastus
Cavum chorionicum [Celoma extra-embryonicum] [Coel-]

Chorion primarium

Villi chorii primarii⁵⁷

Chorion secundarium

Villi chorii secundarii⁵⁷

Chorion frondosum**Chorion laeve****Allantochorion [Chorion tertium]**

Villi chorii tertiarum⁵⁷

Cestus chorionicus (eq)
Calices endometriales (eq)
Cellulae calicis (eq)
Regressio cellulae calicis (eq)
Microcotyledones (eq)
Cotyledones
Areolae

Amniogenesis

Chorion primarium
Plica limitans⁹
Plica chorioamniotica
Umbilicus amnii
Chorion secundarium
Amnion
Cavum amnii
Epithelium amnii
Bracteolae amnioticae⁵⁸
Villi amniotici (bo)
Liquor amnioticus

Allantogenesis

Processus allantoicus
Recessus allantoicus
Allantois
Ductus allantoicus [Urachus]
Cavum allantoicum
Liquor allantoicus
Hippomanes
Allantochorion
Allantoamnion

Implantatio

Phasis preimplantationis [prae-]
Tempus tubale
Tempus uterinum
Denudatio⁵⁹
Tempus implantationis
Phasis precontactationis [prae-]
Phasis appositionis
Phasis conjunctionis⁶⁰
Phasis adhesionis [adhaesionis]
Phasis invasionis

Placentatio

Placenta
Pars fetalis
Allantochorion
Amniochorion (su, Ru)
Pars uterina

Typi placentae

Placenta adeciduata [Semiplacenta] (su, Ru, eq)

Placenta deciduata [Placenta vera] (Car)

Placenta labyrinthica⁶¹

Semiplacenta diffusa incompleta (su)

Apex necroticus

Semiplacenta diffusa completa (eq)

Semiplacenta cotyledonaria (Ru)

Placentomus⁶²

Apex necroticus

Placenta zonaria (Car)

Zona placentaria (Car)

Zona paraplacentaria (Car)

Hematoma [Haematoma] marginale⁶³

Placenta invascularis

Placenta vitellina

unilaminaris

bilaminaris

trilaminaris

Placenta chorionica

Placenta chorioamniotica

Placenta vascularis

Placenta choriovitellina

Placenta vitellina inversa

incompleta

completa

Placenta chorioallantoica

Membrana interhemalis [-haemalis]

Placenta epitheliochorialis (su, Ru, eq)

Placenta endotheliochorialis (Car)

Funiculus umbilicalis

Pars amniotica

Villi amniotici (bo)

Pars allantoica

Mesenchyma umbilicalis

Ductus allantoicus [Urachus]

Arteria umbilicalis dextra

Arteria umbilicalis sinistra

Vena umbilicalis dextra

Vena umbilicalis sinistra

Ductus pedunculi vitellini

DYSMORPHIA**TERMINI DYSMORPHICI GENERALES****Typi dysmorphici generales****Abnormalitas**

Amorphia

Anomalia

Chimera [Chimaera]

Cystosis

Dedifferentiatio

Anaplasia

Cataracta

Fibrosis

Heteroplasia

Metaplasia

Defectio

Defectus

Deformitas

Dysgenesis

Dysplasia

Dystrophia

Error

Malformatio

Monstrum

Mosaicismus [Tessalatio]

Paraplasia

Polydysplasia

Syndroma

Nimum crescentiae

Abundantia

Gigantismus

Hyperplasia

Hypertrophia

Neoplasia

Pseudohypertrophia

Redundantia

Teratoma

Parum crescentiae

Absentia

Agenesis

Amputatio

Aplasia

Ateliosis

Atresia

Atrophia

Coarctatio

Constrictio

Defectio

Deficientia

Deletio

Dissolutio

Hypomerismus

Hypoplasia

Infantilismus

Inhibitio

Involutio

Nanismus

Necrosis

Regressio

Retardatio

Retroplasia

Rudimentaritas

Status crypticus

Status subnumerarius

Status vestigialis

Vestigium

Positio abnormalis

Aberratio

Astrophia

Commutatio

Conjunctio

Ectasia

Ectopia

Herniatio

Heterotopia

Inversio

Malpositio

Malrotatio

Transpositio

Vectio abnormalis

Persistentia primordii

Atavismus

Cystis

Dilatatio

Diverticulum

Imperforatio

Retentio

Multiplicatio organi

Bifurcatio

Diplogenesi

Duplicatio

Hypermerismus

Multilobatio

Reduplicatio

Status accessorius

Status supernumerarius

Fusio abnormalis

Concrescentia

Conjunctio

Obliteratio

Obstructio

Occlusio

Stenosis

Defectus fusionis

Exstrophia

Fissio

Fissura

Fistula

Schistasis

Patentia

Septatio

Sinus

Gradus dysmorphogenesisis**Errores reproductionis**

Infertilitas

Sterilitas

Mors prenatalis [prae-]

Abortio

Resorptio

Retentio

cum calcificatione

cum compressione

cum mumificatione

Partus mortuus

Defectio congenitalis

Defectio prenatalis [prae-]

Defectio postnatalis

Defectio morphologica

simplex

Variatio

Malformatio

Anomalia

multiplex

Syndroma

Monstrum

Tumor monstruosus⁶⁴

' functionalis

Defectio metabolica congenitalis

Defectio gametogenica

Defectio premeiotica [prae-]

Defectio meiotica

Defectio chromosomal

Defectio genetica

Defectio gametica

Defectio fertilisationis

Gametus immaturus

Gametus senilis

Polyspermia

Zygota corrupta

Defectio implantationis

Implantatio corrupta

Implantatio ectopica

abdominalis

primaria

secundaria

ovarica

tubalis

ampullaris

ostialis

isthmica

uterina interstitialis

cervicalis

Defectio membranarum fetalium

Defectio amniotica

Adhesio [Adhaesio]

Hydramnion

Oligohydramnion

Tenia [Taenia] amniotica

Defectio chorionica

Deformatas placentalis

Defectio placentalis

Defectio chorionica paraplacentalis

Defectio funiculi umbilicalis

Funiculus arcuatus

Strangulatio

Amputatio

Anomalia vascularis

Defectio embryogenesisis

Defectio aggregationis

Defectio canalisationis

Defectio compositionis

- ' Gonosomia
 - Monosomia
 - Trisomia
- Autosomia
 - Monosomia
 - Trisomia
 - Polysomia
 - Mosaicismus

- ' ' accidentalis
 - iatrogenica
 - nutritionalis
- physica
 - mechanica
 - Radiatio
- Causa ignota

Aberratio morphologica chromosoma

- Deletio
- Duplicatio
- Fractura
- Indisjunctio
- Inversio
- Isochromosoma
- Translocatio
- Chromosoma anuliforme
- Satelles

Defectio genetica

- Defectio hereditaria
- Mutatio genorum
 - Deletio
 - Duplicatio
 - Genum letale
 - Genum mutans
 - Translocatio
- Genum autosomale
 - dominans
 - recessivum
- Genum gonosomale
 - dominans
 - recessivum

Causa functionalis

- Deficientia
 - stimulatoria
 - reactiva
 - cytogenetica
 - histogenetica
 - organogenetica
- Abundantia
- Causa humoralis
 - Deficientia
 - Abundantia
- Causa immunalis
- Causa infectiva
- Causa vicinalis
 - chemica

CURSUS DYSMORPHOGENESIS**Deficientia**

- Deficientia functionalis
- Deficientia histogenetica
- Deficientia organogenetica
- Deficientia reactiva
- Deficientia secretoria
- Deficientia sensilis
 - Amaurosis
 - Anodynia
 - Anosmia
 - Atactilia
- Deficientia muscularis tonalis [Amyotonia]
- Dystrophia intestinalis
- Incompatibilitas immunalis

Abnormalitas crescentiae

- Agenesis
- Atavismus
- Conjunctio
- Macroplasia
- Microplasia
- Crescentia abnormalis
 - Organismus totalis
 - Asymmetria [Hypertrophia unilateralis]
 - Amorphia [Fetus amorphus]
 - Hypertrophia symmetrica [Gigantismus]
 - Deficientia [Nanismus]
 - hormonalis
 - pituitaria [Nanus pituitarius]
 - thyroidea [thyroidea] [Nanus cretinicus]
 - vitaminalis
 - Defectus plasmaticus [Aprosopia]
- Organum unum, Pars localis
 - Deficientia
 - Agenesis
 - Atresia
 - Hypoplasia
 - Defectus canalisationis

- ' ' Defectus fusionis
 - Apertura persistens
 - Fissura persistens
 - Patentia persistens
- Defectus separationis
- Defectus septationis
 - intracardiacus
 - Cor triloculare
 - intracelomicus [-coel-]
 - Hiatus phrenicus
- Abundantia
 - Gigantismus localis
 - Hyperplasia
 - totalis
 - partialis
- Hypertrophia
- Multiplicatio organi
 - Organum supernumerarium
 - Superlobatio
 - Superpartitio

Abnormalitas organi

- Defectio
 - fusionis
 - hormonalis
 - migrationis
 - Deficientia
 - cellularis
 - organalis
 - Abundantia
 - perforationis
 - plicationis
 - retroplastica
 - synthesis
- Duplicatio
 - Organum unum
 - partialis
 - totalis
 - Organismus totalis
 - Polyembryonia
 - Corpora conjuncta⁶⁶
- Ectopia
 - hernialis
 - inversionalis
 - originalis
 - translocationalis
- Exstrophia
- Inversio
 - partialis
 - totalis

- Persistentia
 - Atresiae naturales
 - Formae fetales
- Syndroma

Abnormalitas textus

- Abundantia
 - integumentalis
 - dermalis
 - epidermalis
 - Stratificatio [Ichthyosis]
 - Pigmentatio [Melanismus]
 - vascularis
- Excrescentia cartilaginea [Nodulus cartilagineus]
- Excrescentia ossea [Exostosis]
- Neoplasia
 - textus neuralis [Neuroblastoma]
 - textus notochordalis [Chordoma]
 - textus renalis [Nephroblastoma]
- Ametastasis
- Heteroplasia
- Hypofunctio
- Hyperfunctio
 - metabolica
 - somatica
- Deficientia
 - intracellularis
 - cellularis
- Dysplasia
 - ectodermalis
 - epidermalis
 - neuralis
 - ossea
 - Achondroplasia
 - Osteogenesis imperfecta
 - multiplex
- Retroplasia

Abnormalitas interactionis cellularis

- Absentia
- Deficientia
- Impedimentum

TERMINI DYSMORPHICI SPECIALES**Defectus capitis****Defectus cranialis**

Acephalia
 Cebocephalia
 Dicephalia
 Hemicephalia
 Hydrocephalia
 Macrocephalia
 Microcephalia
 Craniosynostosis⁶⁷
 Oxycephalia
 Pachycephalia
 Plagiocephalia
 Scaphocephalia
 Schistocephalia [Cephaloschisis]
 Tricephalia
 Canalis craniopharyngeus
 Acrania
 Hemicrania
 Schistocrania [Cranioschisis]

Defectus encephalicus

Anencephalia
 Exencephalia
 Hypoplasia prosencephali⁶⁸
 Dysplasia cerebelli
 Abiotrophia cerebelli
 Hydrencephalia
 Macrencephalia
 Micrencephalia
 Agyria
 Microgyria
 Pachygyria
 Polygyria
 Encephalocelia [-coelia]
 Meningocelia [-coelia]
 cranialis
 spinalis
 Meningoencephalocelia [-coelia]

Defectus lingualis

Aglossia
 Ankyloglossia
 Macroglossia
 Microglossia
 Diglossia
 Pachyglossia

Schistoglossia

Defectus maxillaris et mandibularis

Agnathia
 Brachygnathia inferior, superior
 Prognathia inferior, superior
 Dignathia
 Macrognathia
 Micrognathia
 Hypognathia
 Schistognathia [Gnathoschisis]
 Otonathia⁶⁹

Defectus facialis

Aprosopia
 Diprosopia
 Schistoprosopia
 Fissura facialis obliqua
 Defectus oralis
 Astomia
 Macrostomia
 Microstomia
 Defectus nasalis
 Arrhinia
 Dirrhinia
 Achalasia choanae
 Proboscis

Syndroma schistopalatinum

Defectus labialis
 Acheilia
 Macrocheilia
 Schistocheilia [Fissio labialis]
 unilateralis
 bilateralis
 mediana
 Defectus palatinus
 Palatum fissum
 Fissura palatina
 mediana
 unilateralis
 bilateralis

Defectus ocularis

Anophthalmia
 Cryptophthalmia
 Cyclopia
 Macrophthalmia
 Microphthalmia
 Hypertelorismus ocularis

Hypertelorismus orbitalis
 Ablepharia
 Blepharophimosis
 Ankyloblepharia
 Dacryostenosis
 Cornea conicalis
 Cornea plana
 Cornea perforata
 Fovea lentis persistens
 Aniridia
 Coloboma iridis
 Polycoria
 vera
 spuria
 Membrana pupillaris persistens
 Glaucoma congenitale
 Aplasia lentis [Aphakia]
 Cataracta congenitalis
 Ectopia lentis
 Arteria hyaloidea persistens
 Hypoplasia choroideae [chorioideae]⁷⁰
 Cystis retinalis
 Coloboma retinae
 Atrophia retinae
 Dysplasia retinae

Defectus auricularis

Otocephalia
 Ankylotia
 Synotia
 Microtia
 Anotia
 Macrotia
 Polyotia
 Cystis preauricularis [prae-]
 Sinus preauricularis [prae-]

Defectus dentalis

Anodontia
 Hyperodontia
 Hypodontia
 Polyodontia
 Polyphyodontia
 Enameloma [Adamantinoma]
 Cystis dentigera

Defectus cervicalis

Costa cervicalis
 Cystis cervicalis

' branchialis
 thyroglossalis [thyreo-]
 Fistula cervicalis [branchialis]
 Sinus cervicalis [branchialis]
 Saccus pharyngeus persistens
 Glandula thyroidea [thyreoidea] absens
 Glandula thyroidea [thyreoidea] accessoria
 Malpositio glandulae thyroideae [thyreoideae]

Defectus columnae vertebralis

Vertebra thoracica accessoria
 Vertebra lumbalis accessoria
 Vertebra sacralis accessoria

Kyphosis
 Lordosis
 Scoliosis
 Kyphoscoliosis
 Torticollis⁷¹
 Hemivertebra
 Vertebra transitoria⁷²
 Chordoma
 Neuroblastoma
 Rachischisis vertebralis
 Fissura craniospinalis
 Fissura arcus vertebrae
 Spina bifida
 Meningocele [-coelia]

Defectus medullae spinalis

Amyelia
 Diplomyelia
 Schistomyelia [Myeloschisis]
 Spina bifida
 aperta
 occulta
 Meningocele [-coelia]
 Myelocele [-coelia]
 Meningomyelocele [-coelia]

Defectus thoracici**Defectus cardiacus**

Acardia
 Diplocardia
 Hemicardia
 Ectocardia
 Dextrocardia
 Dextroaorta

Ectopia cordis
 Cor biloculare
 Cor triloculare
 batriale
 biventriculare
 Defectus septi interatrialis
 Foramen ovale persistens
 Septum primum absens
 Septum secundum absens
 Defectus septi interventricularis
 Foramen interventriculare patens
 Pars membranacea defecta
 Pars muscularis defecta
 Truncus arteriosus persistens
 Truncus pulmonalis duplex

Tetralogia Fallotii
 Transpositio aortae
 Stenosis trunci pulmonalis
 Hypertrophia ventriculi dextri
 Defectus septi interventricularis
 Dysplasia valvae
 Stenosis valvae atrioventricularis
 Stenosis valvae trunci pulmonalis
 Stenosis valvae aortae
 Canalis atrioventricularis persistens
 Fibroelastosis endocardiaca

Defectus vascularis
 Aorta coarctata
 Aorta dextra persistens
 Truncus pulmonalis stenoticus
 Ductus arteriosus persistens
 Vena cava cranialis duplex
 Origo pulmonalis arteriae coronariae
 Aneurisma arteriovenosum
 Anastomosis v. portae cum v. cava caudali⁷³
 Hemangioma [Haemangioma]

Defectus thoracicus parietalis
 Schistosternia
 Foramen sternale
 Costa bifurcata
 Schistosoma reflexum⁷⁴

Defectus thoracicus respiratorius
 Fistula tracheoesophagealis [-oeso-]
 Cystis pulmonalis
 Multilobatio pulmonis
 Lobus azygos

Pulmo polycystica
 Hypoplasia pulmonis
 Situs inversus visceralis
 partialis
 totalis

Defectus abdominales

Defectus canalis alimentarii
 Brachyesophagia [-oeso-]
 Megaesophagia [-oeso-]
 Achalasia esophagi [oesophagi]
 Fistula tracheoesophagealis [-oeso-]
 Ventriculus thoracicus
 Malrotatio intestini
 Situs inversus abdominalis
 Diverticulum intestinale jejuni
 Diverticulum jejunale patens
 Chorda fibrosa
 Fistula umbilicalis
 Mucosa gastrica umbilicalis
 Volvulus congenitalis
 Intussusceptio congenitalis
 Mesenterium inconjunctum
 Lobus hepatis accessorius
 Stenosis ductus choledochi
 Pancreas anulare
 Hernia
 diaphragmatica
 umbilicalis
 inguinalis
 Eventeratio
 Gastroschisis
 Schistocelia [-coelia]
 Exomphalos
 Omphalocelia [-coelia]
 Cecum [Caecum] mobile
 Ectopia ceci [caeci]
 Megacolon
 Aganglionosis
 colonica
 rectalis
 Fistulae rectales
 Anus imperforatus

Defectus organorum urinarium
 Ren glomeratus
 Ren lobatus
 Ren pelvicus
 Ren polycysticus

Ren sigmoideus

Ren unguiformis

Ureter duplex

Ureter bifurcatus

Ureter ectopicus

Ureter dorsocavalis

Stenosis ureteris

Ectopia vesicae urinariae

Cystis urachalis

Sinus urachalis

Defectus organorum genitalium

Hydrocelia [-coelia] testis

Ectopia testis

Anorchismus

Cryptorchismus

Polyorchismus

Hermaphroditismus

Pseudohermaphroditismus

Diphallia

Epispadia

Hypospadiac

Anovaria

Polyovaria

Ovotestis

Intersexus

Uterus infantilis

Uterus unicornis

Uterus bicervicalis

Uterus duplex

Uterus didelphys

Vagina septata

Defectus apparatus urogenitalis

Cloaca persistens

Fistula

 rectourethralis

 rectovaginalis

 rectovesicalis

 rectovestibularis

 vesicovaginalis

Defectus urethrae masculinae

 Urethra diphallica

 Urethra epispadiaca

 Urethra hypospadiaca

Phimosis

Defectus integumentii

Ichthyosis

Polymerismus

Achorea

Alopecia

Atrichia

Hypertrichosis

Hypotrichosis

Anhydrosis

Hypohydrosis

Hypochromia

Albinismus

 partialis

 totalis

Hyperchromia

Melanismus

Nevus [Naevus]

Cystis dermoidea

Cystis pilonidalis

Dermoideum

Excrescentia preauricularis [prae-]

Fistula pilonidalis

Sinus dermalis

Sinus pilonidalis

Onychodystrophia

Anonychia

Hyperonychia

Polyonychia

Dysmastia

Amastia

Gynecomastia [Gynaecomastia]

 unilateralis

 bilateralis

Hypermastia

Macromastia

Micromastia

Polymastia

Athelia

Hyperthelia

Microthelia

Polythelia

Defectus skeletales**Absentia**

longitudinalis
 radialis, tibialis
 ulnaris, fibularis
 centralis
 transversalis
 terminalis

Fusio

glenoidalis
 cubitalis
 radioulnaris (Car, su)
 carpalis
 metacarpalis (Car, su)
 phalangealis
 digitalis
 coxalis
 genualis
 tibiofibularis (Car, su)
 tarsalis
 metatarsalis (Car, su)

Dysmelia

Amelia
 Brachymelia
 Dimelia
 Dolichostenomelia
 Ectromelia
 Hemimelia .
 Macromelia
 Meromelia⁷⁵
 Micromelia
 Notomelia
 Peromelia⁷⁵
 Phocomelia
 preaxialis [prae-]
 postaxialis
 Polymelia
 Schistomelia
 Sirenomelia
 Symmelia
 Abrachia
 Hemihypertrophia brachialis
 Macrobrachia
 Microbrachia
 Tribrachia

Acheiria
 Dicheiria
 Macrocheiria
 Microcheiria
 Schistocheiria [Cheiroschisis]

Apodia
 Macropodia
 Monopodia
 Schistopodia [Podoschisis]
 Sympodia
 Tripodia

Adactyilia
 Ankylodactyilia
 Arachnodactyilia
 Brachydactyilia
 Camptodactyilia
 Clinodactyilia
 Ectrodactyilia
 Macrodactyilia
 Microdactyilia
 Polydactyilia
 Polysyndactyilia
 Syndactyilia

Hyperphalangia [Polyphalangia]
 Hypophalangia
 Triphalangia digiti I

Talipes
 Arthrogryposis
 Contractura tendinis
 Deformitas flexa articulationis
 Deformitas angularis articulationis (valgus,
 varus)

Exostosis

Hyperostosis
 Synostosis
 Osteochondrodysplasia
 Osteochondrodystrophia

ANNOTATIONES EMBRYOLOGICAE

- ¹ *Phylogenesis, Reproductio asexualis [agametica]*. These terms lie outside the heading of *Reproductio mammalium*.
- ² *Tempus libidinis, Tempus gestationis*. The length of libido or gestation.
- ³ *Multiparitas*. An animal with many successful gestations in its life.
- ⁴ *Gestatio polyembryonica [Polyparitas]*. When giving birth, bringing forth several young.
- ⁵ *Spermiogenesis*. That portion of spermatogenesis during which the spermatid is converted to a spermatozoon.
- ⁶ *Spheroideum [Sphaeroideum]*. A specific term for the 2-16 cell stage, used in cloning for instance.
- ⁷ *Compactio* is a newly introduced term to name the event in early cleavage-stage mammalian embryos, during which blastomeres become tightly joined, maximizing their contact with one another and forming a compact ball of cells. The process of compaction is readily visible in *in vitro* cultured Morulae and Blastulae (Spheroidea) and is an important criterion for assessing pre-implantation embryos.
- ⁸ *Expansio nodi embryonici*. The stretching of the embryonal node.
- ⁹ *Plica limitans* is the amniotic fold which rises at the periphery of the Sulcus limitans disci embryonici and develops into the Plica chorioamniotica.
- ¹⁰ *Odontoblasti*. Experimental evidence attests their neural crest origin.
- ¹¹ *Textus epithelioideus*. Adrenal cortex; gonadal parenchyma.
- ¹² *Osteogenesis membranacea [desmalis]*. A synonym used by German embryologists.
- ¹³ *Processus neuralis* is a novel term referring to the phylogenetic origin of Arcus vertebrae.
- ¹⁴ *Osteocranium*. This term is introduced in the second edition of the N.E.V. because it is commonly used in textbook of veterinary embryology.
- ¹⁵ *Ala ossis presphenoidalis [prae-]*. This structure may have contributions from pharyngeal arch cartilages.
- ¹⁶ *Cartilago physialis* is the plate of growing and calcifying cartilage between the Epiphysis and the Metaphysis. This term replaces Lamina epiphysialis of the first edition to comply with N.A.V. and N.H.
- ¹⁷ *Musculatura vasorum*. Except the musculature of the aortic arch which originates from neural crest. For the remaining vessels see Systema vasculare (p. 15).
- ¹⁸ *Ductus thyroglossus*. The alternative term Ductus thyroglossalis, although often used in embryologic texts including the first edition of N.E.V., is deleted in favour of the term Ductus thyroglossus which is also listed in N.A.V.
- ¹⁹ *Laminae hepaticae*. Hepatic cords.
- ²⁰ *Insulae pancreaticaе*. These may derive from neural crest cells.

- ²¹ *Vestigium ductus vitellini*. Meckel's diverticulum.
- ²² *Plica genitalis* replaces the former term *Septum urogenitale* which was very rarely used in veterinary embryology and often confused with *Plica urogenitalis* or *Septum urorectale*. It denotes the peritoneal fold which separates *Excavatio rectogenitalis* from *Excavatio vesicogenitalis* in postnatal life and contains the *Ductus deferens* in the male.
- ²³ *Cardiogia* [*Cardiogelatina*]. Known as "cardiac jelly" in English.
- ²⁴ *Septum intermedium* is the trabecular structure that divides the single *Canalis atrioventricularis communis* into a right and a left atrioventricular canal as the growing edges of the *Tubera endocardialia atrioventricularia* meet and fuse. This septum provides a base upon which the interatrial and interventricular septa can fuse to completely separate the right and left atria from each other and the right and left ventricles from each other, respectively.
- ²⁵ *Limbus fossae ovalis*. After postnatal closure of the *Foramen ovale* by the *Valvula foraminis ovalis*, the border surrounding the previous foramen remains visible on the interatrial septum from within the right auricle as an elevated rim surrounding the *Fossa ovalis*.
- ²⁶ *Foramen interventriculare primum*. This becomes the *Ostium aortae*.
- ²⁷ *Foramen interventriculare secundum*. Obliterated when the endocardial cushion forms the membranous part of the interventricular septum.
- ²⁸ *Septum atrioventriculare* is a small membranous septum between *Atrium dextrum* and *Ventriculus sinister*, situated dorsal to the base of *Cuspis septalis* of *Valva atrioventricularis dextra*. Defective development of this septum leads to a congenital defect that has been described occasionally in domestic animals.
- ²⁹ *Septum aorticopulmonale* is listed twice as it is formed by the bulbar and truncal aorticopulmonary ridges. This septum is often designated by the synonym *Septum spirale* (spiral septum) in embryologic works.
- ³⁰ *Hemocytoblasti* [*Haemocytoblasti*]. For Hemocytogenesis : see N.H.
- ³¹ *Truncus aorticus*. Used here only as starting point for the arteries.
- ³² *Arcus aorticus sextus (VI)*. Aortic arch VI may not exist.
- ³³ *Truncus pulmonalis*. The pulmonary trunk may be a branch of aortic arch IV.
- ³⁴ *Ductus arteriosus*. The ductus arteriosus may be formed from branches that grow between the pulmonary trunk and the aorta.
- ³⁵ *A. axialis membri thoracici, pelvini*. Common stem artery for the limb.
- ³⁶ *Plica mesonephrica*. The serosal covering and attachment of the mesonephros.
- ³⁷ *Gonada, Ductus genitales*. For the ligaments of the genital organs see *Celomata et Septa* p. 13.
- ³⁸ *Racemus ovarum*. Clusters of germ cells.
- ³⁹ *Endocrinocytus calcitoninus*. This cell of the *Corpus ultimobranchiale* may be of neural crest origin.
- ⁴⁰ *Cortex* [*Organum interrenale*]. The *Cortex adrenalis* may be derived from disaggregated cells from the intermediate mesoderm.

⁴¹ *Oculus*. In order to harmonize the lists of N.A.V., N.H. and N.E.V., several changes were made in the terms listed under the header *Oculus*. However, there are still a number of inconsistencies, such as the origin of *M. sphincter pupillae* and the nomenclature of the ganglion layers of the retina. Furthermore, several particularities of retinal development, including the formation of a marginal and neuroblastic layer, and the subsequent subdivision of the neuroblastic layer by a transient layer [of Chievitz] are not yet covered adequately.

⁴² *Neurectoderma opticum* is a novel term to situate the origin of the retina.

⁴³ *Stratum nervosum* is a newly introduced term adopted from N.A.V. and N.H. It denotes the retinal portion that develops from the inner layer of the optic cup and differentiates into a multilayered arrangement of nerve cells that transform light stimuli into nerve impulses for the optic nerve. The *Stratum nervosum* forms the inner part of the *Pars optica retinae* and extends posterior to the *Ora serrata*.

⁴⁴ *Epithelium nonpigmentosum* is a term adopted from N.H. and replaces the former term *Epithelium ciliare* of the first edition of N.E.V.

⁴⁵ *Epithelium pigmentosum* is a term adopted from both N.A.V. and N.H. and replaces the former term *Epithelium iridicum* of the first edition of N.E.V.

⁴⁶ *Stratum pigmentosum retinae*. The former term "*Stratum pigmentosum*" is made more specific by adding the genitive "*retinae*" in conformity to N.A.V. This pigmented layer of the retina develops from the outer layer of the optic cup and forms the outer part of the *Pars optica retinae*.

⁴⁷ *Epithelium pigmentosum* is a term adopted from N.H.

⁴⁸ *Mesenchyma camerae aquosae, Camera aquosa*. *Camera aquosa* comprehends *Camera anterior* et *Camera posterior* bulbi of the N.A.V.

⁴⁹ *Tunica interna*. Corresponds to the *Endomeninx* of the brain.

⁵⁰ *Tunica vasculosa bulbi [Uvea]* is composed of three parts, viz. *Choroidea*, *Corpus ciliare* and *Iris*. The alternative term *Uvea* is added as an official synonym in order to be conform with N.H. and because this term is often used in ophthalmology when describing clinical disorders such as uveitis.

⁵¹ *Choroidea [Chorioidea]*. This newly introduced term is adopted from N.A.V. and N.H. Its *Lamina pigmentosa*, however, is not identified in N.A.V. nor in N.H.

⁵² *Tunica externa*. Corresponds to the *Dura mater* of the brain.

⁵³ *Ectoderma opticum* is a novel term introduced to situate the origin of the anterior corneal epithelium.

⁵⁴ *Incus (pleraque), Malleus (plerusque), Stapes (partim)*. Chimeric studies in birds (there are no data for mammals) indicate that the footplate of the stapes comes from the cartilage of the otic capsule, whereas the shaft and distal limbs of the stapes come from neural crest tissue of the second pharyngeal arch.

⁵⁵ *Pili*. The term *Lanugo* is deleted in the present edition of N.E.V. because there is no evidence that this hair type is present in domestic mammals.

⁵⁶ *Saccus vitellinus trilaminaris*. Persists in the dog and horse.

⁵⁷ *Villi chorii primarii, secundarii, tertiarum*. The first edition of N.E.V. only listed *Villi chorii primarii* which are entirely ectodermal. *Villi chorii secundarii* are composed of an ectodermal surface surrounding a

mesenchymal core. Villi chorii tertiarrii consist of an ectodermal covering around a mesenchymal core which contains allantoic (umbilical) blood vessels.

⁵⁸ *Bracteolae amnioticae*. Amniotic plaques.

⁵⁹ *Denudatio*. In veterinary embryology the term *Denudatio* refers to the process by which the expanding blastocyst erupts through the *Zona pellucida*. This hatching process (in German: "Auschlüpfen") is necessary to allow maximal expansion of the pre-implantation embryo and its adherence to the uterine wall. In reproductive research, however, the term "denudation" is used for the removal of the cumulus oöphorus follicle cells surrounding the oocyte. This process occurs in vivo in the uterine tube and is performed in vitro by means of a denudation pipette or enzymatically.

⁶⁰ *Phasis conjunctionis*. Attachment phase.

⁶¹ *Placenta labyrinthica* is an intricate interdigitating placental system formed by chorionic and endometrial lamellae in some species including carnivores and rabbits. The chorionic villi obtain a labyrinthine arrangement because they branch in a lamellar or foliate manner to the extent that there is extensive overlap and fusion of the adjacent branches.

⁶² *Placentomus*. A placentome is a separate unit of the placenta of ruminants, consisting of a maternal part (uterine caruncle) and a fetal part (chorionic cotyledone).

⁶³ *Haematoma [haematoma] marginale*. Marginal hematomas are present in the carnivore placenta at the borders between the *Zona placentaria* and the *Zona paraplacentaria*.

⁶⁴ *Tumor monstruosus*. This structure is often designated by alternative terms such as *Globosus amorphus*, *Mola*, *Acardia*, *Anideus*, *Chorioadenoma* and *Choriocarcinoma*.

⁶⁵ *Junctio media thoraco-epigastrica*. This novel term replaces the former term *Junctio media thoraco-gastrica*, indicating the body wall regions that are fused.

⁶⁶ *Corpora conjuncta*. As in conjoined twins.

⁶⁷ *Craniosynostosis*. This term replaces the term *Craniosynotosis* of the first edition, because it is far more descriptive and more frequently used.

⁶⁸ *Hypoplasia prosencephali* is a congenital condition observed in calves.

⁶⁹ *Otognathia* is a congenital disorder characterised by the presence of a rudimentary accessory mandible at the auricular base. It is most commonly encountered in sheep and to a lesser degree in calves.

⁷⁰ *Hypoplasia choroideae [chorioideae]*. Choroidal hypoplasia is a very common disorder observed in dogs, in particular in Collie breeds, and is generally considered to be the essential lesion of Collie Eye Anomaly. In this recessively inherited congenital ocular syndrome, abnormal mesodermal differentiation results in defects of the posterior parts of the vascular and fibrous tunics of the globe.

⁷¹ *Torticollis* is a well documented congenital or postnatally acquired disorder ("wry neck") in domestic mammals, especially in horses.

⁷² *Vertebrae transitoriae*. Transitional vertebrae rank among the most common congenital disorders in domestic mammals.

⁷³ *Anastomosis v. portae cum v. cava caudali*. Portocaval shunt.

⁷⁴ *Schistosoma reflexum*. This congenital disorder is frequently observed in domestic animals, especially in cattle.

⁷⁵ *Meromelia* denotes incomplete limb development, viz. the absence of specific parts (e.g. tibia and fibula) in one or more limbs. It is a more specific term than *Peromelia* which emphasizes that the affected limb is short and blunt.