

Universal Terminology

HELP ON UNIT PAGE

This document provides a complete description of the unit page. It explains its contents and how to access the corresponding external information sources.

The unit page is the reference presentation for any terminological unit. It contains all the information relevant to that unit, with the exception of the specific documentation of the entities that comprise it.

The vocabulary unit page includes a section dedicated to occurrences. This section lists all occurrences of the given lexeme and its representative words in the entire terminology.

This help file constitutes the second chapter of the general help manual on the TAH website.

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2.1 Introduction

By convention, in this document and other documents on the documentation of TAH, we distinguish anatomical units from anatomical entities. A unit is composed of one to five entities depending on its type. See *chapter 05* of *Universal Terminology* for more details. Entities can be generic or specific, but by definition, only specific entities are present in a partonomy; pairs of specific entities, whose terms end with *(pair)* are frequently encountered.

An example is necessary to clearly establish the fundamental difference between a unit and an entity. Let's take the humerus, a typical object of anatomy. No one has ever seen a humerus! Of course, what actually exist are the *left humerus* and the *right humerus*; together, they form the *humerus (pair)*. Therefore, they are specific entities and can be found in a partonomy. The pair is the partonomic father of the two lateral members. Furthermore, there is a taxonomic father of the two lateral entities, called the *generic humerus*. This is a kind of left humerus without its left form and simultaneously a right humerus without its right form. Such an entity does not actually exist: it is a mental artifice. The entire taxonomy, with the exception of its leaves, is made up of such generic entities. The four entities defined above represent the object *humerus* as a pair unit LA:*humerus*. All pair units are made up of four entities.

This document contains several external references. They will be active when there is an open internet connection: the referenced files will open in the user's default internet browser. External references always point to the most recent version of a file. Therefore, an external reference may be out of sync with a particular unit page because they were prepared on different dates. The user should be aware of this.

2.2 Overview

The unit page presents information directly related to a specific anatomical unit, as defined in the TAH (Terminologia Anatomica Humana) and identified by its official unique identifier (UID). Links to all hierarchical lists containing this unit are available. Other entity-based pages are also accessible.

The presentation of anatomical terminology should be based on the most natural unit of knowledge, corresponding to the experience of casual users and allowing immediate understanding of the domain's content. However, this statement should not obscure the in-depth knowledge, necessarily present in the background and available at the request of users seeking precise and detailed information. The natural units of knowledge are anatomical units, as distinct from anatomical entities. These two aspects must be addressed in parallel, and the art of careful presentation must be applied.

An anatomical entity refers to any part of the body that can be isolated and represented as distinct from other entities. However, there is no doubt that some entities are closely related, such as the left and right humerus; the pair of humerus forms a third entity, and the generic humerus a fourth. More than 60 % of the entities in gross anatomy are pairs. Other entities are grouped into sets. Therefore, the natural unit of representation is the group of entities, which is called a unit. It is important to clarify this aspect of the terminology.

The unit page is less detailed than the entity page and should be consulted

first, using the navigation links for additional information if necessary. The unit page is shorter and simpler: it does not present detailed linguistic information. Furthermore, entity pages are not systematically available due to their large number and their redundancy with the unit pages.

The relevant information on the unit page is categorized in the following sections: identification, navigation, definitions, partonomic hierarchy and taxonomic hierarchy.

This page focuses on the unit level of granularity, which constitutes a major natural division of anatomical terminology. The other levels of granularity—lists, entities, and words—are simply referenced, but not elaborated upon.

On this page, as on many others, the language is threefold: the primary language, the subsidiary language, and the interface language. They can be freely swapped among the available languages: Latin, English, French, Spanish, Russian, and others to come. A typical selection is to use a modern language as the primary language, Latin as the subsidiary language, and the primary language as the interface language. Reversal of primary and subsidiary languages is common.

The explicit restitution of modern anatomical terminology is ensured by the presentation of the unit page with the two basic hierarchies. On the one hand, the partonomic hierarchy is the approach favored by anatomists, as it tends to reproduce the paradigm of the anatomy atlas. On the other hand, the taxonomic hierarchy brings a formal aspect to the terminology, allowing the definition of entities and units.

2.3 General layout

The unit page is divided into up to seven sections, depending on the type of information presented. Not all sections are mandatory. Figure 2.1 shows an example with five sections, three of which have been closed. These sections are as follows:


- Identification section
- Navigation section
- Definition section
- Documentation section
- Occurrences section
- Partonomic section
- Taxonomic section

The Unit Page, like numerous other pages, is governed by the language selection, visible on the top legend of the page and which can be changed as often as necessary. Three languages are active: the main language, the subsidiary language and the presentation language. The first two vernaculars concern the content and the last one concerns the presentation exclusively.




Open/Close
section icons

Terminologia Anatomica Humana
Unit page, primary language: LA, subsidiary: EN, interface: EN, work in progress






vestibulum oris

▼ IDENTIFICATION

| | |
|--------------------------|--|
| Official Latin term | vestibulum oris |
| Official subsidiary term | oral vestibule  |
| Official FMA term | vestibule of mouth |
| Unit identifier | TAH:U2279 |
| Unit type | single |
| Materiality | immaterial |

► NAVIGATION

▼ TAXONOMIC DEFINITION

| | |
|----------------------|---|
| Taxonomic definition | The oral vestibule  is a subdivision of oral cavity  [divisio cavitatis oris  , which is the anterior part of the oral cavity [cavitas oris] forming the space between the teeth and the lips and cheeks. |
|----------------------|---|

► PARTONOMY

► TAXONOMY

Date: 30.06.2024

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Figure 2.1: Structure of a unit page in five sections (out of seven possible sections), on the ^{EN}: *oral vestibule*. The Identification and Definition sections are open. The Navigation, Partonomy, and Taxonomy sections are present but closed. The other sections not visible because they are absent in this example are the Documentation section and the Occurrences section.

Any section may be either open or closed, as indicated by the open/close icons on the left of its title. This is a dynamic feature: any click on the present icon will switch the section to the opposite status.

All sections of the Unit Page will be examined now in turn.

2.4 Identification section

This section consists of six elements or lines of information that identify and reference the unit specified for this page. These elements are visible in figure 2.1.

Official Latin term: Each anatomical entity receives a unique official Latin term from the TAH. This term is guaranteed to be unique in its extended form. However, the uniqueness of an abbreviated form cannot be guaranteed. For example, ^{LA}: *lamina anterior* is not unique, because there is also ^{LA}: *lamina anterior*. The first entity concerns the ^{LA}: *thoracolumbalis fascia*, the second the ^{LA}: *rectus sheath*. Terms (and all other terms on this page) are marked with the universal icon when they come from the universal formula.



Official Subsidiary Term: The content of the unit page is presented in two languages: a primary language and a subsidiary language, including Latin. This item is always presented in the non-Latin language.

Universal stamps

FMA Term: The official Fundamental Model of Anatomy (FMA) term, if entered. Otherwise, this information is missing.

Unit identifier UID: This is the unique identifier for TAH units: a unique, blind, computer-generated sequential number. It is always a positive integer between 1 and 24 999. *blind* means its value is meaningless.

The original unique identifier for the TA98 version, an 11-digit code, has been abandoned and replaced by this identifier. The old 11-digit codes were excluded due to their sequential nature, which made them difficult to use after multiple updates. For historical reasons, the values from 1 to 7444 were assigned to units from TA98 (although this violates the anonymity of the identifiers!). This means that identifiers greater than 7444 designate new units, not present in TA98. This ensures the continuity of the identifiers since the TA98 website opened in 2013.

When the TAH must be referenced by external sources, the recommended format is the prefix *TAH:U* followed by the internal identifier, U for Unit. For example: TAH:U2281 LA:*labia oris*. The mention of LA for Latin is optional.

In reality, TA98 represents units, not entities. Generally, but not always, the TA98 entity is the generic entity in the TAH. This means that generic entities have an entity ID between 1 and 24999. All other entities derived from TA98 have an entity ID (TID) of 25000 or higher. New generic entities resulting from successive revisions have values between 7445 and 24999 or higher for non-generic entities. The final number of entities should be greater than 70000. See also *chapter 03* of *Universal Terminology* for more information on identifiers.

Unit type Each entity necessarily belongs to a defined unit type. There are 14 types documented in figure 2.1. The entity type influences the presentation of the rest of this page.

Materiality: A unit represents either a *material* object from the anatomical domain, or an *immaterial* object such as a volume, space, surface, line, or point. This element has the value *non-physical* when the unit concerns a non-physical object.

2.5 Navigation section

The navigation section is illustrated in figure 2.2.

Navigation to other pages from the unit page is done via 8 different groups of links, each offering one or more possible selections. See table 2.2 for a brief description.

The 8 groups are detailed below.

Link to the unit: Each entity belongs to a unit of a specified unit type. This link is dummy and corresponds to the current unit page.

Generic Entity Link: Some unit types are built with multiple entities, up to 5 entities. An pair unit has 4 entities; a set unit has 5 entities; a set unit has 2 entities; all other units have one. The current link leads to the generic entity, from where the other entities are accessible.

| # | Value | Description |
|----|-----------------|---|
| 1 | undefined | undefined type, normally absent |
| 2 | unique | single unit (1 entity) |
| 3 | pair | pair unit (4 entities) |
| 4 | pair set | pset unit (5 entities) |
| 5 | set | set unit (2 entities) |
| 6 | reference | reference unit used for duplication of an existing unit |
| 7 | deleted | deleted unit, which was previously a published entity |
| 8 | lexical | lexical unit used to rename an existing unit |
| 9 | taxonomic | taxonomic unit limited to a single generic entity |
| 10 | transient | unused unit in a temporary state of standby |
| 11 | vocabulary | vocabulary unit as recipient of language words |
| 12 | duplicated TA98 | reference unit for TA98 |
| 13 | interface | interface unit as container of texts for the website |
| 14 | mixed set | mixed set unit (2 entities) |

Table 2.1: The 14 types of units.

| NAVIGATION | |
|--------------------------------|--|
| Link to the unit | nervus cardiacus cervicalis superior (par) [Ⓢ] |
| Links of entity | generic: nervus cardiacus cervicalis superior [Ⓢ] |
| Entity-oriented links | Universal page Definition page |
| External links | Gray 1918 TA98 FMA PubMed Wikipedia |
| Partonomic links | Level 2: divisio autonómica Short Extended Level 3: pars thoracolumbalis Short Extended Level 4: truncus sympathicus (par) |
| Taxonomic links | Level 2: nervus ramus |
| Subsidiary language with Latin | LA-EN EN LA-FR FR LA-ES ES |
| Non Latin primary language | EN-LA EN FR-LA FR ES-LA ES |

Figure 2.2: A typical navigation section based on ^{EN}:*superior cervical cardiac nerve*. Eight groups of navigation links are provided.

Entity-Oriented Links: Other pages are designed around an entity and are available in different circumstances. These are: the universal page concerning the universal term and its translation into different languages; and the definition page. These pages are directly accessible if they exist.

External links: Various links to external websites are provided and open directly to a page corresponding to the current anatomical unit. This information is optional. The authors of the terminology consider these websites to be relevant worldwide, but express no guarantee regarding the information contained therein.

The referenced websites are generally accessible to the user directly from the current anatomical unit, which serves as the title of the page for the relevant unit. The best match is sought, but may sometimes prove unsatisfactory. In the event of an inexact match, the user is encouraged to browse the website on their own. Some referenced pages may disappear without notice; the authors of the terminology apologize for any inconvenience.

The following websites may be offered:

- **Gray Anatomy 1918 edition:** This link leads directly to the page of this work dealing with the current unit. It is obvious that this reference has historical value, but that more than a hundred years of medical evolution have sometimes brought considerable updates. The reader will appreciate this. (address: <https://archive.org/about/>).
- **Fundamental Model of Anatomy:** The taxonomic hierarchy of the FMA model is open to the current unit. (address: <https://bioportal.bioontology.org/ontologies/FMA/?p=summary>).
- **PubMed:** This website, developed by the National Library of Medicine in the USA, is the leading reference for English-language biomedical literature. Access is by the name of the unit in English, filtered for review articles. A list of relevant scientific articles is calculated and proposed. (address: <https://pubmed.ncbi.nlm.nih.gov/>).
- **KenHub:** This website is a learning platform on medical topics, based in Berlin and Colorado, largely open access. (address: <https://www.kenhub.com/en/library/anatomy/>).
- **Terminologia Anatomica 1998:** The TA98 (2013) website opens on a page representing the relevant unit. (address: <https://ifaa.unifr.ch/Public/EntryPage/HomePublicNew.html>).
- **Wikipedia:** This website opens when an article is specifically devoted to the relevant unit. (address: https://en.wikipedia.org/wiki/Main_Page).
- **Radiopedia:** This website is accessible when an article is specifically devoted to the unit in question. (address: <https://radiopaedia.org>).
- **ScienceDirect:** This website is accessible when an article is specifically devoted to the unit in question. (address: <https://www.sciencedirect.com>).

- **YouTube:** This website offers videos on anatomical topics, more often aimed at the general public than at experts. (address: <https://www.youtube.com/>).
- **AnatoNomina:** This website presents numerous drawings labeled with the TA98 edition. (home is <http://www.terminologia-anatomica.org/en/>).
- **Operative neurosurgery:** This website offers various presentations of anatomical sites, in the form of documents or videos. (address: <https://operativeneurosurgery.com/>).
- **Whonamedit:** This eponym website, with thousands of references, is available for anatomical units also known by an eponym. (address: <https://www.whonamedit.com>).
- **IMAIOS:** This website is only partially accessible and free of charge. It is the most detailed website on anatomical terminology, available in at least 10 languages, with a good correspondence with TA98. (home is <https://www.imaios.com/en>).

The policy of the authors of this terminology is to offer alternative websites that generally provide valuable scientific information in the field of anatomy. However, the authors of this terminology cannot be held responsible for any content displayed or missing. The list of possible references is not exhaustive, but is generally limited to websites with open access, without advertising, or with a reasonable amount of advertising.

Partonomic links: The entity presented may be part of various partonomic lists of different levels, from 1 to 4. Not all levels necessarily exist for all entities; this depends on the size of the anatomical system to which the entity belongs. At each level (except level 4), the partonomic list can take two forms: a short list with undeveloped sublevels or an expanded list. Corresponding selections are provided.

Taxonomic links: The entity presented may be part of different taxonomic lists at different levels, from 1 to 4. Not all levels necessarily exist for all entities; this depends on the size of the taxonomy section to which the entity belongs. At each level (except level 4), the partonomic list can take two forms: a short list with unexpanded sublevels or an expanded list. Corresponding selections are provided.

Subsidiary language with Latin: This selection defines the subsidiary language with Latin as the primary language and English as the presentation language.

Non-Latin primary language: This selection simultaneously defines the primary language and the presentation language. The auxiliary language is Latin. This selection allows access to presentation in languages that may be different from English.

All links are defined when the page is created. This does not guarantee that they will be fulfilled when the user selects them. We will strive to maintain the website with as many fulfilled links as possible, but updates and maintenance tasks may result in missing links.

| # | Group | Description |
|---|-------------------|--|
| 1 | unit | to the present unit (absent on a unit page) |
| 2 | entity | to the entities constituting the present unit |
| 3 | lateral entity | to the left and right members of an even unit |
| 4 | unit-related page | to any other page based on this unit |
| 5 | external website | to any relevant website based on this unit |
| 6 | partonomy | to the higher-level partonomy lists containing this unit |
| 7 | taxonomy | to the higher-level taxonomic lists containing this unit |
| 8 | subsidiary | to another subsidiary language with an English interface |
| 9 | presentation | to another interface language |

Table 2.2: The types of links to other pages from the unit page.

| | |
|-------------------------------|---|
| ▼ TAXONOMIC DEFINITION | |
| Taxonomic definition | An ansa subclavia is a branch of middle cervical ganglion [ramus ganglii cervicalis medii] which forms a loop around the subclavian artery [arteria subclavia] which connects the middle cervical ganglion [ganglion cervicale medium] and cervicothoracic ganglion [ganglion cervicothoracicum] . |
| ▼ DÉFINITION TAXONOMIQUE | |
| Définition taxonomique | Une anse subclavière est un rameau du ganglion cervical moyen [ramus ganglii cervicalis medii] qui forme une boucle autour de l'artère subclavière [arteria subclavia] qui connecte le ganglion cervical moyen [ganglion cervicale medium] et le ganglion cervicothoracique [ganglion cervicothoracicum] . |
| ▼ DEFINICIÓN TAXONÓMICA | |
| Definición taxonómica | Una asa subclavicular es una rama del ganglio cervical medio [ramus ganglii cervicalis medii] que forma un bucle alrededor de la arteria subclavia [arteria subclavia] que conecta el ganglio cervical medio [ganglion cervicale medium] y el ganglio cervicotórácico [ganglion cervicothoracicum] . |
| ▼ ТАКСОНОМИЧЕСКОЕ ОПРЕДЕЛЕНИЕ | |
| таксономическое определение | субключичная петля - это ветвь среднего шейного узла [ramus ganglii cervicalis medii] который образует петлю вокруг подключичной артерии [arteria subclavia] , которая соединяет средний шейный узел [ganglion cervicale medium] и шейно-грудной узел [ganglion cervicothoracicum] . |

Figure 2.3: A collection of four definition sections in four modern languages for the *LA: ansa subclavia*. As shown in the taxonomy, the taxonomic parent *LA: ramus ganglii cervicalis medii* is used to prepare the genus definition.

2.6 Definition section

In figure 2.3, we have constructed an assembly of four different definition sections to demonstrate the translation process when the presentation language is changed.

This section displays the taxonomic definition of a unit. The language is the primary language if it is not Latin, provided a translation has been validated. If the primary language is Latin, English is used for the definition. If there is no translation in the specified language, English is selected by default. If there is no definition, this section is not displayed.

A taxonomic definition is based on the principle of *genus and differentia*, initially stated by Aristotle. The definition consists of a left-hand side based on the genus or taxonomic parent, and a right-hand side based on the differentiations. The genus side is automatically generated from the taxonomy. The differentia side is specified as a short, precise, and free-form text describing the differentiations, without including superfluous properties. For more details on generating definitions, see *chapter 14*.

The translation of the differentia text is handled by the terminology authors, using a translation tool (Google Translate). The source version of the definitions for all languages is the French version. This process is largely automated, ensuring a strictly similar presentation in all vernacular languages. However, these texts must be validated by a native speaker of the language. Before this, translation errors would likely occur.

The text of a definition is regularly interspersed with hyperlinks to other unit pages, when the definition mentions other units. The hyperlink also includes the main Latin term for that unit. The hyperlinks are visible in blue in figure 2.3.

2.7 Documentation section

The documentation section, optional on the unit page, provides information about the specified unit. This information is usually structured into several paragraphs, as needed. This section is visible for *LA:regiones corporis humani*.

2.8 Occurrences section

This section only exists for vocabulary units. This section currently only exists for the primary language Latin, with English as a subsidiary language. This section lists all occurrences of the word documented in this unit, across all terminology. An occurrence section is shown in figure 2.4.


In its simplest and most common form, a vocabulary unit is a non-physical entity classified under a taxonomic parent representing a category of words according to certain criteria. However, in some cases, it is derived from another vocabulary unit, using more or less the same words, but with a different meaning. The presentation is more complex in the latter case. In the example above, we have the simplest form.

Occurrences of the same vocabulary unit are presented in four parts. First, by noun, but only when a noun is present for that unit. Second, by apposition. Third, by adjective, but only when an adjective is present for that unit. Fourth, by prefix, but only when a prefix is present for that unit. Fifth, as a temporary artifice, as string vocabulary: this means searching for occurrences in a part of the terminology where universal formulas are not yet implemented. Conversely, the search for occurrences for the first four parts is performed on universal formulas. The total number of occurrences found and displayed is indicated at the bottom of the list.

In the current implementation, occurrence searches are performed only on Latin formulas and terms. Results are also displayed only for Latin terms. Regardless of the search criteria, results could be displayed in the various languages of the \mathbf{T}_{logy} , but this feature is not yet implemented.

When searching using universal formulas, the result is expected to be error-free, because each formula explicitly contains the identifier of the searched word, in its root part or in one of its extensions. When searching using the terms themselves, the longest invariant left part of the searched word is used, but it can sometimes match other words!

Terminologia Anatomica Humana
Unit page, primary language: LA, subsidiary: EN, interface: EN, work in progress



nomen falx [Ⓜ]

▼ IDENTIFICATION

| | |
|--------------------------|-------------------------|
| Official Latin term | nomen falx [Ⓜ] |
| Official subsidiary term | falx word [Ⓜ] |
| Unit identifier | TAH:U12304 |
| Unit type | vocabulary |
| Materiality | non physical entity |

► NAVIGATION

▼ OCCURRENCES

| | |
|----------------------------------|---|
| Vocabulary for 12304 | nomen falx [Ⓜ] |
| By noun | falx |
| 1893/NFMB pair | falx inguinalis [Ⓜ] |
| 5095/NFMB single | falx cerebri [Ⓜ] |
| 5098/NFMB single | falx cerebelli [Ⓜ] (falx cerebellaris [Ⓜ]) |
| 9036/NFMB pair | plexus venosus falcis cerebri [Ⓜ] |
| by apposition | falx |
| 12304/MFMB voc | nomen falx [Ⓜ] |
| By adjective | falciformis |
| 1523/AFMB pair | processus falciformis [Ⓜ] |
| 2158/AFMB pair | margo falciformis [Ⓜ] |
| 3481/AFMB single | ligamentum falciforme [Ⓜ] |
| Number of occurrences | 8 items |

▼ TAXONOMY

| | |
|---------------------------|---|
| FMA:62955 | ◦ res anatomica [Ⓜ] |
| FMA:67115 | ◦ res nonphysica [Ⓜ] |
| TAH11439 | ◦ nomen rei anatomicae [Ⓜ] |
| TAH12009 | ◦ nomen rei corporeae [Ⓜ] |
| TAH:G12304 | ◦ nomen falx [Ⓜ] |

Date: 20.08.2025

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Figure 2.4: A typical occurrence section based on ^{LA:}*nomen falx* with 8 occurrences. The taxonomy section shows that the present word is classified as a member of a group on material entities. Many groups are defined on anatomical criteria or the membership to a specific chapter of the **T_{logy}**.

Each item in the occurrence list is displayed in two columns. The left column contains a hyperlink to the page of the corresponding unit of the mentioned entity, immediately activable, as well as the unit type. In particular, taxonomic units are visible, but did not exist in the previous TA98 version. The right column contains the corresponding term, when the searched word was found, as well as the main term when it is different.

The occurrence list can be very long for some common words, such as *muscle* or *artery*, and may be limited by an implementation parameter. It is impossible to obtain the complete list in this case.

When a vocabulary unit concerns a word with different meanings, or at least different contexts, it is the taxonomic ancestor of one or more alternative vocabulary units. This is easily explained by the example of LA:*nomen corona*. Here we see that there is a general meaning represented by the noun *corona* and the adjective *coronalis*. However, two specific meanings are important and visible in the terminology. The first meaning is LA:*nomen corona dentis*, which concerns dental crowns, using the same noun and the same adjective. The second meaning is LA:*nomen coronarius cordis*, which exclusively concerns coronary arteries, using a different adjective, *coronarius*. The superordinate unit presents all occurrences of all specific meanings. However, the dependent units can also be viewed separately.

2.9 Partonomy section

A partonomic section is presented in Figure 2.5. This presentation is based on a triggering unit the EN:*sympathetic trunk* at the leftmost position. Above are listed the ancestors and below the children, according to the partonomic hierarchy, all of which are indented to the right of the triggering unit. Since each unit displayed is the descendant of another unit, the relationship to this father is indicated in the form of an acronym to the right of each term.

This section presents the partonomic hierarchy of the TAH above and below the triggering unit selected for this page. This means that each TAH unit occupies one (and only one) position in the TAH tree under LA:*corpus humanum*. Detailed aspects of this hierarchy are detailed in the general documentation.

The partonomic hierarchy is presented with the triggering unit on the far left. From there, the upper (ancestors) and lower (children) levels of the hierarchy are presented with successive indentations. The number of ancestors is unlimited (up to the top of the hierarchy), but not all of them are visible, limited to 20 by an installation parameter. The number of children is unlimited (up to the entire TAH) in theory, but is limited to 200 by an installation parameter in practice. If the number of children is too high, only the first generation of children is listed, as well as the number of unlisted units.

Children may not necessarily be visible, and the user must open the hierarchy using the open/close icons located to the left of the terms.

This presentation of partonomy is not exhaustive: all left and right members of pairs are simply ignored, to avoid excessively long presentations. In the example above, we could have placed the two entries FR:*left sympathetic trunk* and FR:*right sympathetic trunk* immediately under FR:*sympathetic trunk (pair)*.

Each unit is prefixed in a left-hand column by its UID.

The unit name displayed is a simplified form of the official term rather than



Open/Close
icons














| PARTONOMY | |
|------------|--|
| TAH:E10200 | • corpus humanum  |
| TAH:U5062 | • systema nervosum  SOS |
| TAH:U6322 | • systema nervosum periphericum  SOS |
| TAH:U6758 | • divisio autonómica  SOS |
| TAH:U6759 | • pars thoracolumbalis  SOS |
| TAH:U6760 | ▼ truncus sympathicus (par)  UOS |
| TAH:U6761 | ▼ ganglia paravertebralia (par)  VOU |
| TAH:U6766 | • ganglia intermedia (par)  VOV |
| TAH:U8275 | ▶ ganglia trunci sympathici (par)  VOV |
| TAH:U6762 | • rami interganglionares (par)  VOU |
| TAH:U6763 | ▼ rami communicantes trunci sympathici (par)  VOU |
| TAH:U6764 | • rami communicantes grisei (par)  VOV |
| TAH:U6765 | • rami communicantes albi (par)  VOV |
| Total | 55 children |

Figure 2.5: A typical partonomy section based on EN: *sympathetic trunk* with 5 ancestors and 56 children, of which only 7 are visible, the others being visible by user action.

its formal name: pair units are presented by their generating term, followed by the word pair in parentheses. Example: The formal name for the pair of humeri is *pair of humeri* and is replaced by *humerus (pair)*. Set units are presented by their generating term in the plural. This is true in all languages.

To the right of the unit name, an acronym is displayed designating the relationship of the present unit with its partonomic parent. Each acronym carries a hyperlink to a page describing this relationship (temporarily on the Latin/English selection only). These acronyms are documented elsewhere in *chapter 13* of *Universal Terminology* on partonomy.

The subsidiary language term is visible as a bubble. When you move the mouse pointer over the term, the bubble appears after a short while. In addition, the bubble contains a short explanatory text on the relationship with the partonomic parent unit.

The unit names displayed serve as hyperlinks to the corresponding unit pages.

2.10 Taxonomy section

This section is based on the FMA (Fundamental Model of Anatomy) taxonomy as developed by the Structural Informatics Group at the University of Washington, Seattle, USA. This taxonomy is the basis for the taxonomy underlying the **T***logy*.

A typical taxonomy section is illustrated in figure 2.6.

The adapted FMA taxonomy is based on the original FMA publication, but modifications and updates were necessary due to recognized differences in opinion between the FMA group and the FIPAT group. These differences are also explained by the fact that recent terminological additions made by FIPAT have not necessarily been followed by the FMA. These differences have been

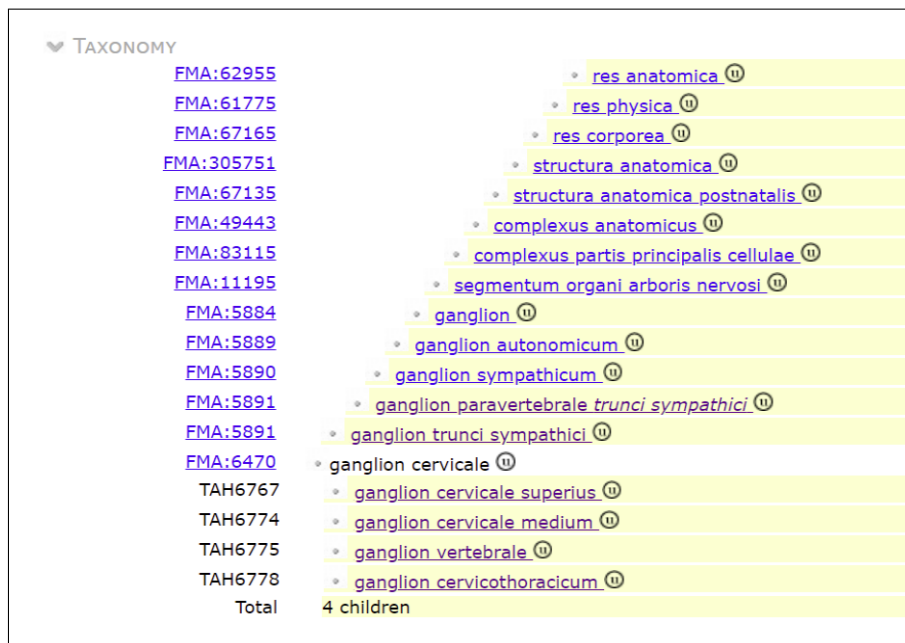


Figure 2.6: A typical taxonomy section based on *EM: cervical ganglia*.

limited as much as possible, and their number is less than a few percent of the total. Hyperlinks to the FMA allow users to form their own opinions on these differences. See also the following section regarding highlights of changes by background color.

All differences have been carefully documented using the background colors in this section. Brief help on the colors used is available when you hover over the corresponding text, on the first line of the section. This feature is only visible on entity pages.

The taxonomy is presented with the current unit on the far left. From there, the upper and lower levels of the hierarchy are presented with successive indentations. The number of ancestors is limited (up to 20), and all are visible. The number of children is theoretically unlimited (up to the entire TAH), but is limited in practice by an installation parameter. If the number of children is too high, only the first generation of children is listed, along with the number of unlisted units.

The unit's displayed name is the preferred term in the primary language. The subsidiary language is visible in the form of bubbles. The displayed name serves as a hyperlink to the corresponding unit's page.

Each unit is prefixed in the left column by its identification number, either TAH or FMA. When both are present, the FMA is selected and the other is displayed in a bubble. In addition, each FMA identifier serves as a hyperlink to its website. This provides direct access to a source representation of this terminology.

2.11 History of changes in taxonomy

As explained above, the taxonomy is essentially that of the FMA. However, some modifications are necessary for two reasons:

- 1) new entities have been added to the terminology, and the corresponding updates have not (yet) been made in the FMA;
- 2) divergent views on certain aspects of the FMA.

The authors of the TAH clearly wish to limit modifications to the strict minimum and maintain broad compatibility with the FMA. However, some modifications are necessary. In particular, the presentation of white matter is considered insufficient in the original FMA, and considerable evolution has taken place in this subfield since the publication of the FMA. Another point concerns the taxonomy of neurons, which is much broader than it was initially, requiring an update.

To securely manage changes to the taxonomy, a background color system has been implemented in the taxonomy presentation of unit pages. Four colors have been selected, each expressing a different message about the selected entity. See figure 2.7 for an example. They are shown below:

Pink for modified entity: The current entity has been modified as indicated by the light blue and gray paths.

Light blue for new path: The new path of the modified entity.

Gray for old path: The old path of the modified entity, terminated at the top by the junction entity allowing you to jump in the hierarchy.

Yellow: Latin terms are generally highlighted in this color.

Indeed, the new taxonomy is readable by ignoring the gray entities. An immediate comparison with the old path is possible. Note: The new entities in light blue do not refer to FMA in the left column, because they do not exist there.

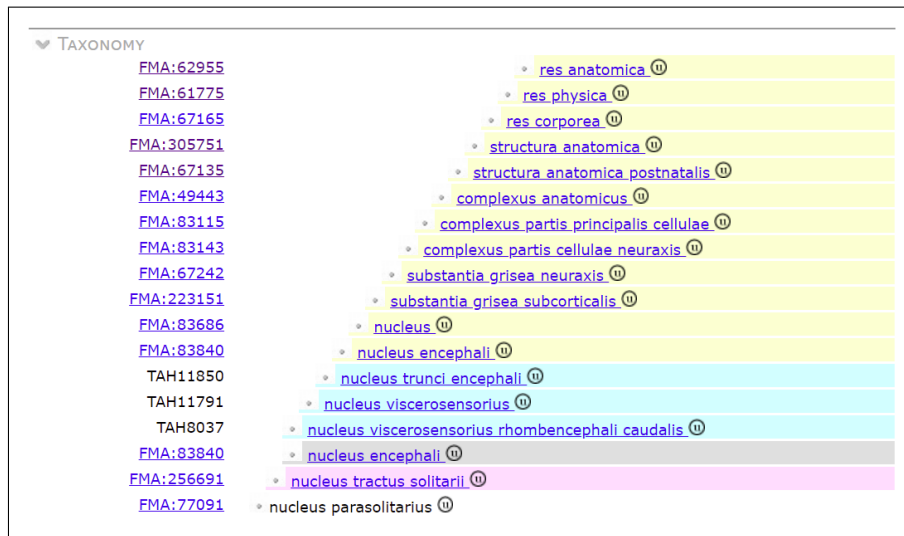


Figure 2.7: A modified taxonomy section based on the EN: *parasolitary nucleus*.

2.12 Log of updates

- 22 Aug 2025** Full revision of this document. This version is a translation of the source French version.
- 30 Jun 2024** Refresh of the documentation.
- 20 Feb 2024** Update of partonomy section for introduction of the relations.
- 07 Feb 2024** New section on occurrences for vocabulary units.
- 05 Feb 2023** Update of the list of possible referenced websites.
- 26 Mar 2022** Update for documentation section.
- 15 Mar 2022** Update for history of changes in taxonomy.
- 01 Dec 2021** Creation of the file.

2.13 Credentials

This document is part of the help system for the Terminologia Anatomica Humana website. It expresses the authors' views on its content and presentation. While it is as accurate as possible, and closely approximates the reality of the terminology database and the software that supports it, approximations, errors, and ambiguities are possible and should be considered beyond their control and intentions.

Any comments regarding the website's content and presentation are welcome. An appropriate response will be provided if necessary.

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