

TERMINOLOGIA EMBRYOLOGICA

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FIPAT

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TE2, PART I

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Caput I: NOMINA GENERALIA

Chapter 1: GENERAL TERMS

	Latin term	Latin synonym	UK English	US English	English synonym	Other
1	Nomina generalia		General terms	General terms		
2	Modus reproductionis		Reproductive mode	Reproductive mode		
3	Reproductio sexualis		Sexual reproduction	Sexual reproduction		
4	Viviparitas		Viviparity	Viviparity		
5	Heterogamia		Heterogamy	Heterogamy		
6	Endogamia		Endogamy	Endogamy		
7	Sequentia reproductionis		Reproductive sequence	Reproductive sequence		
8	Ovulatio		Ovulation	Ovulation		
9	Erectio		Erection	Erection		
10	Coitus		Coitus	Coitus	Sexual intercourse	
11	Ejaculatio		Ejaculation	Ejaculation		<i>Endnote 1</i>
12	Emissio		Emission	Emission		
13	Ejaculatio vera		Ejaculation proper	Ejaculation proper		
14	Semen		Semen	Semen	Ejaculate	
15	Inseminatio		Insemination	Insemination		
16	Fertilisatio		Fertilization	Fertilization		
17	Fecundatio		Fecundation	Fecundation	Impregnation	
18	Superfecundatio		Superfecundation	Superfecundation		
19	Superimpregnatio		Superimpregnation	Superimpregnation		
20	Superfetatio		Superfetation	Superfetation		
21	Ontogenesis		Ontogeny	Ontogeny		
22	Ontogenesis prenatalis		Prenatal ontogeny	Prenatal ontogeny		
23	Tempus prenatale	Tempus gestationis	Prenatal period	Prenatal period	Gestation period	
24	Vita prenatalis		Prenatal life	Prenatal life		
25	Vita intrauterina		Intra-uterine life	Intrauterine life		
26	Tempus embryonicum		Embryonic period	Embryonic period		
27	Embryogenesis		Embryogenesis	Embryogenesis	Embryogeny	<i>Endnote 2</i>
28	Tempus fetale		Fetal period	Fetal period		
29	Fetogenesis		Fetogenesis	Fetogenesis		<i>Endnote 3</i>
30	Tempus natale		Birth period	Birth period		
31	Ontogenesis postnatalis		Postnatal ontogeny	Postnatal ontogeny		
32	Tempus serius		Later period	Later period		
33	Vita postnatalis		Postnatal life	Postnatal life		
34	Cycli genitales		Reproductive cycles	Reproductive cycles		
35	Cycli genitales feminini		Female reproductive cycles	Female reproductive cycles		
36	PHASES OVARICAE		OVARIAN PHASES	OVARIAN PHASES		
37	Phasis infantilis		Infantile phase	Infantile phase		
38	Phasis prepubertalis		Prepubertal phase	Prepubertal phase		
39	Phasis pubertalis		Pubertal phase	Pubertal phase		
40	Phasis matura		Mature phase	Mature phase		
41	Phasis involutionis		Involution phase	Involution phase		

42	CYCLUS OVARICUS		OVARIAN CYCLE	OVARIAN CYCLE	
43	Oogenesis		Oogenesis	Oogenesis	
44	Phases cycli ovarici		Phases of ovarian cycle	Phases of ovarian cycle	
45	Phasis follicularis		Follicular phase	Follicular phase	
46	Ovulatio		Ovulation	Ovulation	
47	Phasis corporis lutei		Luteal phase	Luteal phase	Corpus luteum phase
48	Phasis involutions		Involution phase	Involution phase	
49	Typi ovulationis		Types of ovulation	Types of ovulation	
50	Ovulatio uniovularis		Uni-ovular ovulation	Uniovular ovulation	
51	Ovulatio multiovularis		Multi-ovular ovulation	Multiovular ovulation	
52	Ovulatio spontanea		Spontaneous ovulation	Spontaneous ovulation	
53	Ovulatio superovularis	Superovulatio	Superovulation	Superovulation	
54	Superovulatio inducta		Induced superovulation	Induced superovulation	
55	CYCLUS MENSTRUALIS ENDOMETRII		ENDOMETRIAL MENSTRUAL CYCLE	ENDOMETRIAL MENSTRUAL CYCLE	
56	Amenorrhoea primaria		Primary amenorrhoea	Primary amenorrhea	
57	Menarcha		Menarche	Menarche	
58	Phasis proliferativa	Phasis follicularis	Proliferative phase	Proliferative phase	Follicular phase; Oestrogenic phase; Estrogenic phase
59	Phasis ovulatoria		Ovulatory phase	Ovulatory phase	
60	Phasis secretoria	Phasis lutealis	Secretory phase	Secretory phase	Luteal phase; Progesterone phase
61	Phasis gestatoria		Gestatory phase	Gestatory phase	
62	Phasis ischaemiae		Ischaemic phase	Ischemic phase	
63	Phasis menstrualis	Phasis desquamativa	Menstrual phase	Menstrual phase	Desquamation phase
64	Menses		Menses	Menses	
65	Phasis postmenstrualis		Postmenstrual phase	Postmenstrual phase	
66	Amenorrhoea secundaria		Secondary amenorrhoea	Secondary amenorrhea	
67	Climacter		Climacteric	Climacteric	
68	Menopausa		Menopause	Menopause	
69	CYCLUS CERVICALIS		CERVICAL CYCLE	CERVICAL CYCLE	
70	Phasis preovulatorius		Pre-ovulatory phase	Preovulatory phase	
71	Phasis fertilis		Fertile phase phase	Fertile phase phase	
72	Phasis maxime fertilis		Highly fertile phase	Highly fertile phase	
73	Phasis postovulatorius		Postovulatory phase	Postovulatory phase	
74	CYCLUS VAGINALIS		VAGINAL CYCLE	VAGINAL CYCLE	<i>Endnote 4</i>
75	Phasis initialis		Initial phase	Initial phase	
76	Phasis ovulationis		Ovulation phase	Ovulation phase	
77	Phasis sera		Later phase	Later phase	
78	CYCLUS GLANDULAE MAMMARIAE		MAMMARY GLAND CYCLE	MAMMARY GLAND CYCLE	
79	Phasis inactiva		Inactive phase	Inactive phase	

80	Phasis proliferativa		Proliferative phase	Proliferative phase		
81	Lactatio		Lactation	Lactation		
82	Phasis colostralis		Colostrals phase	Colostrals phase		
83	Phasis lactifera		Milk phase	Milk phase		
84	Phasis involuta		Involution phase	Involution phase		
85	Cyclus genitalis masculinus		Male reproductive cycle	Male reproductive cycle		
86	Phases testiculares		Testicular phases	Testicular phases		
87	Phasis infantilis		Infantile phase	Infantile phase		
88	Phasis prepubertalis		Prepubertal phase	Prepubertal phase		
89	Phasis pubertalis		Pubertal phase	Pubertal phase		
90	Phasis matura		Mature phase	Mature phase		
91	Phasis involuta		Involution phase	Involution phase		
92	Pregnatio	Graviditas	Pregnancy	Pregnancy	Gestation	
93	CYCLUS PREGNATIONIS		PREGNANCY CYCLE	PREGNANCY CYCLE		
94	Conceptio		Conception	Conception		
95	Conceptus		Conceptus	Conceptus		<i>Endnote 5</i>
96	Cyema		Cyema	Cyema		<i>Endnote 6</i>
97	Embryo		Embryo	Embryo		Gradius 1 ad 23; Stages 1-23 <i>Endnote 7</i>
98	Fetus		Fetus	Fetus		
99	Adnexa developmentalia	Membranae embryonicae et fetales; Adnexa embryonica et fetalia	Developmental adnexa	Developmental adnexa	Embryonic and fetal adnexa	<i>Endnote 8</i>
100	Tempus tubale		Tubal period	Tubal period		
101	Tempus uterinum		Uterine period	Uterine period		
102	Phasis pregastrulationis		Pregastrulation phase	Pregastrulation phase		<i>Endnote 9</i>
103	Phasis preimplantationis		Pre-implantation phase	Preimplantation phase		
104	Phasis implantationis		Implantation phase	Implantation phase		
105	Phasis gastrulationis		Gastrulation phase	Gastrulation phase		
106	Phasis preparatoria	Phasis embryogenica	Preparative phase	Preparative phase	Embryogenic phase	<i>Endnote 10</i>
107	Phasis postgastrulationis		Postgastrulation phase	Postgastrulation phase		
108	Phasis placentalis		Placental phase	Placental phase		
109	Terminus		Term	Term	End of pregnancy	
110	Parturitio		Parturition	Parturition	Labour; Labor	
111	Parturitio prematura		Premature labour	Premature labor		
112	Parturitio matura		Mature labour	Mature labor	Full term labour; Full term labor	
113	Parturitio postmatura		Postmature labour	Postmature labor		
114	PREGNATIO UTERINA		UTERINE PREGNANCY	UTERINE PREGNANCY		
115	Pregnatio cornualis		Cornual pregnancy	Cornual pregnancy		
116	Pregnatio fundica		Fundal pregnancy	Fundal pregnancy		
117	Pregnatio corporalis		Uterine body pregnancy	Uterine body pregnancy		
118	Pregnatio cervicalis		Cervical pregnancy	Cervical pregnancy		<i>Endnote 11</i>
119	Placenta previa		Placenta praevia	Placenta previa		

120	GRAVIDITAS		GRAVIDITY	GRAVIDITY	
121	Nulligraviditas		Nulligravidity	Nulligravidity	
122	Nulligravida		Nulligravida	Nulligravida	
123	Primigraviditas		Primigravidity	Primigravidity	
124	Primigravida		Primigravida	Primigravida	
125	Multigraviditas		Multigravidity	Multigravidity	
126	Multigravida		Multigravida	Multigravida	
127	NUMERUS CONCEPTUUM		NUMBER OF CONCEPTUSES	NUMBER OF CONCEPTUSES	
128	Pregnatio singularis		Single pregnancy	Single pregnancy	
129	Cyema singulare		Singleton	Singleton	Single cyema
130	Pregnatio duplex		Twin pregnancy	Twin pregnancy	
131	Geminus		Twin	Twin	
132	Geminus dizygoticus		Dizygotic twin	Dizygotic twin	
133	Geminus monozygoticus		Monozygotic twin	Monozygotic twin	
134	Geminus monozygoticus dichorionicus diamnioticus		Dichorial di-amniotic monozygotic twin	Dichorial diamniotic monozygotic twin	
135	Geminus monochorionic diamnioticus		Monochorial di-amniotic twin	Monochorial diamniotic twin	
136	Geminus monochorionic monoamnioticus		Monochorial mono-amniotic twin	Monochorial monoamniotic twin	
137	Pregnatio multiplex		Multiple pregnancy	Multiple pregnancy	
138	Trigeminus		Triplet	Triplet	
139	Quadriginus		Quadruplet	Quadruplet	
140	Pluriginus polyzygoticus		Polyzygotic fetus	Polyzygotic fetus	
141	Pseudopregnatio	Pseudocyesis	Pseudopregnancy	Pseudopregnancy	False pregnancy
142	TERMINATIO		TERMINATION	TERMINATION	
143	Abortio		Abortion	Abortion	
144	Abortus		Abortus	Abortus	
145	Abortio voluntaria	Abortio therapeutica	Elective abortion	Elective abortion	Therapeutic abortion
146	Abortio spontanea		Spontaneous abortion	Spontaneous abortion	
147	Abortio omissa		Missed abortion	Missed abortion	
148	PARTUS		BIRTH	BIRTH	
149	Partus prematurus		Premature birth	Premature birth	
150	Partus maturus		Full term birth	Full term birth	
151	Partus postmaturus		Postmature birth	Postmature birth	
152	Infans		Infant	Infant	
153	Infans prematurus		Premature infant	Premature infant	
154	Infans maturus		Mature infant	Mature infant	
155	Infans postmaturus		Postmature infant	Postmature infant	
156	Neonatus		Newborn	Newborn	Neonate
157	Tempus postnatale		Postnatal period	Postnatal period	Postpartum period
158	Puerperium		Puerperium	Puerperium	

159	Involutio		Involution	Involution		
160	Mensurae embryonicae et fetales		Embryonic and fetal measurements	Embryonic and fetal measurements		<i>Endnote 12</i>
161	Aetas a fecundatione		Fertilization age	Fertilization age		<i>Endnote 13</i>
162	Aetas ab ovulatione		Ovulation age	Ovulation age		<i>Endnote 14</i>
163	Aetas ab inseminatione		Insemination age	Insemination age		<i>Endnote 15</i>
164	Hebdomades post coitum		Coital weeks	Coital weeks		<i>Endnote 16</i>
165	Hebdomades post menses ultimas		Menstrual weeks	Menstrual weeks		<i>Endnote 17</i>
166	Longitudo corona calx		Crown-heel length	Crownheel length	CHL; Total length; Standing height	
167	Longitudo maxima		Greatest length	Greatest length	GL	<i>Endnote 18</i>
168	Longitudo corona nates		Crown-rump length	Crownrump length	CRL; Sitting height	
169	Longitudo cervix nates		Neck-rump length	Neckrump length		
170	Longitudo ossis femoris ossificati		Ossified femur length	Ossified femur length		
171	Longitudo pedis		Foot length	Foot length	FL	
172	Diameter biparietalis		Biparietal diameter	Biparietal diameter		
173	Diameter cavitatis amnioticae		Amniotic cavity diameter	Amniotic cavity diameter		
174	Diameter cavitatis chorionicae		Chorionic cavity diameter	Chorionic cavity diameter		
175	Diameter vesiculae umbilicalis	Diameter sacci vitellini	Umbilical vesicle diameter	Umbilical vesicle diameter	Yolk sac diameter	
176	Circumferentia abdominis		Abdominal circumference	Abdominal circumference		
177	Circumferentia capitis		Head circumference	Head circumference		
178	Pondus corporis		Body weight	Body weight		
179	Pondus encephali		Brain weight	Brain weight		
180	Pondus placentae		Placental weight	Placental weight		
181	Anomaliae reproductionis		Reproductive anomalies	Reproductive anomalies		
182	Infertilitas		Infertility	Infertility		
183	Sterilitas		Sterility	Sterility		
184	Pregnatio anembryonica		Anembryonic pregnancy	Anembryonic pregnancy		
185	Mors prenatalis		Prenatal death	Prenatal death		
186	Partus mortuus		Stillbirth	Stillbirth		
187	Fetus natus mortuus		Stillborn fetus	Stillborn fetus		
188	Abortio		Abortion	Abortion		
189	Abortio imminens		Threatened abortion	Threatened abortion		
190	Resorptio		Resorption	Resorption		
191	Retentio		Retention	Retention		
192	Retentio cum calcificatione		Retention with calcification	Retention with calcification		
193	Retentio cum compressione		Retention with compression	Retention with compression		
194	Retentio cum mummificatione		Retention with mummification	Retention with mummification		
195	ANOMALIAE IMPLANTATIONIS		IMPLANTATION ANOMALIES	IMPLANTATION ANOMALIES		
196	Implantatio corrupta		Defective implantation	Defective implantation		
197	Implantatio ectopica		Ectopic implantation	Ectopic implantation		
198	Pregnatio ectopica		Ectopic pregnancy	Ectopic pregnancy		<i>Endnote 11</i>
199	Pregnatio extrauterina		Extra-uterine pregnancy	Extrauterine pregnancy		<i>Endnote 11</i>
200	Pregnatio abdominalis		Abdominal pregnancy	Abdominal pregnancy		

201	Pregnatio abdominalis primaria		Primary abdominal pregnancy	Primary abdominal pregnancy	
202	Pregnatio abdominalis secundaria		Secondary abdominal pregnancy	Secondary abdominal pregnancy	
203	Pregnatio ovarica		Ovarian pregnancy	Ovarian pregnancy	
204	Pregnatio tubalis		Tubal pregnancy	Tubal pregnancy	
205	Pregnatio tubalis infundibularis		Infundibular tubal pregnancy	Infundibular tubal pregnancy	
206	Pregnatio tubalis ampullaris		Ampullary tubal pregnancy	Ampullary tubal pregnancy	
207	Pregnatio tubalis isthmicaris		Isthmic tubal pregnancy	Isthmic tubal pregnancy	
208	Pregnatio tubalis partis uterinae		Intramural tubal pregnancy	Intramural tubal pregnancy	Interstitial tubal pregnancy
209	ANOMALIAE EMBRYONIS		EMBRYONIC ANOMALIES	EMBRYONIC ANOMALIES	
210	Situs inversus	Transpositio viscerum	Transposition of viscera	Transposition of viscera	
211	Situs inversus totalis		Total situs inversus	Total situs inversus	
212	Situs inversus partialis		Partial situs inversus	Partial situs inversus	<i>See below, under Organogenesis</i>
213	ANOMALIAE FETALES		FETAL ANOMALIES	FETAL ANOMALIES	
214	Fetus amorphicus		Amorphic fetus	Amorphic fetus	
215	Fetus calcificatus		Calcified fetus	Calcified fetus	
216	Fetus papyraceus		Fetus papyraceus	Fetus papyraceus	
217	Geminus acardiacus		Acardiac twin	Acardiac twin	
218	Absentia totalis cordis		Total absence of heart	Total absence of heart	
219	Absentia subtotalis cordis		Subtotal absence of heart	Subtotal absence of heart	
220	Gemini conjuncti		Conjoined twins	Conjoined twins	<i>Endnote 19</i>
221	Gemini symmetrici		Symmetrical twins	Symmetrical twins	
222	Conjunctio ventralis		Ventral conjunction	Ventral conjunction	
223	Conjunctio ventralis rostralis		Rostral ventral conjunction	Rostral ventral conjunction	
224	Omphalopagia		Omphalopagy	Omphalopagy	
225	Thoracopagia		Thoracopagy	Thoracopagy	
226	Cephalopagia		Cephalopagy	Cephalopagy	
227	Conjunctio ventralis caudalis		Caudal ventral conjunction	Caudal ventral conjunction	
228	Ischiopagia		Ischiopagy	Ischiopagy	
229	Conjunctio ventralis lateralis		Lateral ventral conjunction	Lateral ventral conjunction	
230	Parapagia		Parapagy	Parapagy	
231	Conjunctio dorsalis		Dorsal conjunction	Dorsal conjunction	
232	Craniopagia		Craniopagy	Craniopagy	
233	Rachipagia		Rachipagy	Rachipagy	
234	Pygopagia		Pygopagy	Pygopagy	
235	Gemini asymmetrici		Asymmetrical twins	Asymmetrical twins	
236	Inclusio		Inclusion	Inclusion	
237	Hospes		Host	Host	
238	Parasitus		Parasite	Parasite	
239	Junctio superior		Superior junction	Superior junction	

240	Junctio superior cranialis parasitica		Cranial parasite	Cranial parasite	
241	Junctio superior mandibularis parasitica		Mandibular parasite	Mandibular parasite	
242	Junctio media		Middle junction	Middle junction	
243	Junctio media thoracoepigastrica parasitica		Thoraco-epigastric parasite	Thoracoepigastric parasite	
244	Junctio media abdominalis parasitica		Abdominal parasite	Abdominal parasite	
245	Junctio inferior		Inferior junction	Inferior junction	
246	Junctio inferior pygalis parasitica		Buttocks parasite	Buttocks parasite	
247	Gigantismus		Gigantism	Gigantism	
248	Nanismus		Dwarfism	Dwarfism	
249	Achondroplasia		Achondroplasia	Achondroplasia	
250	Ateliosis		Ateliosis	Ateliosis	
251	Cretinismus		Cretinism	Cretinism	
252	Gametogenesis		Gametogenesis	Gametogenesis	
253	NOMINA GENERALIA		GENERAL TERMS	GENERAL TERMS	
254	Interphasis		Interphase	Interphase	
255	Phasis G I	Intervallum postmitoticum	G1 phase	G1 phase	Postmitotic interval; First gap
256	Phasis G0		G0 phase	G0 phase	Resting phase
257	Phasis S	Phasis synthetica	S phase	S phase	Synthesis phase
258	Phasis G II	Intervallum premitoticum	G2 phase	G2 phase	Premitotic interval; Second gap
259	Mitosis	Phasis M	Mitosis	Mitosis	M phase
260	Prophasis		Prophase	Prophase	
261	Prometaphasis		Prometaphase	Prometaphase	
262	Metaphasis		Metaphase	Metaphase	
263	Anaphasis		Anaphase	Anaphase	
264	Telophasis		Telophase	Telophase	
265	Meiosis		Meiosis	Meiosis	
266	Meiosis I		Meiosis I	Meiosis I	
267	Prophasis I		Prophase I	Prophase I	See Terminologica Histologica
268	Phasis leptotaeniae	Phasis leptonemalis	Leptotene	Leptotene	
269	Phasis zygotaeoniae	Phasis zygonemalis	Zygotene	Zygotene	
270	Phasis pachytaeniae	Phasis pachynemalis	Pachytene	Pachytene	
271	Phasis diplotaeoniae	Phasis diplonemalis	Diplotene	Diplotene	
272	Diakinesis		Diakinesis	Diakinesis	
273	Chromosoma bivalens		Bivalent chromosome	Bivalent chromosome	
274	Prometaphasis I		Prometaphase I	Prometaphase I	
275	Metaphasis I		Metaphase I	Metaphase I	
276	Anaphasis I		Anaphase I	Anaphase I	
277	Telophasis I		Telophase I	Telophase I	
278	Meiosis II		Meiosis II	Meiosis II	
279	Prometaphasis II		Prometaphase II	Prometaphase II	

280	Metaphasis II		Metaphase II	Metaphase II		
281	Anaphasis II		Anaphase II	Anaphase II		
282	Telophasis II		Telophase II	Telophase II		
283	Chromosoma univalens		Univalent chromosome	Univalent chromosome		
284	Status ploideus		Ploidy	Ploidy		
285	Status euploideus		Euploidy	Euploidy		
286	Status diploideus		Diploidy	Diploidy		
287	Status haploideus		Haploidy	Haploidy		
288	Complementum chromosomatum		Chromosome complement	Chromosome complement		
289	1N		1N	1N		
290	2N		2N	2N		
291	4N		4N	4N		
292	Complementum chromatidiorum		Chromatid complement	Chromatid complement		
293	1C		1C	1C		
294	2C		2C	2C		
295	4C		4C	4C		
296	SEQUENTIA GAMETOGENESIS		GAMETOGENETIC SEQUENCE	GAMETOGENETIC SEQUENCE		
297	Genum a parente impressum		Parental gene imprinting	Parental gene imprinting	Genome imprinting; Genetic imprinting	<i>Endnote 20</i>
298	Cellula germinalis precursoria		Primordial germ cell	Primordial germ cell		Diploid (2N, 2C)
299	Mitosis		Mitosis	Mitosis		
300	Gametogonium		Gametogonium	Gametogonium		Diploid (2N, 2C)
301	Gametogonium in phasi G2		Gametogonium in G2 phase	Gametogonium in G2 phase		Diploid (2N, 4C)
302	Mitosis		Mitosis	Mitosis		
303	Gametocytus primarius		Primary gametocyte	Primary gametocyte		Diploid (2N, 4C)
304	Erasio impressionis parentalis prioris		Erasure of previous parental imprinting	Erasure of previous parental imprinting		
305	Meiosis I		Meiosis I	Meiosis I		
306	Gametocytus secundarius		Secondary gametocyte	Secondary gametocyte		Haploid (1N, 2C)
307	Interkinesis		Interkinesis	Interkinesis		
308	Meiosis II		Meiosis II	Meiosis II		
309	Impressio parentalis nova		New parental imprinting	New parental imprinting		
310	Gametus	Gonocytus	Gamete	Gamete	Germ cell	Haploid (1N, 1C)
311	Chromosoma univalens		Univalent chromosome	Univalent chromosome		
312	Autosoma		Autosome	Autosome		
313	Chromosoma sexuelle	Gonosoma	Sex chromosome	Sex chromosome		
314	Chromosoma X	Gonosoma femininum	X chromosome	X chromosome		
315	Inactivatio chromosomatis X	Inactivatio gonosomatis feminini	X chromosome inactivation	X chromosome inactivation		
316	Chromosoma Y	Gonosoma masculinum	Y chromosome	Y chromosome		
317	OOGENESIS		OOGENESIS	OOGENESIS		
318	Folliculus ovaricus primordialis		Primordial ovarian follicle	Primordial ovarian follicle		
319	Folliculus ovaricus primarius		Primary ovarian follicle	Primary ovarian follicle		
320	Folliculus ovaricus secundarius		Secondary ovarian follicle	Secondary ovarian follicle		

321	Folliculus ovaricus tertiarus		Tertiary ovarian follicle	Tertiary ovarian follicle		<i>§Graaf§</i>
322	Cyclus oogeneticus		Oogenetic cycle	Oogenetic cycle		
323	Oogonium		Oogonium	Oogonium		Diploid (2N, 2C)
324	Oogonium in phasi G ₂		Oogonium in G ₂ phase	Oogonium in G ₂ phase		Diploid (2N, 4C)
325	Oocytus primarius		Primary oocyte	Primary oocyte		Diploid (2N, 4C)
326	Polus animalis	Polus embryonicus presumptivus	Animal pole	Animal pole	Presumptive embryonic pole	<i>Endnote 21</i>
327	Polus vegetalis		Vegetal pole	Vegetal pole		
328	Corpus polare primum		First polar body	First polar body	First polocyte	Haploid (1N, 2C)
329	Oocytus secundarius	Gametus femininus	Secondary oocyte	Secondary oocyte	Female gamete	Haploid (1N, 2C)
330	Genum a matre impressum		Maternally imprinted gene	Maternally imprinted gene		
331	Genum cum effectibus maternis		Maternal effect gene	Maternal effect gene		
332	Genum extrachromosomale		Extrachromosomal gene	Extrachromosomal gene		
333	Genum mitochondriale		Mitochondrial gene	Mitochondrial gene		
334	Oocytus secundarius repressus in Metaphasi II		Secondary oocyte arrested in Metaphase II	Secondary oocyte arrested in Metaphase II		Haploid (1N, 2C)
335	Polus animalis	Polus embryonicus presumptivus	Animal pole	Animal pole	Presumptive embryonic pole	
336	Polus vegetalis		Vegetal pole	Vegetal pole		
337	PELLUCIDAGENESIS	Zonagenesis	ZONA PELLUCIDA FORMATION	ZONA PELLUCIDA FORMATION		<i>Endnote 22</i>
338	Epithelium simplex cuboideum folliculi ovarici		Simple cuboidal epithelium of ovarian follicle	Simple cuboidal epithelium of ovarian follicle		
339	Oocytus primarius		Primary oocyte	Primary oocyte		Diploid (2N, 4C)
340	Zona pellucida		Zona pellucida	Zona pellucida		
341	Processus cellulae epithelialis follicularis cuboidalis		Process of cuboidal epithelial follicular cell	Process of cuboidal epithelial follicular cell		
342	Processus oocytii		Process of oocyte	Process of oocyte		
343	Proteina zonae pellucidae I - III		Zona pellucida proteins 1-3	Zona pellucida proteins 1-3	ZP 1-3	
344	SPERMATOGENESIS		SPERMATOGENESIS	SPERMATOGENESIS	Spermatogeny	
345	Unda spermatogenetica	Unda epithelii spermatogenici	Spermatogenic wave	Spermatogenic wave	Wave of spermatogenic epithelium	
346	Cyclus spermatogeneticus	Cyclus epithelii spermatogenici	Spermatogenic cycle	Spermatogenic cycle	Cycle of spermatogenic epithelium	
347	Spermatogonium		Spermatogonium	Spermatogonium		Diploid (2N, 2C) See Terminologia Histologica
348	Spermatogonium in phasi G ₂		Spermatogonium in G ₂ phase	Spermatogonium in G ₂ phase		Diploid (2N, 4C)
349	Spermatocytogenesis		Spermatocytogenesis	Spermatocytogenesis		
350	Spermatocytus primarius		Primary spermatocyte	Primary spermatocyte		Diploid (2N, 4C)
351	Spermatocytus secundarius		Secondary spermatocyte	Secondary spermatocyte		Haploid (1N, 2C)
352	Spermatidium		Spermatid	Spermatid		Haploid (1N, 1C)
353	Spermiatio	Disjunctio ab sustentatocyto	Spermiation	Spermiation	Detachment from sustentacular cell	
354	Spermiogenesis		Spermiogenesis	Spermiogenesis		See Terminologia Histologica
355	Spermatozoon	Spermium; Gametus masculinus	Sperm	Sperm	Sperm cell; Male gamete	Haploid (1N, 1C) See Terminologia Histologica
356	Genum a patre impressum		Paternally imprinted gene	Paternally imprinted gene		

357	Genum cum effectibus paternis		Paternal effect gene	Paternal effect gene		
358	Capacitatio		Capacitation	Capacitation		
359	ANOMALIAE GAMETOGENETICAE		ANOMALIES OF GAMETOGENESIS	ANOMALIES OF GAMETOGENESIS		
360	Nondisjunctio		Nondisjunction	Nondisjunction		
361	Fertilisatio		Fertilization	Fertilization		
362	PHASES FERTILISATIONIS		FERTILIZATION PHASES	FERTILIZATION PHASES		
363	Fertilisatio ante penetrationem spermatozoi	Phasis longinquus	Fertilization before sperm penetration	Fertilization before sperm penetration		
364	Phasis longinquus		Distant phase	Distant phase		
365	Rheotaxis		Rheotaxis	Rheotaxis		
366	Chemotaxis		Chemotaxis	Chemotaxis		
367	Capacitatio		Capacitation	Capacitation		
368	Phasis contactus		Contact phase	Contact phase		
369	Fertilisatio post penetrationem spermatozoi		Fertilization after sperm penetration	Fertilization after sperm penetration		
370	Via spermatica	Iter spermaticum	Sperm track	Sperm track		
371	Corona radiata		Corona radiata	Corona radiata		
372	Via per coronam radiatam		Coronal penetration track	Coronal penetration track		
373	Zona pellucida		Zona pellucida	Zona pellucida		
374	Membrana fertilisationis		Fertilization membrane	Fertilization membrane		
375	Contactum spermatozoi capacitati cum zona pellucida		Sperm-zona contact	Sperm zona contact		
376	Via per zonam pellucidam	Via penetrationis	Pellucidal penetration track	Pellucidal penetration track		
377	Reactio acrosomalis		Acrosome reaction	Acrosome reaction		
378	Spatium subzonale	Spatium subcapsulare	Subzonal space	Subzonal space		Subcapsular space
379	Coagmentatio gametorum		Binding of gametes	Binding of gametes		

Caput II: EMBRYOGENESIS

Chapter 2: EMBRYOGENESIS

	Latin term	Latin synonym	UK English	US English	English synonym	Other
380	Embryogenesis		Embryogenesis	Embryogenesis	Embryogeny	
381	Processus embryonici		Embryonic processes	Embryonic processes		
382	FISSIO		CLEAVAGE	CLEAVAGE		
383	Fissio totalis		Total cleavage	Total cleavage		
384	Fissio aequalis		Equal cleavage	Equal cleavage		
385	Fissio indeterminata		Indeterminate cleavage	Indeterminate cleavage		
386	Fissio determinata		Determinate cleavage	Determinate cleavage		
387	Planum fissionis		Cleavage plane	Cleavage plane		
388	Planum aequatoriale		Equatorial plane	Equatorial plane		
389	Planum latitudinale		Latitudinal plane	Latitudinal plane		
390	Planum meridionale		Meridional plane	Meridional plane		
391	Nucleus fissionis		Cleavage nucleus	Cleavage nucleus		
392	REGULATIO		REGULATION	REGULATION		<i>Endnote 23</i>
393	FORMATIO TYPORUM		PATTERN FORMATION	PATTERN FORMATION		
394	Cognitio loci		Positional information	Positional information		
395	Indicium a loco		Positional value	Positional value		
396	Confactor morphogeneticus		Morphogen	Morphogen		
397	Clivus densitatis		Concentration gradient	Concentration gradient		
398	Limen clivi		Gradient boundary	Gradient boundary		
399	Limen densitatis		Concentration threshold	Concentration threshold		
400	COMPACTIO		COMPACTION	COMPACTION		
401	Differentiatio cellularum in zygoto findenti		Differentiation of cells of cleaving zygote	Differentiation of cells of cleaving zygote	Outside-inside differentiation; Outside inside differentiation	<i>Endnote 24</i>
402	Polarisatio cellularum extarnarum		Polarization of outer cells	Polarization of outer cells		<i>Endnote 25</i>
403	Divisio conservativa		Conservative division	Conservative division		
404	Divisio differentiativa		Differentiative division	Differentiative division		
405	Divisio differentiativa embryoblasti	Divisio differentiativa massae cellularis internae; Divisio differentiativa pluriblasti	Differentiative division of embryoblast	Differentiative division of embryoblast		<i>Endnote 26</i>
406	INDUCTIO ET INTERACTIO		INDUCTION AND INTERACTION	INDUCTION AND INTERACTION		
407	Inductor		Inducer	Inducer		
408	Signum		Signal	Signal		
409	Indicium rectionis		Guidance cue	Guidance cue		
410	Chemotropismus		Chemotropism	Chemotropism	Chemotaxis	
411	Rectio per contactum		Contact guidance	Contact guidance		
412	Indicium per ambitum		Environmental cue	Environmental cue		
413	Signum pheromonale		Pheromone signal	Pheromone signal		

414	Signum intracrinum		Intracrine signal	Intracrine signal	
415	Indicium autocellulare		Autocellular cue	Autocellular cue	
416	Signum autocrinum		Autocrine signal	Autocrine signal	
417	Indicium intercellulare		Intercellular cue	Intercellular cue	
418	Signum juxtacrinum		Juxtacrine signal	Juxtacrine signal	
419	Signum paracrinum		Paracrine signal	Paracrine signal	
420	Signum endocrinum		Endocrine signal	Endocrine signal	
421	Signum neurocrinum		Neurocrine signal	Neurocrine signal	
422	Textus reagens		Reacting tissue	Reacting tissue	Responding tissue
423	Cellula reagens		Reacting cell	Reacting cell	Receiving cell; Responding cell
424	Transductio significacionis		Signal transduction	Signal transduction	
425	Mediatio		Mediation	Mediation	
426	Mediatio a moleculis diffusibilibus		Mediation by diffusible molecules	Mediation by diffusible molecules	
427	Mediatio a contactu cellulomatrice		Cell-matrix contact mediation	Cell matrix contact mediation	
428	Mediatio a contactu cellulocellare		Cell-cell contact mediation	Cell cell contact mediation	
429	Mediatio a superficie ad superficiem		Cell surface to cell surface mediation	Cell surface to cell surface mediation	
430	Mediatio a junctionibus adhaesionis		Adhering junction mediation	Adhering junction mediation	
431	Mediatio a junctione occludente		Tight junction mediation	Tight junction mediation	
432	Mediatio a zonula adhaerente		Adhesive belt mediation	Adhesive belt mediation	
433	Mediatio a fascia adhaerente		Adhesive strip mediation	Adhesive strip mediation	
434	Mediatio a macula adhaerente		Desmosome mediation	Desmosome mediation	
435	Mediatio a hemidesmosomate		Hemidesmosome mediation	Hemidesmosome mediation	
436	Mediatio a junctione intercellulare		Intercellular junction mediation	Intercellular junction mediation	
437	Mediatio a macula communicante		Gap junction mediation	Gap junction mediation	
438	Competentia		Competence	Competence	
439	Factor competentiae		Competency factor	Competency factor	
440	Interactio		Interaction	Interaction	
441	Interactio epithelioepithelialis		Epithelio-epithelial interaction	Epithelioepithelial interaction	
442	Interactio epitheliomesenchymalis		Epitheliomesenchymal interaction	Epitheliomesenchymal interaction	
443	Interactio instructiva		Instructive interaction	Instructive interaction	
444	Interactio permissiva		Permissive interaction	Permissive interaction	
445	Interactio reciproca	Inductio reciproca	Reciprocal interaction	Reciprocal interaction	Reciprocal induction
446	Interactio suppressiva		Suppressive interaction	Suppressive interaction	
447	Interactio repressiva		Repressive interaction	Repressive interaction	
448	Moleculae signantes		Signalling molecules	Signalling molecules	
449	Factor crescentiae		Growth factor	Growth factor	
450	Factor extracellularis		Extracellular factor	Extracellular factor	

451	Factor neurotransmittens		Neurotransmitter	Neurotransmitter		
452	Hormonum		Hormone	Hormone		
453	Tullius significationum transductionis		Signal transduction cascade	Signal transduction cascade		
454	Cellula inducens		Inducing cell	Inducing cell	Sending cell	
455	Molecula signans		Signalling molecule	Signalling molecule		
456	Matrix extracellularis		Extracellular matrix	Extracellular matrix		
457	Cellula reagens		Reacting cell	Reacting cell	Receiving cell; Responding cell	
458	Receptor superficiei membranae		Surface membrane receptor	Surface membrane receptor		
459	Proteinum transducens signum		Signal transduction protein	Signal transduction protein		
460	Nucleus		Nucleus	Nucleus		
461	Acidum desoxyribonucleare		Deoxyribonucleic acid	Deoxyribonucleic acid	DNA	
462	Transcriptio corrupta		Altered transcription	Altered transcription		
463	Translatio corrupta		Altered translation	Altered translation		
464	Frux geni nova		New gene product	New gene product		
465	MORPHOGENESIS		MORPHOGENESIS	MORPHOGENESIS		<i>Endnote 27</i>
466	Nomina generalia		General terms	General terms		
467	Blastema		Blastema	Blastema		<i>Endnote 28</i>
468	Primordium		Primordium	Primordium	Anlage	<i>Endnote 29</i>
469	Rudimentum		Rudiment	Rudiment		<i>Endnote 30</i>
470	Status presumptivus		Presumptive state	Presumptive state		<i>Endnote 31</i>
471	Vestigium		Vestige	Vestige		<i>Endnote 32</i>
472	Phenomena morphogenetica		Morphogenetic phenomena	Morphogenetic phenomena		
473	Adhaesio		Adhesion	Adhesion		
474	Appropinquatio		Approximation	Approximation		
475	Bifurcatio		Bifurcation	Bifurcation		
476	Canalisatio		Canalization	Canalization		
477	Cavitatio		Cavitation	Cavitation		
478	Coalescentia		Coalescence	Coalescence		
479	Compactio		Compaction	Compaction		
480	Condensatio		Condensation	Condensation		
481	Congrutio		Pairing	Pairing		
482	Conjunctio		Fusion	Fusion		
483	Conservatio		Conservation	Conservation		
484	Convergentia		Convergence	Convergence		
485	Corrosio		Corrosion	Corrosion		
486	Crescentia		Growth	Growth		
487	Crescentia accretionalis		Accretional growth	Accretional growth		
488	Crescentia appositionalis		Appositional growth	Appositional growth		
489	Crescentia auxetica	Hypertrophia	Auxetic growth	Auxetic growth	Hypertrophy	
490	Crescentia compensatoria		Compensatory growth	Compensatory growth		
491	Crescentia differentialis		Differential growth	Differential growth		
492	Crescentia interstitialis		Interstitial growth	Interstitial growth		
493	Crescentia multiplicativa	Hyperplasia	Multiplicative growth	Multiplicative growth	Hyperplasia	

494	Cytogenesis		Cytogenesis	Cytogenesis	Cytogeny	
495	Cytokinesis		Cytokinesis	Cytokinesis		
496	Deminutio		Diminution	Diminution		
497	Delaminatio		Delamination	Delamination		
498	Differentiatio		Differentiation	Differentiation		
499	Determinatio		Determination	Determination		
500	Differentiatio chemica		Chemodifferentiation	Chemodifferentiation		
501	Differentiatio cellularis		Cytodifferentiation	Cytodifferentiation		
502	Differentiatio textuum		Histodifferentiation	Histodifferentiation		
503	Differentiatio functionalis		Functional differentiation	Functional differentiation		
504	Differentiatio ordinata		Directed differentiation	Directed differentiation		
505	Dilatatio		Dilation	Dilation		
506	Dispositio		Arrangement	Arrangement		
507	Divergentia		Divergence	Divergence		
508	Elongatio		Elongation	Elongation		
509	Emanatio		Emergence	Emergence		
510	Exstinctio		Elimination	Elimination		
511	Extensio		Elongation	Elongation	Extension	
512	Expansio		Expansion	Expansion		
513	Fatum presumptivum		Prospective fate	Prospective fate	Presumptive fate	
514	Fissio		Cleavage	Cleavage		
515	Formatio anae		Loop formation	Loop formation		<i>Endnote 33</i>
516	Formatio primaria corporis		Primary body development	Primary body development		<i>Endnote 34</i>
517	Formatio secundaria corporis		Secondary body development	Secondary body development		<i>Endnote 35</i>
518	Gastrulatio		Gastrulation	Gastrulation		<i>Endnote 36</i>
519	Histogenesis		Histogenesis	Histogenesis	Histogeny	
520	Incrementum		Growth	Growth		<i>See Crescentia</i>
521	Ingressio		Ingression	Ingression		
522	Inhibitio lateralis		Lateral inhibition	Lateral inhibition		
523	Impedimentum		Constraint	Constraint	Limitation	
524	Inflatio		Ballooning	Ballooning		<i>Endnote 37</i>
525	Interactio		Interaction	Interaction		
526	Interactio epitheliomesenchymalis		Epitheliomesenchymal interaction	Epitheliomesenchymal interaction		
527	Interactio mesenchymoepithelialis		Mesenchymo-epithelial interaction	Mesenchymoepithelial interaction		
528	Intussusceptio		Intussusception	Intussusception		
529	Invaginatio		Invagination	Invagination		
530	Invasio		Invasion	Invasion		
531	Invectio		Recruitment	Recruitment		<i>Endnote 38</i>
532	Laxatio		Loosening	Loosening		
533	Maturatio		Maturation	Maturation		<i>Endnote 39</i>
534	Migratio interkinetica nuclei		Interkinetic nuclear migration	Interkinetic nuclear migration		
535	Mitosis proliferativa		Proliferative mitosis	Proliferative mitosis		
536	Mitosis quantalis		Quantal mitosis	Quantal mitosis		
537	Optio binaria		Binary choice	Binary choice		

538	Morphogenesis		Morphogenesis	Morphogenesis		
539	Morphogenesis gemmans		Budding morphogenesis	Budding morphogenesis		<i>Endnote 40</i>
540	Morphogenesis ramificans		Branching morphogenesis	Branching morphogenesis		<i>Endnote 41</i>
541	Morphogenesis findens		Clefting morphogenesis	Clefting morphogenesis		<i>Endnote 42</i>
542	Mors cellulae programmata		Programmed cell death	Programmed cell death		
543	Apoptosis		Apoptosis	Apoptosis		
544	Autophagocytosis		Autophagy	Autophagy		
545	Autoschisis		Autoschizis	Autoschizis		
546	Chondroptosis		Chondroptosis	Chondroptosis		
547	Paraptosis		Paraptosis	Paraptosis		
548	Motus		Movements	Movements		
549	Motus biokineticus		Biokinetic movement	Biokinetic movement		
550	Motus condensationis	Motus densationis	Condensation movement	Condensation movement	Densation movement	<i>Endnote 43</i>
551	Motus compressionis longitudinalis	Motus concursiois	Longitudinal compression movement	Longitudinal compression movement	Contusional movement	
552	Motus dilatationis		Dilation movement	Dilation movement		<i>Endnote 44</i>
553	Motus expansionis longitudinalis	Motus distusionalis	Elongation movement	Elongation movement	Distusional movement	<i>Endnote 45</i>
554	Motus involutionis	Involutio	Involuntary movement	Involuntary movement	Involution	<i>Endnote 46</i>
555	Motus morphogenetici		Morphogenetic movements	Morphogenetic movements		
556	Motus epibolicus		Epiboly	Epiboly	Spreading	
557	Motus embolicus		Emboly	Emboly	Ingression	
558	Motus convergens		Convergence	Convergence		
559	Motus extendens		Extension	Extension		
560	Motus extensionis convergentis		Convergent extension	Convergent extension		
561	Motus translationis	Migratio	Changing positional relationship	Changing positional relationship	Migration	<i>Endnote 47</i>
562	Migratio vera		True migration	True migration		
563	Migratio ficta		False migration	False migration		
564	Motus relativus		Relative movement	Relative movement		
565	Motus ascensionis		Relative ascent	Relative ascent		
566	Motus descensionis		Relative descent	Relative descent		
567	Neurulatio		Neurulation	Neurulation		
568	Neurulatio primaria		Primary neurulation	Primary neurulation		<i>Endnote 48</i>
569	Neurulatio secundaria		Secondary neurulation	Secondary neurulation		<i>Endnote 49</i>
570	Organogenesis		Organogenesis	Organogenesis	Organogeny	
571	Phenomenon campi		Field phenomenon	Field phenomenon		
572	Campus morphogeneticus	Campus biodynamicus	Morphogenetic field	Morphogenetic field	Biodynamic field	
573	Plicatio		Folding	Folding		
574	Polarisatio		Polarization	Polarization		
575	Polaritas planaris cellulae	Polaritas cellularis planaris	Planar cell polarity	Planar cell polarity		
576	Ramificatio		Branching	Branching		
577	Reconstitutio		Reconstitution	Reconstitution		
578	Regressio		Regression	Regression		
579	Reorganisatio		Reorganization	Reorganization		
580	Resegmentatio		Resegmentation	Resegmentation		
581	Resorptio		Resorption	Resorption		

582	Restrictio		Restriction	Restriction		
583	Retractio		Retraction	Retraction		
584	Segmentatio	Metamerismus	Segmentation	Segmentation	Metamerism	
585	Situs		Position	Position		
586	Situs solitus viscerum		Normal position of viscera	Normal position of viscera		
587	Specificatio		Specification	Specification		
588	Transitio		Transition	Transition		
589	Transitio epitheliomesenchymalis		Epitheliomesenchymal transition	Epitheliomesenchymal transition		<i>Endnote 50</i>
590	Transitio mesenchymoepithelialis		Mesenchymo-epithelial transition	Mesenchymoepithelial transition		<i>Endnote 51</i>
591	Tubulatio		Tubulation	Tubulation		
592	Vesiculatio		Vesiculation	Vesiculation		

Caput III: ONTOGENESIS

Chapter 3: ONTOGENESIS

	Latin term	Latin synonym	UK English	US English	English synonym	Other
593	Ontogenesis		Ontogeny	Ontogeny		<i>Endnote 52</i>
594	Tempora ontogenetica		Ontogenetic periods	Ontogenetic periods		
595	Ontogenesis prenatalis		Prenatal ontogeny	Prenatal ontogeny		
596	TEMPUS EMBRYONICUM		EMBRYONIC PERIOD	EMBRYONIC PERIOD		
597	Embryo gradus I		Stage 1 embryo	Stage 1 embryo	St. 1	
598	Embryo gradus Ia		Stage 1a embryo	Stage 1a embryo	St.1a	
599	Embryo gradus Ib		Stage 1b embryo	Stage 1b embryo	St. 1b	
600	Embryo gradus Ic		Stage 1c embryo	Stage 1c embryo	St. 1c	
601	Embryo gradus II		Stage 2 embryo	Stage 2 embryo	St. 2	
602	Embryo gradus III		Stage 3 embryo	Stage 3 embryo	St. 3	
603	Embryo gradus IV		Stage 4 embryo	Stage 4 embryo	St. 4	
604	Embryo gradus V		Stage 5 embryo	Stage 5 embryo	St. 5	
605	Embryo gradus Va		Stage 5a embryo	Stage 5a embryo	St. 5a	
606	Embryo gradus Vb		Stage 5b embryo	Stage 5b embryo	St. 5b	
607	Embryo gradus Vc		Stage 5c embryo	Stage 5c embryo	St. 5c	
608	Embryo gradus VI		Stage 6 embryo	Stage 6 embryo	St. 6	
609	Embryo gradus VIa		Stage 6a embryo	Stage 6a embryo	St. 6a	
610	Embryo gradus VIb		Stage 6b embryo	Stage 6b embryo	St. 6b	
611	Embryo gradus VII		Stage 7 embryo	Stage 7 embryo	St. 7	
612	Embryo gradus VIII		Stage 8 embryo	Stage 8 embryo	St. 8	
613	Embryo gradus VIIla		Stage 8a embryo	Stage 8a embryo	St. 8a	
614	Embryo gradus VIIlb		Stage 8b embryo	Stage 8b embryo	St. 8b	
615	Embryo gradus IX	Embryo cum somitis I ad III	Stage 9 embryo	Stage 9 embryo	St. 9; 1-3 somite embryo	
616	Embryo gradus X	Embryo cum somitis IV ad XII	Stage 10 embryo	Stage 10 embryo	St. 10; 4-12 somite embryo	
617	Embryo gradus XI	Embryo cum somitis XIII ad XX	Stage 11 embryo	Stage 11 embryo	St. 11; 13-20 somite embryo	
618	Embryo gradus XII	Embryo cum somitis XXI ad XXIX	Stage 12 embryo	Stage 12 embryo	St. 12; 21-29 somite embryo	
619	Embryo gradus XIII	Embryo cum somitis XXX+	Stage 13 embryo	Stage 13 embryo	St. 13; 30+ somite embryo	
620	Embryo gradus XIV		Stage 14 embryo	Stage 14 embryo	St. 14	
621	Embryo gradus XV		Stage 15 embryo	Stage 15 embryo	St. 15	
622	Embryo gradus XVI		Stage 16 embryo	Stage 16 embryo	St. 16	
623	Embryo gradus XVII		Stage 17 embryo	Stage 17 embryo	St. 17	
624	Embryo gradus XVIII		Stage 18 embryo	Stage 18 embryo	St. 18	
625	Embryo gradus XIX		Stage 19 embryo	Stage 19 embryo	St. 19	
626	Embryo gradus XX		Stage 20 embryo	Stage 20 embryo	St. 20	
627	Embryo gradus XXI		Stage 21 embryo	Stage 21 embryo	St. 21	
628	Embryo gradus XXII		Stage 22 embryo	Stage 22 embryo	St. 22	
629	Embryo gradus XXIII		Stage 23 embryo	Stage 23 embryo	St. 23	
630	TEMPUS FETALE		FETAL PERIOD	FETAL PERIOD		<i>Endnote 53</i>
631	Fetogenesis		Fetogenesis	Fetogenesis		
632	Fetus		Fetus	Fetus		
633	Aetas fetalis		Fetal age	Fetal age		<i>Endnote 54</i>

634	Tempus fetale initiale	Fetus hebdomadis nonae ad hebdomadem tertiam decimam	Early fetal period	Early fetal period	Ninth to thirteenth week fetus	<i>Endnote 55</i>
635	Tempus fetale intermedium	Fetus trimestri secundi	Intermediate fetal period	Intermediate fetal period	Second trimester fetus	<i>Endnote 56</i>
636	Tempus fetale serum	Fetus trimestri tertii	Late fetal period	Late fetal period	Third trimester fetus	<i>Endnote 57</i>
637	Ontogenesis postnatalis		Postnatal ontogeny	Postnatal ontogeny		
638	TEMPUS NATALE		BIRTH PERIOD	BIRTH PERIOD		
639	Tempus perinatale		Perinatal period	Perinatal period		<i>Endnote 58</i>
640	Infantia		Infancy	Infancy		
641	Tempus postnatale		Postnatal period	Postnatal period	Postpartum period	
642	Tempus neonatale		Neonatal period	Neonatal period		<i>Endnote 59</i>
643	Tempus neonatale initiale		Early neonatal period	Early neonatal period		
644	Tempus neonatale serum		Later neonatal period	Later neonatal period		
645	TEMPORA SERIORA		LATER PERIODS	LATER PERIODS		
646	Pueritia		Childhood	Childhood		
647	Phasis prima pueritiae		Early childhood	Early childhood		
648	Phasis secunda pueritiae		Later childhood	Later childhood		
649	Acceleratio prepubertalis crescentiae		Prepubertal growth spurt	Prepubertal growth spurt		
650	Neotenia		Neoteny	Neoteny		<i>Endnote 60</i>
651	Pedomorphosis		Pedomorphosis	Pedomorphosis		<i>Endnote 61</i>
652	Pubertas		Puberty	Puberty		
653	Adolescentia		Adolescence	Adolescence		
654	Acceleratio crescentiae adolescentiae		Adolescent growth spurt	Adolescent growth spurt		
655	Aetas adulta		Adulthood	Adulthood		
656	Juvenilitas		Young adulthood	Young adulthood		
657	Maturitas		Middle age	Middle age		
658	Senectus		Old age	Old age		
659	Senescentia		Senescence	Senescence		
660	Ordo ontogeneticus		Ontogenetic sequence	Ontogenetic sequence		
661	Ontogenesis prenatalis		Prenatal ontogeny	Prenatal ontogeny		
662	FERTILISATIO POST PENETRATIONEM SPERMATOZOI		FERTILIZATION FROM SPERM PENETRATION	FERTILIZATION FROM SPERM PENETRATION		<i>Endnote 62</i>
663	Nomina et processus		Terms and processes	Terms and processes		
664	Monospermia		Monospermy	Monospermy		
665	Dispermia		Dispermy	Dispermy		
666	Polyspermia		Polyspermy	Polyspermy		
667	Embryogenesis		Embryogenesis	Embryogenesis	Embryogeny	
668	Blastogenesis		Blastogenesis	Blastogenesis		
669	Spermatozoon		Sperm	Sperm		
670	Plasmalemma spermatozoi		Plasmalemma of sperm	Plasmalemma of sperm		
671	Oocytus		Oocyte	Oocyte		
672	Plasmalemma oocytii		Plasmalemma of oocyte	Plasmalemma of oocyte		

673	Conjunctio inter plasmalemata spermatozoi et oocytii		Sperm-oocyte plasma membrane fusion	Sperm oocyte plasma membrane fusion		
674	Ingressio spermatozoi		Sperm entry	Sperm entry		
675	Determinatio sexus genetici		Determination of genetic sex	Determination of genetic sex		
676	Aditus natrii ionici in oocytum		Sodium ion inflow into oocyte	Sodium ion inflow into oocyte		
677	Obsidio subita polyspermae		Fast polyspermy block	Fast polyspermy block		
678	Propagatio undae calcii		Calcium wave spread	Calcium wave spread		
679	Synkaryon		Synkaryon	Synkaryon		
680	Fertilisatio in vitro		In vitro fertilization	In vitro fertilization		
681	Activatio oocytii		Activation of oocyte	Activation of oocyte		
682	Peractio divisionis meioticae secundae		Completion of second meiotic division	Completion of second meiotic division		
683	Pronucleus femininus	Pronucleus maternus	Female pronucleus	Female pronucleus	Maternal pronucleus	Haploid (1N, 1C)
684	Ootidium	Ovum; Embryo pronuclearis	Ootid	Ootid		<i>Endnote 63</i>
685	Corpus polare secundum	Polocytus secundarius	Second polar body	Second polar body	Second polocyte	Haploid (1N, 1C) <i>Endnote 64</i>
686	Divisio corporis polaris primi		Division of first polar body	Division of first polar body	Division of first polocyte	
687	Corpora polaria duo descendencia		Two daughter polocytes	Two daughter polocytes		Haploid (1N, 1C)
688	Reactio corticalis		Cortical reaction	Cortical reaction		
689	Conjunctio granulorum corticalium cum plasmalemate oocytico		Fusion of cortical granules with oocytic plasma membrane	Fusion of cortical granules with oocytic plasma membrane		
690	Liberatio subzonalis enzymatis	Liberatio subcapsularis enzymatis	Subzonal enzyme release	Subzonal enzyme release	Subcapsular enzyme release	
691	Remotio receptorum ligantium spermatozoi		Removal of sperm-binding receptors	Removal of spermbinding receptors		
692	Obsidio lenta polyspermae		Slow polyspermy block	Slow polyspermy block		
693	Dilatatio spatii subzonalis	Dilatatio spatii subcapsularis	Expansion of subzonal space	Expansion of subzonal space	Expansion of subcapsular space	
694	Liquor subzonalis copiosus		Plenteous subzonal fluid	Plenteous subzonal fluid		
695	Reactio zonalis	Reactio capsularis	Zonal reaction	Zonal reaction	Capsular reaction	
696	Induratio zonae pellucidae		Hardening of zona pellucida	Hardening of zona pellucida		
697	Conus fertilisationis		Fertilization cone	Fertilization cone		
698	Positio intraoocytica nuclei spermatozoi		Intra-oocytic sperm nucleus	Intraoocytic sperm nucleus		Haploid (1N, 1C)
699	Numerus diploideus chromosomatum nonreplicatorum	Numerus diploideus chromosomatum nonreplicatorum	Diploid number of unreplicated chromosomes	Diploid number of unreplicated chromosomes	Diploid number of unreplicated chromosomes	<i>Endnote 65</i>
700	Dissolutio tegumenti nuclearis spermatozoi		Dissolution of sperm nuclear envelope	Dissolution of sperm nuclear envelope		
701	Decondensatio chromatini		Decondensation of chromatin	Decondensation of chromatin		
702	Reconstitutio tegumenti nuclearis spermatozoi		Reconstitution of sperm nuclear envelope	Reconstitution of sperm nuclear envelope		
703	Reordinatio chromatini		Re-organization of chromatin	Reorganization of chromatin		
704	Appropinquatio pronucleorum		Approximation of pronuclei	Approximation of pronuclei		
705	Syngamia		Syngamy	Syngamy		<i>Endnote 66</i>
706	Vesiculatio tegumenti nuclearis		Vesiculation of nuclear envelope	Vesiculation of nuclear envelope		
707	Disintegratio tegumenti nuclearis		Disintegration of nuclear	Disintegration of nuclear		

			envelope	envelope		
708	Conjugatio	Synapsis	Conjugation	Conjugation		
709	Formatio genomi embryonici		Formation of embryonic genome	Formation of embryonic genome		
710	Activatio prima genorum zygoticorum		First transcription	First transcription	First zygotic activation; ZGA1	Endnote 67
711	Chromosomata homologa conjuncta		Paired homologous chromosomes	Paired homologous chromosomes		
712	Axis polaris		Plane of first cleavage division	Plane of first cleavage division	Polar axis	
713	Fissio prima		First cleavage division	First cleavage division		
714	Fertilisatio simplex		Single fertilization	Single fertilization		
715	Cyema singulare		Singleton	Singleton	Single cyema	
716	Fertilisatio duplex		Double fertilization	Double fertilization		
717	TEMPUS EMBRYONICUM	Gradus carnegienses [St.1 ad 23]	EMBRYONIC PERIOD	EMBRYONIC PERIOD	Carnegie stages [St. 1-23]	Endnote 68
718	Embryo		Embryo	Embryo		
719	Embryo pregastrulationis		Pregastrulation embryo	Pregastrulation embryo		Endnote 69
720	Embryo preimplantationis		Pre-implantation embryo	Preimplantation embryo		
721	Embryo preblastocysticus		Preblastocystic embryo	Preblastocystic embryo		
722	Gradus cellulae unicae	Embryo unicellularis	One-cell stage	One cell stage	Single cell embryo	
723	Oocytus penetratus	Oocytus definitivus; Embryo primordialis	Penetrated oocyte	Penetrated oocyte	Definitive oocyte; Primordial embryo	
724	Zygotum	Embryo syngamicus	Zygote	Zygote	Syngamic embryo	
725	Zona pellucida		Zona pellucida	Zona pellucida		
726	Spatium subzonale	Spatium subcapsulare	Subzonal space	Subzonal space	Subcapsular space	Endnote 70
727	Pronucleus		Pronucleus	Pronucleus		
728	Pronucleus femininus	Pronucleus maternus	Female pronucleus	Female pronucleus	Maternal pronucleus	
729	Corpus polare secundum	Polocytus secundarius	Second polar body	Second polar body	Second polocyte	
730	Reactio corticalis		Cortical reaction	Cortical reaction		
731	Reactio zonalis	Reactio capsularis	Zonal reaction	Zonal reaction	Capsular reaction	Endnote 71
732	Degradatio mitochondriorum paternalium		Degradation of paternal mitochondria	Degradation of paternal mitochondria		Endnote 72
733	Conus fertilisationis		Fertilization cone	Fertilization cone		IVF
734	Fusus anaphasis II		Anaphase spindle II	Anaphase spindle II		IVF
735	Fusus telophasis II		Telophase spindle II	Telophase spindle II		IVF
736	Intercorpus		Interbody	Interbody		IVF Endnote 73
737	Ootidium	Ovum; Embryo pronuclearis	Ootid	Ootid	Ovum; Pronuclear embryo	
738	Pronucleus masculinus	Pronucleus paternus	Male pronucleus	Male pronucleus	Paternal pronucleus	
739	Pronuclei admoti		Approximated pronuclei	Approximated pronuclei		
740	Corpusculum precursorium nucleolorum		Nucleolar precursor body	Nucleolar precursor body		
741	Polus animalis	Polus embryonicus presumptivus	Animal pole	Animal pole	Presumptive embryonic pole	
742	Zygotum		Zygote	Zygote		
743	Zygotum findens		Cleaving zygote	Cleaving zygote		Endnote 74

744	Zygotum findens cellularum II		Cleaving zygote of two cells	Cleaving zygote of two cells		
745	Zygotum findens cellularum III		Cleaving zygote of three cells	Cleaving zygote of three cells		
746	Zygotum findens cellularum IV et cetera		Cleaving zygote of four cells, etc.	Cleaving zygote of four cells, etc.		
747	Morula		Morula	Morula		<i>Endnote 75</i>
748	Blastomerus		Blastomere	Blastomere		
749	Compactio		Compaction	Compaction		
750	Nexus	Macula communicans; Synapsis nonvesicularis	Gap junction	Gap junction	Nonvesicular synapse	
751	Macula adhaerens	Desmosoma	Desmosome	Desmosome	Macula adhaerens; Spot desmosome	
752	Zonula occludens		Tight junction	Tight junction		
753	Cellula externa morulae	Cellula trophoblastica presumptiva; Cellula polarisata; Polarblastus	Outer cell of morula	Outer cell of morula	Presumptive trophoblastic cell; Polarized cell; Polarblast	<i>Endnote 76</i>
754	Cellula interna morulae	Cellula embryoblastica presumptiva; Pluriblastus initialis	Inner cell of morula	Inner cell of morula	Presumptive embryoblastic cell; Early pluriblast	<i>Endnote 77</i>
755	Axis radialis morulae		Radial axis of morula	Radial axis of morula		
756	Blastocystis libera		Free blastocyst	Free blastocyst		<i>Endnote 78</i>
757	Blastocystis capsulata		Encapsulated blastocyst	Encapsulated blastocyst	Unhatched blastocyst	
758	Cavitatio		Cavitation	Cavitation		IVF
759	Cavitatio incipiens		Start of cavitation	Start of cavitation		IVF
760	Regressio cavitatis		Collapse of cavity	Collapse of cavity		IVF
761	Redilatatio cavitatis		Re-expansion of cavity	Re-expansion of cavity		IVF
762	Cavitatio terminalis		End of cavitation	End of cavitation		IVF
763	Denudatio		Hatching	Hatching		IVF
764	Cellula rumpens zonam		Zona-breaker cell	Zona breaker cell		IVF
765	Cellula rejecta		Discarded cell	Discarded cell		IVF
766	Cellula sequestrata		Sequestered cell	Sequestered cell		IVF
767	Cellula segregata		Isolated cell	Isolated cell		IVF
768	Fragmentum zonae pellucidae		Fragment of zona pellucida	Fragment of zona pellucida		IVF
769	Blastocystis nuda		Hatched blastocyst	Hatched blastocyst		
770	Segregatio embryoblasti		Segregation of embryoblast	Segregation of embryoblast		
771	Polus embryonicus		Embryonic pole	Embryonic pole		
772	Polus abembryonicus		Abembryonic pole	Abembryonic pole		
773	Embryoblastus	Massa cellularis interna; Pluriblastus serior	Embryoblast	Embryoblast	Inner cell mass; Late pluriblast	<i>Endnote 79</i>
774	Discus embryonicus		Embryonic disc	Embryonic disc		
775	Dorsoventralitas		Dorsoventrality	Dorsoventrality		
776	Epithelium primordiale		Primordial epithelium	Primordial epithelium		<i>Endnote 80</i>
777	Epiblastus		Epiblast	Epiblast	Primary ectoderm	<i>Endnote 81</i>
778	Hypoblastus		Hypoblast	Hypoblast	Primary endoderm	<i>Endnote 82</i>
779	Transitio epitheliomesenchymalis		Epitheliomesenchymal transition	Epitheliomesenchymal transition		
780	Mesenchyma		Mesenchyme	Mesenchyme		<i>Endnote 83</i>

781	Transitio mesenchymoepithelialis		Mesenchymo-epithelial transition	Mesenchymoepithelial transition	Mesenchymoepithelial transition	
782	Cavitas blastocystica		Blastocystic cavity	Blastocystic cavity	Blastocyst cavity	Endnote 84
783	Discus embryonicus		Embryonic disc	Embryonic disc		
784	Trophoblastus	Trophoectoderma	Trophoblast	Trophoblast	Trophectoderm	Endnote 85
785	Trophoblastus polaris		Polar trophoblast	Polar trophoblast		
786	Trophoblastus muralis		Mural trophoblast	Mural trophoblast		
787	Blastocystis unilaminaris		Unilaminar blastocyst	Unilaminar blastocyst		Endnote 86
788	Insignia miscellanea cellularum trophoblasticarum nondifferentiatarum		Miscellaneous features of undifferentiated trophoblast cells	Miscellaneous features of undifferentiated trophoblast cells		Endnote 87
789	Corpus heterophagolysosomati simile		Heterophagolysosome-like body	Heterophagolysosome like body		IVF
790	Telolysosoma	Corpusculum residuale	Telolysosome	Telolysosome	Residual body	IVF
791	Desmosoma		Desmosome	Desmosome	Macula adhaerens	IVF
792	Junctio occludens apicalis		Apical tight junction	Apical tight junction		IVF
793	Junctio occludens basalis		Basal tight junction	Basal tight junction		IVF
794	Junctio occludens anularis		Anular tight junction	Anular tight junction		IVF
795	Lamella anularis		Anulate lamella	Anulate lamella		IVF
796	Microvillus		Microvillus	Microvillus		IVF
797	Mitochondrion longum		Long mitochondrion	Long mitochondrion		IVF
798	Processus cellularis		Cell process	Cell process		IVF
799	Reticulum endoplasmicum granulosum		Rough endoplasmic reticulum	Rough endoplasmic reticulum		IVF
800	Facies dorsalis embryonis		Dorsal embryonic surface	Dorsal embryonic surface		
801	Facies ventralis embryonis		Ventral embryonic surface	Ventral embryonic surface		
802	Blastocystis adhaerens		Attaching blastocyst	Attaching blastocyst		Endnote 88
803	Cavitas amniotica primordialis		Primordial amniotic cavity	Primordial amniotic cavity		Endnote 89
804	Cytotrophoblastus		Cytotrophoblast	Cytotrophoblast		
805	Adhaesio epithelio endometrii		Adherence to endometrial epithelium	Adherence to endometrial epithelium		IVF
806	Complexus junctionalis apicalis		Apical junctional complex	Apical junctional complex		IVF
807	Desmosoma	Macula adhaerens	Desmosome	Desmosome	Macula adhaerens; Spot desmosome	IVF
808	Invaginatio cellulae epiblasticae a processu cellulare		Cell process invaginating epiblastic cell	Cell process invaginating epiblastic cell		IVF
809	Porus nuclearis		Nuclear pore	Nuclear pore		IVF
810	Syncytiotrophoblastus		Syncytiotrophoblast	Syncytiotrophoblast		
811	Processus inter epitheliocytos endometrii		Interendometrial cell processes	Interendometrial cell processes		IVF
812	Margo syncytioepithelialis		Syncytio-epithelial interface	Syncytioepithelial interface		
813	Implantatio superficialis		Superficial implantation	Superficial implantation		
814	Adhaesio		Adhesion	Adhesion		
815	Invasio trophoblastica		Trophoblast invasion	Trophoblast invasion		
816	Implantatio interstitialis		Interstitial implantation	Interstitial implantation		

817	Blastocystis implantata	Conceptus previllosus	Implanted blastocyst	Implanted blastocyst	Invading blastocyst; Previllous conceptus	<i>Endnote 90</i>
818	Discus embryonicus		Embryonic disc	Embryonic disc		
819	Margo syncytiodecidualis		Syncytiodecidual interface	Syncytiodecidual interface		<i>Endnote 91</i>
820	Testa trophoblastica		Trophoblastic shell	Trophoblastic shell		
821	Blastocystis invadens sine lacunis trophoblasticis		Invading blastocyst without trophoblastic lacunae	Invading blastocyst without trophoblastic lacunae		
822	Cavitas blastocystica pressula		Flattened blastocystic cavity	Flattened blastocystic cavity		
823	Discus embryonicus concavus dorsaliter		Dorsally concave embryonic disc	Dorsally concave embryonic disc		
824	Trophoblastus solidus		Solid trophoblast	Solid trophoblast		
825	Cavitas trophoeipiblastica		Tropho-epiblastic cavity	Trophoeipiblastic cavity		<i>Endnote 92</i>
826	Cavitas amniotica primordialis		Primordial amniotic cavity	Primordial amniotic cavity		
827	Amnioblastus	Cellulae amniogenicae	Amnioblast	Amnioblast	Amniogenic cells; Amniotic ectoderm	<i>Endnote 93</i>
828	Primordium marginis caudalis lineae primitivae	Primordium marginis caudalis lineae gastrulationi	Primordium of caudal margin of primitive streak	Primordium of caudal margin of primitive streak	Primordium of caudal margin of gastrulation streak	<i>Endnote 94</i>
829	Margo caudalis lineae primitivae precocquis	Margo caudalis lineae gastrulationis precocquis	Caudal margin of primitive streak	Caudal margin of primitive streak	Caudal margin of gastrulation streak	<i>Endnote 94</i>
830	Area caudalis mesoblastogenica		Caudal mesoblastogenic area	Caudal mesoblastogenic area		<i>Endnote 95</i>
831	Mesoblastus extraembryonicus		Extra-embryonic mesoblast	Extraembryonic mesoblast		<i>Endnote 96</i>
832	Textus angioblasticus mesoblasti		Angioblastic tissue of mesoblast	Angioblastic tissue of mesoblast		<i>Endnote 97</i>
833	Crista previllosa mesoblasti		Previllous crest of mesoblast	Previllous crest of mesoblast		<i>Endnote 97</i>
834	Reticulum extraembryonicum	Magma reticulare	Extra-embryonic reticulum	Extraembryonic reticulum	Mesenchymal reticulum	<i>Endnote 98</i>
835	Blastocystis invadens cum lacunis trophoblasticis separatis		Invading blastocyst with isolated trophoblastic lacunae	Invading blastocyst with isolated trophoblastic lacunae		
836	Lacuna trophoblastica		Trophoblastic lacuna	Trophoblastic lacuna		
837	Aggregatio previllosa cytotrophoblasti		Previllous clump of cytotrophoblast	Previllous clump of cytotrophoblast		
838	Cavitas amniotica definitiva		Definitive amniotic cavity	Definitive amniotic cavity		
839	Chorion primordiale		Primordial chorion	Primordial chorion		
840	Endoblastus extraembryonicus	Membrana exocoelomica	Extra-embryonic endoblast	Extraembryonic endoblast	Exocoelomic membrane; Primary endoderm	<i>Endnote 99</i>
841	Vesicula umbilicalis primaria	Saccus vitellinus primarius	Primary umbilical vesicle	Primary umbilical vesicle	Primary yolk sac	<i>Endnote 100</i>
842	Cavitas vesiculae umbilicalis primariae	Cavitas sacci vitellini primarii	Cavity of primary umbilical vesicle	Cavity of primary umbilical vesicle	Cavity of primary yolk sac	<i>Endnote 100</i>
843	Blastocystis invadens cum lacunis communicantibus		Invading blastocyst with intercommunicating lacunae	Invading blastocyst with intercommunicating lacunae		
844	Obturamentum fibrosus in loco implantationis	Obturamentum occludens	Fibrous coagulum at implantation site	Fibrous coagulum at implantation site	Closing plug	
845	Circulus lacunosus vascularis		Lacunar vascular circle	Lacunar vascular circle		<i>Endnote 101</i>
846	Cavitas chorionica primordialis		Primordial chorionic cavity	Primordial chorionic cavity		

847	Lamina prechordalis precoqua		Precocious prechordal plate	Precocious prechordal plate	Anterior pregastrulation differentiation	<i>Endnote 102</i>
848	Margo disci embryonici		Border of embryonic disc	Border of embryonic disc		
849	Junctio epiblasticoamniotica		Epiblastic-amniotic junction	Epiblastic amniotic junction		
850	Anulus umbilicalis presumptivus		Future umbilical ring	Future umbilical ring		
851	Polus caudalis embryonis		Caudal pole of embryo	Caudal pole of embryo	Caudal end of embryo	
852	Polus rostralis embryonis		Rostral pole of embryo	Rostral pole of embryo	Rostral end of embryo	<i>Endnote 103</i>
853	Polus cephalicus embryonis	Polus cranialis embryonis	Cephalic pole of embryo	Cephalic pole of embryo	Cephalic end of embryo; Cranial end of embryo	<i>Endnote 104</i>
854	Latus dextrum embryonis		Right side of embryo	Right side of embryo		<i>Endnote 105</i>
855	Latus sinistrum embryonis		Left side of embryo	Left side of embryo		
856	Conceptus villosus		Villous conceptus	Villous conceptus		<i>Endnote 106</i>
857	Conceptus villosus sine linea primitiva manifesta	Conceptus villosus sine linea gastrulationis manifesta	Villous conceptus without obvious primitive streak	Villous conceptus without obvious primitive streak		
858	Chorion		Chorion	Chorion		
859	Trophoblastus		Trophoblast	Trophoblast	Trophectoderm	
860	Mesenchyma chorionicum		Chorionic mesenchyme	Chorionic mesenchyme		
861	Mesothelium chorionicum		Chorionic mesothelium	Chorionic mesothelium		
862	Chorion frondosum		Chorion frondosum	Chorion frondosum	Villous chorion	<i>Endnote 107</i>
863	Villus primarius		Primary villus	Primary villus		
864	Villus secundarius		Secondary villus	Secondary villus		
865	Villus tertiaris		Tertiary villus	Tertiary villus		
866	Vas primordiale villi tertiaris		Primordial vessel of tertiary villus	Primordial vessel of tertiary villus		
867	Spatium intervillosum		Intervillous space	Intervillous space		
868	Vesicula umbilicalis secundaria	Saccus vitellinus secundarius	Secondary umbilical vesicle	Secondary umbilical vesicle	Secondary yolk sac	<i>Endnote 100</i>
869	Endoderma extraembryonicum vesiculae umbilicalis	Endoderma extraembryonicum sacci vitellini	Extra-embryonic endoderm of umbilical vesicle	Extraembryonic endoderm of umbilical vesicle	Extra-embryonic endoderm of yolk sac; Extraembryonic endoderm of yolk sac	
870	Mesenchyma vesiculae umbilicalis	Mesenchyma sacci vitellini	Umbilical vesicle mesenchyme	Umbilical vesicle mesenchyme	Yolk sac mesenchyme	
871	Insula sanguinea vesiculae umbilicalis	Insula sanguinea sacci vitellini	Blood island of umbilical vesicle	Blood island of umbilical vesicle	Blood island of yolk sac	
872	Haemangiogenesis vesiculae umbilicalis incipiens	Haemangiogenesis sacci vitellini incipiens	Incipient umbilical vesicle haemangiogenesis	Incipient umbilical vesicle hemangiogenesis	Incipient yolk sac haemangiogenesis; Incipient yolk sac hemangiogenesis	
873	Cavitas vesiculae umbilicalis secundariae	Cavitas sacci vitellini secundarii	Cavity of secondary umbilical vesicle	Cavity of secondary umbilical vesicle	Cavity of secondary yolk sac	<i>Endnote 100</i>
874	Vasculogenesis		Vasculogenesis	Vasculogenesis		<i>Endnote 108</i>
875	Pedunculus connectans primordialis		Primordial connecting stalk	Primordial connecting stalk		
876	Conceptus villosus cum linea primitiva manifesta	Conceptus villosus cum linea gastrulationis manifesta	Villous conceptus with primitive streak	Villous conceptus with primitive streak	Villous conceptus with gastrulation streak	
877	Mesenchyma capitis		Head mesenchyme	Head mesenchyme		<i>Endnote 109</i>
878	Linea primitiva	Linea gastrulationis	Primitive streak	Primitive streak	Gastrulation streak	<i>Endnote 110</i>
879	Sulcus primitivus	Sulcus gastrulationis	Primitive groove	Primitive groove	Gastrulation groove	<i>Endnote 110</i>

880	Mesoderma embryonicum	Mesoblastus	Embryonic mesoderm	Embryonic mesoderm	Mesoblast	Endnote 111
881	Nodus primitivus	Nodus gastrulationis	Primitive node	Primitive node	Gastrulation node	§Hensen§ Endnote 110
882	Endoderma embryonicum		Embryonic endoderm	Embryonic endoderm		Endnote 112
883	Lamina prechordalis		Prechordal plate	Prechordal plate		Endnote 113
884	Allantois		Allantois	Allantois		
885	Diverticulum allantoicum	Ductus allantoicus	Allantoic diverticulum	Allantoic diverticulum	Allantoic duct	Endnote 114
886	Mesenchyma allantoicum		Allantoic mesenchyme	Allantoic mesenchyme		
887	Vas allantoicum		Allantoic vessel	Allantoic vessel		
888	Membrana cloacalis primordialis		Primordial cloacal membrane	Primordial cloacal membrane		
889	Haemangiogenesis vesiculae umbilicalis	Haemangiogenesis sacci vitellini	Umbilical vesicle haemangiogenesis	Umbilical vesicle hemangiogenesis	Yolk sac haemangiogenesis; Yolk sac hemangiogenesis	
890	Pedunculus connectans		Connecting stalk	Connecting stalk		
891	Vas primordiale pedunculi connectantis		Primordial vessel of connecting stalk	Primordial vessel of connecting stalk		
892	Villus tertiarus ramosus		Branching tertiary villus	Branching tertiary villus		
893	Vas villi tertiarum		Vessel of tertiary villus	Vessel of tertiary villus		
894	Villus ancorialis		Anchoring villus	Anchoring villus		
895	Villus liber		Floating villus	Floating villus		
896	Amnion bilaminare		Bilaminar amnion	Bilaminar amnion		
897	Cellula germinalis precursoria	Precursor cellulae germinalis	Primordial germ cell	Primordial germ cell	Germ cell precursor	Endnote 115
898	Embryo postgastrulationis		Postgastrulation embryo	Postgastrulation embryo		Endnote 116
899	Embryo cum processu notochordali	Embryo cum processu axiali; Embryo cum chordo-mesodermate	Embryo with notochordal process	Embryo with notochordal process	Embryo with axial process; Embryo with chordamesoderm	Endnote 117
900	Lamina neuralis		Neural plate	Neural plate		
901	Processus notochordalis	Processus axialis; Chordomesoderma	Notochordal process	Notochordal process	Axial process; Chordamesoderm	
902	Notochorda		Notochord	Notochord		
903	Cardo chordoneuralis	Punctum chordoneurale cardinis	Chordoneural hinge	Chordoneural hinge		Endnote 118
904	Canalis notochordalis		Notochordal canal	Notochordal canal		
905	Canalis neurentericus		Neurenteric canal	Neurenteric canal		Endnote 119
906	Lamina notochordalis		Notochordal plate	Notochordal plate		
907	Cylindrus notochordalis		Notochordal rod	Notochordal rod		
908	Membrana cloacalis		Cloacal membrane	Cloacal membrane		
909	Embryo presomiticus		Presomite embryo	Presomite embryo		Endnote 120
910	Embryo presomiticus sine sulco neurale		Presomite embryo without neural groove	Presomite embryo without neural groove		
911	Embryo piriformis		Pear-shaped embryo	Pear shaped embryo		
912	Fovea primitiva		Primitive pit	Primitive pit		Fovea notochordalis Endnote 121
913	Embryo presomiticus cum sulco neurale		Presomite embryo with neural groove	Presomite embryo with neural groove		
914	Plica capitis primordialis	Plica cephalica primordialis	Primordial head fold	Primordial head fold		
915	Sulcus neuralis		Neural groove	Neural groove		
916	Neurulation primaria		Primary neurulation	Primary neurulation		

917	Plica neuralis		Neural fold	Neural fold		
918	Ectoderma embryonicum		Embryonic ectoderm	Embryonic ectoderm		Endnote 122
919	Textus cristae neuralis presumptivae		Presumptive neural crest tissue	Presumptive neural crest tissue		
920	Junctio neurosomatica ectodermalis	Junctio neurectodermalis	Neurosomatic ectodermal junction	Neurosomatic ectodermal junction	Neuro-ectodermal junction; Neuroectodermal junction	
921	Mesoderma paraxiale		Paraxial mesoderm	Paraxial mesoderm		
922	Somitomerum		Somitomere	Somitomere		Endnote 123
923	Mesoderma laminae lateralis		Lateral plate mesoderm	Lateral plate mesoderm		
924	Mesenchyma cardiogenicum		Cardiogenic mesenchyme	Cardiogenic mesenchyme		
925	Spatium coelomicum segregum		Isolated coelomic space	Isolated celomic space		
926	Zona junctionalis mesenchymalis		Junctional zone of mesenchyme	Junctional zone of mesenchyme		Endnote 124
927	Embryo somiticus		Somite embryo	Somite embryo		
928	Embryo solearis cum lordose		Slipper-sole-shaped embryo with lordosis	Slipper sole shaped embryo with lordosis		
929	Plica capitis	Plica cephalica	Head fold	Head fold		
930	Plica caudalis primordialis		Primordial tail fold	Primordial tail fold	Primordial caudal fold	
931	Plica lateralis primordialis		Primordial lateral fold	Primordial lateral fold		
932	Plica lateralis		Lateral fold	Lateral fold		
933	Eminentia caudalis	Gemma caudalis	Caudal eminence	Caudal eminence	Tail bud	
934	Tuberculum coccygeum		Coccygeal tubercle	Coccygeal tubercle		Endnote 125
935	Tuberculum caudale		Caudal tubercle	Caudal tubercle		Endnote 126
936	Crista ectodermalis ventralis eminentiae caudalis	Crista ectodermalis ventralis gemmae caudalis	Ventral ectodermal ridge of caudal eminence	Ventral ectodermal ridge of caudal eminence	Ventral ectodermal ridge of tail bud; VER of tail bud	
937	Mesenchyma densum axiale		Axial dense mesenchyme	Axial dense mesenchyme	Tail cord	
938	Corde medullaris	Corde neuralis	Medullary cord	Medullary cord	Neural cord	
939	Somitocoeloma		Somitocoele	Somitocoele		
940	Stomatodeum primordiale		Primordial stomodeum	Primordial stomodeum		
941	Membrana oropharyngea		Oropharyngeal membrane	Oropharyngeal membrane		
942	Primordium proenteri	Primordium proenteri	Primordium of foregut	Primordium of foregut		
943	Arcus pharyngei		Pharyngeal arches	Pharyngeal arches		
944	Arcus pharyngeus primus		First pharyngeal arch	First pharyngeal arch		
945	Arcus pharyngeus secundus		Second pharyngeal arch	Second pharyngeal arch		
946	Arcus pharyngeus tertius		Third pharyngeal arch	Third pharyngeal arch		
947	Arcus pharyngeus quartus		Fourth pharyngeal arch	Fourth pharyngeal arch		
948	Arcus pharyngeus sextus		Sixth pharyngeal arch	Sixth pharyngeal arch		
949	Sulcus pharyngeus		Pharyngeal groove	Pharyngeal groove		
950	Primordium metenteri		Primordium of hindgut	Primordium of hindgut		
951	Mesenchyma intermedium		Intermediate mesenchyme	Intermediate mesenchyme		Mesoderma intermedium Endnote 127
952	Mesenchyma somatopleurale		Somatopleuric mesenchyme	Somatopleuric mesenchyme		
953	Coeloma intraembryonicum		Intra-embryonic coelom	Intraembryonic celom		
954	Cavitas pericardica primordialis		Primordial pericardial cavity	Primordial pericardial cavity		
955	Mesenchyma splanchnopleurale		Splanchnopleuric mesenchyme	Splanchnopleuric mesenchyme		

956	Laminae cardiogenicae nonsymmetricae		Bilateral asymmetric cardiogenic plates	Bilateral asymmetric cardiogenic plates		
957	Primordia endocardiaca		Endocardiac primordia	Endocardiac primordia		
958	Endocardium primordiale		Primordial endocardium	Primordial endocardium		
959	Myocardium primordiale		Primordial myocardium	Primordial myocardium		
960	Primordium cordis		Heart primordium	Heart primordium	Plexiform heart	
961	Septum transversum		Septum transversum	Septum transversum		
962	Vasa extraembryonica		Extra-embryonic blood vessels	Extraembryonic blood vessels		
963	Vas chorionicum		Chorionic vessel	Chorionic vessel		
964	Vas allantoicum		Allantoic vessel	Allantoic vessel		
965	Vas vitellinum	Vas omphalomesentericum	Vitelline vessel	Vitelline vessel	Omphalomesenteric vessel	
966	Vasa intraembryonica		Intra-embryonic blood vessels	Intraembryonic blood vessels		
967	V. omphalomesenterica	V. vitellina	Omphalomesenteric vein	Omphalomesenteric vein	Vitelline vein	

Caput IV: HISTOGENESIS GENERALIS

Chapter 4: GENERAL HISTOGENESIS

	Latin term	Latin synonym	UK English	US English	English synonym	Other
968	Histogenesis generalis		General histogenesis	General histogenesis		
969	Cellulae antecedentes		Antecedent cells	Antecedent cells		<i>Endnote 128</i>
970	NOMINA GENERALIA		GENERAL TERMS	GENERAL TERMS		
971	Potestas totalis		Totipotency	Totipotency		<i>Endnote 129</i>
972	Omnipotentia		Omnipotency	Omnipotency		
973	Potestas pluralis		Pluripotency	Pluripotency		<i>Endnote 130</i>
974	Potestas multiplex		Multipotency	Multipotency		<i>Endnote 131</i>
975	Potestas una		Unipotency	Unipotency		<i>Endnote 132</i>
976	Formabilitas		Plasticity	Plasticity		<i>Endnote 133</i>
977	Reprogrammatio		Reprogramming	Reprogramming		
978	TYPI CELLULARUM ANTECEDENTIUM		VARIETIES OF ANTECEDENT CELLS	VARIETIES OF ANTECEDENT CELLS		
979	Cellula primordialis		Primordial cell	Primordial cell		<i>Endnote 134</i>
980	Cellula fundatoria		Founder cell	Founder cell		<i>Endnote 135</i>
981	Cellula progenitalis	Cellula proprecursoria	Progenitor cell	Progenitor cell	Prestem cell; PSC	<i>Endnote 136</i>
982	Cellula staminalis	Cellula precursoria	Stem cell	Stem cell		<i>Endnote 137</i>
983	Cellula staminalis trophoblastica naturalis		Trophoblastic stem cell generated spontaneously <i>in vivo</i>	Trophoblastic stem cell generated spontaneously <i>in vivo</i>	TSC GS	
984	Cellula staminalis trophoblastica inducta artificialiter		Trophoblastic stem cell induced artificially <i>in vitro</i>	Trophoblastic stem cell induced artificially <i>in vitro</i>	TSC IA	
985	Cellula staminalis embryonica	Stipitoblastus	Embryonic stem cell	Embryonic stem cell	ESC	
986	Cellula staminalis embryonica apparens spontaniter	Stipitoblastus verus	Embryonic stem cell generated spontaneously <i>in vivo</i>	Embryonic stem cell generated spontaneously <i>in vivo</i>	ESC GS	
987	Cellula staminalis embryonica inducta artificialiter	Stipitoblastus artificialis	Embryonic stem cell induced artificially <i>in vitro</i>	Embryonic stem cell induced artificially <i>in vitro</i>	ESC IA	
988	Linea cellularis staminalis embryonica		Embryonic stem cell line	Embryonic stem cell line		
989	Cellula germinalis embryonica		Embryonic germ cell	Embryonic germ cell		
990	Cellula staminalis pluripotens inducta		Induced pluripotent stem cell	Induced pluripotent stem cell		
991	Cellula staminalis adulta		Adult stem cell	Adult stem cell		
992	Cellulae prestaminales	Cellulae proprecursoriae; Cellulae pluripotentes	Stem cells in early development	Stem cells in early development		
993	Cellula externa morulae		Outer cell of morula	Outer cell of morula		
994	Cellula staminalis trophoblastica		Trophoblastic stem cell	Trophoblastic stem cell	TSC	
995	Cellula interna morulae		Inner cell of morula	Inner cell of morula		
996	Cellula staminalis embryonica	Stipitoblastus	Embryonic stem cell	Embryonic stem cell	ESC	
997	Cellula epiblastica		Epiblastic cell	Epiblastic cell		
998	Cellula hypoblastica		Hypoblastic cell	Hypoblastic cell		

999	Cellula ectodermalis		Ectodermal cell	Ectodermal cell		
1000	Cellula mesodermalis		Mesodermal cell	Mesodermal cell		
1001	Cellula endodermalis		Endodermal cell	Endodermal cell		
1002	Cellulae staminales	Cellulae multipotentes et unipotentes	Lineage-restricted stem cells	Lineage restricted stem cells	Multipotent and unipotent cells	<i>Endnote 138</i>
1003	Cellula staminalis somatica		Somatic stem cell	Somatic stem cell		
1004	Cellula stromalis medullae rubrae		Bone marrow stromal cell	Bone marrow stromal cell		
1005	Cellula staminalis medullae osseae		Bone marrow stem cell	Bone marrow stem cell		
1006	Cellula staminalis sanguinis funiculi umbilicalis		Cord blood stem cell	Cord blood stem cell		
1007	Cellula staminalis umbilicalis		Umbilical stem cell	Umbilical stem cell		
1008	Cellula staminalis conjunctivalis		Conjunctival stem cell	Conjunctival stem cell		
1009	Cellula staminalis cornealis		Corneal stem cell	Corneal stem cell		
1010	Cellula staminalis endothelialis		Endothelial stem cell	Endothelial stem cell		
1011	Cellula staminalis ependymalis		Ependymal stem cell	Ependymal stem cell		
1012	Cellula staminalis epidermalis		Epidermal stem cell	Epidermal stem cell		
1013	Cellula staminalis gastrointestinalis		Gastro-intestinal stem cell	Gastrointestinal stem cell		
1014	Cellula staminalis haematopoietica		Haematopoietic stem cell	Hematopoietic stem cell		
1015	Cellula staminalis hepatopancreatica		Hepatopancreatic stem cell	Hepatopancreatic stem cell		
1016	Cellula staminalis hypophysialis		Hypophysial stem cell	Hypophysial stem cell		
1017	Cellula staminalis mesechymatica		Mesenchymal stem cell	Mesenchymal stem cell	hMSC	
1018	Cellula staminalis myogenica		Myogenic stem cell	Myogenic stem cell		
1019	Cellula staminalis nervosa		Neural stem cell	Neural stem cell		
1020	Cellula staminalis neuronalis		Neuronal stem cell	Neuronal stem cell		
1021	Cellula staminalis glialis		Glial stem cell	Glial stem cell		
1022	Cellula staminalis epidermalis cristae neuralis		Epidermal neural crest cell stem cell	Epidermal neural crest cell stem cell	eNCSC	
1023	Cellula staminalis olfactoria		Olfactory stem cell	Olfactory stem cell		
1024	Cellula staminalis spermatogonica		Spermatogonial stem cell	Spermatogonial stem cell		
1025	Cellula staminalis germinalis		Germinal stem cell	Germinal stem cell		<i>Endnote 139</i>
1026	Cellulae progenetrices		Progenitor cells	Progenitor cells		<i>See relevant tissue derivatives</i>
1027	Factores crescentiae		Growth factors	Growth factors		<i>Endnote 140</i>
1028	Receptor tyrosinum kinasis		Receptor tyrosine kinase	Receptor tyrosine kinase		
1029	Familia factoris crescentiae fibroblasticae		Fibroblast growth factor family	Fibroblast growth factor family	FGF family	
1030	Familia ephrini		Ephrin family	Ephrin family		
1031	Receptor maculatus		Receptor patched	Receptor patched		
1032	Familia erinacea		Hedgehog family	Hedgehog family		
1033	Receptor crispatus		Receptor frizzled	Receptor frizzled		
1034	Familia receptoris nonalati		Wingless-type family	Wingless type family	WNT family	
1035	Receptor serini/threonini kinasis		Receptor serine/threonine kinase	Receptor serine/threonine kinase		
1036	Superfamilia factoris epidermalis		Epidermal growth factor	Epidermal growth factor	EGF superfamily	

	crescentiam		superfamily	superfamily		
1037	Superfamilia factoris transformantis crescentiam β		Transforming growth factor beta superfamily	Transforming growth factor beta superfamily	TGF- β superfamily	
1038	Familia activini		Activin family	Activin family		
1039	Familia factoris morphogenetici ossium		Bone morphogenetic factor family	Bone morphogenetic factor family	BMP family	
1040	Familia factoris transformantis crescentiam		Transforming growth factor family	Transforming growth factor family	TGF family	
1041	Factor transformans crescentiam α		Transforming growth factor	Transforming growth factor	TGF- α	
1042	Familia vitellogenini I		Vitellogenin family	Vitellogenin family	Vg1 family	
1043	Familia nodalis		Nodal family	Nodal family		
1044	Receptor integrini		Integrin receptor	Integrin receptor		
1045	Ligantia fibronectini/laminini		Fibronectin/Laminin ligands	Fibronectin/Laminin ligands		
1046	Receptor incisurans		Notch receptor	Notch receptor		
1047	Ligantia delta/serrata		Delta/Serrate ligands	Delta/Serrate ligands		
1048	Factores transcriptionis		Transcription factors	Transcription factors		<i>Endnote 141</i>
1049	Crista neuralis		Neural crest	Neural crest		<i>Endnote 142</i>
1050	STRUCTURAE CRISTAE NEURALIS		NEURAL CREST STRUCTURES	NEURAL CREST STRUCTURES		<i>Endnote 143</i>
1051	COMPLEXUS CRISTAE NEURALIS NASALIS		NASAL NEURAL CREST COMPLEX	NASAL NEURAL CREST COMPLEX		<i>Endnote 144</i>
1052	Mesenchyma olfactorium		Olfactory mesenchyme	Olfactory mesenchyme		In part
1053	Basicranium anterius		Anterior basicranium	Anterior basicranium		In part
1054	Leptomeninx		Leptomeninx	Leptomeninx		
1055	Epithelium olfactorium		Olfactory epithelium	Olfactory epithelium		
1056	Cellula olfactoria staminalis		Olfactory stem cell	Olfactory stem cell		
1057	Neuroblastus olfactorius		Olfactory neuroblast	Olfactory neuroblast		
1058	Neuron olfactorium immaturum		Immature olfactory neuron	Immature olfactory neuron		
1059	Epitheliocytus sustentans olfactorius		Olfactory supporting epithelial cell	Olfactory supporting epithelial cell		
1060	Cellula olfactoria implicans	Gliocytus olfactorius implicans	Olfactory ensheathing cell	Olfactory ensheathing cell	OEC; Olfactory ensheathing glial cell	
1061	Epitheliocytus basalis olfactorius		Olfactory basal epithelial cell	Olfactory basal epithelial cell		
1062	Neuroblastus vomeronasalis		Vomeronasal neuroblast	Vomeronasal neuroblast		
1063	Neuron immaturum vomeronasale		Immature vomeronasal neuron	Immature vomeronasal neuron		
1064	Neuron gonadotropinum liberans nervi vomeronasalis		Gonadotropin-releasing hormone neuron of vomeronasal nerve	Gonadotropin releasing hormone neuron of vomeronasal nerve	GnRH neuron of vomeronasal nerve	
1065	Gliocytus vomeronasalis implicans		Vomeronasal ensheathing glial cell	Vomeronasal ensheathing glial cell		
1066	Neuroblastus nervi terminalis		Neuroblast of nervus terminalis	Neuroblast of nervus terminalis		
1067	Neuron immaturum nervi		Immature neuron of nervus	Immature neuron of nervus		

	terminalis		terminalis	terminalis		
1068	Neuron gonadotropinum liberans nervi terminalis		Gonadotropin-releasing hormone neuron of terminal nerve	Gonadotropin releasing hormone neuron of terminal nerve	GnRH neuron of terminal nerve	
1069	Cellula nervi terminalis implicans	Gliocytus nervi terminalis implicans	Ensheathing cell of terminal nerve	Ensheathing cell of terminal nerve	Ensheathing glial cell of terminal nerve	
1070	COMPLEXUS CRISTAE NEURALIS OPTICAE		OPTIC NEURAL CREST COMPLEX	OPTIC NEURAL CREST COMPLEX		<i>Endnote 145</i>
1071	Mesenchyma oculi		Optic mesenchyme	Optic mesenchyme		In part
1072	Basicranium anterius		Anterior basicranium	Anterior basicranium		In part
1073	Leptomeninx		Leptomeninx	Leptomeninx		
1074	Tunica fibrosa bulbi		Fibrous layer of eyeball	Fibrous layer of eyeball		
1075	Cellula staminalis cornealis		Corneal stem cell	Corneal stem cell		<i>Endnote 146</i>
1076	Melanocytus		Melanocyte	Melanocyte		
1077	Tunica vasculosa bulbi	Uvea	Vascular layer of eyeball	Vascular layer of eyeball	Uvea	
1078	Pigmentocytus uvealis		Pigment cell of uvea	Pigment cell of uvea		
1079	CRISTA NEURALIS PREOTICA		PRE-OTIC NEURAL CREST	PREOTIC NEURAL CREST		
1080	Complexus cristae neuralis mesencephalicae		Mesencephalic neural crest complex	Mesencephalic neural crest complex		<i>Endnote 147</i>
1081	Mesenchyma frontonasale		Frontonasal mesenchyme	Frontonasal mesenchyme		
1082	Basicranium anterius		Anterior basicranium	Anterior basicranium		In part
1083	Os frontale		Frontal bone	Frontal bone		
1084	Pars squamosa ossis temporalis		Squamous part of temporal bone	Squamous part of temporal bone		
1085	Viscerocranium membranaceum		Membranous viscerocranium	Membranous viscerocranium		In part
1086	Leptomeninx		Leptomeninx	Leptomeninx		
1087	Mesenchyma oculi		Optic mesenchyme	Optic mesenchyme		In part
1088	Cellula staminalis cornealis		Corneal stem cell	Corneal stem cell		
1089	Keratocytus		Keratocyte	Keratocyte		
1090	Adipocytus		Adipocyte	Adipocyte		
1091	Melanocytus		Melanocyte	Melanocyte		
1092	Epithelium posterius corneae		Endothelium of anterior chamber	Endothelium of anterior chamber		
1093	Stroma iridis		Stroma of iris	Stroma of iris		
1094	Membrana pupillaris		Pupillary membrane	Pupillary membrane	Iridopupillary membrane	In part
1095	Ectomesenchyma dentale		Dental ectomesenchyme	Dental ectomesenchyme		
1096	Papilla dentis		Dental papilla	Dental papilla		
1097	Odontoblastus		Odontoblast	Odontoblast		
1098	Crista neuralis isthmica		Isthmic neural crest	Isthmic neural crest		<i>Endnote 148</i>
1099	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1100	Mesenchyma capitis *		Head mesenchyme *	Head mesenchyme *		In part
1101	Leptomeninx		Leptomeninx	Leptomeninx		
1102	Crista neuralis rhombencephalica		Rhombencephalic neural crest	Rhombencephalic neural crest		
1103	Complexus cristae neuralis		Trigeminal neural crest complex	Trigeminal neural crest complex		<i>Endnote 149</i>

	trigeminalis					
1104	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1105	Leptomeninx		Leptomeninx	Leptomeninx		
1106	Mesenchyma capitis		Head mesenchyme	Head mesenchyme		In part
1107	Dermis capitis		Dermis of head	Dermis of head		
1108	Adipocytus		Adipocyte	Adipocyte		
1109	Melanocytus		Melanocyte	Melanocyte		
1110	Viscerocranium membranaceum		Membranous viscerocranium	Membranous viscerocranium		In part
1111	Cartilago arcus pharyngei primi		First pharyngeal arch cartilage	First pharyngeal arch cartilage		<i>§Meckel§</i>
1112	Ossiculæ auditus		Auditory ossicles	Auditory ossicles		In part
1113	Fasciæ propriae musculorum arcus pharyngei primi		First pharyngeal arch muscle sheaths	First pharyngeal arch muscle sheaths		
1114	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		
1115	Neuron sensorium ganglii trigeminalis		Trigeminal ganglion cell	Trigeminal ganglion cell		
1116	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1117	Schwannocytus		Schwann cell	Schwann cell		
1118	Complexus cristæ neuralis faciovestibulocochlearis		Faciovestibulocochlear neural crest complex	Faciovestibulocochlear neural crest complex		<i>Endnote 150</i>
1119	Complexus cristæ neuralis facialis		Facial neural crest complex	Facial neural crest complex		<i>Endnote 151</i>
1120	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1121	Leptomeninx		Leptomeninx	Leptomeninx		
1122	Mesenchyma capitis		Head mesenchyme	Head mesenchyme		In part
1123	Dermis cervicalis		Dermis of neck	Dermis of neck		In part
1124	Adipocytus		Adipocyte	Adipocyte		
1125	Melanocytus		Melanocyte	Melanocyte		
1126	Viscerocranium membranaceum		Membranous viscerocranium	Membranous viscerocranium		In part
1127	Cartilago arcus pharyngei secundi		Second pharyngeal arch cartilage	Second pharyngeal arch cartilage		<i>§Reichert§</i>
1128	Ossiculæ auditus		Auditory ossicles	Auditory ossicles		In part <i>Endnote 152</i>
1129	Os hyoideum		Hyoid bone	Hyoid bone		In part
1130	Fasciæ propriae musculorum arcus pharyngei secundi		Second pharyngeal arch muscle sheaths	Second pharyngeal arch muscle sheaths		
1131	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		
1132	Neuron sensorium ganglii geniculi		Geniculate ganglion cell	Geniculate ganglion cell		
1133	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1134	Schwannocytus		Schwann cell	Schwann cell		
1135	COMPLEXUS CRISTAE NEURALIS OTICAE		OTIC NEURAL CREST COMPLEX	OTIC NEURAL CREST COMPLEX		<i>Endnote 153</i>
1136	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1137	Leptomeninx		Leptomeninx	Leptomeninx		

1138	Mesenchyma oticum		Otic mesenchyme	Otic mesenchyme		In part
1139	Capsula otica		Otic capsule	Otic capsule		In part
1140	Arcus pharyngei secundi et tertii		Second and third pharyngeal arches	Second and third pharyngeal arches		
1141	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		
1142	Neuron sensorium ganglii vestibularis		Vestibular ganglion cell	Vestibular ganglion cell		
1143	Neuron sensorium ganglii cochlearis		Cochlear ganglion cell	Cochlear ganglion cell		
1144	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1145	Schwannocytus		Schwann cell	Schwann cell		
1146	CRISTA NEURALIS POSTOTICA		POSTOTIC NEURAL CREST	POSTOTIC NEURAL CREST		
1147	Complexus cristae neuralis glossopharyngealis		Glossopharyngeal neural crest complex	Glossopharyngeal neural crest complex		<i>Endnote 154</i>
1148	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1149	Leptomeninx		Leptomeninx	Leptomeninx		
1150	Crista neuralis cardiaca		Cardiac neural crest	Cardiac neural crest		In part <i>Endnote 155</i>
1151	Cartilago arcus pharyngei tertii		Third pharyngeal arch cartilage	Third pharyngeal arch cartilage		
1152	Os hyoideum		Hyoid bone	Hyoid bone		In part
1153	Fascia propria musculi stylopharyngei		Stylopharyngeus muscle sheath	Stylopharyngeus muscle sheath		
1154	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		
1155	Neuron sensorium ganglii glossopharyngei		Glossopharyngeal ganglion cell	Glossopharyngeal ganglion cell		
1156	Ganglion glossopharyngeum superius		Superior glossopharyngeal ganglion	Superior glossopharyngeal ganglion		
1157	Ganglion glossopharyngeum inferius		Inferior glossopharyngeal ganglion	Inferior glossopharyngeal ganglion		
1158	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1159	Schwannocytus		Schwann cell	Schwann cell		
1160	Complexus cristae neuralis vagalis		Vagal neural crest complex	Vagal neural crest complex		<i>Endnote 154</i>
1161	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1162	Leptomeninx		Leptomeninx	Leptomeninx		
1163	Crista neuralis cardiaca		Cardiac neural crest	Cardiac neural crest		In part
1164	Cartilago arcus pharyngei quarti		Fourth pharyngeal arch cartilage	Fourth pharyngeal arch cartilage		
1165	Cartilagineae laryngeae		Laryngeal cartilages	Laryngeal cartilages		<i>Endnote 156</i>
1166	Fasciae propriae musculorum arcus pharyngei quarti		Fourth pharyngeal arch muscle sheaths	Fourth pharyngeal arch muscle sheaths		
1167	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		
1168	Neuron sensorium ganglii vagalis		Vagal ganglion cell	Vagal ganglion cell		
1169	Ganglion vagale superius		Superior vagal ganglion	Superior vagal ganglion		
1170	Ganglion vagale inferius		Inferior vagal ganglion	Inferior vagal ganglion		
1171	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		

1172	Schwannocytus		Schwann cell	Schwann cell		
1173	Linea generationis cellularum parasymphathicarum		Parasympathetic cell lineage	Parasympathetic cell lineage		
1174	Pars enterica systematis nervosi		Enteric nervous system	Enteric nervous system		
1175	Ganglion entericum		Enteric ganglion	Enteric ganglion		
1176	Plexus entericus ganglionaris		Ganglionic enteric plexus	Ganglionic enteric plexus	Enteric nerve plexus	
1177	Plexus nervosus myentericus		Myenteric plexus	Myenteric plexus		<i>§Auerbach§</i>
1178	Plexus nervosus submucosus externus		Outer submucous plexus	Outer submucous plexus		<i>§Schabadasch§</i>
1179	Plexus nervosus submucosus internus		Inner submucous plexus	Inner submucous plexus		<i>§Meissner§</i>
1180	Plexus entericus aganglionaris		Aganglionic enteric plexus	Aganglionic enteric plexus		
1181	Gliocytus entericus		Enteric glial cell	Enteric glial cell		
1182	Complexus cristae neuralis cardiacus		Cardiac neural crest complex	Cardiac neural crest complex		
1183	Arcus pharyngei tertii, quartii et sexti		Third, fourth and sixth pharyngeal arches	Third, fourth and sixth pharyngeal arches		
1184	Aa. arcuum pharyngeorum		Pharyngeal arch arteries	Pharyngeal arch arteries	Aortic arches	<i>Endnote 157</i>
1185	Paraganglion		Paraganglion	Paraganglion		
1186	Paragangliocytus	Cellula typi I	Paragangliocyte	Paragangliocyte	Type I cell	
1187	Glandulae parathyroideae		Parathyroid glands	Parathyroid glands		In part
1188	Stroma glandulae parathyroideae		Parathyroid stroma	Parathyroid stroma		
1189	Cor		Heart	Heart		In part
1190	Basis cordis		Base of heart	Base of heart		In part
1191	Ductus tractus communis egressionis cordis		Common outflow tract of heart	Common outflow tract of heart		In part
1192	Crista endocardiaca septalis	Tuber endocardiaceum septale	Septal ridge	Septal ridge	Septal cushion; Parietal cushion	
1193	Septum aorticopulmonale		Aorticopulmonary septum	Aorticopulmonary septum		In part
1194	Valva aortae		Aortic valve	Aortic valve	Aortic arterial valve	In part
1195	Valva trunci pulmonalis		Pulmonary valve	Pulmonary valve	Pulmonary arterial valve	In part
1196	Tubera endocardiaca atrioventricularia		Atrioventricular endocardial cushions	Atrioventricular endocardial cushions		In part
1197	Cardiomyocytus atrialis secretans		Endocrine atrial cardiomyocyte	Endocrine atrial cardiomyocyte	Atrial myo-endocrine cell; Atrial myoendocrine cell	
1198	Trachea et bronchi		Trachea and bronchi	Trachea and bronchi		In part
1199	Neuroendocrinocytus respiratorius		Respiratory neuro-endocrine cell	Respiratory neuro-endocrine cell		
1200	Gemma thymica		Thymic bud	Thymic bud		In part
1201	Stroma thymi		Thymic stroma	Thymic stroma		
1202	Glandula thyroidea		Thyroid gland	Thyroid gland		In part
1203	Thyrocytus C		C thyrocyte	C thyrocyte	C cell; Parafollicular cell	
1204	Crista neuralis nervi accessorii		Neural crest of accessory nerve	Neural crest of accessory nerve		<i>Endnote 158</i>

1205	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1206	Leptomeninx		Leptomeninx	Leptomeninx		
1207	Schwannocytus		Schwann cell	Schwann cell		
1208	Crista neuralis hypoglossalis	Crista neuralis occipitalis	Hypoglossal neural crest	Hypoglossal neural crest	Occipital neural crest	<i>Endnote 159</i>
1209	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		
1210	Leptomeninx		Leptomeninx	Leptomeninx		
1211	Adipocytus		Adipocyte	Adipocyte		
1212	Melanocytus		Melanocyte	Melanocyte		
1213	Chorda hypoglossalis		Hypoglossal cord	Hypoglossal cord		In part
1214	Schwannocytus		Schwann cell	Schwann cell		
1215	CRISTA NEURALIS SPINALIS		SPINAL NEURAL CREST	SPINAL NEURAL CREST		<i>Endnote 160</i>
1216	Via migrationis dorsolateralis		Dorsolateral migration pathway	Dorsolateral migration pathway		<i>Endnote 161</i>
1217	Melanocytus		Melanocyte	Melanocyte		
1218	Via migrationis ventrolateralis		Ventrolateral migration pathway	Ventrolateral migration pathway		<i>Endnote 162</i>
1219	Neuron sensorium ganglii spinalis		Spinal ganglion cell	Spinal ganglion cell		
1220	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1221	Schwannocytus		Schwann cell	Schwann cell		
1222	Via migrationis ventromedialis		Ventromedial migration pathway	Ventromedial migration pathway		<i>Endnote 163</i>
1223	Linea generationis cellularum sympathicosuprarenalium		Sympathosuprarenal cell lineage	Sympathosuprarenal cell lineage	Sympatho-adrenal cell lineage; Sympathoadrenal cell lineage	
1224	Ganglion trunci sympathici		Ganglion of sympathetic trunk	Ganglion of sympathetic trunk		
1225	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1226	Medulla suprarenalis		Suprarenal medulla	Suprarenal medulla		
1227	Endocrinocytus chromophilus medullaris		Medullary chromaffin cell	Medullary chromaffin cell		
1228	Ganglion preaorticum		Pre-aortic ganglion	Preaortic ganglion		<i>§Zuckerandl§</i>
1229	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1230	Linea generationis cellularum parasymphicarum		Parasympathetic cell lineage	Parasympathetic cell lineage		
1231	Ganglion parasymphicum		Parasympathetic ganglion	Parasympathetic ganglion		
1232	Gliocytus ganglionicus		Ganglionic satellite cell	Ganglionic satellite cell		
1233	Textus connectivi atque sustinentes		Connective and supporting tissues	Connective and supporting tissues		
1234	TEXTUS ADIPOSUS		ADIPOSE TISSUE	ADIPOSE TISSUE		
1235	Mesenchyma somiticum		Somitic mesenchyme	Somitic mesenchyme		
1236	Mesenchyma somatopleurale		Somatopleuric mesenchyme	Somatopleuric mesenchyme		<i>Endnote 164</i>
1237	Mesenchyma splanchnopleurale		Splanchnopleuric mesenchyme	Splanchnopleuric mesenchyme		<i>Endnote 165</i>
1238	Ectomesenchyma	Mesenchyma cristae neuralis	Ectomesenchyme	Ectomesenchyme	Neural crest mesenchyme	
1239	Mesenchyma ex eminentia caudale		Mesenchyme from caudal eminence	Mesenchyme from caudal eminence		
1240	Cellula adipocytogenetrix		Fat cell progenitor	Fat cell progenitor		<i>Endnote 166</i>

1241	Preadipocytus		Pre-adipocyte	Preadipocyte		
1242	Preadipocytus celeriter replicans		Fast replicating pre-adipocyte	Fast replicating preadipocyte		
1243	Preadipocytus cunctanter replicans		Slowly replicating pre-adipocyte	Slowly replicating preadipocyte		
1244	Adipocytus fuscus		Brown adipose cell	Brown adipose cell		
1245	Lobulus adiposus vascularis		Perivascular adipose lobule	Perivascular adipose lobule		
1246	Textus adiposus fuscus		Brown adipose tissue	Brown adipose tissue		
1247	Adipocytus albus		White adipose cell	White adipose cell		
1248	Textus adiposus albus		White adipose tissue	White adipose tissue		
1249	CHONDROHISTOGENESIS		CHONDROHISTOGENESIS	CHONDROHISTOGENESIS		See Terminologia Histologica
1250	Chondroblastus		Chondroblast	Chondroblast		
1251	Chondrocytus		Chondrocyte	Chondrocyte		
1252	CHONDROIDOGENESIS		CHONDROIDOGENESIS	CHONDROIDOGENESIS		See Terminologia Histologica
1253	Chondroidocytus		Chondroidocyte	Chondroidocyte		
1254	Textus chondroideus		Chondroid tissue	Chondroid tissue		See Terminologia Histologica
1255	OSTEOGENESIS		OSTEOGENESIS	OSTEOGENESIS	Osteogeny	
1256	Mesenchyma blastemale		Blastemal mesenchyme	Blastemal mesenchyme		
1257	Motus condensationis	Motus densationis	Condensation movement	Condensation movement	Densation movement	
1258	Cellula osteoprogenetrix		Osteoprogenitor cell	Osteoprogenitor cell		
1259	Osteoblastus		Osteoblast	Osteoblast		
1260	Osteocytus		Osteocyte	Osteocyte		
1261	Stratum preosseum	Osteoideum	Osteoid	Osteoid	Preosseous matrix	
1262	Centrum ossificationis		Ossification centre	Ossification center		
1263	Ossificatio		Ossification	Ossification		
1264	Linea calcificationis		Calcification front	Calcification front		
1265	Crystallum hydroxyapatiti		Hydroxyapatite crystal	Hydroxyapatite crystal		
1266	Trabecula ossea		Bone trabecula	Bone trabecula		
1267	Osteonum		Osteon	Osteon		
1268	Cellula osteoclastoprogenetrix		Osteoclast progenitor cell	Osteoclast progenitor cell		Endnote 167
1269	Osteoclastus		Osteoclast	Osteoclast		Endnote 168
1270	Lacuna erosionis		Osteoclastic crypt	Osteoclastic crypt	Erosion lacuna	
1271	Linea erosionis	Linea resorptionis	Erosion front	Erosion front		
1272	Os membranaceum		Membranous bone	Membranous bone		
1273	Os endochondrale		Endochondral bone	Endochondral bone		
1274	Cellula vestiens ossis progenetrix		Bone-lining cell progenitor	Bone lining cell progenitor		
1275	Ossificatio membranacea	Ossificatio desmalls	Membranous ossification	Membranous ossification	Intramembranous ossification	
1276	Mesenchyma blastemale		Blastemal mesenchyme	Blastemal mesenchyme		
1277	Textus chondroideus		Chondroid tissue	Chondroid tissue		
1278	Centrum ossificationis		Ossification centre	Ossification centre		
1279	Motus detondens		Shearing movement	Shearing movement		
1280	Stratum osteoblasticum		Osteoblastic layer	Osteoblastic layer		
1281	Osteoblastus		Osteoblast	Osteoblast		

1282	Osteoclastus		Osteoclast	Osteoclast		
1283	Trabecula ossea		Bone trabecula	Bone trabecula		
1284	Osteocytus		Osteocyte	Osteocyte		
1285	Ossificatio chondralis		Chondral ossification	Chondral ossification	Cartilaginous ossification	
1286	Permutationes intracartilagineae		Changes in cartilage	Changes in cartilage		
1287	Irruptio a vasis		Vascularization	Vascularization		
1288	Canalis cartilagineus		Cartilage canal	Cartilage canal		<i>Endnote 169</i>
1289	Hypertrophia chondrocyti		Hypertrophy of chondrocyte	Hypertrophy of chondrocyte		
1290	Vacuolatio		Vacuolation	Vacuolation		
1291	Accumulatio glycogeni		Accumulation of glycogen	Accumulation of glycogen		
1292	Formatio septi matricialis		Formation of matrix septum	Formation of matrix septum		
1293	Degeneratio chondrocyti		Degeneration of chondrocyte	Degeneration of chondrocyte		
1294	Formatio lacunae in cartilagine		Formation of cartilage lacuna	Formation of cartilage lacuna		
1295	Calcificatio parietis lacunae		Calcification of lacunar wall	Calcification of lacunar wall		
1296	Ossificatio perichondralis diaphysialis		Perichondral ossification in diaphysis	Perichondral ossification in diaphysis		<i>Endnote 170</i>
1297	Perichondrium diaphysiale		Diaphysial perichondrium	Diaphysial perichondrium		
1298	Ossificatio membranacea	Ossificatio desmalls	Membranous ossification	Membranous ossification	Intramembranous ossification	
1299	Os perichondrale		Perichondral bone	Perichondral bone		
1300	Periosteum		Periosteum	Periosteum		
1301	Stratum osteogenicum		Osteogenic layer	Osteogenic layer		
1302	Osteoblastus		Osteoblast	Osteoblast		
1303	Osteocytus		Osteocyte	Osteocyte		
1304	Trabecula ossea		Bone trabecula	Bone trabecula		
1305	Anulus perichondralis		Perichondral collar	Perichondral collar		<i>Endnote 171</i>
1306	Anulus osseus diaphysialis		Diaphysial bone collar	Diaphysial bone collar		
1307	Periosteum		Periosteum	Periosteum		
1308	Gemma osteogenica		Osteogenic bud	Osteogenic bud		
1309	Gemma capillaris		Capillary sprout	Capillary sprout		
1310	Osteoclastus		Osteoclast	Osteoclast		
1311	Chondroclastus		Chondroclast	Chondroclast		
1312	Cellula osteoprogenitrix		Osteoprogenitor cell	Osteoprogenitor cell		
1313	Erosio osteoclastica anuli ossei diaphysialis		Osteoclastic erosion of diaphysial bone collar	Osteoclastic erosion of diaphysial bone collar		
1314	Canalis erosionis		Erosion canal	Erosion canal		
1315	Ossificatio endochondralis diaphysialis		Endochondral ossification in diaphysis	Endochondral ossification in diaphysis		
1316	Extensio gemmae osteogenicae		Spread of osteogenic bud	Spread of osteogenic bud		<i>Endnote 172</i>
1317	Centrum primarium ossificationis	Centrum diaphysiale ossificationis	Primary ossification centre	Primary ossification centre	Diaphysial ossification centre; Diaphyseal ossification center	
1318	Nucleus osteogenicus primarius		Primary osteogenic nucleus	Primary osteogenic nucleus		
1319	Cavitas medullaris primaria		Primary medullary cavity	Primary medullary cavity		

1320	Ossificatio endochondralis epiphysialis		Endochondral ossification in epiphysis	Endochondral ossification in epiphysis		
1321	Cartilago epiphysialis		Epiphysial cartilage	Epiphyseal cartilage		
1322	Zona quiescens		Resting zone	Resting zone	Quiescent zone	
1323	Zona proliferationis		Proliferation zone	Proliferation zone		
1324	Columella chondrocytorum		Chondrocyte column	Chondrocyte column		
1325	Zona hypertrophica		Hypertrophic zone	Hypertrophic zone		
1326	Chondrocytus hypertrophicus		Hypertrophic chondrocyte	Hypertrophic chondrocyte		
1327	Zona calcificationis		Calcification zone	Calcification zone		
1328	Cartilago calcificata		Calcified cartilage	Calcified cartilage		
1329	Lacuna cartilaginis		Cartilaginous lacuna	Cartilaginous lacuna		
1330	Paries transversus lacunae		Transverse wall of lacuna	Transverse wall of lacuna		
1331	Paries longitudinalis lacunae		Longitudinal wall of lacuna	Longitudinal wall of lacuna		
1332	Zona erosionis		Erosion zone	Erosion zone		
1333	Lacuna erosionis		Osteoclastic crypt	Osteoclastic crypt	Erosion lacuna	
1334	Chondroclastus		Chondroclast	Chondroclast		
1335	Zona ossificationis		Ossification zone	Ossification zone		
1336	Os endochondrale		Endochondral bone	Endochondral bone		
1337	Trabecula ossea primaria		Primary bone trabecula	Primary bone trabecula		
1338	Trabecula ossea secundaria		Secondary bone trabecula	Secondary bone trabecula		
1339	Centrum secundarium ossificationis	Centrum epiphysiale ossificationis	Secondary ossification centre	Secondary ossification center	Epiphysial ossification centre; Epiphyseal ossification center	
1340	Nucleus osteogenicus secundarius		Secondary osteogenic nucleus	Secondary osteogenic nucleus		
1341	Chondrocytus hypertrophicus		Hypertrophic chondrocyte	Hypertrophic chondrocyte		
1342	Cartilago calcificata		Calcified cartilage	Calcified cartilage		
1343	Textus chondroideus		Chondroid tissue	Chondroid tissue		
1344	Textus osseus reticulofibrosus		Woven bone	Woven bone		
1345	Lamina epiphysialis		Epiphysial plate	Epiphyseal plate	Growth plate	
1346	Textus osseus reticulofibrosus		Woven bone	Woven bone		
1347	Trabecula		Trabecula	Trabecula		
1348	Os compactum nonmaturum		Immature compact bone	Immature compact bone		
1349	Spatium vasculare		Vascular space	Vascular space		
1350	Os lamellare		Lamellar bone	Lamellar bone		
1351	Lamella ossea		Osseous lamella	Osseous lamella		
1352	Stratum preosseum	Osteoideum	Osteoid	Osteoid	Preosseous matrix	
1353	Lamella circumtendens		Circumferential lamella	Circumferential lamella		
1354	Lamella concentrica		Concentric lamella	Concentric lamella		
1355	Osteonum primarium		Primary osteon	Primary osteon		<i>Endnote 173</i>
1356	Osteonum secundarium		Secondary osteon	Secondary osteon		<i>Endnote 173</i>
1357	Cavitas medullaris ossis		Medullary cavity of bone	Medullary cavity of bone		

1358	MYOHISTOGENESIS		MUSCLE HISTOGENESIS	MUSCLE HISTOGENESIS		
1359	Myogenesis		Myogenesis	Myogenesis		
1360	Cellulae progenetices		Progenitor cells	Progenitor cells		
1361	Cellula myocytoprogenetrix		Myogenic progenitor	Myogenic progenitor	Myogenic precursor cell; Myocytoprogenitor cell	
1362	Cellula staminalis myogenica		Myogenic stem cell	Myogenic stem cell		
1363	Cellula cardiomyocytoprogenetrix		Cardiac myocytoprogenitor cell	Cardiac myocytoprogenitor cell		
1364	Promyoblastus		Promyoblast	Promyoblast		
1365	Myoblastus		Myoblast	Myoblast		
1366	Myoblastus postmitoticus		Postmitotic myoblast	Postmitotic myoblast		
1367	Status mononuclearis		Mononuclear state	Mononuclear state		
1368	Myocytus		Myocyte	Myocyte		
1369	Myocytus levis	Myocytus nonstriatus	Smooth muscle cell	Smooth muscle cell		
1370	Cardiomyocytus	Myocytus cardiacus	Cardiac muscle cell	Cardiac muscle cell		
1371	Status multinuclearis		Multinuclear state	Multinuclear state		
1372	Myotubus		Myotube	Myotube		
1373	Myotubus primarius		Primary myotube	Primary myotube		
1374	Myotubus secundarius		Secondary myotube	Secondary myotube		
1375	Myofibra		Myofibre	Myofiber		
1376	Cellula adjuncta		Satellite cell	Satellite cell		
1377	Tendinogenesis		Tendinogenesis	Tendinogenesis		
1378	Cellula tendinocytoprogenetrix		Tendinocyte progenitor cell	Tendinocyte progenitor cell		
1379	Tendinoblastus		Tendinoblast	Tendinoblast		
1380	Tendinocytus		Tendon cell	Tendon cell	Tendinocyte; Tenocyte	

ENDNOTES

- 1 *Ejaculatio* The reflex process of *ejaculation* occurs in two phases: in the first – *emission* – contraction of smooth muscle of glands and ducts delivers the various components of semen into the prostatic urethra; in the second – *ejaculation proper* – the striated muscles of the urogenital triangle (particularly the bulbospongiosus muscles) contract spasmodically and expel semen from the urethra.
- 2 *Embryogenesis* Embryogenesis is the process of embryo formation. It entails the formation of the principal organs and systems and the acquisition of uniquely human surface features that are apparent with the unaided eye. The process begins at fertilization and ends, somewhat arbitrarily, 56 days later.
- 3 *Fetogenesis* Fetogenesis entails the growth and differentiation, particularly functional differentiation, of the conceptus after embryogenesis is completed. It thus begins on day 57, following the Stage 23 embryo that already has its principal organs, systems and distinctly human features, and ends at birth, when the fetus becomes a newborn infant or neonate. The time in which fetogenesis occurs may be divided into early, intermediate and late fetal periods, which correspond to the trimesters of pregnancy in which they occur. There is, however, no agreement on precisely which weeks are encompassed by the first trimester; here it is regarded as beginning at fertilization and as consisting of embryogenesis and the early fetal period, the 9th to the 13th post-fertilization weeks.
- 4 *Cyclus vaginalis* Cyclical changes in the stratified squamous epithelium of the vagina are not obvious in histological sections: under normal circumstances its desquamated cells remain nucleated and it does not keratinize. However, according to Papanicolaou, there is a relative increase in acidophilic cells with small dark nuclei at the time of ovulation and thus three phases of the vaginal cycle may be recognized (Papanicolaou GN. The sexual cycle in the human female as revealed by vaginal smears. *Am J Anat* 1933;52:519-637). The changes at ovulation may represent a prekeratinization process, which is completed when the epithelium is exposed to the air, as in cases of prolapse.
- 5 *Conceptus* *Conceptus* refers to the entire product of conception from fertilization onwards.
- 6 *Cyema* The *cyema* is the embryonic or fetal part of the conceptus and thus excludes the *developmental adnexa* (q.v.), which are the placenta, umbilical cord and extra-embryonic membranes (O’Rahilly R, Müller, F. *Human Embryology and Teratology*, 3rd ed. New York: Wiley-Liss; 2001).
- 7 *Embryo* [St.1 ad 23] Both embryonic and extra-embryonic cell lineages extend forward from the zygote and both extra-embryonic and embryonic tissues are necessary for normal development. Nevertheless, it has been argued that to include the early stages in the use of the term embryo is misleading because a discrete and identifiable population of exclusively embryonic or cyemic cells does not exist until gastrulation is under way and because most of the tissues formed prior to this are extra-embryonic or adnexal (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). However, communication risks attend the redefining of a commonly and colloquially used term such as embryo and scientific purposes can be as well served by not redefining the term but defining the cells present at a particular time. Embryo remains the preferred term for all 23 Carnegie Stages.
- 8 *Adnexa developmentalia; Membranae embryonicae et fetales; Adnexa embryonica et fetalia* The Latin word *adnexum* has been used almost exclusively in this plural form to indicate the structures (more than one) adjacent to or subservient to a major structure. The form *adnexae*, although frequently used, is incorrect. The developmental adnexa are commonly referred to as the ‘fetal membranes’. This is inaccurate since they include the trophoblast, amnion, chorion, umbilical vesicle, allantoic vesicle, placenta and umbilical cord (O’Rahilly R, Muller F. *Human Embryology and Teratology*. 3rd ed. New York: Wiley-Liss; 2001).
- 9 *Phasis pregastrulationis* The pregastrulation and postgastrulation phases of the embryonic period and the fetal period are stages of prenatal development, each with its own distinctive characteristics, particularly in respect of its responses to teratogens. The *pregastrulation phase* begins at fertilization, continues through cleavage and implantation and ends with the establishment of a definite primitive streak in Carnegie Stage 6b at about two and a half weeks. It is a phase characterized by rapid increase in cell numbers and by regulation. As a result, response to teratogens is uncertain: induced errors of development may *regulate* but, if they do not, the errors are likely to be of such magnitude that early spontaneous abortion follows.
- 10 *Phasis preparatoria; Phasis embryogenica* The characteristic of the *preparative phase* is that it is spent preparing extra-embryonic membranes and presumptive embryonic cells but that no cells of the conceptus have yet been determined as substantive embryonic cells. It has therefore been called the embryogenic phase (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev*. 1996;8:759-64). The term “pre-embryonic stage”, which has been used in legal and clinical contexts, is not recommended.
- 11 *Pregnatio cervicalis; Pregnatio ectopica; Pregnatio extrauterina* Although appropriately listed with uterine pregnancy sites, a cervical pregnancy is often considered to be an ectopic pregnancy.

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- 12 *Mensurae embryonicae et fetales* The norms for measurements of lengths, diameters and circumferences in mm and of weights in grams are given for each postfertilization week in Table A-4 in O'Rahilly R, Müller F. Human Embryology & Teratology. 3rd ed. New York: Wiley-Liss; 2001.
- 13 *Aetas a fecundatione* Fertilization age begins at the time of fertilization with the sperm penetrating the oocyte and the formation of the zygote. It is the true age of the conceptus and the preferred measure.
- 14 *Aetas ab ovulatione* Ovulation age begins on the day of the ovulation that preceded fertilization and the formation of the zygote: it is about 0.5 day longer than fertilization age.
- 15 *Aetas ab inseminatione* Insemination age begins when the sperm and oocyte are introduced in artificial insemination or *in vitro* fertilization.
- 16 *Hebdomades post coitum* Coital weeks begin from the time of the coitus that resulted in the pregnancy. Normally, fertilization occurs early in the first coital week. Since the embryo does not exist for the first part of the first coital week, the term coital age is inappropriate.
- 17 *Hebdomades post menses ultimas* Menstrual ("gestational") weeks begin from the first day of the mother's last menstrual period [LMP] before becoming pregnant and are the usual measure in obstetric practice. Since the embryo does not usually come into being until the first two menstrual weeks have passed, the term menstrual "age" is inappropriate. The term gestational age is superfluous, ambiguous and should be abandoned, it having been variously equated with menstrual weeks, ovulation age and fertilization age (O'Rahilly R, Müller F. Developmental Stages in Human Embryos: Revised and New Measurements. Cells Tissues Organs 2010;192:73-84).
- 18 *Longitudo maxima* Greatest length [GL] is the preferred measure of length, being independent of fixed points, which are not always easy to determine. GL coincides with crown-rump length [CRL] at Stages 11 and 12; GL is generally more than CRL and coincides with neck-rump length from Stages 13-17; GL and CRL again coincide from Stages 18-20 onwards (O'Rahilly R, Müller F. Developmental Stages in Human Embryos: Revised and New Measurements. Cells Tissues Organs 2010;192:73-84).
- 19 *Gemini conjuncti* See Spencer R. Conjoined twins. Baltimore: Johns Hopkins University Press; 2003. In conjoined twins, as elsewhere, convention has the suffixes *-ia* in Latin and *-y* in English indicating the condition; the suffix *-us*, in either language, refers to an individual with that condition.
- 20 *Genum a parente impressum* Genomic imprinting occurs during meiosis II of gametogenesis and persists until the primary gametocyte stage in the next generation.
- 21 *Polus animalis* Being microlecithal, the human primary oocyte does not exhibit the obvious polarity characteristic of more richly yolked oocytes. It does, however, exhibit some degree of asymmetry in distribution of cytoplasmic elements. The *animal pole* of the arrested secondary oocyte is identified by the position of the second meiotic spindle and the lack of microvilli on the cell membrane overlying it. After fertilization, the animal pole of the ootid is characterized by the presence of the female and male pronuclei. There is no necessary relationship between the animal-vegetal axis and the future embryonic-abembryonic (dorsoventral) axis. In some (but not all) mouse zygotes, the animal-vegetal axis corresponds to the long axis of the ellipsoid blastocyst and thus to the anteroposterior axis of the embryo. In these cases the animal-vegetal axis is orthogonal to the embryonic-abembryonic axis (Selwood L, Johnson MH. Trophoblast and hypoblast in the monotreme, marsupial and eutherian mammal: evolution and origins. BioEssays 2006;28:128-145).
- 22 *Pellucidagenesis; Zonagenesis* Although the term *zonagenesis* is widely used in zoology, it is not recommended as it lacks a locational adjective and could thus apply to any zone. Although the *zona pellucida* cannot be seen with the light microscope before the *primary ovarian follicle* has developed, the heavily glycosylated proteins ZP 1-3 can be demonstrated in the oocytes and follicle cells of *primordial follicles* (Gook DA, Edgar DH, Borg J and Martic M. Detection of zona pellucida proteins during human folliculogenesis. Hum Reprod 2008;23:394-402).
- 23 *Regulatio* The process by which the developmental fates or rates of development of cells of embryonic subsystems may change during embryonic development, thereby permitting normal integrated development of the embryo as a whole and compensating for anomalies. It is the result of changes in gene expression; moreover, since the DNA sequence that comprises the genome remains unchanged during the differentiation of systems, organs, tissues and cell-types, regulation is said to be an epigenetic process. The human zygote is said to be regulatory because in it the primordia of tissues and organs are not

determined at the outset but they become so according to the relation of different parts to one other. The term regulation is applied also at the genetic level: thus, regulatory genes control development by regulating the switching on and off of structural genes that make proteins to build body parts and components.

24 *Differentiatio cellularum in zygoto findenti* Differentiation of the cells of the cleaving zygote into outer blastomeres, which are polarized, and inner blastomeres, which are not.

25 *Polarisatio cellularum externarum* Transformation of rounded, radially symmetrical outer blastomeres into highly asymmetric cells with the characteristics of epithelia. Longitudinal divisions of polarized cells are conservative, resulting only in more polarized cells. Transverse divisions of polarized cells are differentiative, resulting in both embryoblastic cells and polarized cells. Cells remaining polarized give rise to trophoblast (Johnson MH. Origin of pluriblast and trophoblast in the eutherian conceptus. *Reprod Fertil Dev* 1996;8:699-709).

26 *Divisio differentiativa embryoblasti; Divisio differentiativa massae cellularis internae; Divisio differentiativa pluriblasti* Differentiation of the cells of the embryoblast, inner cell mass or pluriblast into the dorsal cells of the epiblast and the ventral cells of the hypoblast, with a basal lamina between them.

27 *Morphogenesis* The development of shape, size or other feature of a particular organ or of a part or the whole of the body. "The word '*morphogenesis*' is often used in a broad sense to refer to many aspects of development, but when used strictly it should mean the moulding of cells and tissues into definite shapes" (Waddington CH. *Principles of Embryology*. London: George Allan & Unwin; 1956). In this strict sense, it refers particularly to the wide-ranging phenomena associated with gastrulation and organogenesis and to local phenomena like budding, branching and clefting (Hogan BLM. *Morphogenesis*. *Cell* 1999;96:225-233).

28 *Blastema* An identifiable mass of rapidly proliferating undifferentiated cells that gives rise to a differentiated structure/organ.

29 *Primordium* A term applied to a structure making its first appearance as a differentiating structure. *Anlage*, from the German, is a synonym. It is now appreciated that, particularly in branching morphogenesis, an epithelial primordium may be preceded by a mesenchymal primordium, which determines the pattern of arborization (Denny PC, Ball WD, Redman RS. Salivary glands: a paradigm for diversity of gland development. *Crit Rev Biol Med* 1997;8:51-75).

30 *Rudimentum; Vestigium* These terms are not interchangeable: a *rudiment* (from the Latin *rudimentum* – that which is unwrought) is an underdeveloped or immature part or organ; a *vestigium* (from the Latin *vestigium* – that which is tracked) is a part or organ that has become reduced in function and/or size in the course of phylogeny; some vestiges, nevertheless, play an important part in ontogeny.

31 *Status presumptivus* The condition of a tissue, region or organ that will, in the course of normal development, become a morphologically differentiated tissue, region or organ. A structure may be *presumptive* solely by virtue of its position or it may have undergone determination or chemodifferentiation but as yet shows no visible signs of differentiation.

32 *Vestigium* See endnote 30.

33 *Formatio ansae* See, for example: Männer J. The anatomy of cardiac looping: a step towards the understanding of the morphogenesis of several forms of congenital heart malformations (*Clin Anat* 2009;22:21-35).

34 *Formatio primaria corporis* *Primary body development* involves the primary germ layers and neural plate more or less directly. It includes primary neurulation, the formation of somites 1-29, of spinal ganglia 1-25, of the foregut, midgut and hindgut and of the corresponding part of the notochord.

35 *Formatio secundaria corporis* *Secondary body development* does not involve the germ layers: in it structures develop directly from the axial dense mesenchyme of the caudal eminence or tail bud, which is the remnant of the primitive streak. It includes secondary neurulation, the formation of somites 30-39, of spinal ganglia 26-35, of the most caudal gut and of the corresponding part of the notochord.

36 *Gastrulatio* It has been said that the term *gastrulation* is inappropriate as it refers to the invagination of a monolayered blastula to form a bilayered gastrula containing an endoderm-lined archenteron (O'Rahilly R and Müller F. *Human embryology and teratology*. 3rd ed. New York: Wylie-Liss; 2001). While this was the original meaning of gastrulation, its meaning has undergone a profound change (Collins P and Billett FS. The terminology of early development: history, concepts, and current usage. *Clin Anat* 1995;8:418-25). It may now be defined as the formative process by which the three germ layers and an axial organization are

established in embryos, a process that probably begins in the attaching human blastocyst [St.4], before the establishment of a definite primitive streak in Stage 6b (Viebahn C. The anterior margin of the mammalian gastrula: comparative and phylogenetic aspects of its role in axis formation and head induction. *Curr Top Dev Biol* 1999;46:63-103).

37 *Inflatio* The ballooning model has succeeded the segmental model of heart chamber formation (Horsthuis T, Christoffels VM, Anderson RH, Moorman AFM. Can recent insights into cardiac development improve our understanding of congenitally malformed hearts? *Clin Anat* 2009;22:4-20).

38 *Invectio* Introduction of material into a structure from outside. An example is the process by which material from the mesocardium is added to the venous and arterial poles of the early heart tube (Horsthuis T, Christoffels VM, Anderson RH, Moorman AFM. Can recent insights into cardiac development improve our understanding of congenitally malformed hearts? *Clin Anat* 2009;22:4-20).

39 *Maturatio* *Maturation* may be defined as the progressive acquisition of definitive structure and function: its prenatal aspects, particularly, are within the compass of *Terminologia Embryologica*.

40 Morphogenesis *gemmans* *Budding morphogenesis* and the ensuing canalization have been most widely studied in the lung, kidney, mammary gland and salivary glands and the processes detailed for it are generally followed elsewhere (Varner VD, Nelson CM. Cellular and physical mechanisms of branching morphogenesis. *Development* 2014;141:2750-2759).

41 *Morphogenesis ramificans* *Branching morphogenesis* is the process of forming organized patterns of epithelial cords and then tubules in organs such as the kidney, glands and lungs. It appears to be determined by mesenchyme and regulated by a wide range of factors (Williams MJ, Clark P. Microscopic analysis of the cellular events during scatter factor/hepatocyte growth factor-induced epithelial tubulogenesis. *J Anat* 2003;203:483-503). The term *tubulogenesis* is not recommended in this context as the product is initially solid and only canalizes later.

42 *Morphogenesis findens* *Clefting* is the process in which a terminal bud is cleaved into multiple lobules with the ingrowth of mesenchyme and the deposition of extracellular matrix. In some organs, such as the lung, budding, branching and clefting each occur at different stages of development, whereas in salivary glands clefting appears to predominate (Hogan BLM. Morphogenesis. *Cell* 1999;96:225-233).

43 *Motus condensationis; Motus densationis* Movement occurring in a morphogenetic field, called a densation field (Blechschild E, Gasser R. Biokinetics and biodynamics of human differentiation. Springfield: Charles C Thomas; 1978). With loss of intercellular fluid, the cells come closer together. The first appearance of the skeleton is as mesenchymal condensations. The cells have rather spherical cell bodies and very little intercellular substance present between them. They show no particular orientation which means that they are under tension stresses that are equal in all directions. A densation field is characterized by its position.

44 *Motus dilatationis* Movement occurring in a morphogenetic field, called a dilation field (Blechschild E, Gasser R. Biokinetics and biodynamics of human differentiation. Springfield: Charles C Thomas; 1978). The field is spatially and kinetically highly organized. Dilation occurs in mesenchymal tissue when it becomes elongated and slenderized by pull in a particular direction without transverse compression. The primordia of skeletal, cardiac and smooth muscle fibres and fibre systems arise in dilation fields. The shape of a muscle is closely related to its position while its structure is closely related to its shape.

45 *Motus expansionis longitudinalis; Motus distensionalis* Movement occurring in a morphogenetic field, called a distension field (Blechschild E, Gasser R. Biokinetics and biodynamics of human differentiation. Springfield: Charles C Thomas; 1978). The spherical mesenchymal cells of a densation field become compressed by opposing forces in the longitudinal axis of the field. Initially, such zones of flattened cells are located only in the centre of a field that has attained sufficient size. For example, cells in such a contusion field become disc-shaped and develop into cartilage cells.

46 *Motio involutionis; Involutio* The rolling-in of cells over a rim. In this context the term *involutionary movement* is preferred because of the different connotations of the term involution.

47 *Motus translationis; Migratio* When re-examined appropriately (Gasser RF. Evidence that some events in mammalian embryogenesis can result from differential growth, making migration unnecessary. *Anat Rec B New Anat* 2006;289B:53-63), many examples of changing positional relations turn out not to be examples of true migration. *Cell migration* may be *false* or *true*. In *false migration*, structures do not move from one site to another but their positional relationships change and they become separated as an embryo enlarges and changes shape. See, for example: Freeman B. The active migration of germ cells in the embryos of mice and men is a myth (*Reproduction* 2003;125:635-643), which explains the relocation of primordial germ cells from the wall of the umbilical vesicle to that of the hindgut by growth movements and shape changes. *True migration*, such as occurs in cytokinesis in the cerebellum and the cerebral cortex, is the movement of cells, cell groups and organs from one site to another, among, around, through or over other structures, in relation to a central reference point that moves minimally as the embryo enlarges or changes shape.

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- 48 *Neurulation primaria* *Primary neurulation*, as distinct from secondary neurulation, is the process entailing *tubulation* in which the neural plate folds and forms, in turn, a neural groove and then a neural tube, which separates from the surface ectoderm. The process concludes with the closure of the caudal neuropore in Stage 12, at about the level of somites 31 (Müller F, O'Rahilly R. The first appearance of the neural tube and optic primordium in the human embryo at stage 10. *Anat Embryol* 1985;172:157-69). The term primary neurulation is best confined to the process rather than applied to the phase of development in which it occurs, which is best referred to as primary body development.
- 49 *Neurulation secundaria* *Secondary neurulation* is the process entailing *canalization* that leads to the formation of the spinal cord beyond the limits of primary neurulation. It occurs after the closure of the caudal neuropore in Stage 12, and thus in Stages 13-18. Axial dense mesenchyme in the caudal eminence forms a neural cord in continuity with the neural tube: the cavity in the neural tube extends into the neural cord (Müller F, O'Rahilly R. The development of the human brain, the closure of the caudal neuropore, and the beginning of secondary neurulation at stage 12. *Anat Embryol* 1987;176:413-30). The term secondary neurulation is best confined to the process rather than applied to the phase of development in which it occurs, which is best referred to as secondary body development.
- 50 *Transitio epitheliomesenchymalis* For sessile cells to become free and migrate they must undergo an *epitheliomesenchymal transition*, first becoming flask-shaped, with the dissolution of juxtaluminal junctions, and then becoming frankly mesenchymal.
- 51 *Transitio mesenchymoepithelialis* Mesenchyme cells that have reached their destinations may condense and revert to sessile epithelial cells, by polarizing, developing basal laminae and specialized juxtaluminal junctions. Some such epithelia may subsequently undergo an epitheliomesenchymal transition.
- 52 *Ontogenesis* Ontogenesis is defined here as the development of the individual, beginning at fertilization and ending at death. It thus covers the principal concerns of this terminology (embryogenesis, fetogenesis and immediate postnatal development) but extends beyond them.
- 53 *Tempus fetale* The pregastrulation and postgastrulation phases of the embryonic period and the fetal period are stages of prenatal development, each with their own distinctive characteristics, particularly in respect of their responses to teratogens. The *fetal period* is taken, somewhat arbitrarily, to begin on day 57, by which time the embryo has already acquired the distinctly human features that are apparent with the unaided eye, and ends at birth, when the fetus becomes a newborn infant or neonate. The main events of organ formation having been completed by Carnegie Stage 23, the fetal period is mainly one of growth and differentiation, particularly functional differentiation, in preparation for extra-uterine life. Notable in this context is the skeletal system, in which cartilaginous precursors are being replaced by bone, and the nervous system, which is forming functional connections. Thus anomalies arising during this period entail disturbances of growth, of hard tissues and of neural connections.
- 54 *Aetas fetalis* *Fetal age* is usually given in weeks and is determined by the use of various starting points, of which only fertilization, insemination and ovulation are valid.
- 55 *Tempus fetale initiale; fetus hebdomadis nonae ad hebdomadam tertiam decimam* The *early fetal period* here corresponds to that of the 9 to 13 week fetus and ends at 90 days and about 90mm: the conclusion of the "second sous-stade de finition histogénétique, de réglage des proportions" (Guyot R. *Théorie nouvelle sur les âges de la vie*. 2nd ed. Paris: Barré & Dayez; 1985) and probably the end of the first trimester. There is, however, no agreement on precisely which weeks are encompassed by the first trimester. The attributes of fetuses have not been subjected to the same systematic, intensive investigation as have embryos. Nevertheless, there are attributes other than size and weight that characterize progression during the early fetal period.
- 56 *Tempus fetale intermedium; Fetus trimestris secundi* The *intermediate fetal period* here corresponds to that of the second trimester fetus and thus begins at 90 days and about 90mm, after the conclusion of the "second sous-stade de finition histogénétique, de réglage des proportions" (Guyot R. *Théorie nouvelle sur les âges de la vie*. 2nd ed. Paris: Barré & Dayez; 1985).
- 57 *Tempus fetale serum; Fetus trimestri tertii* The *late fetal period* corresponds to that of the third trimester fetus.
- 58 *Tempus perinatale* The *perinatal period* extends from immediately prior to birth, through birth and through the first 7 days of postnatal life, the early neonatal period.
- 59 *Tempus neonatale* The first 7 days after birth constitute the early *neonatal period*. The following 21 days of postnatal life constitute the late neonatal period, which thus ends with day 28.

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- 60 *Neotenia* Neoteny in man is the retention of juvenile features in sexually mature adults when compared with other primates. It may be full or partial.
- 61 *Paedomorphosis* Paedomorphosis is exhibited in features such as the human flat face, position of the foramen magnum, retarded skeletal development and continuation of fetal growth rates into infancy and childhood.
- 62 *Fertilisatio post penetrationem spermatozoi* Some of the features included in this section are inferred because they are common to all mammalian fertilization: others, such as *Zonal reaction* and *Fertilization cone*, have been observed in the human as a result of *in vitro* fertilization.
- 63 *Ootidium; Ovum; Embryo pronuclearis [Gradus Ib]* The imprecise term *ovum* has been variously applied, alone or qualified, to stages from the primary oocyte to the implanting blastocyst and beyond. The use of the more precise term is recommended. In mammals, it is the secondary oocyte, arrested in the metaphase of meiosis II, which is penetrated and thus best referred to as a penetrated oocyte until meiosis II has been completed. Penetration activates the oocyte into completing meiosis II, with the formation of the ootid and the second polar body. The mammalian ootid contains two separate haploid elements, the female and male pronuclei. As these two elements fuse into a single diploid aggregation of chromosomes, the ootid becomes a zygote.
- 64 *Corpus polare secundum; Polocytus secundarius* A line through the centres of the zygote and the second polar body defines the polar axis and indicates the plane of the first cleavage division (Veck L L, Zaninovic N. An atlas of human blastocysts. New York: Parthenon Publishing Group; 2003).
- 65 *Numerus diploideus chromosomatum nonreplicatorum; Numerus diploideus chromosomatum nonreplicatorum* This relates to the condition in the penetrated (or definitive) oocyte [2N].
- 66 *Syngamia* Traditionally, *syngamy* has meant sexual reproduction or, more specifically, the fusion of gametes. However, in *in vitro* fertilization it has come to describe a stage, beginning some 21-32 hr after insemination, in which maternal and paternal chromosomes intermingle, although this is not easily discernible by ordinary microscopy (Sathanathan H, Trounson AO, Wood C. Atlas of fine structure of human sperm penetration, eggs and embryos cultured in vitro. New York: Praeger Publishers; 1986).
- 67 *Activatio prima genorum zygoti corum* This first transcription produces only a minor population of mRNAs whereas the second transcription (ZGA2), in the two-celled embryo, produces a major population: most maternal mRNA is degraded at this time although maternal proteins persist into the blastocyst stage (Selwood L, Johnson MH. Trophoblast and hypoblast in the monotreme, marsupial and eutherian mammal: evolution and origins. *BioEssays* 2006;28:128-145); De Paepe C, Krivega M, Cauffman G, Geens M, van de Velde H. Totipotency and lineage segregation in the human embryo. *Mol Hum Reprod* 2014;20:599-618).
- 68 *Tempus embryonicum; Gradus carnegiensis [1-23]* There are 23 defined stages of development during the embryonic period, which begins at fertilization and ends, somewhat arbitrarily, 56 days later, by which time the embryo has already acquired uniquely human surface features that are apparent with the unaided eye. The stages are the internationally accepted Carnegie Stages (O'Rahilly R, Müller F. *Developmental stages in human embryos*. Washington DC: Carnegie Institution of Washington; 1987). Each Carnegie Stage is an arbitrarily defined cut through the time axis of the embryo and is based upon carefully-defined external and internal morphological criteria and not length or age. Thus, embryos of a particular length or age are not necessarily embryos of a particular stage. Carnegie Stage cannot be assigned solely on the basis of such measurements. See Dickey RP, Gasser RF. Ultrasound evidence for variability in the size and development of normal human embryos before the tenth postinsemination week after assisted reproductive technologies. *Hum Reprod* 1993;8:331-337; Wisser J, Dirschedl P, Krone S. Estimation of gestational age by transvaginal sonographic measurement of greatest embryonic length in dated human embryos. *Ultrasound Obstet Gynecol* 1994;4:457-462; Blaas HG-K, Eik-Nes SH, Kiserud T, Hellevik LR. Early development of the forebrain and midbrain: A longitudinal ultrasound study from 7 to 12 weeks of gestation. *Ultrasound Obstet Gynecol* 1994;16:25-29; Pooh RK, Kurjak A, eds *Fetal Neurology*. Jaypee, St.Louis; 2009; Pooh RK, Shiota K, Kurjak A. Imaging of the human embryo with magnetic resonance imaging microscopy and high-resolution transvaginal 3-dimensional sonography: Human embryology in the 21st century. *Am J Obstet Gynecol* 2011;204:77.e1-77.e16.). See also O'Rahilly and Müller F, *op.cit.* for further discussion of staging and for further references on ultrasound studies. Data have also been derived from MR studies on embryos from the Kyoto Collection of Embryos: Yamada S, Samtani RR, Lee ES, Lockett E, Uwabe C, Shiota K, et al. *Developmental atlas of the early first trimester human embryo*. *Dev Dyn* 2010; 239:1585-1595.
- 69 *Embryo pregastrulationis [St.1 ad 6a]* The term *pregastrulation embryo* is useful because such an embryo has distinctive attributes. The foreshortened term "pre-embryo", which has been used in legal and clinical contexts, is not recommended.
- 70 *Spatium subzonale; Spatium subcapsulare* The commonly used term *perivitelline space* is inappropriate for the space surrounding the human oocyte, which is deficient in yolk (*Latin - vitellus*).

71 *Reactio zonalis; Reactio capsularis* This and other items with the superscript ^{IVF} on the English side are observed in *in vitro fertilization* studies.

72 *Degradatio mitochondriorum paternalium* See Sutovsky P, Van Leyen K, McCauley T, Day BN, Sutovsky M. Degradation of paternal mitochondria after fertilization: implications for heteroplasmy, assisted reproductive technologies and mtDNA inheritance. Department of Animal Science, University of Missouri-Columbia, MO, USA. SutovskyP@missouri.edu, *Reprod Biomed Online*. 2004 Jan;8(1):24-33.

73 *Intercorpus* The *interbody* is a prominent intracytoplasmic electron-dense contractile structure in the equatorial plane of the second meiotic spindle, extending from the penetrated oocyte into the extruding second polar body. Fine electron-dense particles of unknown chemical nature are associated with spindle microtubules and the interbody represents the site of detachment of the second polar body and reconstitution of the cell membranes of the embryo and second polar body.

74 *Zygotum findens [Gradus II]* Embryos of Carnegie Stage 2 consist of between 2 and about 32 cells but have no blastocystic cavity by light microscopy. They are generally 0.1-0.2mm in diameter and about 2-3 days old.

75 *Morula* Stage 2 embryos from 12 to about 32 cells and without a blastocystic cavity are called morulae (from Latin *Morus*, mulberry). The term is not ideal because, unlike the amphibian morula, for which the term was coined, the human morula gives rise to extra-embryonic as well as embryonic tissues. Nevertheless, when the number of blastomeres cannot be counted, there is no other term to describe the solid mass that precedes the formation of the blastocystic cavity.

76 *Cellula externa morulae; Cellula trophoblastica presumptiva; Cellula polarisata; Polarblastus* The outer cells of the morula are polarized and are asymmetrical cells with the characteristics of epithelia. Their longitudinal divisions are conservative and result only in more polarized cells. Their transverse divisions are differentiative and result in both unpolarized embryoblastic cells and polarized cells. Cells remaining polarized become trophoblast (Johnson MH. Origin of pluriblast and trophoblast in the eutherian conceptus. *Reprod Fertil Dev* 1996;8:699-709). The term polarblast appropriately describes the tissue.

77 *Cellula interna morulae; Cellula embryoblastica presumptiva; Pluriblastus initialis* The inner cells of the morula are unpolarized and remain rounded and radially symmetrical. Their divisions are conservative and result only in more unpolarized cells. They will become the embryoblast or inner cell mass. The term pluriblast (Johnson MH. Origin of pluriblast and trophoblast in the eutherian conceptus. *Reprod Fertil Dev* 1996;8:699-709) recognizes the fact that its derivatives are both extra-embryonic or adnexal and embryonic or cyemic.

78 *Blastocystis libera [Gradus III]* Embryos of Carnegie Stage 3 are free blastocysts with a blastocystic cavity by light microscopy. They consist of up to 90 cells, of which about 30 are inner cell mass cells. They are about 4-5 days old and are generally 0.1-0.2mm in diameter.

79 *Embryoblastus; Massa cellularis interna; Pluriblastus serior* The term *embryoblast* is widely used although the derivatives of this tissue are both extra-embryonic or adnexal and embryonic or cyemic. The term *inner cell mass* is also used but cannot be used as a comparative term as the corresponding cells are not inner in many, if not all, marsupials (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). The term *pluriblast* has neither of these disadvantages.

80 *Epithelium primordiale* The tissues of the pre-implantation embryo proper are all epithelial in that their cells are sessile, are polarized between a free surface and a basal lamina and they have specialized juxtaluminar junctions and little intercellular substance. Daughter cells may be epithelial or, as a result of epitheliomesenchymal transition, become mesenchymal (see below).

81 *Epiblastus* The term *epiblast* is preferred for this tissue as it provides appropriate information about its site, fate and potential. Primary ectoderm is less preferred both because the term has been used to include amnioblast and because current usage postpones the use of the suffix -derm until after gastrulation (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). Alternatives that include the term ectoderm, the use of which should be limited to the cells remaining on the dorsal surface of the embryo after the early somite stage, are not recommended.

82 *Hypoblastus* The term *hypoblast* is preferred for this tissue as it provides appropriate information about its site, fate and potential. It appears to induce the formation of the primordial amniotic cavity (Cocouvanis E, Martin GR. Signals for death and survival: a two-step mechanism for cavitation in the vertebrate embryo. *Cell* 1995;83:279-287) and of axial patterning in the epiblast, including the forebrain (Beddington RSP, Robertson EP. Axis development and early asymmetry in mammals. *Cell* 1999;96:195-209). The term *primary endoderm* is less preferred both because the term has been used to include the

extra-embryonic endoblast and because current usage postpones the use of the suffix -derm until after gastrulation (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). Other alternatives that include the term endoderm are not recommended.

83 *Mesenchyma* A tissue consisting of free cells without polarity or specialized juxtaluminar junctions. The loosely arranged, often stellate, cells are suspended in a gelatinous matrix and are amoeboid and actively phagocytic. As they migrate their processes make temporary contact with each other, with overlying epithelial cells and with their basal laminae. The outcome of epitheliomesenchymal transition is that there are two types of tissue, namely, epithelial and mesenchymal. These tissue types do not correspond to the primary germ layers, ectoderm, endoderm and mesoderm [q.v.].

84 *Cavitas blastocystica* The term *blastocystic cavity* is recommended, rather than *blastocoel*, because the cavity is not homologous with the blastocoel of amphibians and birds, the homologue of which is "the very narrow slit confined between the epiblast and hypoblast" (Eyal-Giladi H. Establishment of the axis in chordates: facts and speculations. *Development* 1997;124:2285-2296).

85 *Trophoblastus; Trophoectoderma* The term trophoblast is preferred for this tissue, which is defined as the earliest appearing stem cell population dedicated to nourishment of future embryonic tissues. Its cells are adhesive, migratory and, initially, multinucleate. They appear, at least in the mouse, to signal the specification of primordial germ cells and the allantois in the caudal epiblast (Lawson KA, Dunn NR, Roelen BA, Zeinstra LM, Davies AM, Wright CV, Corving JP, Hogan BL. *Bmp4* is required for the generation of primordial germ cells in the mouse embryo. *Genes Dev* 1999;13:424-436). The term trophoectoderm and its variants are not recommended because current usage postpones the use of the suffix -derm until after gastrulation (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). Alternatives that include the term ectoderm, the use of which should be limited to the cells remaining on the dorsal surface of the embryo after the early somite stage, are not recommended.

86 *Blastocystis unilaminaris [Gradus III]* The cavity of a unilaminar blastocyst is surrounded by a single layered extra-embryonic ectodermal membrane, the trophoblast; in the bilaminar blastocyst, the trophoblast is lined by extra-embryonic endoblast; the interposition of extra-embryonic mesoderm creates the trilaminar blastocyst.

87 *Insignia miscellanea cellularum trophoblastorum nondifferentiarum* These miscellaneous features have only been observed *in vitro*. Similar observations on the differentiated trophoblast are not readily available.

88 *Blastocystis adhaerens [Gradus IV]* An embryo of Carnegie Stage 4 is an attaching blastocyst but no such *in vivo* human specimen has been recorded. Previously reliance was placed on those of the macaque (Heuser CH, Streeter GL. *Development of the macaque embryo. Contrib Embryol* 1941;29:15-55) but direct information about Stage 4 is now derived from *in vitro* experiments in which blastocysts are placed on monolayers of cultured endometrial epithelial cells. Embryos of Stage 4 would be about 6 days old and about 0.1-0.2mm in diameter.

89 *Cavitas amniotica primordialis* It appears that a *primordial amniotic cavity* forms by cavitation within the epiblast, that the roof of the primordial amniotic cavity breaks down creating a transient tropho-epiblastic cavity and that the definitive amniotic cavity becomes roofed by cells that arise from the margins of the epiblast. There is no primordial amniotic cavity in embryos of Stage 3 and while most embryos of Stage 5a have a tropho-epiblastic cavity, the "earliest known human implantation stage" (Carnegie N° 8020) has a primordial amniotic cavity (Luckett WP. The development of primordial and definitive amniotic cavities in early Rhesus monkey and human embryos. *Am J Anat* 1975;144:149-168). It is therefore presumed that for most embryos a primordial amniotic cavity occurs in Stage 4.

90 *Blastocystis implantata; Blastocystis invadens; Conceptus previllosus [St.5]* Embryos of Carnegie Stage 5 are implanted but previllous blastocysts. Their trophoblast is solid in Stage 5a, contains isolated lacunae in Stage 5b and contains intercommunicating lacunae in Stage 5c. The embryonic disc in embryos of Stage 5, which are about 7-12 days old, is generally 0.1-0.2mm in diameter.

91 *Margo syncytiodecidualis* The *endometrium* responds to the presence of syncytiotrophoblast by undergoing the predecidual reaction, characterized by oedema and then saw-toothed glands, particularly in the stratum spongiosum. It is thenceforward called *decidua*.

92 *Cavitas trophoepiblastica* The trophoepiblastic cavity is apparently formed by the breakdown of the roof of the primordial amniotic cavity. See above.

93 *Amnioblastus; Cellulae amniogenicae; Ectoderma amnioticum* The term amnioblast is preferred for this tissue as it provides appropriate information about its site, fate and potential. Extra-embryonic ectoderm is least preferred because current usage postpones the use of the suffix -derm until after gastrulation (Johnson MH and Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). Alternatives that include the suffix -derm are not recommended.

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- 94 *Primordium marginis caudalis lineae primitivae; Primordium marginis caudalis lineae gastrulationis / Margo caudalis lineae primitivae precoquis; Margo caudalis lineae gastrulationis precoquis* "The epiblast at the future caudal end of the embryonic disc is flexed dorsally and exhibits an alteration and loosening of its epithelium basally. An accumulation of more loosely associated cells appears to be continuous with, and derived from, the ventral surface of the epiblast. This modification of the epiblast is interpreted as the precociously differentiated caudal margin of the primitive streak" (Luckett WP. Origin and differentiation of the yolk sac and extraembryonic mesoderm in presomite human and rhesus monkey embryos. *Am J Anat* 1979;152:59-98).
- 95 *Area caudalis mesoblastogenica* An area at the future caudal margin of the epiblast, which precedes the appearance of a definite primitive streak [St.6b]. Extra-embryonic mesoblast is thought to arise from this area rather than by delamination from the trophoblast.
- 96 *Mesoblastus extraembryonicus* The term mesoblast is preferred for this tissue because it provides appropriate information on its site, fate and potential. Lankester used the term to describe those cells, which he thought derived from enteric cells (extra-embryonic endoblast), separated, spread out, became amoebiform and "crawled all over the inner wall of the ectodermic vesicle (blastocoel or blastocystic cavity) (Lankester R. Notes on the embryology and classification of the animal kingdom. *Q J Microscop Sci* 1877;17:399-454). A term is necessary to describe the tissues found outside the extra-embryonic endoblast and inside the trophoblast before gastrulation and the use of the suffix *-blast* is a corollary of current usage (Johnson MH, Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). The qualifying adjective extra-embryonic is necessary because the term mesoblast has been used to describe the free cells that migrate between the epiblast and intra-embryonic endoderm (Collins P, Billett FS. The terminology of early development: history, concepts, and current usage. *Clin Anat* 1995;8:418-25) and to denote a temporary, embryonic cell lineage, which will later generate either an epithelial or a free-cell arrangement (Collins P. Embryology and development. In: Williams PL, Bannister LH, Berry MM, Collins P, Dyson M, Dussek J, Ferguson MWJ, editors. *Gray's Anatomy* 38th ed. Edinburgh: Churchill Livingstone; 1995).
- 97 *Textus angioblasticus mesoblasti / Crista previllosa mesoblasti* Extra-embryonic mesoblastic tissues produced from the epiblast before gastrulation.
- 98 *Reticulum extraembryonicum; Magma reticulare* Extra-embryonic mesoblast produced, initially from the hypoblast, before gastrulation. At least in the rhesus monkey, the cells of both the hypoblast and the initial reticulum are mitotically active (Enders AC, King BF. Formation and differentiation of extraembryonic mesoderm in the rhesus monkey. *Am J Anat* 1988;181:327-340) so that later reticulum may have arisen from either source.
- 99 *Endoblastus extraembryonicus; Membrana exocoelomica* The term *endoblast* is preferred for this tissue as it provides appropriate information about its site, fate and potential. The term *primary endoderm* is least preferred both because it applies also to the hypoblast and also because current usage postpones the use of the suffix *-derm* until after gastrulation (Johnson MH, Selwood L. Nomenclature of early development in mammals. *Reprod Fertil Dev* 1996;8:759-64). Other alternatives that include the term endoderm are not recommended.
- 100 *Vesicula umbilicalis primaria / Saccus vitellinus primarius; Cavitas vesiculae umbilicalis primariae / Cavitas sacci vitellini primarii; Vesicula umbilicalis secundaria / Saccus vitellinus secundarius; Cavitas vesiculae umbilicalis secundariae / Cavitas sacci vitellini secundarii* The term umbilical vesicle, which has been in use for many years, is preferred because yolk (Latin vitellus) is not present in the human vesicle and because the term indicates location, the vesicle being a feature of the umbilical region of the embryo and becoming, at least partially, incorporated into the umbilical cord.
- 101 *Circulus lacunosus vascularis* The *lacunar vascular circle* is visible from the endometrial surface.
- 102 *Lamina prechordalis precoqua* "The first clear evidence of a (rostro)caudal embryonic axis appears [at Stage 5c] as a pronounced thickening of the [hypoblast] at the future cranial end of the embryonic disc to form a *prechordal plate*." (Luckett WP. Origin and differentiation of the yolk sac and extraembryonic mesoderm in presomite human and rhesus monkey embryos. *Am J Anat* 1979;152:59-98). However, this thickening may not correspond to the *prechordal plate* but to the extra-embryonic *rostral visceral endoderm* or *rostral marginal crescent* found in other mammals (Viebahn C. The anterior margin of the mammalian gastrula: comparative and phylogenetic aspects of its role in axis formation and head induction. *Curr Top Dev Biol* 1999;46:63-103). The *prechordal plate* proper may not appear until Stage 7.
- 103 *Polus rostralis embryonis* Although *rostrum* means a beak, a snout or the prow of a ship, *rostral* is commonly used as the opposite of caudal, particularly before the appearance of cephalic structures in Stage 8 or cranial structures in Stage 13, but also thereafter: it is also used in neuroanatomy to mean nearer the *rostrum* of the *corpus callosum* in the unfolded nervous system.

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- 104 *Polus cephalicus embryonis* *Cephalic* is a positional term that may appropriately be used in Stage 8 and thereafter, when there is a presumptive brain.
- 105 *Latus dextrum embryonis* Although the sides of the embryo can be recognized and cranial patterning occurs in Stage 5, it is not until Stage 6b, with the formation of the primitive node, that the molecular basis for left-right asymmetry is established.
- 106 *Conceptus villosus [Gradus VI]* Embryos of Carnegie Stage 6 are villous conceptuses. There may be the suggestion of a primitive streak in embryos of Stage 6a or earlier, but one is definitely present in embryos of Stage 6b. The embryonic discs of embryos of Stage 6 are generally about 0.2mm in diameter and they are about 17 days old.
- 107 *Chorion frondosum* The predecidual reaction around embryos of Carnegie Stage 5 becomes a full-blown decidual reaction around embryos of Carnegie Stage 6, with the transformation of stromal cells into decidual cells: they become rounded or polyhedral and glycogen, lipids and mitochondria accumulate within their vacuolated cytoplasm.
- 108 *Vasculogenesis* Formation of a primordial capillary network from cells that differentiate locally: they may be invading angioblasts (Risau W, Flamme I. *Vasculogenesis*. *Annu Rev Cell Dev Biol*. 1995;11:79-91) or be endothelial progenitor cells (EPCs) which differentiate in splanchnopleuric mesenchyme or its derivatives.
- 109 *Mesenchyma capitis* *Head mesenchyme* is listed as present in embryos from Stage 6b onwards in the Edinburgh atlas and database of human developmental anatomy. <http://www.ana.ed.ac.uk/anatomy/database/humat/> but the primary source of the listing is not known. Its presence in embryos of Stage 7 may be inferred from Hill JP, Florian J. A young human embryo (embryo Dobbin) with head-process and prechordal plate (*Phil Trans Roy Soc London B* 1931;219:443-486).
- 110 *Linea primitive / Linea gastrulationis; Nodus primitivus / Nodus gastrulationis; Sulcus primitivus / Sulcus gastrulationis* The terms primitive streak/node/groove are widely used but may be misuses of the term primitive, which more usually refers to phylogeny rather than ontogeny. The alternative terms, gastrulation streak / node / groove, do not have this anomaly and, from a functional viewpoint, are more informative.
- 111 *Mesoderma embryonicum; Mesoblastus* These terms describe the intermediate germ layer of the trilaminar embryo, which will form bone, muscle and connective and blood-vascular tissues. Experimental studies suggest that cells ingressing through the primitive node and the rostral part of the primitive streak give rise to paraxial mesoderm and those through the middle part give rise to lateral plate mesoderm. The qualifying adjective embryonic is necessary as long as terms such as primary mesoderm remain in use. The term mesoblast has been used (Collins P. *Embryology and development*. In: Williams PL, Bannister LH, Berry MM, Collins P, Dyson M, Dussek J, Ferguson MWJ, editors. *Gray's Anatomy* 38th ed. Edinburgh: Churchill Livingstone; 1995 and subsequent editions). However, the use of the suffix -derm for a germ layer produced by gastrulation is preferred and has that restricted use here: the parts of the germ layer are paraxial and lateral plate mesoderms; their derivatives are either epithelial or mesenchymal and are named accordingly.
- 112 *Endoderma embryonicum* The term describes the ventral germ layer of the trilaminar embryo, which will form the epithelium of the gut, including the prechordal plate, and many of their derivatives. These possibly include prechordal mesenchyme but this may be of notochordal origin. Experimental studies suggest that the first cells ingressing through the primitive node give rise to notochord and embryonic endoderm, which will form the roof of the secondary umbilical vesicle, displacing the cells of the hypoblast laterally into its walls. The qualifying adjective embryonic is necessary as long as terms such as primary endoderm remain in use.
- 113 *Lamina prechordalis* The *prechordal plate* may not appear until Stage 7: certainly in Stage 8 it is "a highly developed mesendodermal mass [in which cells resemble either endoderm or mesenchyme] in contact with the floor of the neural groove". At stages 9 and 10, the plate is related to neuromere D1. Lateral growth at stages 9-11 gives rise to the bilateral premandibular condensations (Müller F, O'Rahilly R. The prechordal plate, the rostral end of the notochord and nearby median features in staged human embryos. *Cells Tissues Organs* 2003;173:1-20). Prechordal mesenchyme does not become truly plate-like until Stage 9 and some would thus say that the *prechordal plate* appears in Stage 9.
- 114 *Diverticulum allantoicum; Ductus allantoicus* Several examples of "allantoic diverticula" have been reported in embryos of Stage 6. Nevertheless, "it is difficult to find a convincing example of an allanto-enteric diverticulum at Stage 6" (O'Rahilly R, Müller F. *Developmental stages in human embryos*. Washington DC: Carnegie Institution of Washington; 1987).

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- 115 *Cellula germinalis precursoria* An embryo of Stage 6b showed a marked concentration of glycogen in the extra-embryonic endoderm of the secondary yolk sac and some of the cells may be primordial germ cells (Hertig AT, Adams EC, McKay DG, Rock J, Mulligan WJ, Menkin MF. A thirteen-day human ovum studied histochemically. *Am J Obstet Gynecol* 1958;76:1025-1043). Experimental studies suggest that cells originating in a caudal part of the epiblast, ingress through a caudal part of the primitive streak and migrate into the extra-embryonic endoderm of the secondary yolk sac.
- 116 *Embryo postgastrulationis [St.6b ad 23]* The pregastrulation and postgastrulation phases of the embryonic period and the fetal period are stages of prenatal development, each with its own distinctive characteristics, particularly in respect of its responses to teratogens. In *postgastrulation embryos* the main events of organ formation occur. These entail delicate and complex tissue interactions that are particularly susceptible to teratogens, which have dramatic effects upon morphology. Palate and lips, eyes, ears, brain, spinal cord and heart are all highly susceptible. Susceptibility diminishes as the main events of organ formation are completed by Carnegie Stage 23.
- 117 *Embryo cum processu notochordali [Gradus VII]; Embryo cum processu axiali Gradus VII]; Embryo cum chordomesoderma Gradus VII]* Each embryo of Carnegie Stage 7 has a notochordal process immediately rostral to its primitive node and streak. The embryos are generally about 0.4mm in diameter and about 19 days old.
- 118 *Cardo chordoneuralis; Punctum chordoneurale cardinis* Once the primitive node has started to form, gene expression centred on it becomes asymmetrical and the molecular basis for left-right asymmetry is established. For a review of the first description by Hensen, see: Viebahn C. Hensen's node. *Genesis* 2001; 29:96-103. See also: Müller F, O'Rahilly R. The primitive streak, the caudal eminence and related structures in staged human embryos (*Cells Tissues Organs*; 177:2-20:2004); Charrier J, Teillet M, Lapointe F, Le Douarin N. Defining subregions of Hensen's node essential for caudalward movement, midline development and cell survival (*Development* 1999; 126:4771-4783); Cambray, N, Wilson, V. Axial progenitors with extensive potency are localised to the mouse chordoneural hinge (*Development* 2002; 129:4855-66).
- 119 *Canalis neurentericus* The neurenteric canal is a temporary passage between the amniotic cavity and the umbilical vesicle. It develops during Stage 8 and is constant (whether patent or not). It is most clearly visible at Stage 9 and has almost disappeared at Stage 10 (Müller F, O'Rahilly R. The primitive streak, the caudal eminence and related structures in staged human embryos. *Cells Tissues Organs* 2004;177:2-20).
- 120 *Embryo presomiticus [St.8]* Embryos of Carnegie Stage 8 are late presomite embryos. They are generally 1-1.5mm in greatest length and about 23 days old. The term presomite embryo is sometimes applied more generically to include also Stages 6-8 but this usage is not recommended. Originally, phases were not ascribed to Stage 8 (O'Rahilly R, Müller F. *Developmental stages in human embryos*. Washington DC: Carnegie Institution of Washington; 1987). However, only advanced specimens show a neural groove: in the same specimens the floor of the notochordal process is breaking down and a notochordal plate is present (O'Rahilly R, Müller F. The first appearance of the human nervous system at stage 8. *Anat Embryol* 1981;163:1-13). These distinct phases are recognised here by the use of the terms Presomite embryo without neural groove [St.8a] and Presomite embryo with neural groove [St.8b].
- 121 *Fovea primitive* The term *primitive pit* is widely used but may be a misuse of the term primitive, which more usually refers to phylogeny rather than ontogeny. The term notochordal pit does not have this anomaly and is more informative.
- 122 *Ectoderma embryonicum* The term describes the dorsal germ layer of the somite embryo, which will form the epithelium of the skin and nervous system and their derivatives. Experimental studies suggest that, after obvious primitive streak activity ceases, epiblastic cells continue to ingress through the most caudal part of the primitive streak until the early somite stage. They form axial dense mesenchyme and thence become the endoderm and mesoderm of more caudal parts in secondary body development. The cells remaining on the dorsal surface of the embryo thereafter constitute the embryonic ectoderm. The qualifying adjective embryonic is necessary as long as terms such as primary ectoderm remain in use.
- 123 *Somitomerum* *Somitomeres* are paired whorls of mesenchymal cells that appear metamerically in paraxial mesoderm before the appearance of epithelial somites. Somitomeres form in strict craniocaudal sequence beginning in the head where they subsequently contribute to head mesenchyme. Elsewhere, they condense, epithelialise and form somites. They have been found in all amniote embryos that have been examined by stereo scanning electron microscopy (Jacobson AG. Somites and head mesoderm arise from somitomeres. In: Sanders EJ, Lash JW, Ordaahl CP. Eds. *The origin and fate of somites*. Amsterdam: IOS Press; 2001).
- 124 *Zona junctionalis mesenchymalis* The bar of mesenchyme where somatopleuric and splanchnopleuric mesenchymes meet and which separates the embryonic and extra-embryonic coeloms on each side of the Stage 9 embryo. It breaks down, allowing them to communicate, in Stage 10.

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- 125 *Tuberculum coccygeum* In Stage 20 the vestigial caudal eminence or tail bud is reduced to two transient midline tubercles, caudal to the anal pit: the *coccygeal tubercle*, which is nearer to the pit, is produced by the underlying tip or dorsum of the coccyx and will become submerged; and the *caudal tubercle*, which is further from the pit (see below).
- 126 *Tuberculum caudale* In Stage 20 the *caudal tubercle* (see above) is produced by vestiges of the nonvertebrated part of the caudal eminence or tail bud and may become cystic.
- 127 *Mesenchyma intermedium; Mesoderma intermedium* The tissue primarily responsible for the formation of the kidneys and internal genitalia and their ducts. Experimental studies suggest that intermediate mesoderm in amniotes arises from the middle of the primitive streak distal to somite origin and proximal to lateral plate mesoderm origin. The term intermediate mesenchyme is thus more appropriate than the commonly used intermediate mesoderm.
- 128 *Cellulae antecedentes* The term antecedent cell is used here solely in a generic sense and without any specific connotation. The term *precursor* is not used in a generic sense, to avoid confusion with the specific term *cellula precursoria*, a synonym for the official term for stem cell, *cellula staminalis*.
- 129 *Potestas totalis* *Totipotency* is the capacity (a) to form all cell lineages, embryonic and extra-embryonic, and (b) to self-organise, i.e., to form the body axis and the basic body plan (e.g., zygote; blastomere).
- 130 *Potestas pluralis* *Pluripotency* is the capacity to form either all embryonic or all extra-embryonic cell lineages (e.g., cells of the inner cell mass or pluripotent stem cells).
- 131 *Potestas multiplex* *Multipotency* is the capacity to form multiple cell types of one cell lineage (e.g., cells of one germ layer; somatic adult stem cells).
- 132 *Potestas una* *Unipotency* is the capacity of adult stem cells to form only one cell type (e.g., haematopoietic stem cells; spermatogonia).
- 133 *Formabilitas* *Plasticity* is the ability of a specific stem cell population to transdifferentiate, i.e., to switch to a stem cell population with a different differentiation potential.
- 134 *Cellula primordialis* A *primordial cell* is totipotent; the zygote and its immediate progeny are primordial cells.
- 135 *Cellula fundatoria* Founder cells are capable of contributing to the establishment of one or more cell populations.
- 136 *Cellula progenitalis; Cellula proprecursoria* A prestem cell is capable of contributing to the establishment of one or more stem cell populations.
- 137 *Cellula staminalis; Cellula precursoria* A stem cell is a constituent of a population that is capable of maintaining its own size while exporting an appropriate output of progeny to one or more cell lineages. The term *Cellula staminalis* was adopted by FIPAT as the preferred term.
- 138 *Cellulae multipotentes et unipotentis* Cells are here usually listed according to both their derivation and their potential: an exception is the *epidermal neural crest cell stem cell [eNCSC]*, which is derived from epidermis but is capable of giving rise to neural crest cells.
- 139 *Cellula staminalis germinalis* An embryo of Stage 6b showed a marked concentration of glycogen in the extra-embryonic endoderm of the secondary yolk sac and some of the cells may be primordial germ cells (Hertig AT, Adams EC, McKay DG, Rock J, Mulligan WJ, Menkin MF. A thirteen-day human ovum studied histochemically. *Am J Obstet Gynecol* 1958;76:1025-1043).
- 140 *Factores crescentiae* The factors listed here are only representative but all are known to be active in normal embryogenesis and specific congenital anomalies are known to be associated with disturbances of them (TGF- α). Whether or not these criteria are appropriate and whether or not other growth factors should be included here is debatable. The number of growth factors and their families that have been identified continues to increase as does knowledge of their activities.

141 *Factores transcriptionis* Transcription factors are proteins that interact with specific DNA sequences to enable transcription to occur. Their number is enormous and there is no obvious way to limit their numbers in a way that would permit their inclusion here. A transcription factor classification may be found at <http://www.gene-regulation.com/pub/databases/transfac/cl.html>. Again, what should be included in a terminology that is primarily structure- and time-related is debatable but for the present it is felt that it is appropriate to include the sections headed Induction and interaction growth factors as well as this footnote.

142 *Crista neuralis* Cells of the *primary neural crest* separate from the neurosomatic ectodermal junction to give rise to the *mesencephalic*, *rhombencephalic* and *spinal neural crest* down to S₁. Following secondary neurulation, cells delaminate from the surface of the secondary neural tube and give rise to *spinal neural crest* beyond S₁ (O'Rahilly R, Müller F. The development of the neural crest in the human. J Anat 2007;211:335-351). Neural crest is here divided according to the adjacent part of the brain. The term *circumpharyngeal neural crest* is not used as it describes a migration route to the pharyngeal region, the outflow tract of the heart and great vessels and much of the gut-associated crest derivatives. Furthermore, it is said to be in the posterior rhombencephalic region but the crest for the first two pharyngeal arches is mainly associated with rhombomeres 2 and 4.

143 *Structurae cristae neuralis* *Neural crest* tissue is dealt with under General histogenesis because of the wide range and distribution of its derivatives outside the nervous system. Groups of cells, which behave in a similar manner but arise from some placodes and by delamination from the optic and otic vesicles are classified here as *neural crest-like* cells. *Neural crest cells* and *neural crest-like cells* meld seamlessly into *neural crest complexes* and are no longer morphologically distinguishable (O'Rahilly R, Müller F. The development of the neural crest in the human. J Anat 2007;211:335-351). Here the term *neural crest* is used *in sensu stricto* and the term *neural crest complex* recognizes the dual lineage of its component cells.

144 *Complexus cristae neuralis nasalis* The *nasal neural crest complex* develops from the epithelium of the *nasal placodes* in Stage 13 and migrates towards the telencephalon, reaching it in Stage 15, at which stage complex-derived olfactory fibres enter the region of the future olfactory bulb.

145 *Complexus cristae neuralis opticae* The *optic neural crest complex* develops from the optic primordium in Stages 11 and 12 at the level of Diencephalon 1 and is the only forebrain-derived *neural crest-like tissue*.

146 *Cellula staminalis cornealis* Corneal stem cells come from the corneoscleral junction.

147 *Complexus cristae neuralis mesencephalicae* The *mesencephalic neural crest complex* appears at Stage 9 and at Stage 11 spreads out towards the frontonasal region where it mingles with the *optic neural crest complex*.

148 *Crista neuralis isthmica* *Neural crest cells*, seen in the roof of the isthmical rhombomere in Stage 13, appear to be destined more for the leptomeninges than for the mesencephalic nucleus of the trigeminal nerve.

149 *Complexus cristae neuralis trigeminalis* At Stage 10 *neural crest cells* migrate mainly from future rhombomere 2 but with contributions from adjacent future rhombomeres and with *neural crest-like cells* from the overlying ectoderm form the *trigeminal neural crest complex*.

150 *Complexus cristae neuralis faciovestibulocochlearis* At Stage 11 some cells from the otic vesicle, representing the primordial vestibular ganglion, attach to the facial neural crest. At Stage 14 afferent fibres to the geniculate ganglion and efferent fibres from the vestibular ganglion distinguish between the two parts; at Stage 15 the smaller primordial cochlear ganglion cells appear and fibres are present at Stage 16.

151 *Complexus cristae neuralis facialis* At Stage 10 *neural crest cells* migrate mainly from rhombomere 4 but with contributions from adjacent rhombomeres and with *neural crest-like cells* from the overlying ectoderm form the *facial neural crest complex*.

152 *Ossiculae auditus (partim)* Thompson et al. suggested that the mesenchyme of the auditory ossicles may also originate as a whole or in part from the neural crest. (Thompson H, Ohazama A, Sharpe PT, Tucker AS. The origin of the stapes and relationship to the otic capsule and oval window. Dev Dyn 2012;241:1396-1404.)

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- 153 *Complexus cristae neuralis oticae* *Neural crest-like cells* migrate from the otic placode at Stage 10 and, becoming attached to the *facial neural crest complex*, represent the primordial *vestibular ganglion*. The *cochlear ganglion* is recognizable at Stage 15.
- 154 *Complexus cristae neuralis glossopharyngealis; Complexus cristae neuralis vagalis* At Stage 10 *neural crest cells* migrate mainly from the roof of rhombomere 6 and probably from adjacent rhombomeres and meld with *neural crest-like cells* from the overlying ectoderm to form part of a continuous *glossopharyngeal/vagal neural crest complex*. In Stage 13, the glossopharyngeal and vagal parts separate and each develops superior and inferior ganglia, of which only the superior ganglia are believed to be derived from neural crest *per se*.
- 155 *Crista neuralis cardiaca* At Stage 12 some *neural crest cells* from rhombomeres 6 and 7, which are in continuity ventrally with the *hypoglossal neural crest*, proceed via pharyngeal arches towards the truncus arteriosus; at Stage 13 they are joined by *neural crest* and *neural crest-like cells* and, continuing beyond the inferior glossopharyngeal and vagal ganglia, migrate into the 3rd and 4th pharyngeal arches; these components are interpreted as human *cardiac neural crest tissue*.
- 156 *Cartilagineae laryngeae* The Vagal neural crest complex does not contribute to all of the laryngeal cartilages.
- 157 *Aa. arcuum pharyngeorum* The terms *pharyngeal arch artery / arteries* are preferred to those of *aortic arch/es* to avoid confusion with the definitive aortic arch.
- 158 *Crista neuralis nervi accessorii* At Stage 12 *neural crest cells* from rhombomere 7 migrate and form the *neural crest of the accessory nerve*, which, by Stage 13, extends uninterruptedly between the *vagal neural crest* and the *spinal neural crest*.
- 159 *Crista neuralis hypoglossalis; Crista neuralis occipitalis* In Stage 10 *neural crest cells* migrate from rhombomere 8 and spread between occipital somites where they mingle with myotomic cells to form the *hypoglossal cell cord*; at Stage 12 the cord has reached the 1st pharyngeal arch; and by Stage 16 it has reached the lateral lingual swelling.
- 160 *Crista neuralis spinalis* The spinal leptomeninges, mesenchyme of the neck, trunk and lower limb dermis and adipocytes were formerly attributed to the *spinal neural crest* but are now known to be derived from somites (Christ B, Huang R, Scaal M. Amniote somite derivatives. Dev Dyn 2007;236:2382-2396). The traditional distinction between trunk and lumbosacral *spinal neural crest* seems inappropriate because the trunk lumbar and 1st sacral *spinal neural crest* all form in the same way, whereas the remaining sacral and coccygeal *spinal neural crest*, which form after the caudal neuropore closes at Stage 12, do so by direct outgrowth from the secondary neural tube. The caudal limit of the *spinal neural crest* descends with each Stage, as does the formation of primordial spinal ganglia, which lie at somite 19 at Stage 13 and 33 at Stage 14.
- 161 *Via migrationis dorsolateralis* Dorsolateral migration from the *spinal neural crest* passes between the surface ectoderm and the dermatomyotome.
- 162 *Via migrationis ventrolateralis* Ventrolateral migration from the *spinal neural crest* passes between the dermatomyotome and the sclerotome.
- 163 *Via migrationis ventromedialis* Ventromedial migration from the *spinal neural crest* passes between the sclerotome and the neural tube.
- 164 *Mesenchyma somatopleurale* Together with ectoderm, somatopleuric mesenchyme makes up the body wall. The unqualified term *somatopleure* is not recommended because it is ambiguous, having been used to mean either the whole thickness of the body wall or only its mesenchymal component
- 165 *Mesenchyma splanchnopleurale* Together with endoderm, the splanchnopleuric mesenchyme makes up the walls of the gut-related viscera. The unqualified term *splanchnopleure* is not recommended because it is ambiguous, having been used to mean either the whole thickness of the visceral wall or only its mesenchymal component.
- 166 *Cellula adipocytogenetrix* *Adipose tissue* not only develops from mesenchyme from various sources but also from *fat cell progenitors* derived from granulocyte macrophage colony-forming units (GM-CFU).

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- 167 *Cellula osteoclastoprogenetrix* The *osteoclast progenitor cell* is a multipotent mononuclear stem cell, which is derived from bone marrow and gives rise to monocytes in peripheral blood and to the various types of tissue macrophages (Bar-Shavit Z. The osteoclast: a multinucleated, hematopoietic-origin, bone-resorbing osteoimmune cell (J Cell Biochem 2007;102:1130–1139 and erratum J Cell Biochem 2008;104:1946-1947).
- 168 *Osteoclastus* *Osteoclasts* form by the fusion of *osteoclast progenitor cells* (Bar-Shavit Z. The osteoclast: a multinucleated, hematopoietic-origin, bone-resorbing osteoimmune cell. J Cell Biochem 2007;102:1130–1139).
- 169 *Canalis cartilagineus* *Cartilage canals* first appear in the early fetus and by 28 weeks all the larger masses of cartilage are permeated by them. They contain blood vessels surrounded by loose cellular tissue and provide the osteoblastic tissue for ossification when this later occurs (Haines RW. Cartilage canals. J Anat 1933;68:45-64).
- 170 *Ossificatio perichondralis diaphysialis* Adjectives derived from nouns such as *diaphysis*, *epiphysis* and *hypophysis* are, in a strict grammatical sense, probably best constructed using the suffix *-alis* giving *diaphysialis*, *epiphysialis*, *hypophysialis* and *symphysialis*. However, for reasons of terminological precedence and consistency, the spellings of *diaphysialis*, *epiphysialis*, *hypophysialis* and *symphysialis* have been here retained.
- 171 *Anulus perichondralis* This term describes the site of periosteal activity around the cartilaginous bud of a bone, and later the periosteal activity around the diaphysial cartilage.
- 172 *Extensio gemmae osteogenicae* The spread is that which takes place through an erosion canal into the cartilage model.
- 173 *Osteonum primarium; Osteonum secundarium* *Primary osteons* are directly deposited by the periosteum and not in a preceding resorption cavity. As a result, unlike secondary osteons, primary osteons are not limited by resorption or reversal lines. *Secondary osteons* are deposited in a resorption cavity and are limited by resorption or reversal lines.