NOMINA EMBRYOLOGICA VETERINARIA

SECOND EDITION (revised version)

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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Preface to the second Edition - revised version (2017)

The present revised version of the Nomina Embryologica Veterinaria (N.E.V.) is published on the website of the World Association of Veterinary Anatomists in 2017.

It differs from the second edition published in 2006 by taking into account the recommendations of the Nomenclature Coordinating Committee, consisting of the Chairmen and Secretaries of the International Committee on Veterinary Gross Anatomical Nomenclature (I.C.V.G.A.N.), the International Committee on Veterinary Histological Nomenclature (I.C.V.H.N.) and the International Committee on Veterinary Embryological Nomenclature (I.C.V.E.N.).

The Coordinating Committee convened on June 19, 2016 in Ghent (Belgium) for discussing the discrepancies between the Nomina Anatomica Veterinaria (N.A.V.), Nomina Histologica Veterinaria (N.H.V.) and Nomina Embryologica Veterinaria (N.E.V.). Proposals to obtain uniformity were drafted and were submitted in 2017 to the Boards of the three Nomenclature Committees for discussion and approval. The resulting changes are indicated in blue in the revised version published herewith.

President of the W.A.V.A.
M. Pereira-Sampaio *(Rio-de-Janeiro, Brasil)*

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F. Sinowatz *(Munich, Germany)*
P. Cornillie *(Ghent, Belgium)*
P. Simoens *(Ghent, Belgium)*

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 Veterinaria (N.H.V):

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];
- Greek terms that serve as a prefic or suffix, e.g. Testis [Orchis], Tuba uterina [Salpinx], Lien [Splen].

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.V. 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, ungulae, 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.),* induded 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 (Tenessee, 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]

Ontogenesis

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

Click on term to read footnote

' ' Cyclus mammarius
- Phasis proliferationis
- Lactatio
  - Phasis colostralis
  - Phasis lactiva
  - Phasis involutionis
  - Phasis inactiva

Gestatio
- Primiparitas
- Uniparitas
- Multiparitas[3]
- Nulliparitas
- Gestatio mono-embryonica [Monoparitas]
- Gestatio biembryonica [Biparitas]
- Gestatio polyembryonica [Polyparitas][4]
- Tempus gestationis[2]

Cyclus genitalis masculinus
- Phasis testicularis
  - Phasis fetalis
  - Phasis prepubertalis [prae-]
  - Phasis pubertalis
  - Phasis matura
  - Phasis senilis
- Involutio testis

GAMETOGENESIS [PRO-ONTOGENESIS]

MATURATIO GAMETORUM

Cellulae germinales primordiales
MITOSIS (*vide* N.H.V.)
MEIOSIS (*vide* N.H.V.)

Cyclus genitalis masculinus
Testis
- Unda spermatogenica
- Segmentum germinativum
- Epithelium spermatogenicum
- Cyclus spermatogenicus
  - Cellulae spermatogenicae
  - Spermatogenesis (*vide* N.H.V.)
  - Spermiogenesis[5]
  - Spermatozoon [Spermium] (*vide* N.H.V.)

Cyclus sexualis femininus
Cyclus estrosus [oestrosus]
- Pro-estrus [Pro-oestrus][Pre-estrus; Prae-]
- Estrus [Oestrus]
- Metestrus [Metoestrus] [Postestrus; -oestrus]
- Diestrus [Dioestrus] [Interestrus; -oestrus]

Anestrus [Anoestrus]

Cyclus genitalis femininus
Ovarium
- Cyclus ovogeneticus
- Cellulae ovogeneticae
- Ovogenesis (*vide* N.H.V.)

PERIODUS PRE-EMBRYONICA [PRAE-]

Ovulatio
Ovulatio unifollicularis
Ovulatio multifollicularis
Ovulatio spontanea
Ovulatio provocata
Ovulatio inducta
Superovulatio
Ovum ovulatum
- Involucra
  - Corona radiata
  - Zona pellucida
  - Spatium perivitellinum
  - Membrana vitellina
- Ovoplasma
  - Ovolemma [Plasmalemma]
  - Cortex
    - Granula corticalia
  - Deuteroplasma [Vitellus]
  - Idioplasma

Copulatio
Coitus
- Coitus vaginalis (Ru)
- Coitus uterinus (su, Car, eq)
- Coitus cervicalis (su)

Ejaculatio
Inseminatio

Fertilisatio
Capacitatio
- Reactio acrosomalis

Motus spermii

Click on term to read footnote

Via spermatica
Impregnatio spermii
Penetratio spermii
- Conus fertilisationis
- Membrana fertilisationis
- Membrana vitellina
- Spatium perivitellinum
- Liquor perivitellinus
- Monospermia
- Dispermia
- Polyspermia

Conceptio
Ovum fertilisatum [Spermovium]
- Pronucleus masculinus
- Pronucleus femininus
- Aster spermaticus
- Conjugatio
- Zygosis
- Zygota [Conceptus]

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 tangentiale

Blastomerus
- Macromerus
- Micromerus

Spheroideum [Sphaeroideum][6]
Morula
Compactio[7]

Blastulatio
Blastocystis [Blastula]
- Blastocystis unilaminaris
  - Trophoblastus
  - Cavum blastocystis
  - Massa cellularis interna [Embryoblastus]
- Blastocystis bilaminaris
  - Massa embryonica [Nodus embryonicus]
    - Epiblastus
    - Hypoblastus
    - Trophoblastus
    - Hypoblastus extraembryonicus
  - Saccus vitellinus primarius
- Blastocystis trilaminaris
  - Discus embryonicus
    - Ectoderma embryonicum
    - Endoderma embryonicum
  - Expansio nodi embryonici (Car)[8]
  - Embryocystis
    - Expansio embryocystis (su, Ru)
- Trophoblastus
  - Cytotrophoblastus
  - Syncytiotrophoblastus
  - Endoderma extraembryonicum

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]

Click on term to read footnote

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 limitans[9]

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 pharyngealis initialis
Prominentia frontonasalis
Prominentia prosencephalica
  Vesicula optica
Prominentia mesencephalica
Flexura mesencephalica
Prominentia rhombencephalica
Vesicula otica [Otocystis]
Flexura cervicalis
Arcus pharyngei [branchiales] (I-VI)
Sulci pharyngei [branchiales] (I-IV)
Sacci pharyngei (I-V)
Prominentia cardiaca
Gemma caudalis

Periodus pharyngealis ultima
Pharynx primitivus
Placoda nasalis
Placoda lentis
Prominentia hepatis
Prominentia mesonephrica
Anulus umbilicalis
Cauda

Mesoderma per periodum branchiogenesis
Mesoderma paraxiale
  Somiti
    Sclerotomi
      Pars cranialis (*vide* Skeleton axiale, N.E.V. p. 8)
      Pars caudalis (*vide* Skeleton axiale, N.E.V. p. 8)
    Myoceloma [-coel-]
    Dermatomyotomi
      Dermatomi
      Myotomi
        Myotomi prechordales [prae-] [preotici;-prae-]
        Myotomi parachordales [occipitales]
        Myotomi spinales
Mesoderma intermedium
  Lamina urogenitalis
Mesoderma laterale [Mesoderma laminae lateralis]
  Mesoderma somaticum [parietale]
  Somatopleura
  Mesoderma splanchnicum [viscerale]
  Splanchnopleura
Mesoderma pharyngeum [branchiale]
Mesoderma gemmarum membrorum
  Massa dorsalis
  Massa ventralis
Mesenchyma

Periodus gemmarum membrorum initialis
Calix opticus
Fovea lentis
Prominentia frontonasalis
  Prominentia nasalis medialis
  Fovea nasalis
  Prominentia nasalis lateralis
  Processus nasalis medianus
Gemma membri thoracici et pelvini
  Tuber membri
  Processus membri
  Margo preaxialis [prae-]
  Margo postaxialis
  Facies dorsalis
  Facies ventralis
  Axis proximodistalis
  Arteria axialis
  Crista ectodermalis apicalis

Periodus gemmarum membrorum sera
Prominentia telencephalica
Flexura cephalica
Prominentia mesencephalica
Flexura pontina
Prominentia rhombencephalica
  Prominentia metencephalica
  Prominentia myelencephalica
Flexura cervicalis
Vesicula lentis
Tubercula auricularia
Plica opercularis [Operculum hyoideum]
Sinus cervicalis
Tuberculum genitale
Membrum thoracicum
  Columna membri
  Lamina primitiva manus
  Primordia digitorum manus
Membrum pelvinum
  Columna membri
  Lamina primitiva pedis
  Primordia digitorum pedis
Fovea externa cloacalis
Crista mammaria

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 vulvae [pudendi]
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 autonomica
Neuroblasti
Chromaffinoblasti
  Corpora para-aortica
Neurolemmoblasti
  Myelinisatio
Glioblasti ganglionici
Melanoblasti
Mesenchyma capitis
Chondroblasti
Odontoblasti[10]

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

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

Mesoderma

Endothelium
Mesothelium
  Epithelium mesodermale
    Epithelium glandulare
    Textus epithelioideus[11]
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

Click on term to read footnote

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 interstitionale
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 neuralis[13]
        Arcus vertebrae
          Processus spinosus
          Processus transversus
          Processus articulares
Costa
  Costa precartilaginea [prae-]
  Costa cartilaginea
  Costa ossea
Discus intervertebralis
  Anulus fibrosus
  Nucleus pulposus

Click on term to read footnote

' Mesoderma sternale
Cartilago sternalis
Sternebrae
Processus xiphoideus

Cranium

Desmocranium
Chondrocranium
Osteocranium[14]

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 [thyreoidea]
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 physialis[16]
- 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 (plerusque)
- Primordium sphincteris ani externi
- Primordium sphincteris urogenitalis

Mesoderma splanchnicum

Musculatura canalis alimentarii

Musculatura arboris tracheobronchalis

Musculi systematis urogenitalis

Mesoderma cardiovasculare

Musculi cardiaci

Musculatura vasorum[17]

Mesoderma branchiomericum

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)

SYSTEMA DIGESTORIUM

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 labiogingivalis
Sulcus labiogingivalis
Lamina buccogingivalis
Sulcus buccogingivalis
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 linguogingivalis
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 radicis epithelialis
Diaphragma vaginae radicis
Porus vaginae radicis
Cuticula dentalis

Papilla dentis
Pulpa dentis
Odontoblastus
Predentinum [Prae-]
Dentinum

Sacculus dentalis
Lamina cementoblastica
Cementum
Lamina periodontoblastica

' Periodontium
Lamina osteoblastica
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 [-thyreoidea] externa
Pars ventralis
Gemma thymica major
Saccus pharyngeus quartus (IV)
Pars dorsalis
Gemma parathyroidea [-thyreoidea] interna
Pars ventralis
Gemma thymica minor
Saccus pharyngeus quintus (V)
Corpus ultimobranchiale

Diverticulum thyroideum [thyreoideum]
Foramen cecum [caecum]
Ductus thyroglossus [thyreo-][18]
Glandula thyroidea [thyreoidea]
Esophagus [Oeso-] primitivus
Ventriculus primitivus [Gaster primitiva]
Duodenum primitivum

Diverticulum hepaticum
Ductus hepatopancreaticus
Ductus choledochus
Pars cystica
Ductus cysticus
Vesica biliaris [Vesica fellea]
Pars hepatica
Antrum hepaticum
Ductus hepatici
Laminae hepaticae[19]
Gemma pancreatica ventralis
Ductus pancreaticus ventralis
Pancreas ventrale
Processus uncinatus (Ru)
Systema ductale primitivum
Acini pancreatici
Insulae pancreaticae[20]
Gemma pancreatica dorsalis
Pancreas dorsale
Ductus pancreaticus dorsalis
Systema ductale primitivum
Acini pancreatici
Insulae pancreaticae[20]

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 vitellini[21]
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. l7)

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 [-peritonaealis]
  Plica pleuroperitonealis [-peritonaealis]
  Membrana pleuroperitonealis [-peritonaealis]
Septum transversum
Diaphragma

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

MESENTERIA ET PLICAE PERITONEALES [PERITONAEALES]

Mesenterium dorsale primitivum
Mesoesophageum [-oesophageum] dorsale
Mesogastrium dorsale
  Omentum majus
    Lig. phrenicolienale
    Lig. gastrophrenicum
    Lig. gastrolienale
Mesoduodenum dorsale
Mesenterium
  Mesojejunum
  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 genitalis[22]
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

Click on term to read footnote

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 intermedium[24]

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 ovalis[25]
  - 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 primum[26]
  - Foramen interventriculare secundum[27]
  - Pars muscularis
  - Pars membranacea
- Septum atrioventriculare[28]
- Trabeculae carneae
- Musculi papillares

Ventriculus [dexter et sinister]
Bulbus aortae
- Cristae aorticopulmonales
  - Septum aorticopulmonale (partim)[29]
- Aorta (partim)
  - Valva aortae
    - Valvulae semilunares

Click on term to read footnote

' 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 aorticus[31]
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 pulmonalis[33]
Ductus arteriosus[34]
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 thoracici[35]
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 pelvini[35]
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 [-peritonaealis]
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 (lI)
Tonsilla palatina
Primordia tonsillarum
Tonsillae
Primordia lienis
Lien [Splen]
Lien accessorius
Arcus pharyngeus [branchialis] tertius et quartus (III et IV)
Thymus

SYSTEMA RESPIRATORIUM

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 canalicularis
    Arbor bronchalis
    Gemmae bronchulares
    Bronchuli
  Periodus sacculi terminalis
    Bronchuli respiratorii
    Sacculi alveolares
  Periodus alveolaris
    Ductuli alveolares
    Septa alveolaria
    Alveoli pulmonis

SYSTEMA UROGENITALE

ORGANA URINARIA

Mesoderma intermedium
  Lamina urogenitalis
  Chorda nephrogenica
  Nephrotomi

Pronephros
Glomerulum externum
Tubuli pronephrici
  Nephrostoma
  Canaliculus nephrostomaticus
Ductus pronephricus

Mesonephros
Blastema mesonephricum
Corpus mesonephricum
  Cumulus mesonephricus
  Vesicula
Nephronum mesonephricum
  Corpusculum mesonephricum
    Capsula glomeruli
    Glomerulum
Tubuli mesonephrici
  Pars secretoria
  Pars colligens
Ductus mesonephricus
Plica mesonephrica[36]
  Ligamentum diaphragmaticum
  Ligamentum genitale craniale

Metanephros
Blastema metanephricum
Capsula renis
  Capsula adiposa
  Capsula fibrosa
Nephronum
  Corpusculum renale
    Capsula glomeruli
    Glomerulum
  Tubulus renalis
    Pars convoluta tubuli proximalis [Pars contorta]
    Ansa nephronis
    Pars convoluta tubuli distalis [Pars contorta]
  Tubulus reuniens
Gemma ureterica
Torus uretericus
Ductus uretericus
Pelvis renalis primitiva
Ductus colligens primarius
  Ureter
  Pelvis renalis
  Calices renales
  Ductus papillares
  Tubuli reunientes
    Tubuli reunientes recti
    Tubuli reunientes 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

Gonada[37]

Status indifferens
  Crista genitalis
    Epithelium celomicum [coel-]
    Mesenchyma
  Cellulae germinales primordiales
    Migratio
      Chordae sexuales
' ' ' ' Cellulae germinales
  Blastema retis

Testis [Orchis]
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
Cortex
  Chordae corticales
    Ovogonia
    Racemus ovorum[38]
    Folliculi corticales primordiales
    Epitheliocyti folliculares
    Corpora atretica
Medulla
  Chordae medullares
  Rete ovarii
Stroma ovarii
  Textus connectivus cellularis
  Endocrinocyti interstitiales

Ductus genitales[37]

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 (Ru, eq)
Trigonum vesicae
Ductus paramesonephricus
Appendix testis
Uterus masculinus (partim)

Ductus genitales feminini
Tubuli mesonephrici
Epoophoron
Paroophoron
Ductus paramesonephricus
Pars preinfundibularis [prae-]
Appendix vesiculosa
Pars infundibularis
Pars postinfundibularis
Tuba uterina [Salpinx]
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 vulvae [pudendi]
Tubercula labioscrotalia
Plicae laterales (ca)
Sulcus urogenitalis
Vestibulum vaginae
Glandula vestibularis major
Glandulae vestibulares minores

GLANDULAE ENDOCRINAE

Glandula thyroidea [thyreoidea]
Diverticulum thyroideum [thyreoideum]
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 calcitoninus[39]

Hypophysis
Saccus adenohypophysialis
Canalis craniopharyngeus
Adenohypophysis
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
Cortex [Organum interrenale][40]
Mesothelium
Epithelium mesodermale
Epithelium glandulare
Textus epithelioideus
Medulla
Textus cristae neuralis
Epithelium glandulare
Chromaffinoblasti

Insulae pancreaticae[14] (*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
Intumescentia cervicalis
Intumescentia lumbosacralis
Conus medullaris
Filum terminale
Ascensus medullae spinalis

Crista neuralis

Segmenta cristae neuralis
Ganglia craniospinalia
Ganglia autonomica
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

OCULUS[41]
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

Click on term to read footnote

' Fissura optica
Placoda lentis
Fovea lentis
Porus lentis
Vesicula lentis
Cavum lentis
Epithelium lentis superficiale
Epithelium lentis profundum
Fibrae lentis
Capsula lentis

Neurectoderma opticum[42]
Retina
Lamina interna calicis
Pars optica retinae (partim)
Stratum nervosum[43]
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 nonpigmentosum[44]
Pars iridica retinae (partim)
Epithelium pigmentosum[45]
Lamina externa calicis
Pars optica retinae (partim)
Stratum pigmentosum retinae[46]
Pars ceca [caeca] retinae (partim)
Pars ciliaris retinae (partim)
Epithelium pigmentosum[47]
Pars iridica retinae (partim)
M. sphincter pupillae
M. dilatator pupillae

Mesenchyma opticum
Tunica vascularis lentis
Mesenchyma camerae vitreae
Arteria lentis
Arteria hyaloidea
Canalis hyaloideus
Corpus vitreum
Membrana vitrea
Mesenchyma camerae aquosae[48]
Camera aquosa[48]
' Humor aquosus
Mesenchyma capsulare
Tunica interna[49]
Tunica vasculosa bulbi [Uvea][50]
Choroidea [Chorioidea][51]
Lamina vasculosa
Lamina pigmentosa
Corpus ciliare (partim)
M. ciliaris
Iris (partim)
Stroma iridis
Membrana pupillaris
Tunica externa[52]
Sclera
Cornea (partim)

Ectoderma opticum[53]
Cornea (partim)

Organa oculi accessoria
Plicae palpebrales
Palpebrae
Epithelium ectodermale
Epidermis
Cilia
Epithelium conjunctivale
Gemmae glandularum palpebralium
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 (plerusque)[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
Pili[55]

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 trilaminaris[56]
- Cavum vitellinum
- Pedunculus vitellinus
  - Ductus pedunculi vitellini
- Sinus terminales

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

Chorion primarium
- Villi chorii primarii[57]

Chorion secundarium
- Villi chorii secundarii[57]

Chorion frondosum
Chorion laeve
Allantochorion [Chorion tertium]
- Villi chorii tertiarii[57]
- Cestus chorionicus (eq)
- Calices endometriales (eq)
- Cellulae calicis (eq)
- Regressio cellulae calicis (eq)
- Microcotyledones (eq)
- Cotyledones
- Areolae

Amniogenesis
Chorion primarium
Plica limitans[9]
Plica chorioamniotica
Umbilicus amnii
Chorion secundarium
Amnion
Cavum amnii
Epithelium amnii
- Bracteolae amnioticae[58]
- 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
Denudatio[59]
Tempus implantationis
- Phasis precontactionis [prae-]
- Phasis appositionis
- Phasis conjunctionis[60]
  - Phasis adhesionis [adhaesionis]
  - Phasis invasionis

Placentatio
Placenta
Pars fetalis
- Allantochorion
- Amniochorion (su, Ru)

Pars uterina

Click on term to read footnote

Typi placentae

Placenta adeciduata [Semiplacenta] (su, Ru, eq)
Placenta deciduata [Placenta vera] (Car)
Placenta labyrinthica[61]
Semiplacenta diffusa incompleta (su)
    Apex necroticus
Semiplacenta diffusa completa (eq)
Semiplacenta cotyledonaria (Ru)
    Placentomus[62]
    Apex necroticus
Placenta zonaria (Car)
    Zona placentaria (Car)
    Zona paraplacentaria (Car)
    Hematoma [Haematoma] marginale[63]
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

Click on term to read footnote

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

Nimium 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
Diplogenesis
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 dysmorphogenesis

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 monstruosus[64]
- ' functionalis
  - Defectio metabolica congenitalis

Defectio gametogenica
Defectio premeiotica [prae-]
Defectio meiotica
Defectio chromosomalis
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
- Deformitas placentalis
- Defectio placentalis
- Defectio chorionica paraplacentalis

Defectio funiculi umbilicalis
- Funiculus arcuatus
  - Strangulatio
  - Amputatio
- Anomalia vascularis

Defectio embryogenesis
Defectio aggregationis
Defectio canalisationis
Defectio compositionis

Defectio conclusionis
Defectio conjunctionis
Defectio crescentiae
Defectio differentiationis
Defectio fissionis
Defectio migrationis
Defectio perforationis
Defectio plicationis
Defectio retrogressionis
Defectio retroplasiae
Defectio separationis
Defectio septationis

Embryo defectum
Blastoma
Conceptus abortivus
Conceptus corruptus
Deformitas localis
  simplex
  multiplex
Dyspraxia
Embryo amorphicum
Gemini conjuncti
Monstrum
Partus mortuus
Tumor monstruosus[64]

Forma abnormalis
  totalis
  subtotalis
Fetus
  amorphicus
  calcificatus
  compressus [papyraceus]
  inclusus
Geminus acardiacus
  Defectio cordis
    totalis
    subtotalis
Gemini conjuncti
  Gemini symmetrici
    paralleli
    transversi
    Junctio cranialis
      dorsalis [cranialis, Craniopagus]
      lateralis
      ventralis [craniothoracalis, Janus]
    Junctio media
      xiphoidea
      sternalis
      thoracica
      thoraco-epigastrica[65]
    Junctio caudalis
      dorsalis [clunialis, glutealis; glutaealis]
      lateralis [Dipygus]
      ventralis [coxalis, pelvica]
  Gemini asymmetrici [unus imperfectus]
    Hospes
    Parasitus
    Junctio cranialis
      cranialis parasitica
      gnathialis parasitica
    Junctio media
      thoraco-epigastrica parasitica
      abdominalis parasitica
    Junctio caudalis
      pygalis parasitica
Nanus
  achondroplasticus
  atelioticus
  athyroideus [athyreoideus] [Cretinus]
  Animalculum
Gigas
  Acromegalicus

DYSMORPHOGENESIS

CAUSAE DYSMORPHOGENESIS

Causa genetica

Defectio chromosomalis
Karyotypus modificatus
  Abundantia chromosomalis
  Deficientia chromosomalis

Aberratio numerica chromosomalis
  Aneuploidea
  Heteroploidea
  Hyperploidea
    Triploidea
    Polyploidea
  Hypoploidea
    Monoploidea
  Aneusomia
    Monosomia
    Trisomia
    Polysomia

Click on term to read footnote

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

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

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 [thyreoidea] [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 conjuncta[66]
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
  Craniosynostosis[67]
Oxycephalia
Pachycephalia
Plagiocephalia
Scaphocephalia
Schistocephalia [Cephaloschisis]
Tricephalia
Canalis craniopharyngeus
Acrania
Hemicrania
Schistocrania [Cranioschisis]

Defectus encephalicus
Anencephalia
Exencephalia
Hypoplasia prosencephali[68]
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]
Otognathia[69]

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

Click on term to read footnote

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
Torticollis[71]
Hemivertebra
Vertebra transitoria[72]
Chordoma
Neuroblastoma
Rachischisis vertebralis
  Fissura craniospinalis
  Fissura arcus vertebrae
  Spina bifida
  Meningocelia [-coelia]

Defectus medullae spinalis
Amyelia
Diplomyelia
Schistomyelia [Myeloschisis]
  Spina bifida
    aperta
    occulta
      Meningocelia [-coelia]
      Myelocelia [-coelia]
      Meningomyelocelia [-coelia]

Defectus thoracici

Defectus cardiacus
Acardia
Diplocardia
Hemicardia
Ectocardia
Dextrocardia
Dextroaorta

Ectopia cordis
Cor biloculare
Cor triloculare
  biatriale
  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 caudali[73]
Hemangioma [Haemangioma]

Defectus thoracicus parietalis
Schistosternia
  Foramen sternale
Costa bifurcata
Schistosoma reflexum[74]

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 unguliformis
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
Hypospadia
Anovaria
Polyovaria
Ovotestis
Intersexus
Uterus infantilis
Uterus unicornis
Uterus bicervicalis
Uterus duplex
Uterus didelphys
Vagina septata

Defectus systematis urogenitalis
Cloaca persistens
Fistula
- rectourethralis
- rectovaginalis
- rectovesicalis
- rectovestibularis
- vesicovaginalis

Defectus urethrae masculinae
- Urethra diphallica
- Urethra epispadiaca
- Urethra hypospadiaca

Phimosis

Defectus integumenti

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
Meromelia[75]
Micromelia
Notomelia
Peromelia[75]
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

Adactylia
Ankylodactylia
Arachnodactylia
Brachydactylia
Camptodactylia
Clinodactylia
Ectrodactylia
Macrodactylia
Microdactylia
Polydactylia
Polysyndactylia
Syndactylia

Hyperphalangia [Polyphalangia]
Hypophalangia
Triphalangia digiti I

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

Exostosis
Hyperostosis
Synostosis
Osteochondrodysplasia
Osteochondrodystrophia

Click on term to read footnote

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.V.

[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 pancreaticae*. 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] *Cardioglia [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 Hemocytopoesis : see N.H.V.

[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 ovorum*. 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.V. 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.V. 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.V. 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.V. 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.V.

[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.V. 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.V. Its Lamina pigmentosa, however, is not identified in N.A.V. nor in N.H.V.

[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, tertiarii*. 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 tertiarii 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: "Ausschlüpfen") 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 hematomes 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.